

Curriculum vitae Prof. Dr. Magd ABDEL WAHAB**PERSONAL INFORMATION**

- Family name, First name: Abdel Wahab, Magd
- Research ID: [K-4296-2015](#)
- ORCID: [0000-0002-3610-865X](#)
- Scopus Author ID: [7102582536](#)
- Google Scholar: [Prof. Dr. Magd Abdel Wahab](#)
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**SUMMARY OF H-INDEX AND CITATIONS AS PER MAY 2024**

	WoS	Scopus	Google Scholar	ResearchGate
Citations	12,257	14,753	18,362	15,141
H-index	64	71	77	72

SUMMARY OF ALL PUBLICATIONS UP TO MARCH 2024

The following classification is according to Ghent University Academic Bibliography (total number of publications 745 including some types that are not mentioned in the table below):

<https://biblio.ugent.be/person/802000618513>

	Journal article		Book			Conference proceedings		
	A1	A2	B1	B2	B3	P1	C1	C3
Total	322	27	3	8	40	49	156	87

A1: Articles included in one of the ISI Web of Science databases. A2: Article in a scientific journal with peer review, not included in (A1). B1: Book as author or co-author. B2: Chapter in a book as author or co-author. B3: Book as editor or co-editor. P1: Proceedings included in one of the ISI Web of Science databases. C1: Articles published in proceedings of scientific conferences, not included in (A1) or (P1). C3: conference or meeting abstracts, unpublished lectures, posters, etc.

FELLOWSHIPS AND AWARDS

- Leader Award 2024 - Research.com Mechanical and Aerospace Engineering
- National Ranking 3 in 2024 - Research.com Mechanical and Aerospace Engineering
- World Ranking 319 in 2024 - Research.com Mechanical and Aerospace Engineering
- Fellow of EU Academy of Sciences, 2023
- High Level Foreign Talent in China 2023
- Leader Award 2023 - Research.com Mechanical and Aerospace Engineering
- National Ranking 3 in 2023 - Research.com Mechanical and Aerospace Engineering
- World Ranking 491 in 2023 - Research.com Mechanical and Aerospace Engineering

- Top % 2 among the World's Scientists - AD Scientific Index 2023.
- Medal of honour 2015, national (Belgium) orders award in recognition of outstanding teaching and professional activities
- Egyptian Society & Student Union award 2008, University of Surrey, Guildford, Surrey, UK
- SCEPTRe Fellowship award 2007. This scheme, The Surrey Centre for Excellence in Professional Training and Education, rewards excellence and promote excellent education that enhances the learning and experiences of students
- University of Surrey Teaching and Learning Prize 2005. This scheme acknowledges staffs who are innovative and achieve a high standard of excellence in their teaching activities.
- PhD Scholarship (1991 – 1995), Department of Civil Engineering, KU Leuven, Belgium

EDUCATION

- 2008 **DSc**, Doctor of Science, Department of Aerospace and Mechanical Engineering, University of Surrey, UK
- 1995 **PhD**, Doctor in Engineering, Department of Civil Engineering, Division of Structural Mechanics, K.U. Leuven, Belgium
- 1991 **MSc**, Master of Science, Department of Civil Engineering, Cairo University, Egypt

CURRENT POSITION(S)

- Professor of Applied Mechanics, Faculty of Engineering and Architecture, Ghent University, Belgium <https://magdabdelwahab.ugent.be/>
- Head of Finite Element Modelling Research Group, Laboratorium Soete, Ghent University; <https://www.finiteelementresearch.ugent.be/>
- Honorary Professor, Yuan Ze University, Taiwan
- Visiting Professor, Tongji University, Shanghai, China
- Visting Professor, Jožef Stefan” Institute, Slovenia

PREVIOUS POSITIONS

- 2008 – 2009 Professor of Civil Engineering, Xios University College Limburg, Belgium
- 2003 – 2008 Senior Lecturer, Aerospace & Mechanical Engineering, University of Surrey, UK
- 1999 – 2003 Lecturer, Mechanical & Materials Engineering, University of Surrey, UK
- 1995 – 1999 Post-doctoral researcher, Department of Civil Engineering, KU Leuven, Belgium
- 1991 – 1995 PhD researcher, Department of Civil Engineering, KU Leuven, Belgium

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (2024)

- Completed PhD degrees: 35
- Current supervision of PhD students: 16
- Completed post-doctoral fellows: 5
- Current supervision of post-doctoral fellows: 2

TEACHING ACTIVITIES

- 1995 – 1999: Assistant Lecturer, Finite Element Analysis, KU Leuven, Belgium
- 1999 – 2008: Main lecturer in charge, Dynamics and Vibration, University of Surrey, UK

- 2008 – 2009: Main lecturer in charge, Reinforced Concrete/Mechanics of Materials, Xios University College Limburg, Belgium
- 2009 – : Main lecturer in charge, Kinematics/Finite Element Analysis, Ghent University, Belgium
- 2009 – : Main lecturer in charge, Mechanics of Electromechanical Constructions and Finite Elements, Ghent University, Belgium

INSTITUTIONAL RESPONSIBILITIES

- 2009 – : Head of Finite Element Modelling Research Group, Ghent University, http://www.finite_element_research.ugent.be/
- 2009 – : Member of department committee, faculty examination committee, faculty research committee and faculty teaching committee at Ghent University, Belgium.
- 1999 – 2008: Member of faculty, research & examination committees, Surrey University, UK

COMMISSIONS OF TRUST

- Examiner of several PhD theses in UK, India, Malaysia, Spain and Belgium
- Evaluator of research proposals for STW NOW Netherlands, EPSRC UK
- Evaluator of Promotion for Professorships in UK and China

EDITOR IN CHIEF AND CO-EDITORSHIP

- Editor-in-Chief of International Journal of Applied Mechanics <https://www.mdpi.com/journal/applmech>.
- Editor of more than 40 books, special issues and conference proceedings.
- Editor of conference proceedings in Springer and IOP publisher: International Conference of Fracture Fatigue and Wear (FFW), International Conference of Damage Assessment of Structures (DAMAS) and International Conference of Numerical Modelling in Engineering (NME).
- Lead Guest Editor: special issue Advances in finite element analysis for computational mechanics, Advances in Mechanical Engineering, SAGE publications Inc.
- Guest Editor: special issue Damage Models and Assessment Methods, Shock and Vibration, Hindawi Publishing Corporation.

AWARDED RESEARCH GRANTS

Contributions in total research awards of around 6.5 million Euros.

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role of the PI</i>
Development and Monitoring and Prediction of Coupled Interactions in Material Durability Testing	IWT – Belgian government agency for Innovation by Science and Technology	2,620,050	2014 - 2018	PI of WP5: Improved Residual Stress prediction of Welded steel

				components for fatigue, corrosion and abrasion assessment
Numerical modelling of fracture fatigue and wear	CWO, Faculty of Engineering and Architecture, Ghent University	25,000	2013-2016	PI
Multi-analysis of fretting fatigue using physical and virtual experiments	Research Foundation Flanders (FWO), The Luxembourg National Research Fund (FNR) and Slovenian Research Agency (ARRS)	740,000	2016-2019	PI, coordinator and chair of steering committee
An innovative solution to protect Vietnamese coastal riverbanks from floods and erosion	VLIRUOS, The Flemish Interuniversity Council - University Development	300,000	2017-2021	PI, coordinator and chair of steering committee
Damage assessment tools for Structural Health Monitoring of Vietnamese infrastructures	VLIRUOS, The Flemish Interuniversity Council - University Development	280,000	2018-2022	PI, coordinator and chair of steering committee
PRINT-AM Predictable Integrity of Large Scale Additive Manufactured Components through Intelligent Printing Strategies	IWT - Belgian government agency for Innovation by Science and Technology	1,298,510	2019-2022	PI of Task I.1: Repair or reproduction of existing structures (SBO)
Numerical modelling techniques for fretting fatigue crack initiation and propagation	BOF, Special Research Fund Ghent University	193,000	2010-2015	PI
Structural Adhesive Bonding of Thick Components for Advanced Engineering Design (SABCAD)	DTI-BAs-Airbus, UK	660,000	2006-2009	Co-investigator
Durability of adhesive bonding	QinetiQ-MOD ITT, Ministry of Defense, UK	95,000	2002-2005	Co-investigator
The failure of adhesively bonded joints under service loading conditions	EPSRC-JREI, UK	33,800	2000-2003	Co-investigator

VLIR-ITP 2023 Project: “A research training programme on Machine Learning for climate change mitigation in buildings	VLIRUOS, The Flemish Interuniversity Council - University Development	150,000	2023-2026	PI
SCK-CEN ‘Fatigue damage in fusion and GEN IV reactor steels: FEM modelling and experimental study’	FOD and EUROfusion project (grant number 101052200)	200,000	2021-2025	PI

ORGANISATION OF INTERNATIONAL SCIENTIFIC CONFERENCES

➤ Chairing and organising several international conferences including:

- Fracture Fatigue and Wear (FFW), annual since 2014 – present: <http://www.ffwconf.org/>
- Numerical Modelling in Engineering (NME), annual since 2018 – present, <http://www.nmeconf.org/>
- International Conference on Metals and Alloys (CMA), annual since 2019 – present, <http://www.cmaconf.org/>
- Structural Damage Modelling and Assessment (SDMA), annual since 2020, <http://www.sdmaconf.org/>
- Damage Assessment of Structures (DAMAS 2015, 2017, 2019).

LIST OF PUBLICATIONS AS PER MAY 2024

1. Wang, Gaofang, Yuxing Peng, Zhencai Zhu, Xiangdong Chang, Chao Li, Muhammad Imran, and Magd Abdel Wahab. 2024. “Fretting Wear Behaviour of High Strength Alloy Steel Induced by Plasma Nitriding and Post-Oxidation.” *Tribology International* 196: 109732. doi:10.1016/j.triboint.2024.109732.
2. Han, Sutao, Nana Yang, Lihua Wang, and Magd Abdel Wahab. 2024. “Modelling of Microscopic Crack Initiation Behaviour of Fretting Fatigue Based on X-Ray Micro-Computed Tomography Scan.” *International Journal of Fatigue*: 108374. doi:10.1016/j.ijfatigue.2024.108374.
3. ZHOU, ZHIKUN, Chenwen Tian, Wenbo Dong, Juan Du, Yunpeng Liu, Magd Abdel Wahab, and Ziguang Chen. 2024. “Enhanced Toughness and Ductility of T91 Steel after Exposure to Liquid LBE Saturated by Oxygen at 350-500 °C.” *Journal of Materials Research and Technology*. doi:10.1016/j.jmrt.2024.04.230.
4. Xue, Zhiyuan, Yijia Liu, Lihua Wang, and Magd Abdel Wahab. 2024. “A Meshfree Method for the Nonlinear KdV Equation Using Stabilized Collocation Method and Gradient Reproducing Kernel Approximations.” *Engineering Analysis with Boundary Elements* 164: 105752. doi:10.1016/j.enganabound.2024.105752.
5. Han, Sutao, Nana Yang, Qi Zhao, Yunlai Zhou, Lihua Wang, and Magd Abdel Wahab. 2024. “Prediction of Fretting Fatigue Lifetime of Aluminium Alloy Treated with Friction Stir Processing Using Continuum Damage Mechanics.” *Tribology International*: 109659. doi:10.1016/j.triboint.2024.109659.
6. Abdel Wahab, Magd, Sheila Tobing, and Mosbeh Kaloop, eds. 2024. “Engineering Innovations Vol. 10.” Trans Tech Publications, Ltd. doi:10.4028/v-jegu0y.
7. Wang, Bo, Dagang Wang, Jihong Ye, Liang Tang, Hailang Chong, Wei Xu, Xinxin Zhang, Jianhao Chen, Haiyan Deng, Jie Zhang, Guowen Yao, and Magd Abdel Wahab. 2024. “Effect of Fatigue Load on the Bending Tribo-Corrosion-Fatigue

- Behaviors between the Main Cable Wires.” *Friction*. doi:10.1007/s40544-023-0830-y.
8. Zhao, Qi, Yang Qu, Zhiyi Liu, Hao Ke, Sen Jiang, Xinhong Wang, Chengfu Duan, Zhipeng Zhai, and Magd Abdel Wahab. 2024. “Texture Formation under Control of S Phase Characteristic and Tensile Property of Hot-Rolling 2A12 Aluminum Alloy Improved by Brass Texture.” *Materials Science and Engineering: A*: 146445. doi:10.1016/j.msea.2024.146445.
 9. Liu, Yijia, Lihua Wang, Zhiyuan Xue, and Magd Abdel Wahab. 2024. “A Gradient Reproducing Kernel Based Stabilized Collocation Method for the 5th Order Korteweg-de Vries Equations.” *Wave Motion*: 103308. doi:10.1016/j.wavemoti.2024.103308.
 10. Fan, Kaifa, Daoxin Liu, Kai Zhou, Yanjie Liu, Hao Zhang, Xiaohua Zhang, Yueyang Li, Mengyao Li, Yuan Li, and Magd Abdel Wahab. 2024. “Enhanced Fretting Fatigue Strength of TC11 Titanium Alloy Using Laser-Assisted Ultrasonic Surface Rolling Process.” *Tribology International* 195: 109619. doi:10.1016/j.triboint.2024.109619.
 11. Abdel Wahab, Magd. 2024. “Preface 6th International Conference on Numerical Modelling in Engineering.”
 12. Abdel Wahab, Magd, ed. 2024. “The 6th International Conference on Numerical Modelling in Engineering.” Switzerland: Trans Tech Publications Ltd. doi:10.4028/v-h7qynr.
 13. Díez-Molina, Nicolás, Libardo V. Vanegas-Useche, Carlos A. Mesa, Can Wang, Lihua Wang, and Magd Abdel Wahab. 2024. “Fretting Fatigue Crack Nucleation Analysis under a Variable Coefficient of Friction.” *Tribology International*: 109558. doi:10.1016/j.triboint.2024.109558.
 14. To, Thanh Sang, Minh Hoang Le, Thien Quoc Huynh, Samir Khatir, Magd Abdel Wahab, and Thanh Cuong Le. 2024. “A Nonlinear Optimization Method for Calibration of Large-scale Deep Cement Mixing in Very Soft Clay Deep Excavation.” *International Journal for Numerical and Analytical Methods in Geomechanics*. doi:10.1002/nag.3714.
 15. Phung Van, Phuc, H. Nguyen-Xuan, P.T. Hung, Magd Abdel Wahab, and Chien H. Thai. 2024. “Nonlocal Strain Gradient Analysis of Honeycomb Sandwich Nanoscale Plates.” *Thin-Walled Structures* 198: 111746. doi:10.1016/j.tws.2024.111746.
 16. Li, Chao, Auezhan Amanov, Can Wang, Lihua Wang, and Magd Abdel Wahab. 2024. “Effect of Laser Shock Peening on Fretting Wear Behaviour of AISI 304 Stainless Alloy.” *Tribology International* 193: 109386. doi:10.1016/j.triboint.2024.109386.
 17. Zemani, Kada, Abdelghani May, Samir Khatir, Lionel Gilson, Thanh Cuong Le, Magd Abdel Wahab, and Hana Slamani. 2024. “Numerical Analysis of an Experimental Ballistic Test of Al/SiC Functionally Graded Materials.” *Composite Structures* 333: 117909. doi:10.1016/j.compstruct.2024.117909.
 18. Wang, Can, Kaifa Fan, Qi Zhao, and Magd Abdel Wahab. 2024. “Effect of Shot Peening Parameters on Fretting Fatigue Lifetime.” *Tribology International* 193: 109311. doi:10.1016/j.triboint.2024.109311.
 19. Oulad Brahim, A., R. Capozucca, Samir Khatir, E. Magagnini, B. Benaissa, Magd Abdel Wahab, and Thanh Cuong Le. 2024. “Artificial Neural Network and YUKI Algorithm for Notch Depth Prediction in X70 Steel Specimens.” *THEORETICAL AND APPLIED FRACTURE MECHANICS* 129. doi:10.1016/j.tafmec.2023.104227.
 20. Fan, Kaifa, Daoxin Liu, Can Wang, Jing Yang, Yanjie Liu, Xiaohua Zhang, Junfeng Xiang, and Magd Abdel Wahab. 2024. “Effect of Contact Stress and Slip Amplitude

- on Fretting Fatigue Behaviour of Ultrasonic Surface Nanocrystallized TC11 Titanium Alloy.” *JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T* 28: 4052–4064. doi:10.1016/j.jmrt.2024.01.020.
21. Zhao, Qi, Magd Abdel Wahab, Yong Ling, Zhiyi Liu, and Dagang Wang. 2024. “Fatigue Crack Propagation of AA2024 Alloy under Texture Control Using Crystal Plasticity Coupled with Accelerated Cyclic Cohesive Zone Model.” *ENGINEERING FRACTURE MECHANICS* 296. doi:10.1016/j.engfracmech.2023.109819.
22. Wang, Gaofang, Yuxing Peng, Zhencai Zhu, Xiangdong Chang, Hao Lu, Dagang Wang, Wei Tang, Kun Huang, and Magd Abdel Wahab. 2024. “A Multi-Physics Coupling Analysis to Predict Stress Corrosion Characteristics of Wires in Rope under Wear Damage.” *SIMULATION MODELLING PRACTICE AND THEORY* 131. doi:10.1016/j.simpat.2023.102882.
23. Xue, Zhiyuan, Lihua Wang, Xiaodan Ren, and Magd Abdel Wahab. 2024. “Weighted Radial Basis Collocation Method for Large Deformation Analysis of Rubber-like Materials.” *ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS* 159: 95–110. doi:10.1016/j.enganabound.2023.11.016.
24. Li, Yifei, Minh Hoang Le, MaoSen Cao, Xiangdong Qian, and Magd Abdel Wahab. 2024. “An Integrated Surrogate Model-Driven and Improved Termite Life Cycle Optimizer for Damage Identification in Dams.” *MECHANICAL SYSTEMS AND SIGNAL PROCESSING* 208. doi:10.1016/j.ymsp.2023.110986.
25. Shirazi, Muhammad Irfan, Samir Khatir, Djilali Boutchicha, and Magd Abdel Wahab. 2024. “Feature Extraction and Classification of Multiple Cracks from Raw Vibrational Responses of Composite Beams Using 1D-CNN Network.” *COMPOSITE STRUCTURES* 327. doi:10.1016/j.compstruct.2023.117701.
26. Qin, Shiqiang, Jiacheng Feng, Jian Tang, Xuejin Huo, Yunlai Zhou, Fei Yang, and Magd Abdel Wahab. 2024. “Condition Assessment of a Concrete Filled Steel Tube Arch Bridge Using In-Situ Vibration Measurements and an Improved Artificial Fish Swarm Algorithm.” *COMPUTERS & STRUCTURES* 291. doi:10.1016/j.compstruc.2023.107213.
27. Ayatollahi, Mojtaba, Magd Abdel Wahab, and Seyyed Mohammad Moein Hashemi. 2024. “Transient Analysis of a Cracked Functionally Graded Magneto-electro-elastic Rectangular Finite Plane under Anti-plane Mechanical and In-plane Electric and Magnetic Impacts.” *FATIGUE & FRACTURE OF ENGINEERING MATERIALS & STRUCTURES* 47 (1): 220–239. doi:10.1111/ffe.14174.
28. Zahran, Hussein, Aleksandr Zinovev, Dmitry Terentyev, Xiaowei Wang, and Magd Abdel Wahab. 2024. “Experimental Investigation and Constitutive Material Modelling of Low Cycle Fatigue of EUROFER97 for Fusion Applications.” *JOURNAL OF NUCLEAR MATERIALS* 588. doi:10.1016/j.jnucmat.2023.154809.
29. Fan, Kaifa, Daoxin Liu, Jing Yang, Xiaohua Zhang, Dan Liu, Mengyao Li, Junfeng Xiang, Can Wang, and Magd Abdel Wahab. 2024. “Thermal Relaxation of Compressive Residual Stresses in Surface Gradient Nanostructure of TC11 Titanium Alloy.” *JOURNAL OF ALLOYS AND COMPOUNDS* 970. doi:10.1016/j.jallcom.2023.172549.
30. Qin, Shiqiang, Jian Tang, Jiacheng Feng, Yunlai Zhou, Fei Yang, and Magd Abdel Wahab. 2024. “Modal Parameter Identification in Civil Structures via Hilbert Transform Ensemble with Improved Empirical Wavelet Transform.” *JOURNAL OF VIBRATION AND CONTROL*. doi:10.1177/10775463231166428.

31. Le, Minh Hoang, Thanh Sang To, Guy Theraulaz, Magd Abdel Wahab, and Thanh Cuong Le. 2023. "Termite Life Cycle Optimizer." *Expert Systems with Applications* 213: 119211. doi:10.1016/j.eswa.2022.119211.
32. Zhang, Yanan, and Magd Abdel Wahab. 2023. "Modelling of Single Lap Functionally Graded Adhesive Bonded Joint Using Finite Element Analysis and Machine Learning." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 41–41.
33. Li, Yifei, Cao MaoSen, and Magd Abdel Wahab. 2023. "Finite Element Model Updating with Multi-Fidelity Surrogate Model-Accelerated Improved Termite Life Cycle Optimizer." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 3–3.
34. Hamid, Usama, and Magd Abdel Wahab. 2023. "Optimization of Auxetic Honeycomb Sandwich Nanoplates for Stiffness Enhancement." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 34–34.
35. Han, Sutaο, and Magd Abdel Wahab. 2023. "A More Promising Prediction Method of Fretting Fatigue Behaviour: Combination of Deep Learning and Numerical Modelling." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 35–35.
36. He, Lian, Can Wang, Magd Abdel Wahab, and Xingang Liu. 2023. "Finite Element Analysis of Grain Boundary and Dislocation Interaction in Austenitic Stainless Steel." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 12–12.
37. Nguyen, Ngoc Lan, and Magd Abdel Wahab. 2023. "Application of Weighted Dual Criterion in Damage Assessment of Steel Structures." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 23–23.
38. Fan, Kaifa, Daoxin Liu, and Magd Abdel Wahab. 2023. "A New Finite Element Model to Predict High Temperature Rotating Bending Fretting Fatigue Life Considering Residual Stress Relaxation." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 26–26. Online.
39. Bai, Jianfu, and Magd Abdel Wahab. 2023. "An Improved Crayfish Optimization Algorithm with Opposition-Based Learning and Modified Competition Stages." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 10–10. Online.
40. Shirazi, Muhammad Irfan, and Magd Abdel Wahab. 2023. "Optimizing the Hyperparameters of 1D-CNN Networks Using Genetic Algorithms." In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 20–20. Online.
41. Imran, Muhammad, and Magd Abdel Wahab. 2023. "Developments in Numerical Modelling Techniques for Fretting Wear." In *Book of Abstracts - The 2nd*

- International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 31–31. Online.
42. Wang, Gaofang, Yuxing Peng, and Magd Abdel Wahab. 2023. “A Simulation Study on Fretting Wear Behaviour of High Strength Alloy Steel Induced by Plasma Nitriding and Post-Oxidation.” In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 14–15. Online.
43. Li, Chao, and Magd Abdel Wahab. 2023. “Fretting Wear Volume Determination Using Mathematical Method.” In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 8–8. Online.
44. Wang, Can, and Magd Abdel Wahab. 2023. “Numerical Analysis of Residual Stress Distribution in Fretting Fatigue Problem.” In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 5–6. Online.
45. Fu, Bin, Can Wang, Yujiao Ke, and Magd Abdel Wahab. 2023. “Plastic Deformation Mechanism of Fe-TiB₂ Composites Based on Crystal Plasticity Finite Element Method.” In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 17–17. Online.
46. Kocabaçak, Acar Can, and Magd Abdel Wahab. 2023. “Numerical Investigation of Process Parameter Influences on Deep Drawing Plasticity Simulation of 5182 Aluminum Sheet Material.” In *Book of Abstracts - The 2nd International Conference on Applied Mathematics, Informatics, and Computing Sciences (AMICS 2023)*, ed by. Magd Abdel Wahab, 28–28. Online.
47. Zheng, Mingpo, Yifei Liu, Can Wang, Jianfu Bai, Lihua Wang, Zhifeng Liu, and Magd Abdel Wahab. 2023. “Prediction of Contact Stress in Bolted Joints Using the Polynomial Chaos-Kriging Model.” *ENGINEERING FAILURE ANALYSIS* 154. doi:10.1016/j.engfailanal.2023.107646.
48. Le, Minh Hoang, Thanh Sang To, Samir Khatir, Magd Abdel Wahab, Amir H. Gandomi, and Thanh Cuong Le. 2023. “Augmented Deep Neural Network Architecture for Assessing Damage Severity in 3D Concrete Buildings under Temperature Fluctuations Based on K-Means Optimization.” *STRUCTURES* 57. doi:10.1016/j.istruc.2023.105278.
49. Bai, Jianfu, Yifei Li, Mingpo Zheng, Samir Khatir, Brahim Benaisa, Laith Abualigah, and Magd Abdel Wahab. 2023. “A Sinh Cosh Optimizer.” *KNOWLEDGE-BASED SYSTEMS* 282. doi:10.1016/j.knosys.2023.111081.
50. Wang, Can, Kaifa Fan, Chao Li, and Magd Abdel Wahab. 2023. “Prediction of the Effect of Shot Peening Residual Stress on Fretting Fatigue Behaviour.” *INTERNATIONAL JOURNAL OF FATIGUE* 176. doi:10.1016/j.ijfatigue.2023.107909.
51. Nguyen, Ngoc Lan, Quyet Nguyen-Huu, Thanh Bui-Tien, and Magd Abdel Wahab. 2023. “An Improved Artificial Rabbit Optimization Algorithm Using Neural Network for Damage Detection of Truss Bridge.” In *FFW 2023: The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
52. Li, Yifei, Cao Cao MaoSen, and Magd Abdel Wahab. 2023. “Structural Damage Identification Based on Stochastic Spectrum Embedding Model Combined with

- Enhanced Termite Life Cycle Optimizer.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
53. Han, Sutaο, Samir Khatir, and Magd Abdel Wahab. 2023. “A New Method to Predict Crack Initiation Location of Fretting Fatigue.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
54. Le-Xuan, T., T. Nguyen-Chi, Ngoc Hoa Tran, T. Bui-Tien, and Magd Abdel Wahab. 2023. “A New Approach to Detecting Damage in Structures That Uses Global Search Techniques and Machine Learning with Vectorized Data.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
55. Wang, Gaofang, Yuxing Peng, and Magd Abdel Wahab. 2023. “Effect of Temperature on Corrosion Damage and Bending Fatigue Life of Wire Ropes.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
56. Hamid, Usama, and Magd Abdel Wahab. 2023. “Meta-Heuristic Algorithms in Optimization for Engineering Design Problems.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
57. ZHOU, ZHIKUN, Juan Du, Xiaofei Yu, Ziguang Chen, and Magd Abdel Wahab. 2023. “Characterization of Corrosion Evolution and Mechanical Properties of T91 Steel Exposed to Static Oxygen-Saturated Liquid Lead-Bismuth Eutectic at 500 °C.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
58. Li, Chao, and Magd Abdel Wahab. 2023. “Numerical Study of Fretting Wear Considering Shot Peening Surface Modification Technique.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
59. Kahouadji, Amar, Samir Tiachacht, Mohand Slimani, Amar Behtan, Tawfiq Khatir, and Magd Abdel Wahab. 2023. “Incorporating Modal Strain Energy and Optimization Algorithms for Damage Localization and Quantification in Composite Structures.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
60. Zheng, Mingpo, Zhifeng Liu, and Magd Abdel Wahab. 2023. “A Study on the Stress Distribution and Characterization of Bolted Joint Contact Surface.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
61. Bai, Jianfu, and Magd Abdel Wahab. 2023. “An Enhanced Arithmetic Optimization Algorithm for Engineering Design Problems.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
62. Shirazi, Muhammad Irfan, Samir Khatir, and Magd Abdel Wahab. 2023. “Extracting Damage Features from Vibrational Response in a Cracked Simple Beam Using Convolutional Neural Networks.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
63. Wang, Can, and Magd Abdel Wahab. 2023. “Fretting Fatigue Crack Propagation Behavior under Out-of-Phase Loading.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
64. Fan, Kaifa, Daoxin Liu, and Magd Abdel Wahab. 2023. “Dominant Mechanism of Compressive Residual Stress and Microstructure in Improving Fretting Fatigue Resistance of TC11 Titanium Alloy.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
65. Kocabiçak, Acar Can, and Magd Abdel Wahab. 2023. “Ductile Fracture Criteria Study for Deep Drawing Process.” In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.

- 66.Imran, Muhammad, and Magd Abdel Wahab. 2023. "Fretting Wear Behavior of Steel Wires Used in Coal Mines of the Hoisting System." In *FFW 2023 : The 11th International Conference on Fracture Fatigue and Wear, Abstracts*.
- 67.Han, Sutaο, Can Wang, Samir Khatir, Yong Ling, Dagang Wang, and Magd Abdel Wahab. 2023. "A Deep Neural Network Approach Combined with Findley Parameter to Predict Fretting Fatigue Crack Initiation Lifetime." *INTERNATIONAL JOURNAL OF FATIGUE* 176. doi:10.1016/j.ijfatigue.2023.107891.
- 68.Imran, Muhammad, and Magd Abdel Wahab. 2023. "Numerical Modelling of Fretting Wear of Steel Wires." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 69.Nguyen, Ngoc Lan, Quyet Nguyen-Huu, Ngoc Hoa Tran, Thanh Bui-Tien, and Magd Abdel Wahab. 2023. "A Novel Objective Function for Damage Identification of Ill-Conditioned Beam-like Structures." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 70.Han, Sutaο, Samir Khatir, Can Wang, and Magd Abdel Wahab. 2023. "A Prediction Method of Crack Initiation Lifetime in Fretting Fatigue." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 71.Kocabařak, Acar Can, and Magd Abdel Wahab. 2023. "Investigation of Process Parameter Influences on Deep Drawing Simulation of 5182 Aluminum Sheet Using the Taguchi Method." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 72.Tran, Ngoc Hoa, Samir Khatir, Viet Anh Le, T. Bui-Tien, and Magd Abdel Wahab. 2023. "An Optimized Hybrid Metaheuristic Algorithm Is Employed for the Development of Efficient Artificial Neural Networks Used for Damage Detection in Laminated Composite Structures." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 73.Wang, Gaofang, Yuxing Peng, and Magd Abdel Wahab. 2023. "Simulation Study and Prediction Models on Stress Corrosion Characteristics of Wire in Rope under Wear-Corrosion Coupling Damage." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 74.Hamid, Usama, and Magd Abdel Wahab. 2023. "Bio-Inspired Algorithms for Engineering Problems." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 75.ZHOU, ZHIKUN, Ziguang Chen, and Magd Abdel Wahab. 2023. "Physics-Informed Neural Networks for Corrosion Analysis." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 76.Bai, Jianfu, and Magd Abdel Wahab. 2023. "An Enhanced Golden Jackal Optimization Algorithm." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 77.Zheng, Mingpo, Magd Abdel Wahab, and Zhifeng Liu. 2023. "A Study on the Influencing Factors on Natural Frequencies of Bolted Joints." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
- 78.Shirazi, Muhammad Irfan, Samir Khatir, and Magd Abdel Wahab. 2023. "Quantification of Two Separate Cracks by Retrieval of Relevant Features from Vibrational Data Using a Deep 1D CNN Network." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.

79. Wang, Can, and Magd Abdel Wahab. 2023. "Fretting Fatigue Crack Initiation Behavior in Heterogeneous Materials under Out-of-Phase Loading." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
80. Fan, Kaifa, Daoxin Liu, Kai Zhou, and Magd Abdel Wahab. 2023. "A New Method for Ultrasonic Shot Peening Simulation by Coupling Discrete Element Method and Finite Element Method." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
81. Li, Yifei, MaoSen Cao, and Magd Abdel Wahab. 2023. "Polynomial Chaos Kriging-Based Model for Predicting Initial in-Situ Stresses in Dam Sites." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
82. Li, Chao, Auezhan Amanov, and Magd Abdel Wahab. 2023. "Numerical Investigation of Fretting Fatigue Considering Residual Stress." In *NME 2023 : The 6th International Conference on Numerical Modelling in Engineering, Abstracts*.
83. Nguyen Ngoc, Hau, Thanh Cuong Le, Khuong Duy Nguyen, H. Nguyen-Xuan, and Magd Abdel Wahab. 2023. "Three-Dimensional Polyhedral Finite Element Method for the Analysis of Multi-Directional Functionally Graded Solid Shells." *COMPOSITE STRUCTURES* 305. doi:10.1016/j.compstruct.2022.116538.
84. Wang, Can, Kyvia de Fatima Resende Pereira, Dagang Wang, Aleksandr Zinovev, Dmitry Terentyev, and Magd Abdel Wahab. 2023. "Fretting Fatigue Crack Propagation under Out-of-Phase Loading Conditions Using Extended Maximum Tangential Stress Criterion." *TRIBOLOGY INTERNATIONAL* 187. doi:10.1016/j.triboint.2023.108738.
85. Li, Yifei, Cao MaoSen, Ngoc Hoa Tran, Samir Khatir, Minh Hoang Le, Thanh Sang To, Thanh Cuong Le, and Magd Abdel Wahab. 2023. "Metamodel-Assisted Hybrid Optimization Strategy for Model Updating Using Vibration Response Data." *ADVANCES IN ENGINEERING SOFTWARE* 185. doi:10.1016/j.advengsoft.2023.103515.
86. Nouredine, Fahem, Idir Belaidi, Oulad Brahim Abdelmoumin, Roberto Capozucca, Thanh Cuong Le, Samir Khatir, and Magd Abdel Wahab. 2023. "A New Methodology to Predict the Sequence of GFRP Layers Using Machine Learning and JAYA Algorithm." *MECHANICS OF MATERIALS* 184. doi:10.1016/j.mechmat.2023.104692.
87. Imran, Muhammad, Dagang Wang, and Magd Abdel Wahab. 2023. "Three-Dimensional Finite Element Simulations of Fretting Wear in Steel Wires Used in Coal Mine Hoisting System." *ADVANCES IN ENGINEERING SOFTWARE* 184. doi:10.1016/j.advengsoft.2023.103499.
88. Wang, Can, Lingxiao Li, Aleksandr Zinovev, Dmitry Terentyev, Dagang Wang, and Magd Abdel Wahab. 2023. "Estimation of Fretting Fatigue Lifetime in Heterogeneous Material Based on Microstructure Characterization and Multi-Scale Homogenization." *THEORETICAL AND APPLIED FRACTURE MECHANICS* 126. doi:10.1016/j.tafmec.2023.103949.
89. Han, Sutaο, Matthieu B. Lezaack, Grzegorz Pyka, Nelson Netto, Aude Simar, Magd Abdel Wahab, and Florent Hannard. 2023. "On the Competition between Intergranular and Transgranular Failure within 7xxx Al Alloys with Tailored Microstructures." *MATERIALS* 16 (10). doi:10.3390/ma16103770.
90. Han, Sutaο, Samir Khatir, and Magd Abdel Wahab. 2023. "A Deep Learning Approach to Predict Fretting Fatigue Crack Initiation Location." *TRIBOLOGY INTERNATIONAL* 185. doi:10.1016/j.triboint.2023.108528.

91. Chong, Hailang, Dagang Wang, Bo Wang, Xiaoman Shen, and Magd Abdel Wahab. 2023. "Gradual Deterioration Behavior of the Load-Bearing Strength of Main Cable Wires in a Suspension Bridge." *APPLIED SCIENCES-BASEL* 13 (1). doi:10.3390/app13010129.
92. Li, Chao, Ruslan Karimbaev, Auezhan Amanov, and Magd Abdel Wahab. 2023. "Finite Element Modeling of Ultrasonic Nanocrystalline Surface Modification Process of Alloy 718." In *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 2: Numerical Modelling in Mechanical and Materials Engineering, NME 2022*, ed by. Magd Abdel Wahab, 125–135. Singapore: Springer. doi:10.1007/978-981-99-0373-3_10.
93. Kocabaçak, Acar Can, and Magd Abdel Wahab. 2023. "Shear Stress and Temperature Analysis of Inconel 718 during the Backward Flow Forming Process Using the Finite Element Method." In *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 2: Numerical Modelling in Mechanical and Materials Engineering, NME 2022*, ed by. Magd Abdel Wahab, 103–112. Singapore: Springer. doi:10.1007/978-981-99-0373-3_8.
94. Abdel Wahab, Magd. 2023. "Preface 5th International Conference on Numerical Modelling in Engineering." Ed by. Magd Abdel Wahab.
95. Abdel Wahab, Magd, ed. 2023. "Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 2: Numerical Modelling in Mechanical and Materials Engineering, NME 2022." Singapore: Springer. doi:10.1007/978-981-99-0373-3.
96. Bhatti, Nadeem Ali, Kyvia de Fatima Resende Pereira, and Magd Abdel Wahab. 2023. "Advanced Numerical Modeling Techniques for Crack Nucleation and Propagation." In *Fretting Wear and Fretting Fatigue: Fundamental Principles and Applications*, ed by. Tomasz Liskiewicz and Daniele Dini, 383–406. Elsevier. doi:10.1016/b978-0-12-824096-0.00017-2.
97. Ghandourah, Emad, Samir Khatir, Essam Mohammed Banoqitah, Abdulsalam Mohammed Alhawsawi, Brahim Benaissa, and Magd Abdel Wahab. 2023. "Enhanced ANN Predictive Model for Composite Pipes Subjected to Low-Velocity Impact Loads." *BUILDINGS* 13 (4). doi:10.3390/buildings13040973.
98. Wang, Can, Wenbin Zhang, Chao Li, Dagang Wang, and Magd Abdel Wahab. 2023. "Two-Scale Analysis of Fretting Fatigue Crack Initiation in Heterogeneous Materials Using Continuum Damage Mechanics." *INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES* 269. doi:10.1016/j.ijsolstr.2023.112215.
99. Li, Yifei, Cao MaoSen, Ngoc Hoa Tran, Samir Khatir, and Magd Abdel Wahab. 2023. "Multi-Parameter Identification of Concrete Dam Using Polynomial Chaos Expansion and Slime Mould Algorithm." *COMPUTERS & STRUCTURES* 281. doi:10.1016/j.compstruc.2023.107018.
100. Fan, Kaifa, Daoxin Liu, Yanjie Liu, Junnan Wu, Hailan Shi, Xiaohua Zhang, Kai Zhou, Junfeng Xiang, and Magd Abdel Wahab. 2023. "Competitive Effect of Residual Stress and Surface Roughness on the Fatigue Life of Shot Peened S42200 Steel at Room and Elevated Temperature." *TRIBOLOGY INTERNATIONAL* 183. doi:10.1016/j.triboint.2023.108422.
101. Nghia-Nguyen, Trong, Mamoru Kikumoto, H. Nguyen-Xuan, Samir Khatir, Magd Abdel Wahab, and Thanh Cuong Le. 2023. "Optimization of Artificial Neural Networks Architecture for Predicting Compression Parameters Using Piezocone

- Penetration Test.” *EXPERT SYSTEMS WITH APPLICATIONS* 223. doi:10.1016/j.eswa.2023.119832.
102. Nguyen, Ngoc Lan, Samir Khatir, Huu-Quyet Nguyen, Tran Hieu Nguyen, Dung Bui-Ngoc, Magd Abdel Wahab, and Thanh Bui-Tien. 2023. “Application of Slime Mould Optimization Algorithm on Structural Damage Identification of Suspension Footbridge.” In *Recent Advances in Structural Health Monitoring and Engineering Structures : Select Proceedings of SHM and ES 2022*, ed by. Ravipudi Venkata Rao, Samir Khatir, and Thanh Cuong-Le, 405–415. Springer. doi:10.1007/978-981-19-4835-0_35.
103. Han, Sutaο, Samir Khatir, Can Wang, and Magd Abdel Wahab. 2023. “An Improved Artificial Neural Network for the Direct Prediction of Fretting Fatigue Crack Initiation Lifetime.” *TRIBOLOGY INTERNATIONAL* 183. doi:10.1016/j.triboint.2023.108411.
104. Tran, Ngoc Hoa, T. Le-Xuan, Samir Khatir, G. De Roeck, T. Bui-Tien, and Magd Abdel Wahab. 2023. “A Promising Approach Using Fibonacci Sequence-Based Optimization Algorithms and Advanced Computing.” *SCIENTIFIC REPORTS* 13 (1). doi:10.1038/s41598-023-28367-9.
105. Li, Yifei, Minh Hoang Le, Samir Khatir, Thanh Sang To, Thanh Cuong Le, Cao MaoSen, and Magd Abdel Wahab. 2023. “Structure Damage Identification in Dams Using Sparse Polynomial Chaos Expansion Combined with Hybrid K-Means Clustering Optimizer and Genetic Algorithm.” *ENGINEERING STRUCTURES* 283. doi:10.1016/j.engstruct.2023.115891.
106. Li, Zai-Wei, Yun-Lai Zhou, Xiao-Zhou Liu, and Magd Abdel Wahab. 2023. “Service Reliability Assessment of Ballastless Track in High Speed Railway via Improved Response Surface Method.” *RELIABILITY ENGINEERING & SYSTEM SAFETY* 234. doi:10.1016/j.ress.2023.109180.
107. Ghannadi, Parsa, Samir Khatir, Seyed Sina Kourehli, Andy Nguyen, Djilali Boutchicha, and Magd Abdel Wahab. 2023. “Finite Element Model Updating and Damage Identification Using Semi-Rigidly Connected Frame Element and Optimization Procedure: An Experimental Validation.” *STRUCTURES* 50: 1173–1190. doi:10.1016/j.istruc.2023.02.008.
108. Liu, Yifei, Cao MaoSen, and Magd Abdel Wahab. 2023. “Data-Driven Kriging Model for Predicting Concrete Compressive Strength and Parameter Correlation Analysis.” In *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2022*, ed by. Magd Abdel Wahab, 311:119–128. Singapore: Springer. doi:10.1007/978-981-19-8429-7_11.
109. To, Thanh Sang, Minh Hoang Le, Magd Abdel Wahab, and Thanh Cuong Le. 2023. “Damage Detection in a 3D Truss Structure Using Natural Frequencies and Metaheuristic Algorithms.” In *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2022*, ed by. Magd Abdel Wahab, 311:93–100. Singapore: Springer. doi:10.1007/978-981-19-8429-7_9.
110. To, Thanh Sang, Minh Hoang Le, Quoc Thien Huynh, Magd Abdel Wahab, and Thanh Cuong Le. 2023. “A Nonlinear Approach to Investigate the Effect of Sheet Pile Toe’s Embedded Length on the Lateral Displacement Derived from Soft Clay-Deep Excavation.” In *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering,*

- NME* 2022, ed by. Magd Abdel Wahab, 311:83–91. Singapore: Springer. doi:10.1007/978-981-19-8429-7_8.
111. Tran, Ngoc Hoa, T. Le-Xuan, N. Hoang-Thanh, L. Dao-Dac, T. Bui-Tien, and Magd Abdel Wahab. 2023. “A Hybrid Optimization Algorithm for Structural Health Monitoring.” In *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2022*, ed by. Magd Abdel Wahab, 311:43–52. Singapore: Springer. doi:10.1007/978-981-19-8429-7_4.
112. Ho, Viet Long, Thanh Bui-Tien, and Magd Abdel Wahab. 2023. “Application of Gorilla Troops’ Social Intelligence in Damage Detection for a Girder Bridge.” In *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2022*, ed by. Magd Abdel Wahab, 311:11–30. Singapore: Springer. doi:10.1007/978-981-19-8429-7_2.
113. Le, Minh Hoang, Thanh Sang To, Magd Abdel Wahab, and Thanh Cuong Le. 2023. “K-Means Optimizer: An Efficient Optimization Algorithm for Predicting the Uncertain Material Parameters in Real Structures.” In *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2022*, ed by. Magd Abdel Wahab, 311:71–81. Singapore: Springer. doi:10.1007/978-981-19-8429-7_7.
114. Abdel Wahab, Magd. 2023. “Preface.” Ed by. Magd Abdel Wahab. *Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2022*. Springer.
115. Abdel Wahab, Magd, ed. 2023. “Proceedings of the 5th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2022.” Singapore: Springer. doi:10.1007/978-981-19-8429-7.
116. Wang, Can, Dagang Wang, and Magd Abdel Wahab. 2023. “Fretting Fatigue Lifetime Estimation for Heterogeneous Material Using Critical Distance with Mesh Control.” *ENGINEERING FRACTURE MECHANICS* 281. doi:10.1016/j.engfracmech.2023.109092.
117. Li, Chao, Ruslan Karimbaev, Shengjie Wang, Auezhan Amanov, Dagang Wang, and Magd Abdel Wahab. 2023. “Fretting Wear Behavior of Inconel 718 Alloy Manufactured by DED and Treated by UNSM.” *SCIENTIFIC REPORTS* 13 (1). doi:10.1038/s41598-023-28128-8.
118. Le, Minh Hoang, Thanh Sang To, Samir Khatir, Magd Abdel Wahab, and Thanh Cuong Le. 2023. “Damage Identification in High-Rise Concrete Structures Using a Bio-Inspired Meta-Heuristic Optimization Algorithm.” *ADVANCES IN ENGINEERING SOFTWARE* 176. doi:10.1016/j.advengsoft.2022.103399.
119. Amanov, Auezhan, Ruslan Karimbaev, Chao Li, and Magd Abdel Wahab. 2023. “Effect of Surface Modification Technology on Mechanical Properties and Dry Fretting Wear Behavior of Inconel 718 Alloy Fabricated by Laser Powder-Based Direct Energy Deposition.” *SURFACE & COATINGS TECHNOLOGY* 454. doi:10.1016/j.surfcoat.2022.129175.
120. Dang, Bao-Loi, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2023. “An Effective Approach for VARANS-VOF Modelling Interactions of Wave and Perforated Breakwater Using Gradient Boosting Decision Tree Algorithm.” *OCEAN ENGINEERING* 268. doi:10.1016/j.oceaneng.2022.113398.

121. Nguyen, Huong Duong, and Magd Abdel Wahab. 2023. "Damage Detection in Slab Structures Based on Two-Dimensional Curvature Mode Shape Method and Faster R-CNN." *ADVANCES IN ENGINEERING SOFTWARE* 176. doi:10.1016/j.advengsoft.2022.103371.
122. Saadatmorad, Morteza, Ramazan-Ali Jafari-Talookolaei, Mohammad-Hadi Pashaei, Samir Khatir, and Magd Abdel Wahab. 2023. "Delamination Detection of Rectangular Laminated Composite Plates by Combining the One-Dimensional and Two-Dimensional Discrete Wavelet Transforms." In *Proceedings of the 10th International Conference on Fracture Fatigue and Wear, FFW 2022*, 41–51. Springer. doi:10.1007/978-981-19-7808-1_5.
123. Zheng, Mingpo, Zhifeng Liu, and Magd Abdel Wahab. 2023. "Finite Element Failure Analysis of Single-Lap Bolted Connection under Impact Load." In *Proceedings of the 10th International Conference on Fracture Fatigue and Wear, FFW 2022*, 11–19. Singapore: Springer. doi:10.1007/978-981-19-7808-1_2.
124. Seguini, Meriem, Samir Khatir, Djamel Nedjar, and Magd Abdel Wahab. 2023. "Machine Learning for Predicting Pipeline Displacements Based on Soil Rigidity." In *Proceedings of the 10th International Conference on Fracture Fatigue and Wear, FFW 2022*, 29–40. Singapore: Springer. doi:10.1007/978-981-19-7808-1_4.
125. Nguyen, Ngoc Lan, Samir Khatir, Ngoc Hoa Tran, Huu-Quyet Nguyen, Long Ngoc-Nguyen, Thanh Bui-Tien, and Magd Abdel Wahab. 2023. "A Feasibility Review of Novel Avian-Based Optimization Algorithms for Damage Detection in a Truss Bridge." In *Proceedings of the 10th International Conference on Fracture Fatigue and Wear, FFW 2022*, ed by. Magd Abdel Wahab, 53–63. Springer. doi:10.1007/978-981-19-7808-1_6.
126. Zahran, Hussein, Aleksandr Zinovev, Dmitry Terentyev, and Magd Abdel Wahab. 2023. "Modeling Crack Initiation in Low Cycle Fatigue : A Review." In *Proceedings of the 10th International Conference on Fracture Fatigue and Wear, FFW 2022*, ed by. Magd Abdel Wahab, 79–89. Singapore: Springer. doi:10.1007/978-981-19-7808-1_8.
127. Wang, Can, and Magd Abdel Wahab. 2023. "Investigating the Effect of the Characteristics of Inclusions and Micro-Voids on Fretting Fatigue Initiation Lifetime with Two-Scale Analysis Approach." In *Proceedings of the 10th International Conference on Fracture Fatigue and Wear, FFW 2022*, ed by. Magd Abdel Wahab, 91–102. Springer. doi:10.1007/978-981-19-7808-1_9.
128. Abdel Wahab, Magd. 2023. "Preface of the 10th International Conference on Fracture Fatigue and Wear." *Proceedings of the 10th International Conference on Fracture Fatigue and Wear, FFW 2022*. Singapore: Springer.
129. Abdel Wahab, Magd, ed. 2023. "Proceedings of the 10th International Conference on Fracture Fatigue and Wear, FFW 2022." Springer.
130. Zara, Abdeldjebar, Idir Belaidi, Samir Khatir, Abdelmoumin Oulad Brahim, Djilali Boutchicha, and Magd Abdel Wahab. 2023. "Damage Detection in GFRP Composite Structures by Improved Artificial Neural Network Using New Optimization Techniques." *COMPOSITE STRUCTURES* 305. doi:10.1016/j.compstruct.2022.116475.
131. Zheng, Mingpo, Zhifeng Liu, Magd Abdel Wahab, Xing Yan, Wentao Chen, and Chao Li. 2023. "Degradation and Failure Analysis of Bolted Joints under Transverse Loading." *TRIBOLOGY INTERNATIONAL* 179. doi:10.1016/j.triboint.2022.108140.

- 132.To, Thanh Sang, Minh Hoang Le, Magd Abdel Wahab, and Thanh Cuong Le. 2023. "A New Metaheuristic Algorithm : Shrimp and Goby Association Search Algorithm and Its Application for Damage Identification in Large-Scale and Complex Structures." *ADVANCES IN ENGINEERING SOFTWARE* 176. doi:10.1016/j.advengsoft.2022.103363.
- 133.Oulad Brahim, Abdelmoumin, Idir Belaidi, Samir Khatir, Thanh Cuong Le, Seyedali Mirjalili, and Magd Abdel Wahab. 2023. "Strength Prediction of a Steel Pipe Having a Hemi-Ellipsoidal Corrosion Defect Repaired by GFRP Composite Patch Using Artificial Neural Network." *COMPOSITE STRUCTURES* 304 (2). doi:10.1016/j.compstruct.2022.116299.
- 134.Shirazi, Muhammad Irfan, Samir Khatir, Brahim Benaissa, Seyedali Mirjalili, and Magd Abdel Wahab. 2023. "Damage Assessment in Laminated Composite Plates Using Modal Strain Energy and YUKI-ANN Algorithm." *COMPOSITE STRUCTURES* 303. doi:10.1016/j.compstruct.2022.116272.
- 135.Ling, Yong, Junyan Ni, Joachim Antonissen, Haithem Ben Hamouda, John Vande Voorde, and Magd Abdel Wahab. 2023. "Numerical Prediction of Microstructure and Hardness for Low Carbon Steel Wire Arc Additive Manufacturing Components." *SIMULATION MODELLING PRACTICE AND THEORY* 122. doi:10.1016/j.simpat.2022.102664.
- 136.Tran, Van-Thien, Trung-Kien Nguyen, H. Nguyen-Xuan, and Magd Abdel Wahab. 2023. "Vibration and Buckling Optimization of Functionally Graded Porous Microplates Using BCMO-ANN Algorithm." *THIN-WALLED STRUCTURES* 182 (Part B). doi:10.1016/j.tws.2022.110267.
- 137.Le, Minh Hoang, Samir Khatir, R. Venkata Rao, Magd Abdel Wahab, and Thanh Cuong Le. 2023. "A Variable Velocity Strategy Particle Swarm Optimization Algorithm (VVS-PSO) for Damage Assessment in Structures." *ENGINEERING WITH COMPUTERS* 39 (2): 1055–1084. doi:10.1007/s00366-021-01451-2.
- 138.Nguyen, Khuong Duy, Thanh Cuong Le, H. Nguyen-Xuan, and Magd Abdel Wahab. 2023. "A Hybrid Phase-Field Isogeometric Analysis to Crack Propagation in Porous Functionally Graded Structures." *ENGINEERING WITH COMPUTERS* 39 (1): 129–149. doi:10.1007/s00366-021-01518-0.
- 139.Rudawska, Anna, Magd Abdel Wahab, Miroslav Müller, and Dana Stančková. 2022. "Mechanical Properties and Leak-Tightness of Polymeric Pipe Adhesive Joints." *APPLIED MECHANICS (BASEL)* 3 (1): 64–77. doi:10.3390/applmech3010004.
- 140.Le, Thanh Cuong, Minh Hoang Le, Thanh Sang To, Samir Khatir, Seyedali Mirjalili, and Magd Abdel Wahab. 2022. "A Novel Version of Grey Wolf Optimizer Based on a Balance Function and Its Application for Hyperparameters Optimization in Deep Neural Network (DNN) for Structural Damage Identification." *ENGINEERING FAILURE ANALYSIS* 142. doi:10.1016/j.engfailanal.2022.106829.
- 141.Abdel Wahab, Magd, ed. 2022. "Special Issue 'Exclusive Papers of the Editorial Board Members (EBMs) of Applied Mechanics (Volume II).'" *APPLIED MECHANICS (BASEL)*.
- 142.Nguyen, Ngoc Lan, Ngoc Hoa Tran, Samir Khatir, Thang Le-Xuan, Quyet Huu-Nguyen, G. De Roeck, Thanh Bui-Tien, and Magd Abdel Wahab. 2022. "Damage Assessment of Suspension Footbridge Using Vibration Measurement Data Combined with a Hybrid Bee-Genetic Algorithm." *SCIENTIFIC REPORTS* 12 (1). doi:10.1038/s41598-022-24445-6.

143. Fahem, Nouredine, Idir Belaidi, Abdelmoumin Oulad Brahim, Mohammad Noori, Samir Khatir, and Magd Abdel Wahab. 2022. "Prediction of Resisting Force and Tensile Load Reduction in GFRP Composite Materials Using Artificial Neural Network-Enhanced Jaya Algorithm." *COMPOSITE STRUCTURES* 304 (Part 1). doi:10.1016/j.compstruct.2022.116326.
144. Oulad Brahim, Abdelmoumin, Idir Belaidi, Nouredine Fahem, Samir Khatir, Seyedali Mirjalili, and Magd Abdel Wahab. 2022. "Prediction of the Peak Load and Crack Initiation Energy of Dynamic Brittle Fracture in X70 Steel Pipes Using an Improved Artificial Neural Network and Extended Finite Element Method." *THEORETICAL AND APPLIED FRACTURE MECHANICS* 122. doi:10.1016/j.tafmec.2022.103627.
145. Mousavi, Mohsen, Amir H. Gandomi, Magd Abdel Wahab, and Branko Glisic. 2022. "Monitoring Onsite-temperature Prediction Error for Condition Monitoring of Civil Infrastructures." *STRUCTURAL CONTROL & HEALTH MONITORING* 29 (12). doi:10.1002/stc.3112.
146. Kocabiçak, Acar Can, and Magd Abdel Wahab. 2022. "Multiphysics Numerical Modelling of Backward Flow Forming Process of AISI 5140 Steel." *SIMULATION MODELLING PRACTICE AND THEORY* 121. doi:10.1016/j.simpat.2022.102656.
147. Tran, Ngoc Hoa, Samir Khatir, T. Le-Xuan, H. Tran-Viet, G. De Roeck, T. Bui-Tien, and Magd Abdel Wahab. 2022. "Damage Assessment in Structures Using Artificial Neural Network Working and a Hybrid Stochastic Optimization." *SCIENTIFIC REPORTS* 12 (1). doi:10.1038/s41598-022-09126-8.
148. Le, Minh Hoang, Thanh Sang To, Magd Abdel Wahab, and Thanh Cuong Le. 2022. "A New Metaheuristic Optimization Based on K-Means Clustering Algorithm and Its Application to Structural Damage Identification." *KNOWLEDGE-BASED SYSTEMS* 251. doi:10.1016/j.knosys.2022.109189.
149. Pitta, Siddharth, Jose Rojas, Francesc Roure, Daniel Crespo, and Magd Abdel Wahab. 2022. "An Experimental and Numerical Investigation on Fatigue of Composite and Metal Aircraft Structures." *STEEL AND COMPOSITE STRUCTURES* 43 (1): 19–30. doi:10.12989/scs.2022.43.1.019.
150. To, Thanh Sang, Minh Hoang Le, Seyedali Mirjalili, Magd Abdel Wahab, and Thanh Cuong Le. 2022. "A New Movement Strategy of Grey Wolf Optimizer for Optimization Problems and Structural Damage Identification." *ADVANCES IN ENGINEERING SOFTWARE* 173. doi:10.1016/j.advengsoft.2022.103276.
151. Dang, Bao-Loi, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2022. "An Effective Approach to Calibrate Numerical Modelling of Wave Interaction with Thin Perforated Plate Using Data-Driven Method." In *NME 2022, the 5th International Conference on Numerical Modelling in Engineering, Abstracts*.
152. Fan, Kaifa, and Magd Abdel Wahab. 2022. "Finite Element Model for FF Considering CRS Relaxation under High Temperature." In *NME 2022, the 5th International Conference on Numerical Modelling in Engineering, Abstracts*.
153. Zhou, Yunlai, Youjie Cao, Ning Wang, and Magd Abdel Wahab. 2022. "Crack Detection in L-Shaped Aluminum Plate via Electromagnetic Ultrasonic Measurements." *THEORETICAL AND APPLIED FRACTURE MECHANICS* 121. doi:10.1016/j.tafmec.2022.103534.
154. Wang, Can, Yifei Li, Ngoc Hoa Tran, Dagang Wang, Samir Khatir, and Magd Abdel Wahab. 2022. "Artificial Neural Network Combined with Damage Parameters to

- Predict Fretting Fatigue Crack Initiation Lifetime.” *TRIBOLOGY INTERNATIONAL* 175. doi:10.1016/j.triboint.2022.107854.
155. Zhao, Qi, Magd Abdel Wahab, Yong Ling, and Zhiyi Liu. 2022. “Texture Controlled Fatigue Crack Propagation of AA2024 Alloy Using Crystal Plasticity Combined with Cyclic Cohesive Zone Model and Cycle Jump Technique.” In *FFW 2022, the 10th International Conference on Fracture Fatigue and Wear (FFW 2022), Abstracts*.
156. Zheng, Mingpo, Yifei Li, Chao Li, Can Wang, and Magd Abdel Wahab. 2022. “Stress State Evolution Analysis of Bolted Connection under Transverse Impact Load.” In *FFW 2022, the 10th International Conference on Fracture Fatigue and Wear (FFW 2022), Abstracts*.
157. Ho, Viet Long, Bui-Tien Thanh, and Magd Abdel Wahab. 2022. “Structural Damage Detection in a Girder Bridge.” In *FFW 2022, the 10th International Conference on Fracture Fatigue and Wear (FFW 2022), Abstracts*.
158. Kocabiçak, Acar Can, Senai Yalçınkaya, Yusuf Şahin, and Magd Abdel Wahab. 2022. “Tool Wear Investigation during the Drilling Operation of the AISI D2 Cold Work Steel.” In *FFW 2022, the 10th International Conference on Fracture Fatigue and Wear (FFW 2022), Abstracts*.
159. Han, Sutao, Samir Khatir, and Magd Abdel Wahab. 2022. “Application of Machine Learning for Fatigue and Fretting Fatigue.” In *FFW 2022, the 10th International Conference on Fracture Fatigue and Wear (FFW 2022), Abstracts*.
160. Le, Minh Hoang, Thanh Sang To, Magd Abdel Wahab, and Thanh Cuong Le. 2022. “Structural Damage Identification in Thin-Shell Structures Using a New Technique Combining Finite Element Model Updating and Improved Cuckoo Search Algorithm.” *ADVANCES IN ENGINEERING SOFTWARE* 173. doi:10.1016/j.advengsoft.2022.103206.
161. Saadatmorad, Morteza, Ramazan-Ali Jafari Talookolaei, Mohammad-Hadi Pashaei, Samir Khatir, and Magd Abdel Wahab. 2022. “Pearson Correlation and Discrete Wavelet Transform for Crack Identification in Steel Beams.” *MATHEMATICS* 10 (15). doi:10.3390/math10152689.
162. To, Thanh Sang, Minh Hoang Le, Magd Abdel Wahab, and Thanh Cuong-Le. 2022. “An Efficient Planet Optimization Algorithm for Solving Engineering Problems.” *SCIENTIFIC REPORTS* 12. doi:10.1038/s41598-022-12030-w.
163. Khatir, Samir, Samir Tiachacht, Thanh Cuong Le, Ngoc Hoa Tran, Seyedali Mirjalili, and Magd Abdel Wahab. 2022. “A Robust FRF Damage Indicator Combined with Optimization Techniques for Damage Assessment in Complex Truss Structures.” *CASE STUDIES IN CONSTRUCTION MATERIALS* 17. doi:10.1016/j.cscm.2022.e01197.
164. Zhao, Qi, Magd Abdel Wahab, Yong Ling, and Zhiyi Liu. 2022. “Fatigue Crack Propagation across Grain Boundary of Al-Cu-Mg Bicrystal Based on Crystal Plasticity XFEM and Cohesive Zone Model.” *JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY* 126: 275–287. doi:10.1016/j.jmst.2022.03.020.
165. Wang, Can, Dagang Wang, and Magd Abdel Wahab. 2022. “Fretting Fatigue Crack Initiation Behaviour in Heterogeneous Materials under Out-of-Phase Loading.” *TRIBOLOGY INTERNATIONAL* 171. doi:10.1016/j.triboint.2022.107571.
166. Khatir, T., M. Bouchetara, K. Derrar, M. Djafri, Samir Khatir, and Magd Abdel Wahab. 2022. “Thermomechanical Behavior of Brake Drums under Extreme Braking Conditions.” *CMC-COMPUTERS MATERIALS & CONTINUA* 72 (2): 2259–2273. doi:10.32604/cmc.2022.020879.

167. Wang, Can, Chao Li, Yong Ling, and Magd Abdel Wahab. 2022. "Investigation on Fretting Fatigue Crack Initiation in Heterogenous Materials Using a Hybrid of Multiscale Homogenization and Direct Numerical Simulation." *TRIBOLOGY INTERNATIONAL* 169. doi:10.1016/j.triboint.2022.107470.
168. Wang, Shengjie, Tongyan Yue, Dagang Wang, and Magd Abdel Wahab. 2022. "Effect of Wear Debris on Fretting Fatigue Crack Initiation." *FRICITION* 10 (6): 927–943. doi:10.1007/s40544-021-0543-z.
169. Dang, Bao-Loi, Vuong Nguyen-Van, Phuong Tran, Magd Abdel Wahab, Jaehong Lee, Klaus Hackl, and H. Nguyen-Xuan. 2022. "Mechanical and Hydrodynamic Characteristics of Emerged Porous Gyroid Breakwaters Based on Triply Periodic Minimal Surfaces." *OCEAN ENGINEERING* 254. doi:10.1016/j.oceaneng.2022.111392.
170. Rudawska, Anna, Magd Abdel Wahab, and Miroslav Müller. 2022. "Strength of Epoxy-Bonded Aluminium Alloy Joints after Sandblasting." *ADVANCES IN SCIENCE AND TECHNOLOGY-RESEARCH JOURNAL* 16 (2): 262–279. doi:10.12913/22998624/147524.
171. Abdel Wahab, Magd, ed. 2022. "Proceedings of the 4th International Conference on Numerical Modelling in Engineering, Volume 2, Numerical Modelling in Mechanical and Materials Engineering, NME 2021." Singapore: Springer. doi:10.1007/978-981-16-8806-5.
172. Abdel Wahab, Magd. 2022. "Preface: Proceedings of the 4th International Conference on Numerical Modelling in Engineering, Volume 2, Numerical Modelling in Mechanical and Materials Engineering, NME 2021." Ed by. Magd Abdel Wahab. *PROCEEDINGS OF THE 4TH INTERNATIONAL CONFERENCE ON NUMERICAL MODELLING IN ENGINEERING: NUMERICAL MODELLING IN MECHANICAL AND MATERIALS ENGINEERING, VOL 2, NME 2021*. Singapore: Springer.
173. Nguyen, Khuong Duy, H. Nguyen-Xuan, and Magd Abdel Wahab. 2022. "Crack Propagations in Functionally Graded Material Using a Phase-Field NURBS-Based Finite Element Approach." In *PROCEEDINGS OF THE 4TH INTERNATIONAL CONFERENCE ON NUMERICAL MODELLING IN ENGINEERING: NUMERICAL MODELLING IN MECHANICAL AND MATERIALS ENGINEERING, VOL 2, NME 2021*, ed by. Magd Abdel Wahab, 159–176. Singapore: Springer. doi:10.1007/978-981-16-8806-5_11.
174. Nguyen Ngoc, Hau, H. Nguyen-Xuan, and Magd Abdel Wahab. 2022. "Dynamic Analysis of 3D Solid Structure Using a Consecutive-Interpolation over Polyhedral Element Mesh." In *PROCEEDINGS OF THE 4TH INTERNATIONAL CONFERENCE ON NUMERICAL MODELLING IN ENGINEERING: NUMERICAL MODELLING IN MECHANICAL AND MATERIALS ENGINEERING, VOL 2, NME 2021*, ed by. Magd Abdel Wahab, 1–8. Singapore: Springer. doi:10.1007/978-981-16-8806-5_1.
175. Le, Thanh Cuong, Minh Hoang Le, A. J. M. Ferreira, and Magd Abdel Wahab. 2022. "Small Size-Effect Isogeometric Analysis for Linear and Nonlinear Responses of Porous Metal Foam Microplate." *COMPOSITE STRUCTURES* 285. doi:10.1016/j.compstruct.2022.115189.
176. Wang, Dagang, Huilong Zhu, Wei Xu, Jihong Ye, Dekun Zhang, and Magd Abdel Wahab. 2022. "Contact and Slip Behaviors of Main Cable of the Long-Span Suspension Bridge." *ENGINEERING FAILURE ANALYSIS* 136. doi:10.1016/j.engfailanal.2022.106232.

177. Chen, Chuanqing, Magd Abdel Wahab, Qiao Wang, and Xiaochun Yin. 2022. "Unloading of Low Velocity Impact between Elastic and Elastic-Plastic Bodies." In *Proceedings of the 9th International Conference on Fracture, Fatigue and Wear, FFW 2021*, ed by. Magd Abdel Wahab, 47–66. Singapore: Springer. doi:10.1007/978-981-16-8810-2_5.
178. Rudawska, Anna, Magd Abdel Wahab, Izabela Miturska, Jakub Szabelski, Elżbieta Doluk, and Dana Stančeková. 2022. "Impact of Mechanical Treatment on Strength of Steel Adhesive Joints." In *Proceedings of the 9th International Conference on Fracture, Fatigue and Wear, FFW 2021*, ed by. Magd Abdel Wahab, 109–122. Singapore: Springer. doi:10.1007/978-981-16-8810-2_9.
179. Abdel Wahab, Magd. 2022. "Preface." Ed by. Magd Abdel Wahab. *Proceedings of the 9th International Conference on Fracture, Fatigue and Wear, FFW 2021*. Singapore: Springer.
180. Abdel Wahab, Magd, ed. 2022. "Proceedings of the 9th International Conference on Fracture, Fatigue and Wear, FFW 2021." Singapore: Springer. doi:10.1007/978-981-16-8810-2.
181. Dang, Bao-Loi, Quoc Viet Dang, Magd Abdel Wahab, and H. Nguyen-Xuan. 2022. "Prediction of Wave Overtopping Discharge on Coastal Protection Structure Using SPH-Based and Neural Networks Method." In *Proceedings of the 4th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2021*, ed by. Magd Abdel Wahab, 217:71–79. Singapore: Springer. doi:10.1007/978-981-16-8185-1_6.
182. Abdel Wahab, Magd. 2022. "Preface." Ed by. Magd Abdel Wahab. *Proceedings of the 4th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2021*. Singapore: Springer.
183. Abdel Wahab, Magd, ed. 2022. "Proceedings of the 4th International Conference on Numerical Modelling in Engineering: Volume 1: Numerical Modelling in Civil Engineering, NME 2021." Singapore: Springer. doi:10.1007/978-981-16-8185-1.
184. Le, Thanh Cuong, Khuong Duy Nguyen, Minh Hoang Le, Thanh Sang To, Phuong Phan-Vu, and Magd Abdel Wahab. 2022. "Nonlocal Strain Gradient IGA Numerical Solution for Static Bending, Free Vibration and Buckling of Sigmoid FG Sandwich Nanoplate." *PHYSICA B-CONDENSED MATTER* 631. doi:10.1016/j.physb.2022.413726.
185. Behtani, Amar, Samir Tiachacht, Tawfiq Khatir, Samir Khatir, Magd Abdel Wahab, Brahim Benaissa, and Mohand Slimani. 2022. "Residual Force Method for Damage Identification in a Laminated Composite Plate with Different Boundary Conditions." *FRATTURA ED INTEGRITA STRUTTURALE-FRACTURE AND STRUCTURAL INTEGRITY* 16 (59): 35–48. doi:10.3221/igf-esis.59.03.
186. Seguini, Meriem, Nedjar Djamel, Boutchicha Djilali, Samir Khatir, and Magd Abdel Wahab. 2022. "Crack Prediction in Beam-like Structure Using ANN Based on Frequency Analysis." *FRATTURA ED INTEGRITA STRUTTURALE-FRACTURE AND STRUCTURAL INTEGRITY* 16 (59): 18–34. doi:10.3221/igf-esis.59.02.
187. To, Thanh Sang, Minh Hoang Le, Tran-Thanh Danh, Samir Khatir, Magd Abdel Wahab, and Thanh Cuong Le. 2022. "Combination of Intermittent Search Strategy and an Improve Particle Swarm Optimization Algorithm (IPSO) for Model Updating." *FRATTURA ED INTEGRITA STRUTTURALE-FRACTURE AND STRUCTURAL INTEGRITY* 16 (59): 141–152. doi:10.3221/igf-esis.59.11.

188. Al Thobiani, Faisal, Samir Khatir, Brahim Benaissa, Emad Ghandourah, Seyedali Mirjalili, and Magd Abdel Wahab. 2022. "A Hybrid PSO and Grey Wolf Optimization Algorithm for Static and Dynamic Crack Identification." *THEORETICAL AND APPLIED FRACTURE MECHANICS* 118. doi:10.1016/j.tafmec.2021.103213.
189. Nguyen, Khuong Duy, Thanh Cuong Le, Frank Vogel, H. Nguyen-Xuan, and Magd Abdel Wahab. 2022. "Crack Propagation in Quasi-Brittle Materials by Fourth-Order Phase-Field Cohesive Zone Model." *THEORETICAL AND APPLIED FRACTURE MECHANICS* 118. doi:10.1016/j.tafmec.2021.103236.
190. Wang, Dagang, Bo Wang, Wenli Gao, Jihong Ye, and Magd Abdel Wahab. 2022. "Dynamic Contact Behaviors of Saddle Materials for Suspension Bridge." *ENGINEERING FAILURE ANALYSIS* 134. doi:10.1016/j.engfailanal.2022.106031.
191. Ouladbrahim, A., I. Belaidi, Samir Khatir, E. Magagnini, R. Capozucca, and Magd Abdel Wahab. 2022. "Experimental Crack Identification of API X70 Steel Pipeline Using Improved Artificial Neural Networks Based on Whale Optimization Algorithm." *MECHANICS OF MATERIALS* 166. doi:10.1016/j.mechmat.2021.104200.
192. Fan, Kaifa, Daoxin Liu, Xiaohua Zhang, Dan Liu, Weidong Zhao, Jing Yang, Amin Ma, Mengyao Li, Yanan Qi, Junfeng Xiang, and Magd Abdel Wahab. 2022. "Effect of Residual Stress Induced by Ultrasonic Surface Rolling on Fretting Fatigue Behaviors of Ti-6Al-4V Alloy." *ENGINEERING FRACTURE MECHANICS* 259. doi:10.1016/j.engfracmech.2021.108150.
193. Khatir, Samir, Samir Tiachacht, Brahim Benaissa, Thanh Cuong Le, Roberto Capozucca, and Magd Abdel Wahab. 2022. "Damage Identification in Frame Structure Based on Inverse Analysis." In *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*, ed by. Magd Abdel Wahab, 204:197–211. Springer. doi:10.1007/978-981-16-7216-3_15.
194. Saadatmorad, Morteza, Ramazan-Ali Jafari-Talookolaei, Mohammad-Hadi Pashaei, Samir Khatir, and Magd Abdel Wahab. 2022. "Adaptive Network-Based Fuzzy Inference for Damage Detection in Rectangular Laminated Composite Plates Using Vibrational Data." In *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*, ed by. Magd Abdel Wahab, 204:179–196. Springer. doi:10.1007/978-981-16-7216-3_14.
195. Saadatmorad, Morteza, Ramazan-Ali Jafari-Talookolaei, Mohammad-Hadi Pashaei, Samir Khatir, and Magd Abdel Wahab. 2022. "Application of Multilayer Perceptron Neural Network for Damage Detection in Rectangular Laminated Composite Plates Based on Vibrational Analysis." In *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*, ed by. Magd Abdel Wahab, 204:163–178. Springer. doi:10.1007/978-981-16-7216-3_13.
196. To, Thanh Sang, Minh Hoang Le, Magd Abdel Wahab, and Thanh Cuong Le. 2022. "Predicting the Displacement of Diaphragm Wall for Deep Excavation Problem on the Basing Thickly Soft Soil in an Urban Area Using Semi-Top-down Construction Method." In *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*, ed by. Magd Abdel Wahab, 204:49–56. Springer. doi:10.1007/978-981-16-7216-3_5.
197. Tran, Ngoc Hoa, H. Nguyen-Manh, H. Viet Tran, Q. Nguyen-Huu, N. Hoang-Thanh, T. Le-Xuan, T. Bui-Tien, N. Nguyen-Cam, and Magd Abdel Wahab. 2022. "Topology Optimization for a Large-Scale Truss Bridge Using a Hybrid

- Metaheuristic Search Algorithm.” In *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*, ed by. Magd Abdel Wahab, 204:37–48. Springer. doi:10.1007/978-981-16-7216-3_4.
198. Nguyen, Huong Duong, Quoc Bao Nguyen, and Magd Abdel Wahab. 2022. “Monitoring Bridge Frequencies Using Passing Vehicle.” In *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*, ed by. magd Abdel Wahab, 204:27–36. Springer. doi:10.1007/978-981-16-7216-3_3.
199. Le, Minh Hoang, Thanh Sang To, Tran-Thanh Danh, Nguyen-Ngoc Phu, Magd Abdel Wahab, and Thanh Cuong Le. 2022. “A Two-Step Approach for Damage Detection in a Real 3D Tower Using the Reduced-Order Finite Element Model Updating and Atom Search Algorithm (ASO).” In *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*, ed by. Magd Abdel Wahab, 204:13–26. Springer. doi:10.1007/978-981-16-7216-3_2.
200. Nguyen, Ngoc Lan, Samir Khatir, Ngoc Hoa Tran, Tran Hieu Nguyen, Magd Abdel Wahab, Binh Duc-Nguyen, and Thanh Bui-Tien. 2022. “Finite Element Model Updating of Lifeline Truss Bridge Using Vibration-Based Measurement Data and Balancing Composite Motion Optimization.” In *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*, ed by. Magd Abdel Wahab, 204:3–12. Springer. doi:10.1007/978-981-16-7216-3_1.
201. Abdel Wahab, Magd. 2022. “Preface of 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021).” Ed by. Magd Abdel Wahab. *Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021)*. Springer.
202. Abdel Wahab, Magd, ed. 2022. “Proceedings of the 2nd International Conference on Structural Damage Modelling and Assessment (SDMA 2021).” Springer. doi:10.1007/978-981-16-7216-3.
203. Deng, Qingming, Xiaochun Yin, Dagang Wang, and Magd Abdel Wahab. 2022. “Numerical Analysis of Crack Propagation in Fretting Fatigue Specimen Repaired by Stop Hole Method.” *INTERNATIONAL JOURNAL OF FATIGUE* 156. doi:10.1016/j.ijfatigue.2021.106640.
204. Ho, Viet Long, Trang Thi Trinh, Guido De Roeck, Thanh Bui-Tien, Long Nguyen-Ngoc, and Magd Abdel Wahab. 2022. “An Efficient Stochastic-Based Coupled Model for Damage Identification in Plate Structures.” *ENGINEERING FAILURE ANALYSIS* 131. doi:10.1016/j.engfailanal.2021.105866.
205. Vu, Huu Truong, Thanh Cuong Le, H. Nguyen-Xuan, and Magd Abdel Wahab. 2022. “Polygonal Finite Element for Two-Dimensional Lid-Driven Cavity Flow.” *CMC-COMPUTERS MATERIALS & CONTINUA* 70 (3): 4217–4239. doi:10.32604/cmc.2022.020889.
206. Ouladbrahim, Abdelmoumin, Idir Belaidi, Samir Khatir, Erica Magagnini, Roberto Capozucca, and Magd Abdel Wahab. 2022. “Prediction of Gurson Damage Model Parameters Coupled with Hardening Law Identification of Steel X70 Pipeline Using Neural Network.” *METALS AND MATERIALS INTERNATIONAL* 28 (2): 370–384. doi:10.1007/s12540-021-01024-4.
207. Tran, Ngoc Hoa, Samir Khatir, T. Le-Xuan, G. De Roeck, T. Bui-Tien, and Magd Abdel Wahab. 2022. “Finite Element Model Updating of a Multispan Bridge with a Hybrid Metaheuristic Search Algorithm Using Experimental Data from Wireless

- Triaxial Sensors.” *ENGINEERING WITH COMPUTERS* 38 (Suppl. 3): 1865–1883. doi:10.1007/s00366-021-01307-9.
208. Tiachacht, Samir, Samir Khatir, Thanh Cuong Le, Ravipudi Venkata Rao, Seyedali Mirjalili, and Magd Abdel Wahab. 2022. “Inverse Problem for Dynamic Structural Health Monitoring Based on Slime Mould Algorithm.” *ENGINEERING WITH COMPUTERS* 38 (Suppl. 3): 2205–2228. doi:10.1007/s00366-021-01378-8.
209. Le, Thanh Cuong, Trong Nghia Nguyen, Huu Truong Vu, Samir Khatir, and Magd Abdel Wahab. 2022. “A Geometrically Nonlinear Size-Dependent Hypothesis for Porous Functionally Graded Micro-Plate.” *ENGINEERING WITH COMPUTERS* 38 (Suppl. 1): 449–460. doi:10.1007/s00366-020-01154-0.
210. Rudawska, Anna, Magd Abdel Wahab, Izabela Miturska, Jakub Szabelsk, Eżbieta Doluk, and Dana Stančeková. 2021. “Impact of Mechanical Treatment on Strength of Steel Adhesive Joints.” In *FFW 2021, the 9th International Conference on Fracture Fatigue and Wear, Abstracts*.
211. Nguyen, Ngoc Lan, Ngoc Hoa Tran, Tran Hieu Nguyen, Binh Nguyen-Duc, Dang Nguyen-Le-Minh, Thanh Bui-Tien, and Magd Abdel Wahab. 2021. “Damaged Detection in Structures Using Artificial Neural Networks and Genetic Algorithms.” In *Proceedings of the 3rd International Conference on Sustainability in Civil Engineering (ICSCE 2020)*, ed by. Thanh Bui-Tien, Long Nguyen Ngoc, and Guido De Roeck, 145:33–38. Springer. doi:10.1007/978-981-16-0053-1_4.
212. Abdel Wahab, Magd, ed. 2021. “Special Issue ‘Exclusive Papers of the Editorial Board Members (EBMs) of Applied Mechanics.’” *APPLIED MECHANICS (BASEL)*.
213. To, Thanh Sang, Minh Hoang Le, Samir Khatir, Seyedali Mirjalili, Magd Abdel Wahab, and Thanh Cuong Le. 2021. “Forecasting of Excavation Problems for High-Rise Building in Vietnam Using Planet Optimization Algorithm.” *SCIENTIFIC REPORTS* 11 (1). doi:10.1038/s41598-021-03097-y.
214. Wang, Dagang, Daozhu Song, and Magd Abdel Wahab. 2021. “Effects of Contact Load and Torsion Angle on Crack Propagation Behaviors of Inclined Crossed Steel Wires during Tension-Torsion Fretting Fatigue in Acid Solution.” *APPLIED SCIENCES-BASEL* 11 (22). doi:10.3390/app112210529.
215. Ouladbrahim, Abdelmoumin, Idir Belaidi, Samir Khatir, Erica Magagnini, Roberto Capozucca, and Magd Abdel Wahab. 2021. “Sensitivity Analysis of the GTN Damage Parameters at Different Temperature for Dynamic Fracture Propagation in X70 Pipeline Steel Using Neural Network.” *FRATTURA ED INTEGRITÀ STRUTTURALE-FRACTURE AND STRUCTURAL INTEGRITY* 58: 442–452. doi:10.3221/igf-esis.58.32.
216. Khatir, Samir, Samir Tiachacht, Thanh Cuong Le, Hoa Tran, Seyedali Mirjalili, and Magd Abdel Wahab. 2021. “A New Robust Flexibility Index for Structural Damage Identification and Quantification.” *ENGINEERING FAILURE ANALYSIS* 129. doi:10.1016/j.engfailanal.2021.105714.
217. Le, Minh Hoang, Samir Khatir, Magd Abdel Wahab, and Thanh Cuong Le. 2021. “A Concrete Damage Plasticity Model for Predicting the Effects of Compressive High-Strength Concrete under Static and Dynamic Loads.” *JOURNAL OF BUILDING ENGINEERING* 44. doi:10.1016/j.job.2021.103239.
218. Le, Thanh Cuong, Minh Hoang Le, Samir Khatir, Magd Abdel Wahab, Minh Thi Tran, and Seyedali Mirjalili. 2021. “A Novel Version of Cuckoo Search Algorithm for Solving Optimization Problems.” *EXPERT SYSTEMS WITH APPLICATIONS* 186. doi:10.1016/j.eswa.2021.115669.

219. Khatir, Samir, Magd Abdel Wahab, Samir Tiachacht, Cuong Le Thanh, Roberto Capozucca, Erica Magagnini, and Brahim Benaissa. 2021. "Damage Identification in Steel Plate Using FRF and Inverse Analysis." *FRATTURA ED INTEGRITA STRUTTURALE-FRACTURE AND STRUCTURAL INTEGRITY* 58: 416–433. doi:10.3221/igf-esis.58.30.
220. Zhao, Qi, Magd Abdel Wahab, Yong Ling, and Zhiyi Liu. 2021. "Fatigue Crack Propagation within Al-Cu-Mg Single Crystals Based on Crystal Plasticity and XFEM Combined with Cohesive Zone Model." *MATERIALS & DESIGN* 210. doi:10.1016/j.matdes.2021.110015.
221. Nghia Nguyen, Trong, Thanh Cuong Le, Samir Khatir, and Magd Abdel Wahab. 2021. "A Novel Approach to the Complete Stress Strain Curve for Plastically Damaged Concrete under Monotonic and Cyclic Loads." *COMPUTERS AND CONCRETE* 28 (1): 39–53. doi:10.12989/cac.2021.28.1.039.
222. Gillich, Gilbert-Rainer, Nuno M. M. Maia, Magd Abdel Wahab, Cristian Tufisi, Zoltan-Iosif Korca, Nicoleta Gillich, and Marius Vasile Pop. 2021. "Damage Detection on a Beam with Multiple Cracks : A Simplified Method Based on Relative Frequency Shifts." *SENSORS* 21 (15). doi:10.3390/s21155215.
223. Zhao, Qi, Magd Abdel Wahab, Yong Ling, and Zhiyi Liu. 2021. "Fatigue Crack Propagation across Grain Boundary of Al-Cu-Mg Bicrystal Based on Crystal Plasticity and XFEM Combining Cohesive Zone Model." In *SDMA 2021, the 2nd International Conference on Structural Damage Modelling and Assessment, Abstracts*.
224. Ho, Viet Long, Trang Thi Trinh, Guido De Roeck, Thanh Bui-Tien, and Magd Abdel Wahab. 2021. "Application of Antlion's Hunting Strategy and Artificial Neural Network to Failure Identification of 2D Cantilever Structures." In *SDMA 2021, the 2nd International Conference on Structural Damage Modelling and Assessment, Abstracts*.
225. Nguyen, Tran Hieu, Dung Ngoc-Bui, Ngoc Lan Nguyen, Thanh Bui, Guido De Roeck, and Magd Abdel Wahab. 2021. "Vibration-Based Damage Detection of Z24 Bridge Using Two-Dimensional Convolutional Neural Network." In *SDMA 2021, the 2nd International Conference on Structural Damage Modelling and Assessment, Abstracts*.
226. Wang, Shengjie, and Magd Abdel Wahab. 2021. "Numerical Analysis of the Effect on Wear on Crack Propagation in Fretting by Linear Elastic Fracture Mechanics." In *FFW 2021, the 9th International Conference on Fracture Fatigue and Wear, Abstracts*.
227. Li, Chao, Ruslan Karimbaev, Shengjie Wang, Auezhan Amanov, and Magd Abdel Wahab. 2021. "A Numerical Study on Fretting Wear of Inconel 718 Alloy Processed by Ultrasonic Nanocrystal Surface Modification." In *FFW 2021, the 9th International Conference on Fracture Fatigue and Wear, Abstracts*.
228. Wang, Dagang, Ruixin Wang, Bo Wang, and Magd Abdel Wahab. 2021. "Effect of Vibration on Emergency Braking Tribological Behaviors of Brake Shoe of Deep Coal Mine Hoist." *APPLIED SCIENCES-BASEL* 11 (14). doi:10.3390/app11146441.
229. Nguyen-Ngoc, L., Ngoc Hoa Tran, T. Bui-Tien, A. Mai-Duc, Magd Abdel Wahab, Huan X. Nguyen, and G. De Roeck. 2021. "Damage Detection in Structures Using Particle Swarm Optimization Combined with Artificial Neural Network." *SMART STRUCTURES AND SYSTEMS* 28 (1): 1–12. doi:10.12989/sss.2021.28.1.001.

230. Nguyen Ngoc, Hau, Khanh Nguyen, Khuong Duy Nguyen, Hung Nguyen, and Magd Abdel Wahab. 2021. "A Consecutive-interpolation Polyhedral Finite Element Method for Solid Structures." *INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING* 122 (20): 5692–5717. doi:10.1002/nme.6769.
231. Wang, Dagang, Jihong Ye, Bo Wang, and Magd Abdel Wahab. 2021. "Review on the Service Safety Assessment of Main Cable of Long Span Multi-Tower Suspension Bridge." *APPLIED SCIENCES-BASEL* 11 (13). doi:10.3390/app11135920.
232. Le, Minh Hoang, Samir Khatir, Magd Abdel Wahab, and Thanh Cuong Le. 2021. "An Enhancing Particle Swarm Optimization Algorithm (EHVPSO) for Damage Identification in 3D Transmission Tower." *ENGINEERING STRUCTURES* 242. doi:10.1016/j.engstruct.2021.112412.
233. Khatir, Samir, Samir Tiachacht, Thanh Cuong Le, Emad Ghandourah, Seyedali Mirjalili, and Magd Abdel Wahab. 2021. "An Improved Artificial Neural Network Using Arithmetic Optimization Algorithm for Damage Assessment in FGM Composite Plates." *COMPOSITE STRUCTURES* 273. doi:10.1016/j.compstruct.2021.114287.
234. Slimani, M., S. Tiachacht, T. Khatir, Samir Khatir, A. Behtani, Thanh Cuong Le, and Magd Abdel Wahab. 2021. "A Chimp Optimization Algorithm (ChOA) for Vibration-Based Damage Detection of a Damaged Steel Truss." In *Structural Health Monitoring and Engineering Structures, Select Proceedings of SHM&ES 2020*, ed by. Tinh Quoc Bui, Le Thanh Cuong, and Samir Khatir, 148:121–132. Springer. doi:10.1007/978-981-16-0945-9_10.
235. Tiachacht, S., Samir Khatir, M. Slimani, A. Behtani, Thanh Cuong Le, and Magd Abdel Wahab. 2021. "Model Updating of Frame Structure Using Equilibrium Optimizer (EO) and Cuckoo Search (CS) Algorithms." In *Structural Health Monitoring and Engineering Structures, Select Proceedings of SHM&ES 2020*, ed by. Tinh Quoc Bui, Le Thanh Cuong, and Samir Khatir, 148:19–28. Springer. doi:10.1007/978-981-16-0945-9_2.
236. Seguini, Meriem, Djilali Boutchicha, Samir Khatir, Djamel Nedjar, Thanh Cuong Le, and Magd Abdel Wahab. 2021. "Experimental and Numerical Vibration Analyses of Healthy and Cracked Pipes." In *Structural Health Monitoring and Engineering Structures, Select Proceedings of SHM&ES 2020*, ed by. Tinh Quoc Bui, Le Thanh Cuong, and Samir Khatir, 148:251–260. Springer. doi:10.1007/978-981-16-0945-9_21.
237. Ho, Viet Long, Huong Duong Nguyen, Mohsen Mousavi, Guido De Roeck, Thanh Bui-Tien, Amir H. Gandomi, and Magd Abdel Wahab. 2021. "A Hybrid Computational Intelligence Approach for Structural Damage Detection Using Marine Predator Algorithm and Feedforward Neural Networks." *COMPUTERS & STRUCTURES* 252. doi:10.1016/j.compstruc.2021.106568.
238. Zhao, Qi, Magd Abdel Wahab, Yong Ling, and Zhiyi Liu. 2021. "Grain-Orientation Induced Stress Formation in AA2024 Monocrystal and Bicrystal Using Crystal Plasticity Finite Element Method." *MATERIALS & DESIGN* 206. doi:10.1016/j.matdes.2021.109794.
239. Wang, Shengjie, and Magd Abdel Wahab. 2021. "A Numerical Study on the Effect of Variable Wear Coefficient on Fretting Wear Characteristics." *MATERIALS* 14 (8). doi:10.3390/ma14081840.
240. Nguyen, Huong Duong, T. Bui Tien, Guido De Roeck, and Magd Abdel Wahab. 2021. "Damage Detection in Structures Using Modal Curvatures Gapped Smoothing

- Method and Deep Learning.” *STRUCTURAL ENGINEERING AND MECHANICS* 77 (1): 47–56. doi:10.12989/sem.2021.77.1.047.
241. Tran, Ngoc Hoa, Samir Khatir, H. Ho-Khac, G. De Roeck, T. Bui-Tien, and Magd Abdel Wahab. 2021. “Efficient Artificial Neural Networks Based on a Hybrid Metaheuristic Optimization Algorithm for Damage Detection in Laminated Composite Structures.” *COMPOSITE STRUCTURES* 262. doi:10.1016/j.compstruct.2020.113339.
242. Ho, Viet Long, Huong Duong Nguyen, Guido De Roeck, Thanh Bui-Tien, and Magd Abdel Wahab. 2021. “Damage Detection in Steel Plates Using Feed-Forward Neural Network Coupled with Hybrid Particle Swarm Optimization and Gravitational Search Algorithm.” *JOURNAL OF ZHEJIANG UNIVERSITY-SCIENCE A* 22 (6): 467–480. doi:10.1631/jzus.A2000316.
243. Seguini, Meriem, Samir Khatir, Djilali Boutchicha, Djamel Nedjar, and Magd Abdel Wahab. 2021. “Crack Prediction in Pipeline Using ANN-PSO Based on Numerical and Experimental Modal Analysis.” *SMART STRUCTURES AND SYSTEMS* 27 (3): 507–523. doi:10.12989/sss.2021.27.3.507.
244. Abdel Wahab, Magd. 2021. “Special Issue on : Advances in Fracture and Damage Assessment.” *THEORETICAL AND APPLIED FRACTURE MECHANICS*. doi:10.1016/j.tafmec.2021.102944.
245. Vu, Huu Truong, Thanh Cuong Le, Sy Pham-Van, Q. Hoan Pham, H. Nguyen-Xuan, and Magd Abdel Wahab. 2021. “The Convergence Rate of a Polygonal Finite Element for Stokes Flows on Different Mesh Families.” In *JOURNAL OF PHYSICS. CONFERENCE SERIES*. Vol. 1777. doi:10.1088/1742-6596/1777/1/012065.
246. Wang, Shengjie, and Magd Abdel Wahab. 2021. “Fretting Wear Effect on Fretting Fatigue by Findley Parameter in Mixed Slip Regime.” In *Proceedings of the 8th International Conference on Fracture, Fatigue and Wear, FFW 2020*, 647–656. Singapore: Springer. doi:10.1007/978-981-15-9893-7_48.
247. Rudawska, Anna, Jakub Szabelski, Magd Abdel Wahab, and Izabela Miturska. 2021. “Impact of Abrasive Blasting Media on the Strength of Steel Sheets Adhesively Bonded Joints.” In *Proceedings of the 8th International Conference on Fracture, Fatigue and Wear, FFW 2020*, ed by. Magd Abdel Wahab, 81–95. Singapore: Springer. doi:10.1007/978-981-15-9893-7_5.
248. Nguyen, Huong Duong, Viet Long Ho, Thanh Bui-Tien, Guido De Roeck, and Magd Abdel Wahab. 2021. “Damage Evaluation of Free-Free Beam Based on Vibration Testing.” In *Proceedings of the 8th International Conference on Fracture, Fatigue and Wear, FFW 2020*, ed by. Magd Abdel Wahab, 55–66. Singapore: Springer. doi:10.1007/978-981-15-9893-7_3.
249. Ling, Yong, J. Ni, Magd Abdel Wahab, J. Antonissen, and J. Vande Voorde. 2021. “A Heat Transfer Finite Element Model for Wire-Arc-Additive-Manufacturing Process.” In *Proceedings of the 8th International Conference on Fracture, Fatigue and Wear, FFW 2020*, ed by. Magd Abdel Wahab, 201–215. Singapore. doi:10.1007/978-981-15-9893-7_14.
250. Ho, Viet Long, Guido De Roeck, Thanh Bui-Tien, and Magd Abdel Wahab. 2021. “Determination of the Effective Stiffness of Half-Open Cross-Section Bars and Orthotropic Steel Deck of a Truss Bridge Using Model Updating.” In *Proceedings of the 8th International Conference on Fracture, Fatigue and Wear, FFW 2020*, ed by. Magd Abdel Wahab, 97–108. Singapore: Springer. doi:10.1007/978-981-15-9893-7_6.

251. Deng, Qingming, Xiaochun Yin, and Magd Abdel Wahab. 2021. "A Comparative Study on Indentation and Flattening Contacts." In *Proceedings of the 8th International Conference on Fracture, Fatigue and Wear, FFW 2020*, ed by. Magd Abdel Wahab, 67–79. Singapore: Springer. doi:10.1007/978-981-15-9893-7_4.
252. Abdel Wahab, Magd, ed. 2021. "Proceedings of the 8th International Conference on Fracture, Fatigue and Wear, FFW 2020." doi:10.1007/978-981-15-9893-7.
253. Abdel Wahab, Magd. 2021. "Preface: Proceedings of the 8th International Conference on Fracture Fatigue and Wear FFW 2020." Ed by. Magd Abdel Wahab. *Proceedings of the 8th International Conference on Fracture, Fatigue and Wear, FFW 2020*. Springer.
254. Abdel Wahab, Magd. 2021. "Preface : Proceedings of 1st International Conference on Structural Damage Modelling and Assessment." Ed by. Magd Abdel Wahab. *Proceedings of 1st International Conference on Structural Damage Modelling and Assessment (SDMA 2020)*. Springer.
255. Abdel Wahab, Magd, ed. 2021. "Proceedings of 1st International Conference on Structural Damage Modelling and Assessment, SDMA 2020." Singapore: Springer. doi:10.1007/978-981-15-9121-1.
256. Wang, Shengjie, D. G. Wang, G. Z. Xie, and Magd Abdel Wahab. 2021. "Numerical Investigation on the Effect of Wear Coefficient on Fretting Wear." In *Proceedings of 1st International Conference on Structural Damage Modelling and Assessment (SDMA 2020)*, 110:221–227. Singapore: Springer. doi:10.1007/978-981-15-9121-1_17.
257. Deng, Qingming, Xiaochun Yin, and Magd Abdel Wahab. 2021. "A Comparative Study on the Evolution of Plastic Zone between Indentation and Flattening Contact." In *Proceedings of 1st International Conference on Structural Damage Modelling and Assessment (SDMA 2020)*, ed by. Magd Abdel Wahab, 110:481–491. Singapore: Springer. doi:10.1007/978-981-15-9121-1_33.
258. Rudawska, Anna, Magd Abdel Wahab, Jakub Szabelski, Izabela Miturska, and Elżbieta Doluk. 2021. "The Strength of Rigid and Flexible Adhesive Joints at Room Temperature and after Thermal Shocks." In *Proceedings of 1st International Conference on Structural Damage Modelling and Assessment (SDMA 2020)*, ed by. Magd Abdel Wahab, 110:229–241. Springer. doi:10.1007/978-981-15-9121-1_18.
259. Bui-Ngoc, Dung, Thanh Bui-Tien, Hieu Nguyen-Tran, Magd Abdel Wahab, and Guido De Roeck. 2021. "Structural Health Monitoring Using Handcrafted Features and Convolution Neural Network." In *Proceedings of 1st International Conference on Structural Damage Modelling and Assessment (SDMA 2020)*, ed by. Magd Abdel Wahab, 110:103–112. Singapore: Springer. doi:10.1007/978-981-15-9121-1_8.
260. Nguyen, Khuong Duy, Thanh Cuong Le, N. Nguyen-Trong, Samir Khatir, H. Nguyen-Xuan, and Magd Abdel Wahab. 2021. "A Three-Dimensional Solution for Free Vibration and Buckling of Annular Plate, Conical, Cylinder and Cylindrical Shell of FG Porous-Cellular Materials Using IGA." *COMPOSITE STRUCTURES* 259. doi:10.1016/j.compstruct.2020.113216.
261. Nguyen Ngoc, Hau, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2021. "Three-Dimensional Meshfree Analysis of Interlocking Concrete Blocks for Step Seawall Structure." *CMC-COMPUTERS MATERIALS & CONTINUA* 66 (1): 165–178. doi:10.32604/cmc.2020.012948.

262. Deng, Qingming, Xiaochun Yin, and Magd Abdel Wahab. 2021. "The Effect of Surface Pit Treatment on Fretting Fatigue Crack Initiation." *CMC-COMPUTERS MATERIALS & CONTINUA* 66 (1): 659–673. doi:10.32604/cmc.2020.012878.
263. Dang, Bao-Loi, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2021. "Numerical Study on Wave Forces and Overtopping over Various Seawall Structures Using Advanced SPH-Based Method." *ENGINEERING STRUCTURES* 226. doi:10.1016/j.engstruct.2020.111349.
264. Wang, Xiaowei, Tianyu Zhang, Wei Zhang, Magd Abdel Wahab, and Jianming Gong. 2021. "An Improved Unified Viscoplastic Model for Modelling Low Cycle Fatigue and Creep Fatigue Interaction Loadings of 9-12%Cr Steel." *EUROPEAN JOURNAL OF MECHANICS A-SOLIDS* 85. doi:10.1016/j.euromechsol.2020.104123.
265. Wang, Shengchun, Hao Wang, Yunlai Zhou, Junbo Liu, Peng Dai, Xinyu Du, and Magd Abdel Wahab. 2021. "Automatic Laser Profile Recognition and Fast Tracking for Structured Light Measurement Using Deep Learning and Template Matching." *MEASUREMENT* 169. doi:10.1016/j.measurement.2020.108362.
266. Vu, Huu Truong, C. Le-Thanh, H. Nguyen-Xuan, and Magd Abdel Wahab. 2021. "Equal-Order Polygonal Analysis for Fluid Computation in Curved Domain." *INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS* 18 (05). doi:10.1142/s0219876220400034.
267. Djafri, Mohammed, Mostefa Bouchetara, Tawfiq Khatir, Samir Khatir, and Magd Abdel Wahab. 2021. "Calculation of the Braking Temperature on a Brake Disc of Light Passenger Aircraft Using FEM and Newcomb Models." *INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS* 18 (5). doi:10.1142/s0219876220400022.
268. Gillich, G. R., D. Nedelcu, C. O. Hamat, Magd Abdel Wahab, and C. Barbinta. 2020. "About the Calculus of the Relative Frequency Shifts for a Beam with Multiple Cracks." In *INTERNATIONAL CONFERENCE ON APPLIED SCIENCES*. Vol. 1426. doi:10.1088/1742-6596/1426/1/012024.
269. Gillich, G. R., D. Nedelcu, Magd Abdel Wahab, M. Pop, and C. O. Hamat. 2020. "A New Mathematical Model for Cracked Beams with Uncertain Boundary Conditions." In *PROCEEDINGS OF INTERNATIONAL CONFERENCE ON NOISE AND VIBRATION ENGINEERING (ISMA2020) / INTERNATIONAL CONFERENCE ON UNCERTAINTY IN STRUCTURAL DYNAMICS (USD2020)*, ed by. W. Desmet, B. Pluymers, D. Moens, and S. Vandemaele, 3871–3883.
270. Tran, Ngoc Hoa, L. Nguyen-Ngoc, H. Ho-Khac, A. Le-Thuc, G. De Roeck, Tien Bui, and Magd Abdel Wahab. 2020. "Application of Improved Artificial Neural Network to Stiffness Reduction Analysis of Truss Joints in a Railway Bridge." In *The 8th International Conference on Fracture Fatigue and Wear (FFW 2020), Abstracts*.
271. Abdel Wahab, Magd, ed. 2020. "Engineering: Applied Mechanics and Materials Engineering (AMME)." *SN APPLIED SCIENCES*.
272. Abdel Wahab, Magd, ed. 2020. "Topical Collection 'Fracture, Fatigue, and Wear.'" *APPLIED MECHANICS (BASEL)*.
273. Rudawska, Anna, Izabela Miturska, Magd Abdel Wahab, Dana Stančeková, and Miroslava Ľavodová. 2020. "Influence of the Assembly Method of Sleeve Joints on Their Strength." *MANUFACTURING TECHNOLOGY (ÚSTÍ NAD LABEM)* 20 (5): 660–667. doi:10.21062/mft.2020.093.
274. Ho, Viet Long, Samir Khatir, Guido D. Roeck, Thanh Bui-Tien, and Magd Abdel Wahab. 2020. "Finite Element Model Updating of a Cable-Stayed Bridge Using

- Metaheuristic Algorithms Combined with Morris Method for Sensitivity Analysis.” *SMART STRUCTURES AND SYSTEMS* 26 (4): 451–468. doi:10.12989/sss.2020.26.4.451.
275. Zhao, Qi, Zhiyi Liu, and Magd Abdel Wahab. 2020. “Enhanced Brass Texture of Hot-Rolled Al-4Cu-1.6Mg Alloy by 0.1% Zr Addition.” *MATERIALS CHARACTERIZATION* 169. doi:10.1016/j.matchar.2020.110643.
276. Tran, Ngoc Hoa, Samir Khatir, T. Le-Xuan, G. De Roeck, T. Bui-Tien, and Magd Abdel Wahab. 2020. “A Novel Machine-Learning Based on the Global Search Techniques Using Vectorized Data for Damage Detection in Structures.” *INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE* 157. doi:10.1016/j.ijengsci.2020.103376.
277. Nguyen, Huong Duong, Quoc Bao Nguyen, T. Bui-Tien, Guido De Roeck, and Magd Abdel Wahab. 2020. “Damage Detection in Girder Bridges Using Modal Curvatures Gapped Smoothing Method and Convolutional Neural Network : Application to Bo Nghi Bridge.” *THEORETICAL AND APPLIED FRACTURE MECHANICS* 109. doi:10.1016/j.tafmec.2020.102728.
278. Wang, Shengjie, Samir Khatir, and Magd Abdel Wahab. 2020. “Proper Orthogonal Decomposition for the Prediction of Fretting Wear Characteristics.” *TRIBOLOGY INTERNATIONAL* 152. doi:10.1016/j.triboint.2020.106545.
279. Nguyen, Huong Duong, Ngoc Hoa Tran, T. Bui-Tien, G. De Roeck, and Magd Abdel Wahab. 2020. “Damage Detection in Truss Bridges Using Transmissibility and Machine Learning Algorithm : Application to Nam O Bridge.” *SMART STRUCTURES AND SYSTEMS* 26 (1): 35–47. doi:10.12989/sss.2020.26.1.035.
280. Nguyen, Khuong Duy, Charles E. Augarde, William M. Coombs, H. Nguyen-Xuan, and Magd Abdel Wahab. 2020. “Non-Conforming Multipatches for NURBS-Based Finite Element Analysis of Higher-Order Phase-Field Models for Brittle Fracture.” *ENGINEERING FRACTURE MECHANICS* 235. doi:10.1016/j.engfracmech.2020.107133.
281. Nguyen-Le, Duyen H., Q. B. Tao, Vu-Hieu Nguyen, Magd Abdel Wahab, and H. Nguyen-Xuan. 2020. “A Data-Driven Approach Based on Long Short-Term Memory and Hidden Markov Model for Crack Propagation Prediction.” *ENGINEERING FRACTURE MECHANICS* 235. doi:10.1016/j.engfracmech.2020.107085.
282. Resende Pereira, Kyvia de Fatima, Libardo V. Vanegas-Useche, and Magd Abdel Wahab. 2020. “Aspects of Fretting Fatigue Finite Element Modelling.” *CMC-COMPUTERS MATERIALS & CONTINUA* 64 (1): 97–144. doi:10.32604/cmc.2020.09862.
283. Zenzen, Roumaissa, Samir Khatir, Idir Belaidi, Cuong Le Thanh, and Magd Abdel Wahab. 2020. “A Modified Transmissibility Indicator and Artificial Neural Network for Damage Identification and Quantification in Laminated Composite Structures.” *COMPOSITE STRUCTURES* 248. doi:10.1016/j.compstruct.2020.112497.
284. Bendada, A., D. Boutchicha, Samir Khatir, E. Magagnini, R. Capozucca, and Magd Abdel Wahab. 2020. “Mechanical Characterization of an Epoxy Panel Reinforced by Date Palm Petiole Particle.” *STEEL AND COMPOSITE STRUCTURES* 35 (5): 627–634. doi:10.12989/scs.2020.35.5.627.
285. Khatir, Samir, T. Khatir, D. Boutchicha, C. Le Thanh, Ngoc Hoa Tran, T.Q. Bui, R. Capozucca, and Magd Abdel Wahab. 2020. “An Efficient Hybrid TLBO-PSO-ANN for Fast Damage Identification in Steel Beam Structures Using IGA.” *SMART STRUCTURES AND SYSTEMS* 25 (5): 605–617. doi:10.12989/sss.2020.25.5.605.

286. Tran, Ngoc Hoa, Samir Khatir, Guido De roeck, Thanh Bui-Tien, Long Nguyen-Ngoc, and Magd Abdel Wahab. 2020. "Stiffness Identification of Truss Joints of the Nam O Bridge Based on Vibration Measurements and Model Updating." In *Proceedings of ARCH 2019: 9th International Conference on Arch Bridges*, ed by. Antonio Arêde and Cristina Costa, 11:264–272. doi:10.1007/978-3-030-29227-0_26.
287. Tran, Ngoc Hoa, Samir Khatir, G De Roeck, Long Nguyen, T. Thanh Bui, and Magd Abdel Wahab. 2020. "An Efficient Approach for Model Updating of a Large-Scale Cable-Stayed Bridge Using Ambient Vibration Measurements Combined with a Hybrid Metaheuristic Search Algorithm." *SMART STRUCTURES AND SYSTEMS* 25 (4): 487–499. doi:10.12989/sss.2020.25.4.487.
288. Abdel Wahab, Magd, ed. 2020. "Appl. Mech., Volume 1, Issue 2 (June 2020)." *APPLIED MECHANICS (BASEL)*.
289. Abdel Wahab, Magd, ed. 2020. "Appl. Mech., Volume 1, Issue 1 (March 2020)." *APPLIED MECHANICS (BASEL)*.
290. Bozyigit, Baran, Yusuf Yesilce, and Magd Abdel Wahab. 2020. "Free Vibration and Harmonic Response of Cracked Frames Using a Single Variable Shear Deformation Theory." *STRUCTURAL ENGINEERING AND MECHANICS* 74 (1): 33–54. doi:10.12989/sem.2020.74.1.033.
291. Nguyen Ngoc, Hau, H. Nguyen-Xuan, and Magd Abdel Wahab. 2020. "A Numerical Investigation on the Use of Pervious Concrete for Seawall Structures." *OCEAN ENGINEERING* 198. doi:10.1016/j.oceaneng.2020.106954.
292. Tran, Ngoc Hoa, Leqia He, Edwin Reynders, Samir Khatir, T. Le-Xuan, Guido De Roeck, T. Bui-Tien, and Magd Abdel Wahab. 2020. "An Efficient Approach to Model Updating for a Multispan Railway Bridge Using Orthogonal Diagonalization Combined with Improved Particle Swarm Optimization." *JOURNAL OF SOUND AND VIBRATION* 476. doi:10.1016/j.jsv.2020.115315.
293. Khatir, Samir, D. Boutchicha, Thanh Cuong Le, Ngoc Hoa Tran, T.N. Nguyen, and Magd Abdel Wahab. 2020. "Improved ANN Technique Combined with Jaya Algorithm for Crack Identification in Plates Using XIGA and Experimental Analysis." *THEORETICAL AND APPLIED FRACTURE MECHANICS* 107. doi:10.1016/j.tafmec.2020.102554.
294. Zhou, Yun Lai, and Magd Abdel Wahab, eds. 2020. "Bridge Optimization: Inspection and Condition Monitoring." intechopen. doi:10.5772/intechopen.79062.
295. Vu, Huu Truong, Hung Nguyen-Xuan, Thanh Cuong Le, and Magd Abdel Wahab. 2020. "Stabilization for Equal-Order Polygonal Finite Element Method for High Fluid Velocity and Pressure Gradient." *CMC - COMPUTERS MATERIALS & CONTINUA* 62 (3): 1109–1123. doi:10.32604/cmc.2020.07989.
296. Bozyigit, Baran, Yusuf Yesilce, and Magd Abdel Wahab. 2020. "Transfer Matrix Formulations and Single Variable Shear Deformation Theory for Crack Detection in Beam-like Structures." *STRUCTURAL ENGINEERING AND MECHANICS* 73 (2): 109–121. doi:10.12989/sem.2020.73.2.109.
297. Bozyigit, Baran, Yusuf Yesilce, and Magd Abdel Wahab. 2020. "Single Variable Shear Deformation Theory for Free Vibration and Harmonic Response of Frames on Flexible Foundation." *ENGINEERING STRUCTURES* 208. doi:10.1016/j.engstruct.2020.110268.
298. Ni, Junyan, Xincun Zhuang, and Magd Abdel Wahab. 2020. "Review on the Prediction of Residual Stress in Welded Steel Components." *CMC - COMPUTERS MATERIALS & CONTINUA* 62 (2): 495–523. doi:10.32604/cmc.2020.08448.

299. Papagianni, Dimitra, and Magd Abdel Wahab. 2020. "Multi-Scale Analysis of Fretting Fatigue in Heterogeneous Materials Using Computational Homogenization." *CMC - COMPUTERS MATERIALS & CONTINUA* 62 (1): 79–97. doi:10.32604/cmc.2020.07988.
300. Wang, Shengjie, Tongyan Yue, and Magd Abdel Wahab. 2020. "Multiscale Analysis of the Effect of Debris on Fretting Wear Process Using a Semi-Concurrent Method." *CMC - COMPUTERS MATERIALS & CONTINUA* 62 (1): 17–35. doi:10.32604/cmc.2020.07790.
301. Rudawska, Anna, Magd Abdel Wahab, and Miroslav Müller. 2020. "Effect of Ageing Process on Mechanical Properties of Adhesive Tubular Butt Joints in Aqueous Environment." *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 96. doi:10.1016/j.ijadhadh.2019.102466.
302. Abdel Wahab, Magd. 2020. "Editorial: Applied Mechanics." *APPLIED MECHANICS*. doi:10.3390/applmech1010001.
303. Deng, Qingming, Nadeem Ali Bhatti, Xiaochun Yin, and Magd Abdel Wahab. 2020. "The Effect of a Critical Micro-Void Defect on Fretting Fatigue Crack Initiation in Heterogeneous Material Using a Multiscale Approach." *TRIBOLOGY INTERNATIONAL* 141. doi:10.1016/j.triboint.2019.105909.
304. Resende Pereira, Kyvia de Fatima, and Magd Abdel Wahab. 2020. "Fretting Fatigue Lifetime Estimation Using a Cyclic Cohesive Zone Model." *TRIBOLOGY INTERNATIONAL* 141. doi:10.1016/j.triboint.2019.105899.
305. Vu, Huu Truong, Thanh Cuong Le, H. Nguyen-Xuan, and Magd Abdel Wahab. 2020. "An Equal-Order Mixed Polygonal Finite Element for Two-Dimensional Incompressible Stokes Flows." *EUROPEAN JOURNAL OF MECHANICS B-FLUIDS* 79: 92–108. doi:10.1016/j.euromechflu.2019.08.005.
306. Slimani, M., S. Tiachacht, Samir Khatir, A. Behtani, L. Mansouri, A. Bouazzouni, and Magd Abdel Wahab. 2020. "Damage Localization and Quantification in Structures Using Residual Force Indicator." In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 213–224. Springer. doi:10.1007/978-981-13-8331-1_15.
307. Mansouri, L., D. Arezki, Samir Khatir, A. Behtani, S. Tiachacht, M. Slimani, and Magd Abdel Wahab. 2020. "A Comparative Study of the Behavior of Glass Fiber-Reinforced Polyester Composite Laminates under Static Loading." In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 875–886. Springer. doi:10.1007/978-981-13-8331-1_70.
308. Behtani, A., S. Tiachacht, Samir Khatir, M. Slimani, L. Mansouri, A. Bouazzouni, and Magd Abdel Wahab. 2020. "The Sensitivity of Modal Strain Energy for Damage Localization in Composite Stratified Beam Structures." In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 863–874. Springer. doi:10.1007/978-981-13-8331-1_69.
309. Tiachacht, S., M. Slimani, Samir Khatir, A. Behtani, L. Mansouri, A. Bouazzouni, and Magd Abdel Wahab. 2020. "Damage Assessment of Laminated Composite Plates Using a Modified Cornwell Indicator." In *Proceedings of the 13th International Conference on Damage Assessment of Structures, DAMAS 2019*, ed by. Magd Abdel Wahab, 853–862. Singapore. doi:10.1007/978-981-13-8331-1_68.
310. Rudawska, Anna, Izabela Miturska, Jakub Szabelski, Magd Abdel Wahab, Dana Stančeková, Nadežda Čuboňová, and Radovan Madleňák. 2020. "The Impact of the

- Selected Exploitation Factors on the Adhesive Joints Strength.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 899–913. Singapore. doi:10.1007/978-981-13-8331-1_72.
311. Khatir, Samir, S. Tiachacht, Thanh Cuong Le, T. Khatir, R. Capozucca, and Magd Abdel Wahab. 2020. “Damage Detection in Laminated Composite Plates Based on Local Frequency Change Ratio Indicator.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 887–898. Springer. doi:10.1007/978-981-13-8331-1_71.
312. Le, Thanh Cuong, Samir Khatir, and Magd Abdel Wahab. 2020. “Free Vibration of Angle-Ply Laminated Micro-Plates Using Isogeometric Analysis and Modified Couple Stress Theory.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 844–852. Springer. doi:10.1007/978-981-13-8331-1_67.
313. Resende Pereira, Kyvia de Fatima, and Magd Abdel Wahab. 2020. “An Implementation of Cyclic Cohesive Zone Models in ABAQUS and Its Applicability to Predict Fatigue Lives.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 684–691. Springer. doi:10.1007/978-981-13-8331-1_53.
314. Infante-García, D., H. Miguelez, E. Giner, and Magd Abdel Wahab. 2020. “Damage Assessment in Fretting Fatigue Specimens with Micro-Voids Using Critical Plane Approach.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 666–671. Springer. doi:10.1007/978-981-13-8331-1_51.
315. Wang, Shengjie, and Magd Abdel Wahab. 2020. “Effect of Loading Conditions in Fretting Fatigue on Wear Characteristics.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures*, ed by. Magd Abdel Wahab, 659–665. Singapore. doi:10.1007/978-981-13-8331-1_50.
316. Ho, Viet Long, Thanh Nam Hoang, Guido De Roeck, Tien Thanh Bui, and Magd Abdel Wahab. 2020. “Effects of Measuring Techniques on the Accuracy of Estimating Cable Tension in a Cable-Stay Bridge.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 433–445. Springer. doi:10.1007/978-981-13-8331-1_31.
317. Bozyigit, Baran, Irem Bozyigit, Yusuf Yesilce, and Magd Abdel Wahab. 2020. “Crack Identification in Multi-Span Beams on Elastic Foundation by Using Transfer Matrix Method.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 402–409. Springer. doi:10.1007/978-981-13-8331-1_29.
318. Tran, Ngoc Hoa, Samir Khatir, G. De Roeck, T. Bui-Tien, and Magd Abdel Wahab. 2020. “Damage Assessment in Beam-like Structures Using Cuckoo Search Algorithm and Experimentally Measured Data.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 380–385. Springer. doi:10.1007/978-981-13-8331-1_27.
319. Gillich, Gilbert-Rainer, Dorian Nedelcu, Cristian-Tatian Malin, Istvan Biro, and Magd Abdel Wahab. 2020. “Efficient Algorithm for Frequency Estimation Used in Structural Damage Detection.” In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 283–300. Springer. doi:10.1007/978-981-13-8331-1_20.

320. Zenzen, Roumaissa, Samir Khatir, Idir Belaidi, and Magd Abdel Wahab. 2020. "Damage Detection in Truss Structures Using Transmissibility Combined with Optimization Techniques." In *Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)*, ed by. Magd Abdel Wahab, 225–233. Springer. doi:10.1007/978-981-13-8331-1_16.
321. Gillich, Gilbert-Rainer, Alexandra Teodora Aman, Magd Abdel Wahab, and Cristian Tufisi. 2020. "Detection of Multiple Cracks Using an Energy Method Applied to the Concept of Equivalent Healthy Beam." In *Proceedings of the 13th International Conference on Damage Assessment of Structures, DAMAS 2019*, ed by. Magd Abdel Wahab, 63–78. Singapore: Springer. doi:10.1007/978-981-13-8331-1_5.
322. Abdel Wahab, Magd. 2020. "Preface - 13th International Conference on Damage Assessment of Structures DAMAS 2019." Ed by. Magd Abdel Wahab. *Proceedings of the 13th International Conference on Damage Assessment of Structures, DAMAS 2019*.
323. Abdel Wahab, Magd, ed. 2020. "Proceedings of the 13th International Conference on Damage Assessment of Structures (DAMAS 2019)." Singapore: Springer. doi:10.1007/978-981-13-8331-1.
324. Abdel Wahab, Magd, ed. 2019. "Applied Mechanics and Materials Engineering 2019." *SN APPLIED SCIENCES*. Springer.
325. Zhou, Yun Lai, Magd Abdel Wahab, Nuno Mai, Linya Liu, and Elói Figueiredo, eds. 2019. "Data Mining in Structural Dynamic Analysis: A Signal Processing Perspective." doi:10.1007/978-981-15-0501-0.
326. Abdel Wahab, Magd. 2019. "Editorial." *IOP CONFERENCE SERIES. MATERIALS SCIENCE AND ENGINEERING*. IOP Publishing.
327. Abdel Wahab, Magd, ed. 2019. "Proceedings of the 2nd International Conference on Numerical Modelling in Engineering." IOP.
328. Abdel Wahab, Magd. 2019. "Editorial." *IOP CONFERENCE SERIES. MATERIALS SCIENCE AND ENGINEERING*. IOP Publishing.
329. Abdel Wahab, Magd, ed. 2019. "Proceedings of the 1st International Conference on Metals and Alloys." IOP.
330. V. Vanegas-Useche, Libardo, Magd Abdel Wahab, and Graham A. Parker. 2019. "Numerical Analysis of Tilted Cutting and F128 Brushes." *CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES* 121 (1): 23–47. doi:10.32604/cmes.2019.06481.
331. Alghazoul, Ruba, Almohanad Makki, and Magd Abdel Wahab. 2019. "Improvement of Flat Surfaces Quality of Aluminum Alloy 6061-O by a Proposed Trajectory of Ball Burnishing Tool." *CMC-COMPUTERS MATERIALS & CONTINUA* 61 (2): 555–568. doi:10.32604/cmc.2019.06337.
332. Le, Thanh Cuong, A.J.M. Ferreira, and Magd Abdel Wahab. 2019. "A Refined Size-Dependent Couple Stress Theory for Laminated Composite Micro-Plates Using Isogeometric Analysis." *THIN-WALLED STRUCTURES* 145. doi:10.1016/j.tws.2019.106427.
333. Khatir, Samir, Samir Tiachacht, Thanh Cuong Le, Tinh Quoc Bui, and Magd Abdel Wahab. 2019. "Damage Assessment in Composite Laminates Using ANN-PSO-IGA and Cornwell Indicator." *COMPOSITE STRUCTURES* 230. doi:10.1016/j.compstruct.2019.111509.
334. Phung Van, Phuc, Chien H. Thai, H. Nguyen-Xuan, and Magd Abdel Wahab. 2019. "An Isogeometric Approach of Static and Free Vibration Analyses for Porous FG

- Nanoplates.” *EUROPEAN JOURNAL OF MECHANICS A-SOLIDS* 78. doi:10.1016/j.euromechsol.2019.103851.
335. Tran, Ngoc Hoa, Samir Khatir, G. De Roeck, T. Bui-Tien, and Magd Abdel Wahab. 2019. “An Efficient Artificial Neural Network for Damage Detection in Bridges and Beam-like Structures by Improving Training Parameters Using Cuckoo Search Algorithm.” *ENGINEERING STRUCTURES* 199. doi:10.1016/j.engstruct.2019.109637.
336. Dang, Bao-Loi, Hau Nguyen Ngoc, Thao Duc Hoang, H. Nguyen-Xuan, and Magd Abdel Wahab. 2019. “Numerical Investigation of Novel Prefabricated Hollow Concrete Blocks for Stepped-Type Seawall Structures.” *ENGINEERING STRUCTURES* 198. doi:10.1016/j.engstruct.2019.109558.
337. Vanegas-Useche, Libardo, Magd Abdel Wahab, and Graham A. Parker. 2019. “Dynamic Analysis of a Horizontal Oscillatory Cutting Brush.” *CMC-COMPUTERS MATERIALS & CONTINUA* 60 (3): 871–893. doi:10.32604/cmc.2019.06480.
338. Nguyen, Duong, Thanh Bui, Guido De Roeck, and Magd Abdel Wahab. 2019. “Damage Detection in Ca Non Bridge Using Transmissibility and Artificial Neural Networks.” *STRUCTURAL ENGINEERING AND MECHANICS* 71 (2): 175–183. doi:10.12989/sem.2019.71.2.175.
339. Mansouri, Lilla, Arezki Djebbar, Samir Khatir, Hafiz Tauqeer Ali, Amar Behtani, and Magd Abdel Wahab. 2019. “Static and Fatigue Behaviors of Short Glass Fiber–Reinforced Polypropylene Composites Aged in a Wet Environment.” *JOURNAL OF COMPOSITE MATERIALS* 53 (25): 3629–3647. doi:10.1177/0021998319861142.
340. Vu, Huu Truong, Thanh Cuong Le, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2019. “A High-Order Mixed Polygonal Finite Element for Incompressible Stokes Flow Analysis.” *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING* 356: 175–198. doi:10.1016/j.cma.2019.07.005.
341. Ni, Junyan, John Vande Voorde, Joachim Antonissen, and Magd Abdel Wahab. 2019. “The Influence of Chemistry Inhomogeneity on Microstructure Development and Residual Stress.” In *Mathematical Modelling of Weld Phenomena 12, MM 12, 12th International Seminar “Numerical Analysis of Weldability”, Proceedings*, ed by. C. Sommitsch, N. Enzinger, and P. Mayr, 125–138. Verlag der Technischen Universität Graz. doi:10.3217/978-3-85125-615-4-08.
342. Kosec, Gregor, Jure Slak, Matja Depolli, Roman Trobec, Kyvia de Fatima Resende Pereira, Satyendra Tomar, Thibault Jacquemin, Stéphane P. A. Bordas, and Magd Abdel Wahab. 2019. “Weak and Strong from Meshless Methods for Linear Elastic Problem under Fretting Contact Conditions.” *TRIBOLOGY INTERNATIONAL* 138: 392–402. doi:10.1016/j.triboint.2019.05.041.
343. Yue, Tongyan, and Magd Abdel Wahab. 2019. “A Review on Fretting Wear Mechanisms, Models and Numerical Analyses.” *CMC - COMPUTERS MATERIALS & CONTINUA* 59 (2): 405–432. doi:10.32604/cmc.2019.04253.
344. Le, Thanh Cuong, Loc V. Tran, Huu Truong Vu, H. Nguyen-Xuan, and Magd Abdel Wahab. 2019. “Size-Dependent Nonlinear Analysis and Damping Responses of FG-CNTRC Micro-Plates.” *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING* 353: 253–276. doi:10.1016/j.cma.2019.05.002.
345. Nguyen Ngoc, Hau, Phuc Phung Van, Bao-Loi Dang, H. Nguyen-Xuan, and Magd Abdel Wahab. 2019. “Static and Dynamic Analyses of Three-Dimensional Hollow Concrete Block Revetments Using Polyhedral Finite Element Method.” *APPLIED OCEAN RESEARCH* 88: 15–28. doi:10.1016/j.apor.2019.03.012.

346. Khatir, Samir, and Magd Abdel Wahab. 2019. "A Computational Approach for Crack Identification in Plate Structures Using XFEM, XIGA, PSO and Jaya Algorithm." *THEORETICAL AND APPLIED FRACTURE MECHANICS* 103. doi:10.1016/j.tafmec.2019.102240.
347. Le, Thanh Cuong, Loc V. Tran, Tinh Quoc Bui, Hoang X. Nguyen, and Magd Abdel Wahab. 2019. "Isogeometric Analysis for Size-Dependent Nonlinear Thermal Stability of Porous FG Microplates." *COMPOSITE STRUCTURES* 221. doi:10.1016/j.compstruct.2019.04.010.
348. Le, Thanh Cuong, Loc V. Tran, Huu Truong Vu, and Magd Abdel Wahab. 2019. "The Size-Dependent Thermal Bending and Buckling Analyses of Composite Laminate Microplate Based on New Modified Couple Stress Theory and Isogeometric Analysis." *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING* 350: 337–361. doi:10.1016/j.cma.2019.02.028.
349. Zhou, Yun Lai, Magd Abdel Wahab, Francisco Javier Cara Cañas, and Cheng Jiang, eds. 2019. "Advances in FRP Composites : Applications, Sensing, and Monitoring." *SENSORS*.
350. Zhou, Yun Lai, Magd Abdel Wahab, Eloi Figueiredo, and Francisco Javier Cara Cañas, eds. 2019. "Bridge Structural Health Monitoring and Damage Identification." *SENSORS (BASEL)*.
351. Liu, Weiji, Yunlai Zhou, Xiaohua Zhu, Xiannan Meng, Mei Liu, and Magd Abdel Wahab. 2019. "Numerical Modelling of Bottom-Hole Rock in Underbalanced Drilling Using Thermo-Poroelastoplasticity Model." *STRUCTURAL ENGINEERING AND MECHANICS* 69 (5): 537–545. doi:10.12989/sem.2019.69.5.537.
352. Khatir, Samir, Magd Abdel Wahab, Djilali Boutchicha, and Tawfiq Khatir. 2019. "Structural Health Monitoring Using Modal Strain Energy Damage Indicator Coupled with Teaching-Learning-Based Optimization Algorithm and Isogeometric Analysis." *JOURNAL OF SOUND AND VIBRATION* 448: 230–246. doi:10.1016/j.jsv.2019.02.017.
353. Wang, Xiaowei, Wei Zhang, Tianyu Zhang, Jianming Gong, and Magd Abdel Wahab. 2019. "A New Empirical Life Prediction Model for 9–12%Cr Steels under Low Cycle Fatigue and Creep Fatigue Interaction Loadings." *METALS* 9 (2). doi:10.3390/met9020183.
354. Wang, Xiaowei, Wei Zhang, Junyan Ni, Tianyu Zhang, Jianming Gong, and Magd Abdel Wahab. 2019. "Quantitative Description between Pre-Fatigue Damage and Residual Tensile Properties of P92 Steel." *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING* 744: 415–425. doi:10.1016/j.msea.2018.12.029.
355. Rudawska, Anna, and Magd Abdel Wahab. 2019. "The Effect of Cataphoretic and Powder Coatings on the Strength and Failure Modes of EN AW-5754 Aluminium Alloy Adhesive Joints." *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 89: 40–50. doi:10.1016/j.ijadhadh.2018.11.005.
356. Phung Van, Phuc, Chien H. Thai, H. Nguyen-Xuan, and Magd Abdel Wahab. 2019. "Porosity-Dependent Nonlinear Transient Responses of Functionally Graded Nanoplates Using Isogeometric Analysis." *COMPOSITES PART B-ENGINEERING* 164: 215–225. doi:10.1016/j.compositesb.2018.11.036.
357. Bhatti, Nadeem Ali, K. Pereira, and Magd Abdel Wahab. 2019. "Effect of Stress Gradient and Quadrant Averaging on Fretting Fatigue Crack Initiation Angle and

- Life.” *TRIBOLOGY INTERNATIONAL* 131: 212–221.
doi:10.1016/j.triboint.2018.10.036.
- 358.Khatir, Samir, and Magd Abdel Wahab. 2019. “Fast Simulations for Solving Fracture Mechanics Inverse Problems Using POD-RBF XIGA and Jaya Algorithm.” *ENGINEERING FRACTURE MECHANICS* 205: 285–300.
doi:10.1016/j.engfracmech.2018.09.032.
- 359.Mansouri, Lilla, Arezki Djebbar, Samir Khatir, and Magd Abdel Wahab. 2019. “Effect of Hygrothermal Aging in Distilled and Saline Water on the Mechanical Behaviour of Mixed Short Fibre / Woven Composites.” *COMPOSITE STRUCTURES* 207: 816–825. doi:10.1016/j.compstruct.2018.09.067.
- 360.Ho, Viet Long, Ngoc Hoa Tran, Guido De Roeck, Tien Thanh Bui, and Magd Abdel Wahab. 2019. “System Identification Based on Vibration Testing of a Steel I-Beam.” In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, 20:254–268. Singapore: Springer. doi:10.1007/978-981-13-2405-5_21.
- 361.Nguyen, Huong Duong, Tien Thanh Bui, Guido De Roeck, and Magd Abdel Wahab. 2019. “Damage Detection in Simply Supported Beam Using Transmissibility and Auto-Associative Neutral Network.” In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, 20:177–186. Singapore: Springer Singapore. doi:10.1007/978-981-13-2405-5_15.
- 362.Liu, Weiji, Xiaohua Zhu, Yunlai Zhou, Quanmin Liu, and Magd Abdel Wahab. 2019. “The Rock Failure Behavior Analysis in Rock Cutting Using Finite Element Analysis.” In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, 20:143–149. Singapore: Springer Singapore. doi:10.1007/978-981-13-2405-5_12.
- 363.Tran, Loc V., Magd Abdel Wahab, and Jarkko Niiranen. 2019. “A Six-Variable Quasi-3D Model for Static Analysis of Laminated Composite Plates Using Isogeometric Analysis.” In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, 20:135–142. Singapore: Springer Singapore. doi:10.1007/978-981-13-2405-5_11.
- 364.Liu, Weiji, Xiaohua Zhu, Yunlai Zhou, Xiangning Zhang, and Magd Abdel Wahab. 2019. “Investigation of Inclined Wellbore Stability Using Numerical Analysis.” In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, 20:213–224. Singapore: Springer Singapore. doi:10.1007/978-981-13-2405-5_18.
- 365.Abdel Wahab, Magd. 2019. “Preface.” Ed by. Magd Abdel Wahab. *Proceedings of the 1st International Conference on Numerical Modelling in Engineering, Volume 1 : Numerical Modelling in Civil Engineering*. Singapore: Springer.
- 366.Abdel Wahab, Magd, ed. 2019. “Proceedings of the 1st International Conference on Numerical Modelling in Engineering, Volume 2 : Numerical Modelling in Mechanical and Materials Engineering.” Springer. doi:10.1007/978-981-13-2273-0.
- 367.Abdel Wahab, Magd, ed. 2019. “Proceedings of the 1st International Conference on Numerical Modelling in Engineering, Volume 1 : Numerical Modelling in Civil Engineering.” Singapore: Springer. doi:10.1007/978-981-13-2405-5.
- 368.Zenzen, R., Samir Khatir, I. Belaidi, and Magd Abdel Wahab. 2019. “Structural Health Monitoring of Beam-like and Truss Structures Using Frequency Response and Particle Swarm Optimization.” In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, ed by. Magd Abdel Wahab, 390–399. Singapore: Springer Singapore. doi:10.1007/978-981-13-2273-0_30.

- 369.Khatir, Samir, Magd Abdel Wahab, Djilali Boutchicha, Roberto Capozucca, and Tawfiq Khatir. 2019. "Optimization of IGA Parameters Based on Beam Structure Using Cuckoo Search Algorithm." In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, ed by. Magd Abdel Wahab, 380–389. Singapore: Springer Singapore. doi:10.1007/978-981-13-2273-0_29.
- 370.Ni, Junyan, J. Vande Voorde, J. Antonissen, and Magd Abdel Wahab. 2019. "The Influence of Microstructure Heterogeneity on Crack Propagation in Welds Using XFEM." In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, ed by. Magd Abdel Wahab, 379. Singapore: Springer Singapore. doi:10.1007/978-981-13-2273-0_28.
- 371.Truong, Thi Phuong, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2019. "A Coupled SPH-FEM for Fluid-Structures Interaction Problem with Free-Surface and Revetment Slope Thin-Walled Structures." In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, ed by. Magd Abdel Wahab, 20:187–201. Singapore: Springer Singapore. doi:10.1007/978-981-13-2405-5_16.
- 372.Nguyen Ngoc, Hau, Bao-Loi Dang, Hung Nguyen-Xuan, Hoang Duc Thao, and Magd Abdel Wahab. 2019. "Topology Optimization of an Interlocking Revetment Block." In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, ed by. Magd Abdel Wahab, 20:165–176. Singapore: Springer Singapore. doi:10.1007/978-981-13-2405-5_14.
- 373.Nguyen Ngoc, Hau, Bao-Loi Dang, Hung Nguyen-Xuan, Hoang Duc Thao, and Magd Abdel Wahab. 2019. "Three-Dimensional Analysis of an Innovative Hollow Concrete Block of Interlocking Revetment." In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, ed by. Magd Abdel Wahab, 20:112–122. Singapore: Springer Singapore. doi:10.1007/978-981-13-2405-5_9.
- 374.Dang, Bao-Loi, Hau Nguyen Ngoc, Hung Nguyen-Xuan, Hoang Duc Thao, and Magd Abdel Wahab. 2019. "Numerical Simulations of Precast Thin-Walled Concrete Blocks Forming Coastal Structure." In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, 20:67–80. Singapore: Springer Singapore. doi:10.1007/978-981-13-2405-5_6.
- 375.Vu, Huu Truong, Thanh Cuong Le, Nguyen-Xuan Hung, and Magd Abdel Wahab. 2019. "Incompressible Fluid Computation Based on Polygonal Finite Element." In , ed by. Magd Abdel Wahab, 20:11.
- 376.Le, Thanh Cuong, Huu Truong Vu, Phuc Phung Van, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2019. "Size-Dependent Analysis for FG-CNTRC Nanoplates Based on Refined Plate Theory and Modified Couple Stress." In *Proceedings of the 1st International Conference on Numerical Modelling in Engineering*, ed by. Magd Abdel Wahab, 20:1–13. doi:10.1007/978-981-13-2405-5_19.
- 377.Pitta, S., J. I. Rojas, D. Crespo, and Magd Abdel Wahab. 2019. "Fatigue Life Analysis of Un-Repaired and Repaired Metallic Substrate Using FRANC2D." In *Proceedings of the 7th International Conference on Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 558–565. Springer Singapore. doi:10.1007/978-981-13-0411-8_50.
- 378.Wang, Xiaowei, Wei Zhang, Jianming Gong, and Magd Abdel Wahab. 2019. "Simulation of Cyclic Deformation Behavior of Ferritic P92 Steel Based on Unified Viscoplastic Model." In *Proceedings of the 7th International Conference on Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 547–557. Springer Singapore. doi:10.1007/978-981-13-0411-8_49.

379. Resende Pereira, Kyvia de Fatima, and Magd Abdel Wahab. 2019. "Effect of Short Crack Behavior on the Propagation Life Prediction for a Fretting Cylindrical Pad Configuration." In *Proceedings of the 7th International Conference on Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 539–546. Springer Singapore. doi:10.1007/978-981-13-0411-8_48.
380. Bhatti, Nadeem Ali, Kyvia de Fatima Resende Pereira, and Magd Abdel Wahab. 2019. "A Comparison between Critical-Plane and Stress-Invariant Approaches for the Prediction of Fretting Fatigue Crack Nucleation." In *Proceedings of the 7th International Conference on Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 530–538. Springer Singapore. doi:10.1007/978-981-13-0411-8_47.
381. Rudawska, Anna, Magd Abdel Wahab, Dalibor Barta, and Saugirdas Pukalskas. 2019. "The Effect of Technological and Structural Factors on the Strength of Polyethylene Adhesive Joints." In *Proceedings of the 7th International Conference on Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 241–257. Springer Singapore. doi:10.1007/978-981-13-0411-8_23.
382. Khatir, Samir, Magd Abdel Wahab, Brahim Benaissa, and Mario Köppen. 2019. "Crack Identification Using Extended Isogeometric Analysis and Particle Swarm Optimization." In *Proceedings of the 7th International Conference on Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 210–222. Springer Singapore. doi:10.1007/978-981-13-0411-8_21.
383. Gillich, Gilbert-Rainer, Horia Furdui, Magd Abdel Wahab, and Zoltan-Iosif Korca. 2019. "A Robust Damage Detection Method Based on Multi-Modal Analysis in Variable Temperature Conditions." *MECHANICAL SYSTEMS AND SIGNAL PROCESSING* 115: 361–379. doi:10.1016/j.ymsp.2018.05.037.
384. Khatir, Samir, Idir Belaidi, Roger Serra, Magd Abdel Wahab, and Tawfiq Khatir. 2018. "Republished Paper: Numerical Study for Single and Multiple Damage Detection and Localization in Beam-like Structures Using BAT Algorithm (Reprinted from Journal of Vibroengineering, Vol 18, Pg 4491-4499, 2016)." *JOURNAL OF VIBROENGINEERING*. doi:10.21595/jve.2016.19717.
385. Deng, Qingming, Nadeem Ali Bhatti, Xiaochun Yin, and Magd Abdel Wahab. 2018. "Numerical Modeling of the Effect of Randomly Distributed Inclusions on Fretting Fatigue-Induced Stress in Metals." *METALS* 8 (10). doi:10.3390/met8100836.
386. Tran, Ngoc Hoa, Samir Khatir, G. De Roeck, T. Bui-Tien, L. Nguyen-Ngoc, and Magd Abdel Wahab. 2018. "Model Updating for Nam o Bridge Using Particle Swarm Optimization Algorithm and Genetic Algorithm." *SENSORS* 18 (12). doi:10.3390/s18124131.
387. Ni, Junyan, Xiaowei Wang, Jianming Gong, and Magd Abdel Wahab. 2018. "A Multi-Phase Model for Transformation Plasticity Using Thermodynamics-Based Metallurgical Algorithm." *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES* 148: 135–148. doi:10.1016/j.ijmecsci.2018.08.025.
388. Roumaissa, Zenzen, Idir Belaidi, Samir Khatir, and Magd Abdel Wahab. 2018. "A Damage Identification Technique for Beam-like and Truss Structures Based on FRF and Bat Algorithm." *COMPTEs RENDUS MECANIQUE* 346 (12): 1253–1266. doi:10.1016/j.crme.2018.09.003.
389. Tiachacht, Samir, Amar Bouazzouni, Samir Khatir, Magd Abdel Wahab, Amar Behtani, and Reberto Capozucca. 2018. "Damage Assessment in Structures Using Combination of a Modified Cornwell Indicator and Genetic Algorithm." *ENGINEERING STRUCTURES* 177: 421–430. doi:10.1016/j.engstruct.2018.09.070.

390. Rudawska, Anna, Mateusz Malczarski, Dana Stančková, Magd Abdel Wahab, and Vladimira Schindlerová. 2018. "Mechanical Properties of Hand-Making Polyester Composites." *ADVANCES IN SCIENCE AND TECHNOLOGY-RESEARCH JOURNAL* 12 (2): 112–120. doi:10.12913/22998624/91891.
391. Abdel Wahab, Magd, Yun Lai Zhou, and Nuno Maia, eds. 2018. "Structural Health Monitoring from Sensing to Processing." IntechOpen. doi:10.5772/intechopen.73069.
392. Abdel Wahab, Magd. 2018. "Proceedings of the 1st International Conference on Numerical Modelling in Engineering - Volume 2 Numerical Modelling in Mechanical and Materials Engineering." Ed by. Magd Abdel Wahab.
393. Vu, Huu Truong, Phuc Phung Van, Hung Nguyen Xuan, and Magd Abdel Wahab. 2018. "Polygonal Analysis and Polytree-Based Adaptive Topology Optimization of Fluid-Submerged Breakwater Interaction." In .
394. Le, Thanh Cuong, Phuc Phung Van, Chien Thai Hoang, and Magd Abdel Wahab. 2018. "Vibration Analysis of FG-CNTRC Nanoplates Using MCST and IGA." In *International Conference on Modelling in Mechanics & Materials*.
395. Alali, Hanan, Lutgart Braeckman, Tanja Van Hecke, and Magd Abdel Wahab. 2018. "Shift Work and Occupational Accident Absence in Belgium: Findings from the Sixth European Working Condition Survey." *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH* 15 (9). doi:10.3390/ijerph15091811.
396. Vanegas-Useche, Libardo, Magd Abdel Wahab, and Graham Parker. 2018. "Determination of the Normal Contact Stiffness and Integration Time Step for the Finite Element Modeling of Bristle-Surface Interaction." *CMC-COMPUTERS MATERIALS & CONTINUA* 56 (1): 169–184. doi:10.3970/cmc.2018.01827.
397. Abdel Wahab, Magd. 2018. "Proceedings of the 7th International Conference on Fracture Fatigue and Wear." Ed by. Magd Abdel Wahab. Springer Singapore.
398. Abdel Wahab, Magd, ed. 2018. "Proceedings of the 7th International Conference on Fracture Fatigue and Wear." doi:10.1007/978-981-13-0411-8.
399. Vu, Huu Truong, Phuc Phung Van, H. Nguyen-Xuan, and Magd Abdel Wahab. 2018. "A Polytree-Based Adaptive Polygonal Finite Element Method for Topology Optimization of Fluid-Submerged Breakwater Interaction." *COMPUTERS & MATHEMATICS WITH APPLICATIONS* 76 (5): 1198–1218. doi:10.1016/j.camwa.2018.06.008.
400. Phung Van, Phuc, Thanh Cuong Le, H. Nguyen-Xuan, and Magd Abdel Wahab. 2018. "Nonlinear Transient Isogeometric Analysis of FG-CNTRC Nanoplates in Thermal Environments." *COMPOSITE STRUCTURES* 201: 882–892. doi:10.1016/j.compstruct.2018.06.087.
401. Ni, Junyan, Xiaowei Wang, Jianming Gong, and Magd Abdel Wahab. 2018. "Thermal, Metallurgical and Mechanical Analysis of Circumferentially Multi-Pass Welded P92 Steel Pipes." *INTERNATIONAL JOURNAL OF PRESSURE VESSELS AND PIPING* 165: 164–175. doi:10.1016/j.ijpvp.2018.06.009.
402. Resende Pereira, Kyvia de Fatima, Nadeem Ali Bhatti, and Magd Abdel Wahab. 2018. "Prediction of Fretting Fatigue Crack Initiation Location and Direction Using Cohesive Zone Model." *TRIBOLOGY INTERNATIONAL* 127: 245–254. doi:10.1016/j.triboint.2018.05.038.
403. Thai, Chien H., A. J. M. Ferreira, Magd Abdel Wahab, and H. Nguyen-Xuan. 2018. "A Moving Kriging Meshfree Method with Naturally Stabilized Nodal Integration for

- Analysis of Functionally Graded Material Sandwich Plates.” *ACTA MECHANICA* 229 (7): 2997–3023. doi:10.1007/s00707-018-2156-9.
404. Wang, Xiaowei, Wei Zhang, Jianming Gong, and Magd Abdel Wahab. 2018. “Low Cycle Fatigue and Creep Fatigue Interaction Behavior of 9Cr-0.5Mo-1.8W-V-Nb Heat-Resistant Steel at High Temperature.” *JOURNAL OF NUCLEAR MATERIALS* 505: 73–84. doi:10.1016/j.jnucmat.2018.03.055.
405. Ni, Junyan, J. Vande Voorde, J. Antonissen, and Magd Abdel Wahab. 2018. “Dependency of Phase Transformation on the Prior Austenite Grain Size and Its Influence on Welding Residual Stress of S700 Steel.” *WELDING IN THE WORLD* 62 (4): 699–712. doi:10.1007/s40194-018-0575-9.
406. Djafri, M., M. Bouchetara, C. Busch, Samir Khatir, T. Khatir, S. Weber, K. Shbaita, and Magd Abdel Wahab. 2018. “Influence of Thermal Fatigue on the Wear Behaviour of Brake Discs Sliding against Organic and Semi-Metallic Friction Materials.” *TRIBOLOGY TRANSACTIONS* 61 (5): 861–868. doi:10.1080/10402004.2018.1437491.
407. Truong, Thi Phuong, Bao-Loi Dang, Magd Abdel Wahab, H. Duong-Ngoc, T. Hoang-Duc, and Hung Nguyen-Xuan. 2018. “Analysis of Fluid–Structures Interaction Problem of Revetment Slope Thin-Walled Structure Using Abaqus.” In *Proceedings of the International Conference on Advances in Computational Mechanics 2017 (ACOME 2017)*, 917–925. Springer. doi:10.1007/978-981-10-7149-2_64.
408. Dang, Bao-Loi, Thi Phuong Truong, Magd Abdel Wahab, and Hung Nguyen-Xuan. 2018. “Numerical Studies on Contact Problem of Inter-Locking Concrete Blocks Forming Revetment Structure.” In *Proceedings of the International Conference on Advances in Computational Mechanics 2017 (ACOME 2017)*, 143–154. Springer. doi:10.1007/978-981-10-7149-2_10.
409. Vu, Huu Truong, Phuc Phung Van, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2018. “Fluid–Structure Interaction Analysis of Revetment Structures : An Overview.” In *Proceedings of the International Conference on Advances in Computational Mechanics 2017*, ed by. Hung Nguyen-Xuan, Phuc Phung-Van, and T. Rabczuk, 723–731. Singapore: Springer. doi:10.1007/978-981-10-7149-2_50.
410. Qin, Shiqiang, Yun-Lai Zhou, Hongyou Cao, and Magd Abdel Wahab. 2018. “Model Updating in Complex Bridge Structures Using Kriging Model Ensemble with Genetic Algorithm.” *KSCE JOURNAL OF CIVIL ENGINEERING* 22 (9): 3567–3578. doi:10.1007/s12205-017-1107-7.
411. Zhang, Wei, Xiaowei Wang, Xiang Li, Jianming Gong, and Magd Abdel Wahab. 2018. “Influence of Prior Low Cycle Fatigue on Microstructure Evolution and Subsequent Creep Behavior.” *INTERNATIONAL JOURNAL OF FATIGUE* 109: 114–125. doi:10.1016/j.ijfatigue.2018.01.001.
412. Abdel Wahab, Magd, S. Tiachacht, A. Bouazzouni, Samir Khatir, A. Behtani, and Y.-L.-M. Zhou. 2018. “Structural Health Monitoring of 3D Frame Structures Using Finite Element Modal Analysis and Genetic Algorithm.” *JOURNAL OF VIBROENGINEERING* 20 (1): 202–214. doi:10.21595/jve.2017.18571.
413. Bhatti, Nadeem Ali, and Magd Abdel Wahab. 2018. “Fretting Fatigue Damage Nucleation under out of Phase Loading Using a Continuum Damage Model for Non-Proportional Loading.” *TRIBOLOGY INTERNATIONAL* 121: 204–213. doi:10.1016/j.triboint.2018.01.038.

414. Bhatti, Nadeem Ali, and Magd Abdel Wahab. 2018. "Fretting Fatigue Crack Nucleation: A Review." *TRIBOLOGY INTERNATIONAL* 121: 121–138. doi:10.1016/j.triboint.2018.01.029.
415. Khatir, Samir, Benaissa Brahim, Roberto Capozucca, and Magd Abdel Wahab. 2018. "Damage Detection in CFRP Composite Beams Based on Vibration Analysis Using Proper Orthogonal Decomposition Method with Radial Basis Functions and Cuckoo Search Algorithm." *COMPOSITE STRUCTURES* 187: 344–353. doi:10.1016/j.compstruct.2017.12.058.
416. Khatir, Samir, Kevin Dekemele, Mia Loccufier, Tawfiq Khatir, and Magd Abdel Wahab. 2018. "Crack Identification Method in Beam-like Structures Using Changes in Experimentally Measured Frequencies and Particle Swarm Optimization." *COMPTEs RENDUS MECANIQUE* 346 (2): 110–120. doi:10.1016/j.crme.2017.11.008.
417. Thai, Chien H., Magd Abdel Wahab, and Hung Nguyen-Xuan. 2018. "A Layerwise C-0-Type Higher Order Shear Deformation Theory for Laminated Composite and Sandwich Plates." *COMPTEs RENDUS MECANIQUE* 346 (1): 57–76. doi:10.1016/j.crme.2017.11.001.
418. Gadala, Ibrahim, Magd Abdel Wahab, and Akram AlFantazi. 2018. "Electrochemical Corrosion Finite Element Analysis and Burst Pressure Prediction of Externally Corroded Underground Gas Transmission Pipelines." *JOURNAL OF PRESSURE VESSEL TECHNOLOGY-TRANSACTIONS OF THE ASME* 140 (1). doi:10.1115/1.4038224.
419. Le, Thanh Cuong, Phuc Phung Van, Chien H. Thai, H. Nguyen-Xuan, and Magd Abdel Wahab. 2018. "Isogeometric Analysis of Functionally Graded Carbon Nanotube Reinforced Composite Nanoplates Using Modified Couple Stress Theory." *COMPOSITE STRUCTURES* 184: 633–649. doi:10.1016/j.compstruct.2017.10.025.
420. Bhatti, Nadeem Ali, Kyvia de Fatima Resende Pereira, and Magd Abdel Wahab. 2018. "A Continuum Damage Mechanics Approach for Fretting Fatigue under out of Phase Loading." *TRIBOLOGY INTERNATIONAL* 117: 39–51. doi:10.1016/j.triboint.2017.08.009.
421. Zhou, Yun-Lai, Nuno Maia, and Magd Abdel Wahab. 2018. "Damage Detection Using Transmissibility Compressed by Principal Component Analysis Enhanced with Distance Measure." *JOURNAL OF VIBRATION AND CONTROL* 24 (10): 2001–2019. doi:10.1177/1077546316674544.
422. Abdel Wahab, Magd, ed. 2017. "Special Issue 'Numerical Analysis of Tribology Behavior of Materials.'" *MATERIALS*.
423. Behtani, A., A. Bouazzouni, Samir Khatir, S. Tiachacht, Y.-L. Zhou, and Magd Abdel Wahab. 2017. "Damage Localization and Quantification of Composite Beam Structures Using Residual Force and Optimization." *JOURNAL OF VIBROENGINEERING* 19 (7): 4977–4988. doi:10.21595/jve.2017.18302.
424. ZHOU, Yun-Lai, and Magd Abdel Wahab. 2017. "Damage Detection Using Vibration Data and Dynamic Transmissibility Ensemble with Auto-Associative Neural Network." *MECHANIKA* 23 (5): 688–695. doi:10.5755/j01.mech.23.5.15339.
425. Khatir, T., M. Bouchetara, M. Djafri, Samir Khatir, and Magd Abdel Wahab. 2017. "Influence of Balancing of Internal Combustion Engines on the Operating Conditions of Hydrodynamic Bearings." *JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY* 31 (10): 4579–4588. doi:10.1007/s12206-017-0904-8.

- 426.Khatir, Tawfiq, Boutchicha Djillali, Samir Khatir, Lousdad Abdelkader, and Magd Abdel Wahab. 2017. "Experimental and Numerical Investigation of Flutter Phenomenon of an Aircraft Wing (NACA 0012)." *MECHANIKA* 23 (4): 562–566. doi:10.5755/j01.mech.23.4.15175.
- 427.Khatir, Samir, Idir Belaidi, Tawfiq Khatir, Abderrachid Hamrani, Yun-Lai Zhou, and Magd Abdel Wahab. 2017. "Multiple Damage Detection in Composite Beams Using Particle Swarm Optimization and Genetic Algorithm." *MECHANIKA* 23 (4): 514–521. doi:10.5755/j01.mech.23.4.15254.
- 428.Zhou, Yun-Lai, Hongyou Cao, Quanmin Liu, and Magd Abdel Wahab. 2017. "Output-Based Structural Damage Detection by Using Correlation Analysis Together with Transmissibility." *MATERIALS* 10 (8). doi:10.3390/ma10080866.
- 429.Tran, Loc V., Magd Abdel Wahab, and Seung-Eock Kim. 2017. "An Isogeometric Finite Element Approach for Thermal Bending and Buckling Analyses of Laminated Composite Plates." *COMPOSITE STRUCTURES* 179: 35–49. doi:10.1016/j.compstruct.2017.07.056.
- 430.Resende Pereira, Kyvia de Fatima, and Magd Abdel Wahab. 2017. "Fretting Fatigue Crack Propagation Lifetime Prediction in Cylindrical Contact Using an Extended MTS Criterion for Non-Proportional Loading." *TRIBOLOGY INTERNATIONAL* 115: 525–534. doi:10.1016/j.triboint.2017.06.026.
- 431.Bhatti, Nadeem Ali, and Magd Abdel Wahab. 2017. "A Numerical Investigation on Critical Plane Orientation and Initiation Lifetimes in Fretting Fatigue under out of Phase Loading Conditions." *TRIBOLOGY INTERNATIONAL* 115: 307–318. doi:10.1016/j.triboint.2017.05.036.
- 432.Abdel Wahab, Magd, ed. 2017. "Numerical Analysis of Tribology Behavior of Materials."
- 433.Zhou, Yun-Lai, Xudong Qian, Hongyou Cao, and Magd Abdel Wahab. 2017. "Damage Detection in Structures Using Frequency Response Functions Ensemble with Extended Cosine Based Indicator." In *6TH INTERNATIONAL CONFERENCE ON FRACTURE FATIGUE AND WEAR (FFW)*, ed by. Magd Abdel Wahab. Vol. 843. UK: IOP Publishing. doi:10.1088/1742-6596/843/1/012021.
- 434.Yue, Tongyan, and Magd Abdel Wahab. 2017. "Roughness Effects on Fretting Fatigue." In *6TH INTERNATIONAL CONFERENCE ON FRACTURE FATIGUE AND WEAR (FFW)*, ed by. Magd Abdel Wahab. Vol. 843. UK: IOP Publishing. doi:10.1088/1742-6596/843/1/012056.
- 435.Phung Van, Phuc, Magd Abdel Wahab, and H Nguyen-Xuan. 2017. "Buckling Analysis of Nanoplates Using IGA." In *Proceedings of the 6th International Conference on Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab. Vol. 843. UK: IOP Publishing. doi:10.1088/1742-6596/843/1/012016.
- 436.Resende Pereira, Kyvia de Fatima, and Magd Abdel Wahab. 2017. "Minimum Shear Stress Range : A Criterion for Crack Path Determination." In *6TH INTERNATIONAL CONFERENCE ON FRACTURE FATIGUE AND WEAR (FFW)*, ed by. Magd Abdel Wahab. Vol. 843. UK: IOP Publishing. doi:10.1088/1742-6596/843/1/012053.
- 437.Ni, Junyan, and Magd Abdel Wahab. 2017. "The Prediction of Residual Stress and Its Influence on the Mechanical Properties of Weld Joint." In *6TH INTERNATIONAL CONFERENCE ON FRACTURE FATIGUE AND WEAR (FFW)*, ed by. Magd Abdel Wahab. Vol. 843. UK: IOP Publishing. doi:10.1088/1742-6596/843/1/012001.
- 438.Bhatti, Nadeem Ali, and Magd Abdel Wahab. 2017. "Numerical Investigation of Contact Stresses for Fretting Fatigue Damage Initiation." In *6TH INTERNATIONAL*

- CONFERENCE ON FRACTURE FATIGUE AND WEAR (FFW)*, ed by. Magd Abdel Wahab. Vol. 843. UK: IOP Publishing. doi:10.1088/1742-6596/843/1/012054.
439. Abdel Wahab, Magd. 2017. "6th International Conference on Fracture Fatigue and Wear." Ed by. Magd Abdel Wahab. *Proceedings of the 6th International Conference on Fracture Fatigue and Wear*. UK: IOP Publishing. doi:10.1088/1742-6596/843/1/011001.
440. Abdel Wahab, Magd, ed. 2017. "Proceedings of the 6th International Conference on Fracture Fatigue and Wear." UK: IOPscience.
441. Zhou, Yun-Lai, Cao Hongyou, Ni Zhen, Li Zhang, and Magd Abdel Wahab. 2017. "Structural System Identification by Utilizing Transmissibility Coherence from Limited Measured Data." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. UK: IOP Publishing. doi:10.1088/1742-6596/842/1/012020.
442. Zhou, Yun-Lai, Cao Hongyou, Ni Zhen, and Magd Abdel Wahab. 2017. "Review on Structural Damage Assessment via Transmissibility with Vibration Based Measurements." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. UK: IOP Publishing. doi:10.1088/1742-6596/842/1/012016.
443. Tiachacht, S, A Bouazzouni, Samir Khatir, M A behtani, Y-L Zhou, and Magd Abdel Wahab. 2017. "Damage Detection and Quantification in Composite Beam Structure Using Strain Energy and Vibration Data." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. IOP Publishing. doi:10.1088/1742-6596/842/1/012027.
444. Phung Van, Phuc, Magd Abdel Wahab, and H Nguyen-Xuan. 2017. "An Isogeometric Approach for Size-Dependent Buckling Analysis of FGM Nanoplates." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. IOP Publishing. doi:10.1088/1742-6596/842/1/012085.
445. Nitescu, C, G R Gillich, Magd Abdel Wahab, T Manescu, and Z I Korca. 2017. "Damage Severity Estimation from the Global Stiffness Decrease." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. UK: IOP Publishing. doi:10.1088/1742-6596/842/1/012034.
446. Khatir, Samir, A Behtani, S Tiachacht, A Bouazzouni, Magd Abdel Wahab, and Y-L Zhou. 2017. "Delamination Detection in Laminated Composite Using Virtual Crack Closure Technique (VCCT) and Modal Flexibility Based on Dynamic Analysis." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. IOP. doi:10.1088/1742-6596/842/1/012084.
447. Habib, S H, I Belaidi, S Khatir, and Magd Abdel Wahab. 2017. "Numerical Simulation of Cracked Orthotropic Materials Using Extended Isogeometric Analysis." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. UK: IOP Publishing. doi:10.1088/1742-6596/842/1/012061.
448. Gillich, G R, J L Ntakpe, Magd Abdel Wahab, Z I Praisach, and M C Mimis. 2017. "Damage Detection in Multi-Span Beams Based on the Analysis of Frequency Changes." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT*

- OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. IOP Publishing. doi:10.1088/1742-6596/842/1/012033.
449. Benaissa, B, M Köppen, Magd Abdel Wahab, and Samir Khatir. 2017. "Application of Proper Orthogonal Decomposition and Radial Basis Functions for Crack Size Estimation Using Particle Swarm Optimization." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. IOP. doi:10.1088/1742-6596/842/1/012014.
450. Behtani, A, A Bouazzouni, Samir Khatir, S Tiachacht, Y-L Zhou, and Magd Abdel Wahab. 2017. "Damage Localization and Quantification of Composite Stratified Beam Structures Using Residual Force Method." In *12TH INTERNATIONAL CONFERENCE ON DAMAGE ASSESSMENT OF STRUCTURES*, ed by. Magd Abdel Wahab. Vol. 842. UK: IOPscience. doi:10.1088/1742-6596/842/1/012028.
451. Abdel Wahab, Magd. 2017. "12th International Conference on Damage Assessment of Structures." Ed by. Magd Abdel Wahab. UK: IOPscience. doi:doi :10.1088/1742-6596/842/1/011001.
452. Abdel Wahab, Magd, ed. 2017. "Proceedings of the 12th International Conference on Damage Assessment of Structures." UK: IOPscience.
453. Ni, Junyan, and Magd Abdel Wahab. 2017. "A Numerical Kinematic Model of Welding Process for Low Carbon Steels." *COMPUTERS & STRUCTURES* 186: 35–49. doi:10.1016/j.compstruc.2017.03.009.
454. Zhou, Yun-Lai, and Magd Abdel Wahab. 2017. "Cosine Based and Extended Transmissibility Damage Indicators for Structural Damage Detection." *ENGINEERING STRUCTURES* 141: 175–183. doi:10.1016/j.engstruct.2017.03.030.
455. Martínez, Juan Carlos, Libardo Vicente Vanegas Useche, and Magd Abdel Wahab. 2017. "Numerical Prediction of Fretting Fatigue Crack Trajectory in a Railway Axle Using XFEM." *INTERNATIONAL JOURNAL OF FATIGUE* 100 (1): 32–49. doi:10.1016/j.ijfatigue.2017.03.009.
456. Cao, Hongyou, Yun-Lai Zhou, Zhijun Chen, and Magd Abdel Wahab. 2017. "Form-Finding Analysis of Suspension Bridges Using an Explicit Iterative Approach." *STRUCTURAL ENGINEERING AND MECHANICS* 62 (1): 85–95. doi:10.12989/sem.2017.62.1.085.
457. Alali, Hanan, Lutgart Braeckman, Tanja Van Hecke, Bart De Clercq, Heidi Janssens, and Magd Abdel Wahab. 2017. "Relationship between Non-Standard Work Arrangements and Work-Related Accident Absence in Belgium." *JOURNAL OF OCCUPATIONAL HEALTH* 59 (2): 177–186. doi:10.1539/joh.016-0119-OA.
458. Phung Van, Phuc, AJM Ferreira, H Nguyen-Xuan, and Magd Abdel Wahab. 2017. "An Isogeometric Approach for Size-Dependent Geometrically Nonlinear Transient Analysis of Functionally Graded Nanoplates." *COMPOSITES PART B-ENGINEERING* 118: 125–134. doi:10.1016/j.compositesb.2017.03.012.
459. Resende Pereira, Kyvia de Fatima, Tongyan Yue, and Magd Abdel Wahab. 2017. "Multiscale Analysis of the Effect of Roughness on Fretting Wear." *TRIBOLOGY INTERNATIONAL* 110: 222–231. doi:10.1016/j.triboint.2017.02.024.
460. Bhatti, Nadeem Ali, and Magd Abdel Wahab. 2017. "Finite Element Analysis of Fretting Fatigue under out of Phase Loading Conditions." *TRIBOLOGY INTERNATIONAL* 109: 552–562. doi:10.1016/j.triboint.2017.01.022.
461. Phung Van, Phuc, Qui X. Lieu, H Nguyen-Xuan, and Magd Abdel Wahab. 2017. "Size-Dependent Isogeometric Analysis of Functionally Graded Carbon Nanotube-

- Reinforced Composite Nanoplates.” *COMPOSITE STRUCTURES* 166: 120–135. doi:10.1016/j.compstruct.2017.01.049.
462. Zhou, Y-L, NMM Maia, RPC Sampaio, and Magd Abdel Wahab. 2017. “Structural Damage Detection Using Transmissibility Together with Hierarchical Clustering Analysis and Similarity Measure.” *STRUCTURAL HEALTH MONITORING-AN INTERNATIONAL JOURNAL* 16 (6): 711–731. doi:10.1177/1475921716680849.
463. Kumar, Deepak, Raja Biswas, Leong Hien Poh, and Magd Abdel Wahab. 2017. “Fretting Fatigue Stress Analysis in Heterogeneous Material Using Direct Numerical Simulations in Solid Mechanics.” *TRIBOLOGY INTERNATIONAL* 109: 124–132. doi:10.1016/j.triboint.2016.12.033.
464. Yue, Tongyan, and Magd Abdel Wahab. 2017. “Finite Element Analysis of Fretting Wear under Variable Coefficient of Friction and Different Contact Regimes.” *TRIBOLOGY INTERNATIONAL* 107: 274–282. doi:10.1016/j.triboint.2016.11.044.
465. X. Nguyen, Hoang, Tuan N. Nguyen, Magd Abdel Wahab, SPA Bordas, H Nguyen-Xuan, and Thuc P. Voa. 2017. “A Refined Quasi-3D Isogeometric Analysis for Functionally Graded Microplates Based on the Modified Couple Stress Theory.” *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING* 313: 904–940. doi:10.1016/j.cma.2016.10.002.
466. Phung Van, Phuc, Loc Tran Vinh, AJM Ferreira, H Nguyen-Xuan, and Magd Abdel Wahab. 2017. “Nonlinear Transient Isogeometric Analysis of Smart Piezoelectric Functionally Graded Material Plates Based on Generalized Shear Deformation Theory under Thermo-Electro-Mechanical Loads.” *NONLINEAR DYNAMICS* 87 (2): 879–894. doi:10.1007/s11071-016-3085-6.
467. Gillich, Gilbert-Rainer, Magd Abdel Wahab, Ruqiang Yan, and José V. Araújo dos Santos. 2016. “Damage Models and Assessment Methods.” *Shock and Vibration*. Hindawi Limited. doi:10.1155/2016/1748712.
468. Gillich, Gilbert-Rainer, Magd Abdel Wahab, Ruqiang Yan, and José Araújo dos Santos, eds. 2016. “Damage Models and Assessment Methods.”
469. Khatir, Abdelwahhab, Mohamed Tehami, Samir Khatir, and Magd Abdel Wahab. 2016. “Multiple Damage Detection and Localization in Beam-like and Complex Structures Using Co-Ordinate Modal Assurance Criterion Combined with Firefly and Genetic Algorithms.” *JOURNAL OF VIBROENGINEERING* 18 (8): 5063–5073. doi:10.21595/jve.2016.17026.
470. Zhou, Yun-Lai, and Magd Abdel Wahab. 2016. “Rapid Early Damage Detection Using Transmissibility with Distance Measure Analysis under Unknown Excitation in Long-Term Health Monitoring.” *JOURNAL OF VIBROENGINEERING* 18 (7): 4491–4499. doi:10.21595/jve.2016.17226.
471. Gadala, Ibrahim, Magd Abdel Wahab, and Akram Alfantazi. 2016. “A Finite Element Model of the External Corrosion of Buried Pipeline Steel under the Combined Influence of Heat Transfer, Cathodic Protection, and Oxygen Diffusion in Surrounding Soil.” In . NACE International.
472. Abdel Wahab, Magd, Nao-Aki Noda, Hung Nguyen Xuan, and Libardo Vanegas-Useche. 2016. “Advances in Finite Element Analysis for Computational Mechanics 2015.”
473. Zhou, Y-L, NMM Maia, R Sampaio, and Magd Abdel Wahab. 2016. “Damage Detection via Transmissibility Enhanced with Similarity Analysis and Principal Component Analysis.” In *Noise and Vibration Engineering ISMA 2016*. Leuven: PMA Noise & Vibration research group.

474. Yue, Tongyan, and Magd Abdel Wahab. 2016. "A Numerical Study on the Effect of Debris Layer on Frettingwear." *MATERIALS* 9 (7). doi:10.3390/ma9070597.
475. Resende Pereira, Kyvia de Fatima, Stephane Bordas, Satyendra Tomar, Roman Trobec, Matjaz Depolli, Gregor Kosec, and Magd Abdel Wahab. 2016. "On the Convergence of Stresses in Fretting Fatigue." *MATERIALS* 9 (8). doi:10.3390/ma9080639.
476. Khatir, Abdelwahhab, Mohamed Tehami, Samir Khatir, Idir Belaidi, Serra Roger, and Magd Abdel Wahab. 2016. "Damage Detection and Localization on Thin Plates Using Vibration Analysis." In *23rd International Congress on Sound and Vibration*. Greece: International Institute of Acoustics and Vibration.
477. Resende Pereira, Kyvia de Fatima, S Bordas, S Tomar, R Trobec, M Depolli, G Kosec, and Magd Abdel Wahab. 2016. "Cyclic Cohesive Zone Models and Its Applicability to Fretting Fatigue Crack Propagation." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 4:228–233. Ghent, Belgium: Labo Soete, Universiteit Gent.
478. Abdel Wahab, Magd, ed. 2016. "International Journal of Fracture Fatigue and Wear." Ghent, Belgium: Labo Soete, Universiteit Gent.
479. Abdel Wahab, Magd. 2016. "International Journal of Fracture Fatigue and Wear: Conference Series Proceedings Volume 4, 2016." *International Journal of Fracture Fatigue and Wear*. Ghent: Labo Soete, Universiteit Gent.
480. Trobec, R, M Depolli, G Kosec, S Bordas, S Tomar, Kyvia de Fatima Resende Pereira, and Magd Abdel Wahab. 2016. "Parallelization Approaches for Fretting Fatigue Simulation." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 4:204–208. Ghent, Belgium: Labo Soete, Universiteit Gent.
481. Zhou, Yun-Lai, Xiaobo Yang, and Magd Abdel Wahab. 2016. "Structural Health Monitoring Using Transmissibility Coherence." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 4:200–203. Ghent, Belgium: Labo Soete, Universiteit Gent.
482. Ni, Junyan, and Magd Abdel Wahab. 2016. "Predicting Residual Stress in Welds Using Empirical and Reconstructive Methods." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 4:86–92. Ghent, Belgium: Labo Soete, Universiteit Gent.
483. Bhatti, Nadeem Ali, and Magd Abdel Wahab. 2016. "A Review on Fretting Fatigue Crack Initiation Criteria." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 4:78–85. Ghent, Belgium: Labo Soete, Universiteit Gent.
484. Phung Van, Phuc, Loc Tran Vinh, H Nguyen-Xuan, and Magd Abdel Wahab. 2016. "Nonlinear Control of Smart Plates Using Isogeometric Analysis." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 4:70–77. Ghent, Belgium: Labo Soete, Universiteit Gent.
485. Tran Vinh, Loc, Phuc Phung Van, H Nguyen-Xuan, and Magd Abdel Wahab. 2016. "Nonlinear Transient Isogeometric Analysis of Laminated Composite Plates Based on Higher Order Plate Theory." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 64–69. Ghent, Belgium: Labo Soete, Universiteit Gent.
486. Yue, Tongyan, and Magd Abdel Wahab. 2016. "Finite Element Simulations of the Effect of Friction Coefficient in Fretting Wear." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 4:58–63. Ghent: Labo Soete, Universiteit Gent.

487. Yue, Tongyan, Dagang Wang, and Magd Abdel Wahab. 2016. "Elastoplastic Fretting Wear Behaviour of Contact Wires." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 4:50–57. Ghent: Labo Soete, Universiteit Gent.
488. Alali, Hanan, Magd Abdel Wahab, Tanja Van Hecke, Lutgart Braeckman, Heidi Janssens, and Bart De Clercq. 2016. "The Relationship between Non-Standard Work Arrangements and Injuries in Europe." In *Injuries in Europe*, 1–1. UGENT: Knowledge for Growth (KfG), FlandersBio's annual life sciences conference.
489. Alali, Hanan, Magd Abdel Wahab, Tanja Van Hecke, and Lutgart Braeckman. 2016. "Work Accident Victims: A Comparison between Non-Standard and Standard Workers in Belgium." *INTERNATIONAL JOURNAL OF OCCUPATIONAL MEDICINE AND ENVIRONMENTAL HEALTH* 22 (2): 99–106. doi:10.1080/10773525.2016.1168588.
490. Gadala, Ibrahim, Magd Abdel Wahab, and Akram Alfantazi. 2016. "Numerical Simulations of Soil Physicochemistry and Aeration Influences on the External Corrosion and Cathodic Protection Design of Buried Pipeline Steels." *MATERIALS & DESIGN* 97: 287–299. doi:10.1016/j.matdes.2016.02.089.
491. Gillich, Gilbert-Rainer, Zeno-Iosif Praisach, Magd Abdel Wahab, Nicoleta Gillich, Ion Cornel Mituletu, and Codrin Nitescu. 2016. "Free Vibration of a Perfectly Clamped-Free Beam with Stepwise Eccentric Distributed Masses." *SHOCK AND VIBRATION*. doi:10.1155/2016/2086274.
492. Khatir, Samir, Idir Belaidi, Roger Serra, Magd Abdel Wahab, and Tawfiq Khatir. 2016. "Numerical Study for Single and Multiple Damage Detection and Localization in Beam-like Structures Using BAT Algorithm." *JOURNAL OF VIBROENGINEERING* 18 (1): 202–213.
493. Nao-Aki, Nao-Aki, Xin Chen, Yoshikazu Sano, Magd Abdel Wahab, Hikaru Maruyama, Ryota Fujisawa, and Yasushi Takase. 2016. "Effect of Pitch Difference between the Bolt-Nut Connections upon the Anti-Loosening Performance and Fatigue Life." *MATERIALS & DESIGN* 96: 476–489. doi:10.1016/j.matdes.2016.01.128.
494. Tran Vinh, Loc, Phuc Phung Van, Jaehong Lee, Magd Abdel Wahab, and H Nguyen-Xuan. 2016. "Isogeometric Analysis for Nonlinear Thermomechanical Stability of Functionally Graded Plates." *COMPOSITE STRUCTURES* 140: 655–667. doi:10.1016/j.compstruct.2016.01.001.
495. Thai, Chien, AJM Ferreira, Magd Abdel Wahab, and H Nguyen-Xuan. 2016. "A Generalized Layerwise Higher-Order Shear Deformation Theory for Laminated Composite and Sandwich Plates Based on Isogeometric Analysis." *ACTA MECHANICA* 227 (5): 1225–1250. doi:10.1007/s00707-015-1547-4.
496. Thai, Chien, AM Zenkour, Magd Abdel Wahab, and H Nguyen-Xuan. 2016. "A Simple Four-Unknown Shear and Normal Deformations Theory for Functionally Graded Isotropic and Sandwich Plates Based on Isogeometric Analysis." *COMPOSITE STRUCTURES* 139: 77–95. doi:10.1016/j.compstruct.2015.11.066.
497. Gillich, Gilbert-Rainer, Magd Abdel Wahab, Ruqiang Yan, and José V. Araújo dos Santos. 2016. "Damage Models and Assessment Methods." *Shock and Vibration*. Hindawi Publishing Corporation.
498. Chen, Xin, Nao-Aki Noda, Magd Abdel Wahab, Yoshikazu Sano, Hikaru Maruyama, Huan Wang, Ryota Fujisawa, and Yasushi Takase. 2016. "Fatigue Life Improvement by Slight Pitch Difference in Bolt-Nut Connections." *JOURNAL OF THE CHINESE SOCIETY OF MECHANICAL ENGINEERS* 37 (1): 11–19.

499. Vanegas-Useche, Libardo, Magd Abdel Wahab, and Graham Parker. 2015. "Determination of the Rayleigh Damping Coefficients of Steel Bristles and Clusters of Bristles of Gutter Brushes." *DYNA* 82 (194): 230–237.
500. Khatir, Samir, Idir Belaidi, Roger Serra, Magd Abdel Wahab, and Tawfiq Khatir. 2015. "Damage Detection and Localization in Composite Beam Structures Based on Vibration Analysis." *MECHANIKA* 21 (6): 472–479. doi:10.5755/j01.mech.21.6.12526.
501. Chen, Xin, Nao-Aki Noda, Magd Abdel Wahab, Yu-Ichiro Akaishi, Yoshikazu Sano, Yasushi Takase, and Gusztáv Fekete. 2015. "Fatigue Failure Analysis for Bolt-Nut Connections Having Slight Pitch Differences Using Experimental and Finite Element Methods." *ACTA POLYTECHNICA HUNGARICA* 12 (8): 61–79.
502. Abdel Wahab, Magd, Nao-Aki Noda, Stéphane PA Bordas, Weidong Zhu, Hung Nguyen Xuan, and Libardo Vicente Vanegas-Useche. 2015. "Advances in Finite Element Analysis for Computational Mechanics 2015."
503. Abdel Wahab, Magd, Nao-Aki Noda, Stéphane PA Bordas, Weidong Zhu, Hung Nguyen Xuan, and Libardo Vicente Vanegas-Useche, eds. 2015. "Advances in Finite Element Analysis for Computational Mechanics 2014." SAGE Publications Ltd.
504. Abdel Wahab, Magd. 2015. "Aerospace: Application to Aircraft Structures." In *Joining Composites with Adhesives: Theory and Applications*, ed by. Magd Abdel Wahab, 201–218. U.S.A: DEStech Publications, Inc.
505. Ali, HT, and Magd Abdel Wahab. 2015. "History of Adhesive Composite Joints." In *Joining Composites with Adhesives: Theory and Applications*, ed by. Magd Abdel Wahab, 1–14. U.S.A: DEStech Publications, Inc.
506. Abdel Wahab, Magd. 2015. "Preface: Joining Composites with Adhesives."
507. Abdel Wahab, Magd, ed. 2015. "Joining Composites with Adhesives: Theory and Applications." U.S.A: DEStech Publications, Inc.
508. Zhou, Yun-Lai, Magd Abdel Wahab, R Perera, N Maia, R Sampaio, and E Figueiredo. 2015. "Single Side Damage Simulations and Detection in Beam-like Structures." In *Journal of Physics Conference Series*, ed by. Magd Abdel Wahab. Vol. 628. doi:10.1088/1742-6596/628/1/012036.
509. Alali, Hanan, Magd Abdel Wahab, Tanja Van Hecke, Bart De Clercq, Heidi Janssens, and Lutgart Braeckman. 2015. "Relationships between Irregular Work Arrangements and Occupational Injuries in EU 27: Findings from the Fifth European Working Condition Survey." In *ARCHIVES OF PUBLIC HEALTH*. Vol. 73. doi:10.1186/2049-3258-73-S1-P20.
510. Wang, Chong, Qun Sun, Magd Abdel Wahab, Xingyu Zhang, and Limin Xu. 2015. "Regression Modeling and Prediction of Road Sweeping Brush Load Characteristics from Finite Element Analysis and Experimental Results." *WASTE MANAGEMENT* 43: 19–27. doi:10.1016/j.wasman.2015.06.027.
511. Vanegas-Useche, Libardo, Magd Abdel Wahab, and Graham Parker. 2015. "Effectiveness of Oscillatory Gutter Brushes in Removing Street Sweeping Waste." *WASTE MANAGEMENT* 43: 28–36. doi:10.1016/j.wasman.2015.05.014.
512. Resende Pereira, Kyvia de Fatima, Tongyan Yue, and Magd Abdel Wahab. 2015. "Multiscale Modelling of Roughness Effect in Fretting Wear." In *International Journal of Fracture Fatigue and Wear, Proceedings*, ed by. Magd Abdel Wahab, 3:272–278.

513. Yue, Tongyan, and Magd Abdel Wahab. 2015. "Debris Models Used for Wear Simulations." In *International Journal of Fracture Fatigue and Wear, Proceedings*, ed by. Magd Abdel Wahab, 3:227–232.
514. Abdel Wahab, Magd, LV Vanegas-Useche, and GA Parker. 2015. "Comparison of Two Finite Element Models of Bristles of Gutter Brushes for Street Sweeping." In *4th International Conference on Fracture Fatigue and Wear, Proceedings*, ed by. Magd Abdel Wahab, 3:221–226.
515. Wang, DG, Magd Abdel Wahab, LL Wang, XW Li, ZC Zhu, DK Zhang, and XB Mao. 2015. "Finite Element Analysis of Fretting Fatigue of Fretted Wires." In *4th International Conference on Fracture Fatigue and Wear, Proceedings*, ed by. Magd Abdel Wahab, 3:135–142.
516. Phung Van, Phuc, Loc Tran Vinh, Magd Abdel Wahab, and Hung Nguyen-Xuan. 2015. "An Efficient Computational Approach for Nonlinear Analysis of Smart Piezoelectric Plates." In *International Journal of Fracture Fatigue and Wear, Proceedings*, ed by. Magd Abdel Wahab, 3:265–271.
517. Zhou, Yun-Lai, Magd Abdel Wahab, and Ricardo Perera. 2015. "Damage Detection by Transmissibility Conception in Beam-Damage Detection by Transmissibility Conception in Beam-like Structures." In *International Journal of Fracture Fatigue and Wear, Proceedings*, ed by. Magd Abdel Wahab, 3:254–259.
518. Tran Vinh, Loc, H Nguyen-Xuan, and Magd Abdel Wahab. 2015. "Extended Isogeometric Analysis in Modelling Cracked Structures." In *International Journal of Fracture Fatigue and Wear, Proceedings*, ed by. Magd Abdel Wahab, 3:57–64.
519. Takase, Yasushi, Nao-Aki Noda, Xin Chen, Yoshikazu Sano, Ryota Fujisawa, Hikaru Maruyama, and Magd Abdel Wahab. 2015. "Fatigue Strength Evaluation for Bolt-Nut Connections Having Slight Pitch Difference Considering Incomplete Threads of Nut." In *International Journal of Fracture Fatigue and Wear, Proceedings*, ed by. Magd Abdel Wahab, 3:43–49.
520. Hilmy, Irfan, Magd Abdel Wahab, Erry Yullian Adesta, and Tasnim Firdaus. 2015. "Damage Detection Based on the Natural Frequency Shifting of a Clamped Rectangular Plate Model." In *Journal of Physics Conference Series*, ed by. Magd Abdel Wahab. Vol. 628. doi:10.1088/1742-6596/628/1/012034.
521. Abdel Wahab, Magd. 2015. "International Journal of Fracture Fatigue and Wear: Proceedings of the 4th International Conference on Fracture, Fatigue and Wear."
522. Abdel Wahab, Magd. 2015. "11th International Conference on Damage Assessment of Structures (DAMAS 2015)."
523. Abdel Wahab, Magd, ed. 2015. "International Journal of Fracture Fatigue and Wear: Proceedings of the 4th International Conference on Fracture, Fatigue and Wear." Belgium: Labo Soete, Universiteit Gent.
524. Abdel Wahab, Magd, ed. 2015. "11th International Conference on Damage Assessment of Structures (DAMAS 2015)." UK: IOP Publishing.
525. Alali, Hanan, Magd Abdel Wahab, Tanja Van Hecke, and Lutgart Braeckman. 2015. "Work Accident Victims and Witnesses: A Comparison Between Non-Standard and Standard Workers in Belgium." In , 1–1. Seoul, Korea: ICOH Congress.
526. Alali, Hanan, Magd Abdel Wahab, Tanja Van Hecke, and Lutgart Braeckman. 2015. "Occupational Injuries: A Comparison between Temporary and Permanent Workers. Findings from the Fifth European Working Condition Survey." In , 1–1. Gent, Belgium: kfg.

527. Phung Van, Phuc, Lieu B Nguyen, Loc Tran Vinh, Tien Dung Dinh, Chien H Thai, SPA Bordas, Magd Abdel Wahab, and H Nguyen-Xuan. 2015. "An Efficient Computational Approach for Control of Nonlinear Transient Responses of Smart Piezoelectric Composite Plates." *INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS* 76: 190–202. doi:10.1016/j.ijnonlinmec.2015.06.003.
528. Tran Vinh, Loc, Jaehong Lee, Hung Anh Ly, Magd Abdel Wahab, and Hung Nguyen-Xuan. 2015. "Vibration Analysis of Cracked FGM Plates Using Higher-Order Shear Deformation Theory and Extended Isogeometric Approach." *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES* 96–97: 65–78. doi:10.1016/j.ijmecsci.2015.03.003.
529. Tran Vinh, Loc, Jaehong Lee, Hieu Nguyen-Van, Hung Nguyen-Xuan, and Magd Abdel Wahab. 2015. "Geometrically Nonlinear Isogeometric Analysis of Laminated Composite Plates Based on Higher-Order Shear Deformation Theory." *INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS* 72: 42–52. doi:10.1016/j.ijnonlinmec.2015.02.007.
530. Ferjaoui, Abdelwaheb, Tongyan Yue, Magd Abdel Wahab, and R Hojjati-Talemi. 2015. "Prediction of Fretting Fatigue Crack Initiation in Double Lap Bolted Joint." *INTERNATIONAL JOURNAL OF FATIGUE* 73: 66–76. doi:10.1016/j.ijfatigue.2014.11.012.
531. Hafiz, TA, and Magd Abdel Wahab. 2015. "Predicting the Fatigue Life of Adhesively-Bonded Composite Joints under Mode I Fracture Conditions." In *Fatigue and Fracture of Adhesively-Bonded Composite Joints*, 401–417. Elsevier.
532. Abdel Wahab, Magd. 2015. "Simulating Mode I Fatigue Crack Propagation in Adhesively-Bonded Composite Joints." In *Fatigue and Fracture of Adhesively-Bonded Composite Joints*, 323–344. Elsevier.
533. Phung Van, Phuc, Magd Abdel Wahab, KM Liew, SPA Bordas, and H Nguyen-Xuan. 2015. "Isogeometric Analysis of Functionally Graded Carbon Nanotube-Reinforced Composite Plates Using Higher-Order Shear Deformation Theory." *COMPOSITE STRUCTURES* 123: 137–149. doi:10.1016/j.compstruct.2014.12.021.
534. Phung Van, Phuc, L De Lorenzis, Chien H Thai, Magd Abdel Wahab, and H Nguyen-Xuan. 2015. "Analysis of Laminated Composite Plates Integrated with Piezoelectric Sensors and Actuators Using Higher-Order Shear Deformation Theory and Isogeometric Finite Elements." *COMPUTATIONAL MATERIALS SCIENCE* 96: 495–505. doi:10.1016/j.commatsci.2014.04.068.
535. Gillich, GR, Magd Abdel Wahab, ZI Praisach, and JL Ntakpe. 2014. "The Influence of Transversal Crack Geometry on the Frequency Changes of Beams." In *PROCEEDINGS OF INTERNATIONAL CONFERENCE ON NOISE AND VIBRATION ENGINEERING (ISMA2014) AND INTERNATIONAL CONFERENCE ON UNCERTAINTY IN STRUCTURAL DYNAMICS (USD2014)*, ed by. P Sas, D Moens, and H Denayer, 485–498.
536. Gillich, G.R., Z.I. Praisach, Magd Abdel Wahab, and H. Furdui. 2014. "A New Modal-Based Damage Location Indicator." In *PROCEEDINGS OF INTERNATIONAL CONFERENCE ON NOISE AND VIBRATION ENGINEERING (ISMA2014) AND INTERNATIONAL CONFERENCE ON UNCERTAINTY IN STRUCTURAL DYNAMICS (USD2014)*, ed by. P Sas, D Moens, and H Denayer, 499–512.

537. Fekete, Gusztáv, Béla Málnási Csizmadia, Magd Abdel Wahab, Patrick De Baets, Libardo Vanegas, and István Bíró. 2014. "Patellofemoral Model of the Knee Joint under Non-Standard Squatting." *DYNA-COLOMBIA* 81 (183): 60–67.
538. Yue, Tongyan, and Magd Abdel Wahab. 2014. "Finite Element Analysis of Stress Singularity in Partial Slip and Gross Sliding Regimes in Fretting Wear." *WEAR* 321: 53–63. doi:10.1016/j.wear.2014.09.008.
539. Hojjati Talemi, Reza, Magd Abdel Wahab, Tongyan Yue, and L D'Alvise. 2014. "On Fretting Fatigue Behaviour of Single Bolted Lap Joint." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 2:269–274. Laboratory Soete – Ghent University.
540. Phung Van, Phuc, Magd Abdel Wahab, Loc V Tran, and H Nguyen-Xuan. 2014. "Buckling Analysis of Piezoelectric Composite Plates Using NURBS-Based Isogeometric Finite Elements and Higher-Order Shear Deformation Theory." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 134–140. Laboratory Soete – Ghent University.
541. Tran Vinh, Loc, Phuc Phung Van, Vinh Phu Nguyen, and Magd Abdel Wahab. 2014. "Vibration Analysis of Cracked Plate Using Higher-Order Shear Deformation Theory." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 2:127–133. Laboratory Soete – Ghent University.
542. Sobhani Aragh, B, and Magd Abdel Wahab. 2014. "Buckling of Functionally Graded Carbon Nanotube-Fiber Reinforced Plates under Mechanical Loads." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 2:148–154. Laboratory Soete – Ghent University.
543. Abdel Wahab, Magd. 2014. "3rd International Conference on Fracture Fatigue and Wear."
544. Abdel Wahab, Magd, ed. 2014. "International Journal of Fracture Fatigue and Wear." Ghent, Belgium: Department of Mechanical construction and production.
545. Gillich, GR, ZI Praisach, Magd Abdel Wahab, and O Vasile. 2014. "Localization of Transversal Cracks in Sandwich Beams and Evaluation of Their Severity." *SHOCK AND VIBRATION*. doi:10.1155/2014/607125.
546. Abdel Wahab, Magd. 2014. *The Mechanics of Adhesives in Composite and Metal Joints*. DEStech Publications.
547. Hojjati Talemi, Reza, Magd Abdel Wahab, and Patrick De Baets. 2014. "Finite Element Simulation of Phase Difference Effects on Fretting Fatigue Crack Nucleation Behaviour." *PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART J-JOURNAL OF ENGINEERING TRIBOLOGY* 228 (4): 470–479. doi:10.1177/1350650113517092.
548. Hojjati Talemi, Reza, Magd Abdel Wahab, Jan De Pauw, and Patrick De Baets. 2014. "Prediction of Fretting Fatigue Crack Initiation and Propagation Lifetime for Cylindrical Contact Configuration." Ed by. David Hills and David Nowell. *TRIBOLOGY INTERNATIONAL* 76: 73–91. doi:10.1016/j.triboint.2014.02.017.
549. Abdel Wahab, Magd, and Nao-Aki Noda, eds. 2014. "Advances in Finite Element Analysis for Computational Mechanics." Springer.
550. Abdel Wahab, Magd, and Nao-Aki Noda. 2014. "Advances in Finite Element Analysis for Computational Mechanics." *ADVANCES IN MECHANICAL ENGINEERING*. doi:10.1155/2014/504965.

551. Abdel Wahab, Magd, ed. 2013. "Proceedings of the 2nd International Symposium on Engineering Mechanics and Its Applications, Kitakyushu, Japan, 30 – 31 August 2013." Laboratory Soete – Ghent University.
552. Abdel Wahab, Magd. 2013. "International Journal of Fracture Fatigue and Wear, Volume 1." *INTERNATIONAL JOURNAL OF FRACTURE FATIGUE AND WEAR*.
553. Abdel Wahab, Magd, and Reza Hojjati Talemi. 2013. "Finite Element Analysis of Fretting Fatigue." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 1:132–137. Laboratory Soete – Ghent University.
554. Aragh, Behnam, and Magd Abdel Wahab. 2013. "Thermal Analysis of Two-Dimensional Temperature-Dependent Functionally Graded Open Cylindrical Shells." In *International Journal of Fracture Fatigue and Wear*, ed by. Magd Abdel Wahab, 1:17–23. Laboratory Soete – Ghent University.
555. Hojjati Talemi, Reza, Magd Abdel Wahab, Eugenio Giner, and Mohamad Sabsabi. 2013. "Numerical Estimation of Fretting Fatigue Lifetime Using Damage and Fracture Mechanics." *TRIBOLOGY LETTERS* 52 (1): 11–25. doi:10.1007/s11249-013-0189-8.
556. Abdel Wahab, Magd, Irfan Hilmy, and Reza Hojjati Talemi. 2013. "On the Use of Low and High Cycle Fatigue Damage Models." In *Key Engineering Materials*, 569–570:1029–1035. doi:10.4028/www.scientific.net/KEM.569-570.1029.
557. Hojjati Talemi, Reza, Patrick De Baets, and Magd Abdel Wahab. 2013. "A Fretting Fatigue Numerical Lifetime Prediction Tool: Combination of Damage and Fracture Mechanics Approaches." In *International Symposium on Fretting Fatigue, Abstracts*, ed by. David Hills and David Nowell.
558. De Smedt, Bart, Magd Abdel Wahab, Reza Hojjati Talemi, and Kris Hertschap. 2013. "Survey on Techniques to Detect Micro-Cracks in Steel after Bending." In *SUSTAINABLE CONSTRUCTION & DESIGN*.
559. Yue, Tongyan, Magd Abdel Wahab, Reza Hojjati Talemi, and Mohammadzamaan Sadeghi. 2013. "Numerical Modeling of Fretting Wear." In *SUSTAINABLE CONSTRUCTION AND DESIGN*.
560. Sadeghi, Mohammadzamaan, Magd Abdel Wahab, Reza Hojjati Talemi, and Tongyan Yue. 2013. "A Review of FE on Crack Initiation in Fretting Fatigue." In *SUSTAINABLE CONSTRUCTION & DESIGN*.
561. Hojjati Talemi, Reza, Magd Abdel Wahab, Mohammadzamaan Sadeghi, Tongyan Yue, and Jan De Pauw. 2013. "Xfem VS Fem: Application to Fretting Fatigue 2D Crack Propagation." In *SUSTAINABLE CONSTRUCTION AND DESIGN*.
562. Sobhani Aragh, B, A Zeighami, M Rafiee, MH Yas, and Magd Abdel Wahab. 2013. "3-D Thermo-Elastic Solution for Continuously Graded Isotropic and Fiber-Reinforced Cylindrical Shells Resting on Two-Parameter Elastic Foundations." *APPLIED MATHEMATICAL MODELLING* 37 (9): 6556–6576. doi:10.1016/j.apm.2013.01.005.
563. Hojjati Talemi, Reza, and Magd Abdel Wahab. 2013. "Fretting Fatigue Crack Initiation Lifetime Predictor Tool: Using Damage Mechanics Approach." *TRIBOLOGY INTERNATIONAL* 60: 176–186. doi:10.1016/j.triboint.2012.10.028.
564. Hafiz, TA, Magd Abdel Wahab, AD Crocombe, and PA Smith. 2013. "Mixed-Mode Fatigue Crack Growth in FM73 Bonded Joints." *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 40: 188–196. doi:10.1016/j.ijadhadh.2012.07.004.
565. Fekete, Gusztáv, Béla Csizmadia, Magd Abdel Wahab, and Patrick De Baets. 2013. "Experimental Determination of Horizontal Motion of Human Center of Gravity

- during Squatting.” *EXPERIMENTAL TECHNIQUES* 37 (6): 66–76. doi:10.1111/j.1747-1567.2011.00768.x.
566. Adediran, OA, Magd Abdel Wahab, W Xu, and AD Crocombe. 2012. “Application of FE Model Updating for Damage Assessment of FRP Composite Beam Structure.” In *Conference Proceedings of the Society for Experimental Mechanics Series*, 6:385–398. Berlin, Germany: Springer.
567. Fekete, Gusztáv, Patrick De Baets, Magd Abdel Wahab, Béla Csizmadia, Gábor Katona, Libardo Vanegas-Useche, and José Alfredo Solanilla. 2012. “Sliding-Rolling Ratio during Deep Squat with Regard to Different Knee Prostheses.” *ACTA POLYTECHNICA HUNGARICA* 9 (5): 5–24.
568. Abdel Wahab, Magd. 2012. “Fatigue in Adhesively Bonded Joints: A Review.” *ISRN MATERIALS SCIENCE* 2012. doi:10.5402/2012/746308.
569. Hojjati Talemi, Reza, and Magd Abdel Wahab. 2012. “Finite Element Analysis of Localized Plasticity in Al 2024-T3 Subjected to Fretting Fatigue.” *TRIBOLOGY TRANSACTIONS* 55 (6): 805–814. doi:10.1080/10402004.2012.711436.
570. Hojjati Talemi, Reza, and Magd Abdel Wahab. 2012. “XFEM for Fretting Fatigue: Straight VS Mixed Mode Crack Propagation.” In *Proceedings of the 4th International Conference on Crack Paths (CP2012)*, ed by. Andrea Carpinteri, Francesco Iacoviello, Les P Pook, and Luca Susmel, 351–358. Gaeta, Italy: 4th International Conference on “Crack Paths” (CP - 2012).
571. Vanegas-Useche, Libardo, Juan Arroyave Londoño, and Magd Abdel Wahab. 2012. “Effect of the Normal Force upon the Friction Coefficient between Two Solid Surfaces.” *ENTRE CIENCIA E INGENIERIA* 5 (10): 75–92.
572. Alali, Hanan, and Magd Abdel Wahab. 2012. “Modelling of Crack Initiation in Adhesively Bonded Joints.” In *SUSTAINABLE CONSTRUCTION & DESIGN: INTERNATIONAL JOURNAL*, ed by. Stijn Hertelé, 3:221–227. Ghent University, Laboratory Soete. doi:10.21825/scad.v3i3.20577.
573. Hojjati Talemi, Reza, Magd Abdel Wahab, and Jan De Pauw. 2012. “On Finite Element Analysis of Fretting Fatigue.” In *SUSTAINABLE CONSTRUCTION & DESIGN: INTERNATIONAL JOURNAL*, ed by. Stijn Hertelé, 3:207–220. Ghent University, Laboratory Soete. doi:10.21825/scad.v3i3.20576.
574. Fekete, Gusztáv, B Csizmadia, Patrick De Baets, and Magd Abdel Wahab. 2012. “Multibody Dynamic Models in Biomechanics : Modelling Issues and a New Model.” In *SUSTAINABLE CONSTRUCTION & DESIGN: INTERNATIONAL JOURNAL*, ed by. Stijn Hertelé, 3:128–137. Ghent University, Laboratory Soete. doi:10.21825/scad.v3i2.20566.
575. Abdel Wahab, Magd, Irfan Hilmy, Tauqeer Hafiz, and Reza Hojjati Talemi. 2012. “Finite Element Modelling of Damage Fracture and Fretting Fatigue.” In *15th International Conference on Applied Mechanics and Mechanical Engineering, Proceedings*, MD1–MD14. Ghent, Belgium: Ghent University, Department of Mechanical construction and production.
576. Hojjati Talemi, Reza, Magd Abdel Wahab, and Patrick De Baets. 2012. “Numerical Investigation into Effect of Contact Geometry on Fretting Fatigue Crack Propagation Lifetime.” Ed by. Farshid Sadeghi. *TRIBOLOGY TRANSACTIONS* 55 (3): 365–375. doi:10.1080/10402004.2012.658987.
577. Abdel Wahab, Magd, Reza Hojjati Talemi, and Patrick De Baets. 2012. “FEA of Fretting Fatigue: A Comparison between ANSYS and ABAQUS.” In *KEY ENGINEERING MATERIALS*, ed by. Z Tonković and MH Aliabadi, 488–489:662–

665. Stafa-Zürich, Switzerland: Trans Tech. doi:10.4028/www.scientific.net/KEM.488-489.662.
578. Hojjati Talemi, Reza, Magd Abdel Wahab, Patrick De Baets, and Jan De Pauw. 2011. "Effect of Different Fretting Fatigue Primary Variables on Relative Slip Amplitude." *MECHANICAL ENGINEERING LETTERS* 5: 57–67.
579. Abdel Wahab, Magd, Wei Xu, Andrew Crocombe, and O Adediran. 2011. "The Effect of Boundary Conditions on Vibration Based Damage Detection in FRP Composite Beams." *MECHANICAL ENGINEERING LETTERS* 5: 154–160.
580. Vanegas-Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2011. "Modeling of an Oscillatory Freely-Rotating Cutting Brush for Street Sweeping." *DYNA-COLOMBIA* 78 (170): 204–213.
581. Fekete, Gusztáv, Béla Csizmadia, Patrick De Baets, and Magd Abdel Wahab. 2011. "Review of Current Knee Biomechanical Modeling Techniques." Ed by. István Szabó and Gábor Kalácska. *MECHANICAL ENGINEERING LETTERS* 5: 30–36.
582. Fekete, Gusztáv, Béla Csizmadia, Magd Abdel Wahab, and Patrick De Baets. 2011. "Analytical Patellofemoral Knee Models: Past and Present." In *Synergy in the Technical Development of Agriculture and Food Industry (Synergy2011)*, ed by. Zoltán Kurják and László Magó. Gödöllő, Hungary: Szent István University. Faculty of Mechanical Engineering.
583. Vanegas-Useche, LV, Magd Abdel Wahab, and GA Parker. 2011. "Determination of Friction Coefficients, Brush Contact Arcs and Brush Penetrations for Gutter Brush–Road Interaction through FEM." *ACTA MECHANICA* 221 (1–2): 119–132. doi:10.1007/s00707-011-0490-2.
584. Hojjati Talemi, Reza, Magd Abdel Wahab, and Patrick De Baets. 2011. "Numerical Modelling of Fretting Fatigue." In *JOURNAL OF PHYSICS CONFERENCE SERIES*, ed by. H Ouyang. Vol. 305. Bristol, UK: IOP. doi:10.1088/1742-6596/305/1/012061.
585. Vanegas-Useche, Libardo, Magd Abdel Wahab, and Graham Parker. 2011. "Dynamic Finite Element Model of Oscillatory Brushes." *FINITE ELEMENTS IN ANALYSIS AND DESIGN* 47 (7): 771–783. doi:10.1016/j.finel.2011.02.008.
586. Abdel Wahab, Magd, Chong Wang, Libardo Vanegas-Useche, and Graham Parker. 2011. "Experimental Determination of Optimum Gutter Brush Parameters and Road Sweeping Criteria for Different Types of Waste." *WASTE MANAGEMENT* 31 (6): 1109–1120. doi:10.1016/j.wasman.2010.12.014.
587. Fekete, Gusztáv, B Csizmadia Málnási, Magd Abdel Wahab, and Patrick De Baets. 2011. "Analytical and Computational Estimation of Patellofemoral Forces in the Knee under Squatting and Isometric Motion." In *SUSTAINABLE CONSTRUCTION AND DESIGN*, ed by. Jeroen Van Wittenberghe, 2:246–257. Ghent, Belgium: Ghent University, Laboratory Soete.
588. Hojjati Talemi, Reza, M Soori, Magd Abdel Wahab, and Patrick De Baets. 2011. "Experimental and Numerical Investigation into Effect of Elevated Temperature on Fretting Fatigue Behavior." In *SUSTAINABLE CONSTRUCTION AND DESIGN*, ed by. Jeroen Van Wittenberghe, 2:2–11. Ghent, Belgium: Ghent University, Laboratory Soete.
589. Hojjati Talemi, Reza, A Hojjati Talemi, Magd Abdel Wahab, and Patrick De Baets. 2011. "Finite Element Analysis of Fretting Fatigue Using Different Pad's Geometries and Compression Forces." In *KEY ENGINEERING MATERIALS*, ed by. A Saimoto and MH Aliabadi, 452–453:9–12. Stafa-Zürich, Switzerland: Trans Tech Publications Ltd. doi:10.4028/www.scientific.net/KEM.452-453.9.

590. Abdel Wahab, Magd, I Hilmy, IA Ashcroft, and AD Crocombe. 2011. "Damage Parameters of Adhesive Joints with General Triaxiality, Part 2: Scarf Joint Analysis." *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 25 (9): 925–947. doi:10.1163/016942410X533363.
591. Abdel Wahab, Magd, I Hilmy, IA Ashcroft, and AD Crocombe. 2011. "Damage Parameters of Adhesive Joints with General Triaxiality, Part 1: Finite Element Analysis." *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 25 (9): 903–923. doi:10.1163/016942410X534939.
592. Abdel Wahab, Magd. 2010. *Finite Elements in Fracture Mechanics*. LAP Lambert Academic Publishing.
593. Hafiz, TA, Magd Abdel Wahab, AD Crocombe, and PA Smith. 2010. "Mixed-Mode Fracture of Adhesively Bonded Metallic Joints under Quasi-Static Loading." *ENGINEERING FRACTURE MECHANICS* 77 (17): 3434–3445. doi:10.1016/j.engfracmech.2010.09.015.
594. Jumbo, FS, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2010. "Thermal Residual Stress Analysis of Epoxy Bi-Material Laminates and Bonded Joints." *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 30 (7): 523–538. doi:10.1016/j.ijadhadh.2010.03.009.
595. Van Wittenberghe, Jeroen, Jan De Pauw, Patrick De Baets, Wim De Waele, Magd Abdel Wahab, and Guido De Roeck. 2010. "Experimental Determination of the Fatigue Life of Modified Threaded Pipe Couplings." In *International Fatigue Congress, 10th, Abstracts, 257–257*. Brno, Czech Republic: Ústav fyziky materiálu.
596. Van Wittenberghe, Jeroen, Jan De Pauw, Patrick De Baets, Wim De Waele, Magd Abdel Wahab, and Guido De Roeck. 2010. "Experimental Determination of the Fatigue Life of Modified Threaded Pipe Couplings." In *PROCEDIA ENGINEERING*, ed by. Petr Lukas, 2:1849–1858. Amsterdam, The Netherlands: Elsevier Science bv. doi:10.1016/j.proeng.2010.03.199.
597. Abdel Wahab, Magd, C Wang, L Vanegas Useche, and Graham Parker. 2010. "Finite Element Models for Brush-Debris Interaction in Road Sweeping." *ACTA MECHANICA* 215 (1–4): 71–84. doi:10.1007/s00707-010-0304-y.
598. Safaei, Mohsen, Wim De Waele, Magd Abdel Wahab, and Patrick De Baets. 2010. "Finite Element Simulation of Springback in TRIP 780 Advanced High Strength Steel." In *SUSTAINABLE CONSTRUCTION & DESIGN: INTERNATIONAL JOURNAL*, ed by. Jeroen Van Wittenberghe, 1:151–156. Ghent University. Laboratory Soete. doi:10.21825/scad.v1i1.20418.
599. Abdel Wahab, Magd. 2010. "Finite Element Modelling of Several Physical Engineering Problems." In *SUSTAINABLE CONSTRUCTION & DESIGN: INTERNATIONAL JOURNAL*, ed by. Jeroen Van Wittenberghe, 1:30–39. Ghent University. Laboratory Soete. doi:10.21825/scad.v1i1.20392.
600. Hertelé, Stijn, Wim De Waele, Rudi Denys, Magd Abdel Wahab, and Matthias Verstraete. 2010. "Inherent Possibilities and Limitations of Finite Element Modelling of Defective Girth Welds." In *SUSTAINABLE CONSTRUCTION & DESIGN: INTERNATIONAL JOURNAL*, ed by. Jeroen Van Wittenberghe, 1:127–135. Ghent University. Laboratory Soete.
601. Van Wittenberghe, Jeroen, Jan De Pauw, Patrick De Baets, Wim De Waele, Magd Abdel Wahab, Wouter Ost, Guido De Roeck, and Tien Thanh Bui. 2010. "Fatigue Investigation of Threaded Pipe Connections." In *SUSTAINABLE CONSTRUCTION &*

- DESIGN: INTERNATIONAL JOURNAL*, ed by. Jeroen Van Wittenberghe, 1:182–189. Ghent University. Laboratory Soete. doi:10.21825/scad.v1i1.20424.
602. Vanegas Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2010. “Determination of Friction Coefficients for Cutting Brush: Road Surface Interaction through FEM.” In *IEEE SoutheastCon, Proceedings*. New York, NY, USA: IEEE.
603. Abdel Wahab, Magd, I Hilmy, IA Ashcroft, and AD Crocombe. 2010. “Evaluation of Fatigue Damage in Adhesive Bonding, Part 2: Single Lap Joint.” *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 24 (2): 325–345. doi:10.1163/016942409X12508517390833.
604. Abdel Wahab, Magd, I Hilmy, IA Ashcroft, and AD Crocombe. 2010. “Evaluation of Fatigue Damage in Adhesive Bonding, Part 1: Bulk Adhesive.” *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 24 (2): 305–324. doi:10.1163/016942409X12508517390798.
605. Vanegas Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2010. “Effectiveness of Gutter Brushes in Removing Street Sweeping Waste.” *WASTE MANAGEMENT* 30 (2): 174–184. doi:10.1016/j.wasman.2009.09.036.
606. Hafiz, T, P Smith, AD Crocombe, and Magd Abdel Wahab. 2009. “The Development of an Experimental Technique to Characterise Mixed-Mode Fracture in Adhesively Bonded Joints.” In *Aerospace Science and Engineering, 1st International Conference, Abstracts*.
607. Ceulemans, Wesley, Magd Abdel Wahab, Kurt De Proft, and Geert Wets. 2009. “Modelling Traffic Flow with Constant Speed Using the Galerkin Finite Element Method.” In *LECTURE NOTES IN ENGINEERING AND COMPUTER SCIENCE*, ed by. SI Ao, L Gelman, DWL Hukins, A Hunter, and AM Korsunsky, 993–999. Hong Kong, PR China: International Association of Engineers (IAENG).
608. Shenoy, V, IA Ashcroft, GW Critchlow, AD Crocombe, and Magd Abdel Wahab. 2009. “An Investigation into the Crack Initiation and Propagation Behaviour of Bonded Single Lap Joints Using Backface Strain.” *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 29 (4): 361–371. doi:10.1016/j.ijadhadh.2008.07.008.
609. Shenoy, V, IA Ashcroft, GW Critchlow, AD Crocombe, and Magd Abdel Wahab. 2009. “An Evaluation of Strength Wearout Models for the Lifetime Prediction of Adhesive Joints Subjected to Variable Amplitude Fatigue.” *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 29 (6): 639–649. doi:10.1016/j.ijadhadh.2009.02.008.
610. Khoramishad, H, AD Crocombe, K Katnam, Magd Abdel Wahab, and IA Ashcroft. 2008. “Fatigue Damage Study of Adhesively Bonded Joints on Thick Laminated Substrates.” In *European Adhesion Conference, 8th, Proceedings*.
611. Abdel Wahab, Magd. 2008. “Implementation of Supplemental Instruction for Surrey Engineering Students.” In *International Conference on Supplemental Instruction, 5th, Abstracts*.
612. Hilmy, I, Magd Abdel Wahab, IA Ashcroft, and AD Crocombe. 2008. “A Finite Element Analysis of Scarf Joint for Controlling the Triaxiality Function in Adhesive Bonding.” In *KEY ENGINEERING MATERIALS*, ed by. HS Lee, IS Yoon, and MH Aliabadi, 385–387:17–20. Stafa-Zürich, Switzerland: Trans Tech Publications Ltd.
613. Abdel Wahab, Magd. 2008. “Fatigue in Adhesive Bonding.” In *Cairo University International Conference on Mechanical Design and Production, 9th, Proceedings*.
614. Abdel Wahab, Magd. 2008. “Research Publications in Adhesive Bonding Technology: Dynamics and Vibration of Structures; Fracture Mechanics and Finite

- Element Analysis.” Guilford, UK: University of Surrey. Mechanical and Aerospace Engineering.
615. Crocombe, AD, IA Ashcroft, and Magd Abdel Wahab. 2008. “Environmental Degradation.” In *Modeling of Adhesively Bonded Joints*, ed by. Lucas F Martins da Silva and Andreas Öchsner, 225–241. Berlin, Germany: Springer. doi:10.1007/978-3-540-79056-3_8.
616. Abdel Wahab, Magd. 2008. *Dynamics and Vibration: An Introduction*. Chichester, UK ; Hoboken, NJ, USA: John Wiley.
617. Shenoy, V, IA Ashcroft, GW Critchlow, AD Crocombe, and Magd Abdel Wahab. 2008. “Strength Wearout of Adhesively Bonded Joints under Constant Amplitude Fatigue.” *INTERNATIONAL JOURNAL OF FATIGUE* 31 (5): 820–830. doi:10.1016/j.ijfatigue.2008.11.007.
618. Vanegas Useche, Libardo, Magd Abdel Wahab, and Juan Felipe Arroyave L. 2008. “Determinación Del Coeficiente de Fricción Entre Cerdas de Acero de Cepillos Laterales Para Barrer Calles.” *SCIENTIA ET TECHNICA* 14 (39): 165–169.
619. Vanegas Useche, Libardo, Magd Abdel Wahab, and Graham A Parker. 2008. “Effectividad de Los Cepillos Laterales Para Barrido de Calles.” *SCIENTIA ET TECHNICA* 14 (39): 159–164.
620. Hua, Y, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2008. “Continuum Damage Modelling of Environmental Degradation in Joints Bonded with EA9321 Epoxy Adhesive.” *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 28 (6): 302–313. doi:10.1016/j.ijadhadh.2007.08.005.
621. Vanegas Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2008. “Dynamics of a Freely Rotating Cutting Brush Subjected to Variable Speed.” *INTERNATIONAL JOURNAL OF MECHANICAL SCIENCES* 50 (4): 804–816. doi:10.1016/j.ijmecsci.2007.11.004.
622. Liljedahl, CDM, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2007. “Modelling the Environmental Degradation of Adhesively Bonded Aluminium and Composite Joints Using a CZM Approach.” *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 27 (6): 505–518. doi:10.1016/j.ijadhadh.2006.09.015.
623. Solana, A Graner, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2007. “Fatigue Initiation in Adhesively-Bonded Single-Lap Joints.” *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 21 (14): 1343–1357. doi:10.1163/156856107782313629.
624. Hua, Y, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2007. “Continuum Damage Modelling of Environmental Degradation in Joint Bonded with E32 Epoxy Adhesive.” *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 21 (2): 179–195. doi:10.1163/156856107780437444.
625. Ali, AM, Magd Abdel Wahab, AD Crocombe, and IA Ashcroft. 2007. “Damage Assessment of Adhesively Bonded FRP Beams Using Modal Parameters.” In *KEY ENGINEERING MATERIALS*, ed by. L Garibaldi, C Surace, K Holford, and WM Ostachowicz, 347:525–530. Stafa-Zürich, Switzerland: Trans Tech Publications Ltd.
626. Hilmy, I, Magd Abdel Wahab, AD Crocombe, IA Ashcroft, and AG Solana. 2007. “Effect of Triaxiality on Damage Parameters in Adhesive.” In *KEY ENGINEERING MATERIALS*, ed by. J Alfaiate, MH Aliabadi, M Guagliano, and L Susmei, 348–349:37–40. Stafa-Zürich, Switzerland: Trans Tech Publications Ltd.
627. Vanegas Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2007. “Dynamics of an Unconstrained Oscillatory Flicking Brush for Road Sweeping.”

- JOURNAL OF SOUND AND VIBRATION* 307 (3–5): 778–801.
doi:10.1016/j.jsv.2007.07.010.
628. Abdel Wahab, Magd, Graham A Parker, and C Wang. 2007. “Modelling Rotary Sweeping Brushes and Analyzing Brush Characteristic Using Finite Element Method.” *FINITE ELEMENTS IN ANALYSIS AND DESIGN* 43 (6–7): 521–532.
doi:10.1016/j.finel.2006.12.003.
629. Attaba, M, Magd Abdel Wahab, G Richardson, and H Newell. 2006. “Comportement Thermo-Élastique d’un Télescope Spatial.” In *Journées d’optique et de Traitement de l’information, 5ièmes, Abstracts*. INPT.
630. Abbes, Yacine, A Throne, M Matthews, Magd Abdel Wahab, S Rowett, and V Simpson. 2006. “Design and Development of a Blended Learning Module Template for On-Campus and Distance Learning in Civil Engineering.” In *WSEAS/IASME International Conference on Engineering Education, 3rd, Abstracts*.
631. Vanegas Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2006. “Design of Noncircular Gears to Minimise Shaft Accelerations.” In *Proceedings of the 8th Biennial Conference on Engineering Systems Design and Analysis, Vol 3*, 421–430. New York, NY, USA: American Society of Mechanical Engineers.
632. Vanegas Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2006. “Theoretical Model for the Dynamics of an Unconstrained Cutting Brush of a Street Sweeper.” In *Proceedings of the 8th Biennial Conference on Engineering Systems Design and Analysis, Vol 3*, 431–440. New York, NY, USA: American Society of Mechanical Engineers.
633. Vanegas Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2006. “Brush Dynamics: Models and Characteristics.” In *Proceedings of the 8th Biennial Conference on Engineering Systems Design and Analysis, Vol 3*, 441–450. New York, NY, USA: American Society of Mechanical Engineers.
634. Crocombe, AD, YX Hua, WK Loh, Magd Abdel Wahab, and IA Ashcroft. 2006. “Predicting the Residual Strength for Environmentally Degraded Adhesive Lap Joints.” *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 26 (5): 325–336. doi:10.1016/j.ijadhadh.2005.04.003.
635. Abbes, Yacine, Anthony Throne, Marcus Matthews, Magd Abdel Wahab, Steve Rowett, and Vicki Simpson. 2006. “Development and Dissemination of Blended Learning in Civil Engineering Education: A Comprehensive Approach.” *WSEAS TRANSACTIONS ON ADVANCES IN ENGINEERING EDUCATION* 3 (5): 269–276.
636. Hilmy, I, Magd Abdel Wahab, IA Ashcroft, and AD Crocombe. 2006. “Measuring of Damage Parameters in Adhesive Bonding.” In *KEY ENGINEERING MATERIALS*, ed by. MH Aliabadi, Q Li, L Li, and FG Buchholz, 324–325:275–278. Stafa-Zürich, Switzerland: Trans Tech Publications Ltd.
637. Hua, Y, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2006. “Modelling Environmental Degradation in EA9321-Bonded Joints Using a Progressive Damage Failure Model.” *JOURNAL OF ADHESION* 82 (2): 135–160.
doi:10.1080/00218460600559557.
638. Vanegas Useche, Libardo, Graham A Parker, and Magd Abdel Wahab. 2006. “Desarrollos Recientes En Equipos de Barrido de Calles.” *SCIENTIA ET TECHNICA* 30: 173–178.
639. Vanegas Useche, Libardo, Magd Abdel Wahab, and Graham A Parker. 2006. “Dinámica de Cepillos Laterales Para Barrido de Calles.” *SCIENTIA ET TECHNICA* 12 (30): 197–202.

640. Abdel Wahab, Magd, and Djelloul Mahboub. 2006. "Students Understanding and Participation Using ULearn: Dynamics Case." *EUROPEAN JOURNAL OF ENGINEERING EDUCATION* 31 (4): 407–420. doi:10.1080/03043790600676232.
641. Liljedahl, CDM, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2006. "Damage Modelling of Adhesively Bonded Joints." *INTERNATIONAL JOURNAL OF FRACTURE* 141 (1–2): 147–161. doi:10.1007/s10704-006-0072-9.
642. Abdel Wahab, Magd. 2005. "Approximating a Variable Order Singularity Using Standard Quadratic Isoparametric Element." In *Annual Meeting of JSME/MMD, Proceedings*, 203–204. Japanese Society of Mechanical Engineers (JSME).
643. Crocombe, AD, Magd Abdel Wahab, and IA Ashcroft. 2005. "Characterising Adhesive Joint Fatigue Damage Evolution Using Multiple Backface Strain Gauges." In *Adhesion Society, 28th Annual Meeting, Proceedings*, ed by. K Vorvolakos, 211–213. Adhesion Society.
644. Mahboub, D, and Magd Abdel Wahab. 2005. "Designing Online Modules for Dynamics to Support Engineering Students." In *IADAT International Conference on Education, 2nd, Proceedings*, 6–10. International Association for the Development of Advances in Technology (IADAT).
645. Vanegas Useche, Libardo V, Magd Abdel Wahab, and Graham A Parker. 2005. "Theoretical Model for the Free-Flight Behaviour of the Bristles of an Oscillatory Gutter Brush for Road Sweeping." In *International Conference on Vibration Engineering, 11th, Proceedings*, 83–90.
646. Jumbo, F, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2005. "Investigation of Hygrothermal Residual Stresses in Adhesively Bonded Joints." In *Adhesion Society, 28th Annual Meeting, Proceedings*, ed by. K Vorvolakos, 250–252. Adhesion Society.
647. Crocombe, AD, CD Liljedahl, Y Hua, Magd Abdel Wahab, and IA Ashcroft. 2005. "Extending the Application of Progressive Damage Durability Modelling of Adhesively Bonded Joints." In *Adhesion Society, 28th Annual Meeting, Proceedings*, ed by. K Vorvolakos, 339–341. Adhesion Society.
648. Jumbo, F, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2005. "Modelling of Hygro-Thermal Residual Stresses in Adhesively Bonded Joints." In *Adhesion 2005 : 9th International Conference on the Science and Technology of Adhesion and Adhesives*, 138–142. IOM Communications.
649. Ashcroft, IA, A Al-Ghamdi, AD Crocombe, and Magd Abdel Wahab. 2005. "Creep-Fatigue Interactions and the Effect of Frequency on Crack Growth in Adhesively Bonded Joints." In *Adhesion 2005 : 9th International Conference on the Science and Technology of Adhesion and Adhesives*, 110–113. IOM Communications.
650. Liljedahl, D, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2005. "The Modelling of Interfacial Degradation in Bonded Joint Durability." In *Adhesion 2005 : 9th International Conference on the Science and Technology of Adhesion and Adhesives*, 45–48. IOM Communications.
651. Abdel Wahab, Magd, I Hilmy, IA Ashcroft, and AD Crocombe. 2005. "Damage Modelling of Adhesive Bonding." In *Advances in Fracture and Damage Mechanics IV*, ed by. MH Aliabadi and Boris Abersek, 431–435. Eastleigh, UK: EC.
652. Hua, Y, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2005. "Modelling Continuum Failure in Environmentally Aged Adhesive Joints." In *Adhesion 2005 : 9th International Conference on the Science and Technology of Adhesion and Adhesives*, 124–127. IOM Communications.

653. Abdel Wahab, Magd. 2005. "Finite Element Analysis: Rubber." In *Handbook of Adhesion*, ed by. DE Packham, 192–194. 2nd ed. Hoboken, NJ, USA: John Wiley.
654. Mahboub, D, and Magd Abdel Wahab. 2005. "Supporting Undergraduate Modules Using Ulearn and E-Learning." *IADAT JOURNAL OF ADVANCED TECHNOLOGY ON EDUCATION* 2 (2): 253–255.
655. Vanegas Useche, Libardo, and Magd Abdel Wahab. 2005. "Efectividad de Las Barredoras de Calles Para Remover Contaminantes de Las Vías." *SCIENTIA ET TECHNICA* 11 (27): 87–92.
656. Liljedahl, CDM, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2005. "The Effect of Residual Strains in the Progressive Damage Modelling of Environmentally Degraded Adhesive Joints." *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 19 (7): 525–548. doi:10.1163/1568561054352513.
657. Votsis, RA, Magd Abdel Wahab, and MK Chryssanthopoulos. 2005. "Simulation of Damage Scenarios in an FRP Composite Suspension Footbridge." Ed by. WM Ostachowicz, JM Dulieu Barton, KM Holford, M Krawczuk, and A Zak. *KEY ENGINEERING MATERIALS* 293–294: 599–606.
658. Loh, WK, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2005. "Modelling Anomalous Moisture Uptake, Swelling and Thermal Characteristics of a Rubber Toughened Epoxy Adhesive." *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 25 (1): 1–12. doi:10.1016/j.ijadhadh.2004.02.002.
659. Attaba, Mehdi, Magd Abdel Wahab, G Richardson, and H Newell. 2004. "Thermal Stress and Vibration Analyses for a Space Telescope." In *Conférence Internationale d'Optique, Abstracts*.
660. Al-Ghamdi, A, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2004. "Creep and Fatigue Crack Growth in DCB Joints." In *International Conference on Structural Adhesives in Engineering, 7th, Proceedings, 22–25*. London, UK: IOM Communications.
661. Crocombe, AD, Magd Abdel Wahab, and IA Ashcroft. 2004. "Modelling the Evolution of Fatigue Cracks in Adhesively Bonded Joints." In *International Conference on Structural Adhesives in Engineering, 7th, Proceedings, 113–117*. London, UK: IOM Communications.
662. Crocombe, AD, K Loh, Y Hua, Magd Abdel Wahab, and IA Ashcroft. 2004. "Progressive Damage Modelling of Environmentally Degraded Adhesively Bonded Lap Joints." In *International Conference on Structural Adhesives in Engineering, 7th, Proceedings, 72–75*. London, UK: IOM Communications.
663. Mahboub, D, and Magd Abdel Wahab. 2004. "Simulations of Dynamic Mechanisms to Support Learning Using LABView." In *International Conference on Innovation, Good Practice and Research in Engineering Education*, ed by. A Halstead and P Lister, 51–56. Wolverhampton, UK: University of Wolverhampton.
664. Jumbo, F, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2004. "The Analysis of Thermal Residual Stresses in Adhesively Bonded Joints." In *European Adhesion Conference, 7th, Proceedings*.
665. Liljedahl, D, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2004. "Interfacial Diffusion in Adhesively Bonded Joints." In *European Adhesion Conference, 7th, Proceedings*.
666. Liljedahl, D, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2004. "The Effect of Adhesive Joint Residual Stresses on the Predictive Modelling of Environmental Degradation." In *European Adhesion Conference, 7th, Proceedings*.

667. Crocombe, AD, Magd Abdel Wahab, and IA Ashcroft. 2004. "Predicting the Evolution of Fatigue Damage from Backface Strain Measurements." In *European Adhesion Conference, 7th, Proceedings*.
668. Erpolat, S, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2004. "On the Analytical Determination of Strain Energy Release Rate in Bonded DCB Joints." *ENGINEERING FRACTURE MECHANICS* 71 (9–10): 1393–1401. doi:10.1016/S0013-7944(03)00163-2.
669. Erpolat, S, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2004. "A Study of Adhesively Bonded Joints Subjected to Constant and Variable Amplitude Fatigue." *INTERNATIONAL JOURNAL OF FATIGUE* 26 (11): 1189–1196. doi:10.1016/j.ijfatigue.2004.03.011.
670. Erpolat, S, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2004. "Fatigue Crack Growth Acceleration Due to Intermittent Overstressing in Adhesively Bonded CFRP Joints." *COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING* 35 (10): 1175–1183. doi:10.1016/j.compositesa.2004.03.002.
671. Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, and PA Smith. 2004. "Finite Element Prediction of Fatigue Crack Propagation Lifetime in Composite Bonded Joints." *COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING* 35 (2): 213–222. doi:10.1016/j.compositesa.2003.10.002.
672. Abdel Wahab, Magd, IA Ashcroft, and AD Crocombe. 2004. "A Comparison of Failure Prediction Methods for an Adhesively Bonded Composite Beam." *JOURNAL OF STRAIN ANALYSIS FOR ENGINEERING DESIGN* 39 (2): 173–185. doi:10.1243/030932404773123903.
673. Wang, C, Magd Abdel Wahab, and Graham Parker. 2003. "FEA Brush Modelling of Semi-Autonomous Road Sweeping Vehicles." In *LuxFem, Abstracts*.
674. Al-Ghamdi, AH, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2003. "Crack Growth in Adhesively Bonded Joints Subjected to Variable Frequency Fatigue Loading." *JOURNAL OF ADHESION* 79 (12): 1161–1182. doi:10.1080/00218460390268254.
675. Ashcroft, IA, Magd Abdel Wahab, and AD Crocombe. 2003. "Predicting Degradation in Bonded Composite Joints Using a Semi-Coupled Finite-Element Method." *MECHANICS OF ADVANCED MATERIALS AND STRUCTURES* 10 (3): 227–248. doi:10.1080/15376490390208571.
676. Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, and PA Smith. 2003. "Fatigue Crack Propagation in Adhesively Bonded Joints." Ed by. FG Buchholz, HA Richard, and MH Aliabadi. *KEY ENGINEERING MATERIALS* 251–252: 229–234.
677. Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, and L Jousot. 2003. "Lifetime Prediction for Fatigue Damage in Bonded Joints." Ed by. JM Dulieu Barton, MJ Brennan, KM Holford, and K Worden. *KEY ENGINEERING MATERIALS* 245–246: 43–50.
678. Loh, WK, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2003. "Modelling Interfacial Degradation Using Interfacial Rupture Elements." *JOURNAL OF ADHESION* 79 (12): 1135–1160. doi:10.1080/00218460390268164.
679. Loh, K, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2002. "Interfacial Rupture Elements for Durability Modelling of Bonded Structures." In *Adhesion and Related Phenomena, 2nd World Congress, Proceedings*.

- 680.Loh, K, AD Crocombe, J Watts, Magd Abdel Wahab, and IA Ashcroft. 2002. "The Effect of Moisture on an Epoxy-Steel Interphase." In *International Conference on Adhesion and Surface Analysis, 7th, Proceedings*.
- 681.Al-Ghamdi, A, IA Ashcroft, AD Crocombe, and Magd Abdel Wahab. 2002. "Crack Growth in Adhesively-Bonded Carbon Fibre Composite Joints Subjected to Fatigue and Creep." In *European Adhesion Conference, 6th, Proceedings*, 190–193.
- 682.Attaba, M, Magd Abdel Wahab, G Richardson, and H Newell. 2002. "Finite Element Stress and Vibration Analyses for a Space Telescope." In *2002 International ANSYS Conference Proceedings*. Canonsburg, PA, USA: ANSYS.
- 683.Loh, K, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2002. "Progressive Damage Modelling as a Predictive Tool for Environmental Degradation." In *European Adhesion Conference, 6th, Proceedings*, 62–65.
- 684.Abdel Wahab, Magd, IA Ashcroft, and AD Crocombe. 2002. "Fatigue Lifetime Prediction in Composite Bonded Joints." In *European Adhesion Conference, 6th, Proceedings*, 198–201.
- 685.Abdel Wahab, Magd, and IA Ashcroft. 2002. "Failure Prediction Using FEA and Analytical Solutions for Adhesively Bonded Composite Beams." In *European Adhesion Conference, 6th, Proceedings*, 137–140.
- 686.Abdel Wahab, Magd, AD Crocombe, A Beevers, and K Ebtahaj. 2002. "Coupled Stress-Diffusion Analysis for Durability Study in Adhesively Bonded Joints." *INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES* 22 (1): 61–73. doi:10.1016/S0143-7496(01)00037-9.
- 687.Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, and PA Smith. 2002. "Numerical Prediction of Fatigue Crack Propagation Lifetime in Adhesively Bonded Structures." *INTERNATIONAL JOURNAL OF FATIGUE* 24 (6): 705–709. doi:10.1016/S0142-1123(01)00173-6.
- 688.Loh, WK, AD Crocombe, Magd Abdel Wahab, JF Watts, and IA Ashcroft. 2002. "The Effect of Moisture on the Failure Locus and Fracture Energy of an Epoxy-Steel Interface." *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 16 (11): 1407–1429. doi:10.1163/156856102320252877.
- 689.Loh, WK, AD Crocombe, Magd Abdel Wahab, and IA Ashcroft. 2002. "Environmental Degradation of the Interfacial Fracture Energy in an Adhesively Bonded Joint." *ENGINEERING FRACTURE MECHANICS* 69 (18): 2113–2128. doi:10.1016/S0013-7944(02)00004-8.
- 690.Crocombe, AD, CY Ong, Magd Abdel Wahab, and IA Ashcroft. 2002. "Investigating Fatigue Damage Evolution in Adhesively Bonded Structures Using Backface Strain Measurement." *JOURNAL OF ADHESION* 78 (9): 745–776. doi:10.1080/00218460290010548.
- 691.Abdel Wahab, Magd, S Kandil, M Abdel-kader, and M Moustafa. 2001. "Stress Intensity Factor Calculation for Autofrettaged Tube Test-Specimens Using Finite Element Method." In *Aerospace Sciences and Aviation Technology, 9th International Conference, Abstracts*.
- 692.Loh, K, AD Crocombe, Magd Abdel Wahab, J Watts, and IA Ashcroft. 2001. "Investigating the Degradation of an Epoxy-Steel Interphase." In *International Conference on Structural Adhesives in Engineering, 6th, Proceedings*, 107–110.
- 693.Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, SJ Shaw, and K Loh. 2001. "A Damage Model for Fatigue Crack Initiation Threshold Prediction in Adhesively

- Bonded Joints.” In *International Conference on Structural Adhesives in Engineering, 6th, Proceedings*, 187–290.
694. Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, and SJ Shaw. 2001. “Prediction of Fatigue Thresholds in Adhesively Bonded Joints Using Damage Mechanics and Fracture Mechanics.” *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 15 (7): 763–782. doi:10.1163/15685610152540830.
695. Ashcroft, IA, DJ Hughes, SJ Shaw, Magd Abdel Wahab, and A Crocombe. 2001. “Effect of Temperature on the Quasi-Static Strength and Fatigue Resistance of Bonded Composite Double Lap Joints.” *JOURNAL OF ADHESION* 75 (1): 61–88. doi:10.1080/00218460108029594.
696. Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, DJ Hughes, and SJ Shaw. 2001. “The Effect of Environment on the Fatigue of Bonded Composite Joints, Part 2: Fatigue Threshold Prediction.” *COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING* 32 (1): 59–69. doi:10.1016/S1359-835X(00)00132-9.
697. Ashcroft, IA, Magd Abdel Wahab, AD Crocombe, DJ Hughes, and SJ Shaw. 2001. “The Effect of Environment on the Fatigue of Bonded Composite Joints, Part 1: Testing and Fractography.” *COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING* 32 (1): 45–58. doi:10.1016/S1359-835X(00)00131-7.
698. Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, and SJ Shaw. 2001. “Diffusion of Moisture in Adhesively Bonded Joints.” *JOURNAL OF ADHESION* 77 (1): 43–80. doi:10.1080/00218460108030731.
699. Abdel Wahab, Magd. 2001. “Effect of Modal Curvatures on Damage Detection Using Model Updating.” *MECHANICAL SYSTEMS AND SIGNAL PROCESSING* 15 (2): 439–445. doi:10.1006/mssp.2000.1340.
700. Abdel Wahab, Magd, and JE Mottershead. 2001. “Beat-Frequencies for Damage Detection.” Ed by. KM Holford, JA Brandon, JM Dulieu Barton, MD Gilchrist, and K Worden. *KEY ENGINEERING MATERIALS* 204–205: 211–219.
701. Crocombe, AD, Magd Abdel Wahab, and K Loh. 2000. “Modelling Interfacial Degradation in Adhesively Bonded Structures.” In *European Adhesion Conference, 5th, Proceedings*, 616–621.
702. Abdel Wahab, Magd. 2000. “A Higher Order Finite Element to Model Singularities.” In *STRUCTURES AND MATERIALS*, ed by. APS Selvadurai and CA Brebbia, 6:511–520. Guilford, UK: WIT Press.
703. Ashcroft, IA, Magd Abdel Wahab, AD Crocombe, DJ Hughes, and SJ Shaw. 2000. “Adhesive Bonding of CFRP for Aerospace Applications.” In *Composite Materials, 9th European Conference, Proceedings*. IOM Communications.
704. Abdel Wahab, Magd, IA Ashcroft, AD Crocombe, D Hughes, and S Shaw. 2000. “Prediction of Fatigue Strength of Adhesively Bonded Composite Joints in a Hostile Environment Using a Fracture Mechanics Approach.” In *Modern Practice in Stress and Vibration Analysis : Proceedings of the Fourth International Conference*, ed by. AA Becker, 297–307. Solihull, UK: EMAS.
705. Maeck, J, Magd Abdel Wahab, B Peeters, G De Roeck, J De Visscher, WP De Wilde, JM Ndambi, and J Vantomme. 2000. “Damage Identification in Reinforced Concrete Structures by Dynamic Stiffness Determination.” *ENGINEERING STRUCTURES* 22 (10): 1339–1349. doi:10.1016/S0141-0296(99)00074-7.
706. Ndambi, JM, P Peeters, M Maeck, J De Visscher, Magd Abdel Wahab, J Vantomme, G De Roeck, and WP De Wilde. 2000. “Comparison of Techniques for Modal

- Analysis of Concrete Structures.” *ENGINEERING STRUCTURES* 22 (9): 1159–1166. doi:10.1016/S0141-0296(99)00054-1.
707. Abdel Wahab, Magd. 2000. “On the Use of Fracture Mechanics in Designing a Single Lap Adhesive Joint.” *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 14 (6): 851–865.
708. De Visscher, J, Willy De Wilde, Jean-Marie Ndambi, J Vantomme, B Peeters, Magd Abdel Wahab, and Guido De Roeck. 1999. “An Experimental Study of Damping in Reinforced Concrete.” In *International Congress on Creating with Concrete, Proceedings, ?-?*
709. De Roeck, Guido, Magd Abdel Wahab, J Maeck, and B Peeters. 1999. “Localisation of Damage in Reinforced Concrete Structures by Dynamic System Identification.” In *Baustatik-Baupraxis 7: Berichte Der 7. Konferenz Über Baustatik-Baupraxis*, ed by. K Meskouris, 347–355. CRC Press.
710. Abdel Wahab, Magd, Guido De Roeck, and B Peeters. 1999. “On the Application of FE Model Updating to Damaged Concrete Beams.” In *Identification in Engineering Systems: Proceedings of the Second International Conference Held in Swansea, March 1999*, ed by. MI Friswell, JE Mottershead, and Aw Lees, 578–587. Swansea, Wales, UK: University of Wales.
711. Maeck, J, Magd Abdel Wahab, and G De Roeck. 1999. “Damage Localization in Reinforced Concrete Beams by Dynamic Stiffness Determination.” In *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, 3727:1289–1295. Bethel, CT, USA: Society for Experimental Mechanics inc.
712. Abdel Wahab, Magd, J Maeck, and G De Roeck. 1999. “Numerical Simulation of Damage Scenarios of Bridge Z24.” In *PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS (SPIE)*, 3727:1276–1282. Bethel, CT, USA: Society for Experimental Mechanics inc.
713. Abdel Wahab, Magd, Guido De Roeck, and B Peeters. 1999. “Parameterization of Damage in Reinforced Concrete Structures Using Model Updating.” *JOURNAL OF SOUND AND VIBRATION* 228 (4): 717–730. doi:10.1006/jsvi.1999.2448.
714. Abdel Wahab, Magd, and Guido De Roeck. 1999. “Damage Detection in Bridges Using Modal Curvatures: Application to a Real Damage Scenario.” *JOURNAL OF SOUND AND VIBRATION* 226 (2): 217–235. doi:10.1006/jsvi.1999.2295.
715. Abdel Wahab, Magd, and Guido De Roeck. 1999. “Effect of Excitation Type on Dynamic System Parameters of a Reinforced Concrete Bridge.” *STRUCTURAL ENGINEERING AND MECHANICS* 7 (4): 387–400.
716. Abdel Wahab, Magd, and G De Roeck. 1999. “An Effective Method for Selecting Physical Modes by Vector Autoregressive Model.” *MECHANICAL SYSTEMS AND SIGNAL PROCESSING* 13 (3): 449–474. doi:10.1006/mssp.1998.0193.
717. Ndambi, Jean-Marie, J De Visscher, J Vantomme, W De Wilde, B Peeters, Magd Abdel Wahab, and Guido De Roeck. 1998. “Material Property Assessment in Cracked Reinforced Concrete Beams Using Dynamic System Identification.” In *International EXPERTCENTRUM Conference, 7th, Proceedings*, 351–356. Bratislava, Slovak Republic: EXPERTCENTRUM.
718. Maeck, J, Magd Abdel Wahab, and Guido De Roeck. 1998. “Damage Detection in Reinforced Concrete Structures by Dynamic System Identification.” In *Noise and Vibration Engineering, 23rd International Conference, Proceedings*, 939–946. Heverlee, Belgium: KU Leuven. Departement Werktuigkunde.

- 719.Ndambi, Jean-Marie, J Vantomme, J De Visscher, G Van Vinckenroy, W De Wilde, B Peeters, Magd Abdel Wahab, and G De Roeck. 1998. "Structural Damage Detection in Cracked Reinforced Concrete by Dynamic System Identification." In *Noise and Vibration Engineering, 23rd International Conference, Proceedings*, 915–921. Heverlee, Belgium: KU Leuven. Departement Werktuigkunde.
- 720.Abdel Wahab, Magd, Guido De Roeck, B Peeters, J De Visscher, W De Wilde, G Van Vinckenory, Jean-Marie Ndambi, and J Vantomme. 1998. "Damage Evaluation of a Reinforced Concrete Beam Using Finite Element Model Updating." In *International Conference on Computational Engineering Science, Proceedings*, 1641–1646.
- 721.Abdel Wahab, Magd, and Guido De Roeck. 1998. "Dynamic Testing of Prestressed Concrete Bridges and Numerical Verification." *JOURNAL OF BRIDGE ENGINEERING* 3 (4): 159–169. doi:10.1061/(ASCE)1084-0702(1998)3:4(159).
- 722.Abdel Wahab, Magd, and Guido De Roeck. 1997. "Application of System Identification to Bridges." In *National Congress on Theoretical and Applied Mechanics, 4th, Proceedings*, 517–520.
- 723.Ndambi, JM, J De Visscher, G Van Vinckenroy, WP De Wilde, J Vantomme, B Peeters, Magd Abdel Wahab, and G De Roeck. 1997. "Material Property Assessment in Cracked Reinforced Concrete by Dynamic System Identification." In *MATERIAL IDENTIFICATION USING MIXED NUMERICAL EXPERIMENTAL METHODS*, ed by. H Sol and CWJ Oomens, 223–232. Dordrecht, The Netherlands: Springer.
- 724.De Visscher, J, G Van Vinckenroy, WP De Wilde, JM Ndambi, J Vantomme, B Peeters, Magd Abdel Wahab, and G De Roeck. 1997. "Evaluation of Damage in Reinforced Concrete Beams Using Dynamic System Parameters." In *COMPUTATIONAL METHODS AND EXPERIMENTAL MEASUREMENTS*, ed by. P Anagnostopoulos, GM Carlomagno, and CA Brebbia, 233–243. Southampton, UK: Computational Mechanics Publications Ltd.
- 725.Abdel Wahab, Magd, and Guido De Roeck. 1997. "Experimental Modal Analysis of a Prestressed Concrete Bridge." In *Challenges to Civil and Mechanical Engineering in 2000 and Beyond*, ed by. R Ciesielski, B Ciszewski, J Gronostajski, H Hawrylak, J Kmita, and S Kobiela, 559–568. Wroclaw, Poland: Wroclaw University of Technology Press.
- 726.Abdel Wahab, Magd, and Guido De Roeck. 1997. "Experimental Dynamic Testing and Numerical Modelling of a Prestressed Concrete Bridge." In *International Modal Analysis Conference, 15th, Proceedings*, 587–593.
- 727.Abdel Wahab, Magd, and Guido De Roeck. 1997. "Dynamic Testing of a Prestressed Concrete Bridge and Numerical Verification." In *COMPUTATIONAL METHODS AND EXPERIMENTAL MEASUREMENTS*, ed by. P Anagnostopoulos, GM Carlomagno, and CA Brebbia, 195–204. Southampton, UK: Computational Mechanics Publications Ltd.
- 728.Abdel Wahab, Magd, and G De Roeck. 1997. "A Fracture Mechanics Approach for Designing an Adhesive Joint for Glass Fibre Reinforced Pipes." *JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY* 11 (5): 719–733. doi:10.1163/156856197X00688.
- 729.Abdel Wahab, Magd, and Guido De Roeck. 1997. "Effect of Temperature on Dynamic System Parameters of a Highway Bridge." *STRUCTURAL ENGINEERING INTERNATIONAL* 7 (4): 266–270. doi:10.2749/101686697780494563.

730. Peeters, B, Magd Abdel Wahab, Guido De Roeck, J De Visscher, W De Wilde, Jean-Marie Ndambi, and J Vantomme. 1996. "Evaluation of Structural Damage by System Identification." In *Noise and Vibration Engineering, 21st International Conference, Proceedings*, 1349–1361. Heverlee, Belgium: KU Leuven. Departement Werktuigkunde.
731. De Roeck, G, and Magd Abdel Wahab. 1996. "A Fracture Mechanics Analysis of an Adhesive Joint for Glass Fibre Reinforced Pipes." In *COMPUTER AIDED DESIGN IN COMPOSITE MATERIAL TECHNOLOGY V*, ed by. WR Blain and WP De Wilde, 143–152. Southampton, UK: Computational Mechanics Publications Ltd.
732. Abdel Wahab, Magd, and G De Roeck. 1996. "On the Use of the ICCI Method in 3-D Crack Problems." In *LOCALIZED DAMAGE IV - COMPUTER-AIDED ASSESSMENT AND CONTROL*, ed by. H Nisitani, MH Aliabadi, and DJ Cartwright, 659–666. Southampton, UK: Computational Mechanics Publications Ltd.
733. El-Hawary, MM, AM Ragab, and Magd Abdel Wahab. 1996. "A Nonlinear Finite Element Analysis of Horizontal Elastomers of Revolution." *FINITE ELEMENTS IN ANALYSIS AND DESIGN* 21 (3): 145–157. doi:10.1016/0168-874X(95)00033-P.
734. Abdel Wahab, Magd, and G De Roeck. 1996. "A Family of Elements with Lambda Singularity." *ADVANCES IN ENGINEERING SOFTWARE* 26 (1): 23–28. doi:10.1016/0965-9978(95)00113-1.
735. Abdel Wahab, Magd, and G De Roeck. 1996. "A Finite Element Solution for Elliptical Cracks Using the ICCI Method." *ENGINEERING FRACTURE MECHANICS* 53 (4): 519–526. doi:10.1016/0013-7944(95)00163-8.
736. Abdel Wahab, Magd, and G De Roeck. 1995. "A Family of Elements to Model Power Type Singularity." In *DEVELOPMENTS IN COMPUTATIONAL TECHNIQUES FOR STRUCTURAL ENGINEERING*, ed by. BHV Topping, 109–115. Edinburgh, Scotland, UK: Civil-Comp Press.
737. Abdel Wahab, Magd. 1995. "Finite Elements for General Power Type Singularity Problems in Fracture Mechanics." Leuven, Belgium: KU Leuven. Department of Civil Engineering.
738. Abdel Wahab, Magd, and G De Roeck. 1995. "A 2-D Five-Noded Finite Element to Model Power Singularity." *INTERNATIONAL JOURNAL OF FRACTURE* 74 (1): 89–97. doi:10.1007/BF00018577.
739. Abdel Wahab, Magd, and G De Roeck. 1995. "A 3-D Six-Noded Finite Element Containing a Lambda Singularity." *INTERNATIONAL JOURNAL OF FRACTURE* 70 (4): 347–356.
740. De Roeck, G, and Magd Abdel Wahab. 1995. "Strain Energy Release Rate Formulas for 3-D Finite Elements." *ENGINEERING FRACTURE MECHANICS* 50 (4): 569–580. doi:10.1016/0013-7944(94)00232-7.
741. Abdel Wahab, Magd, and G De Roeck. 1995. "A 2-D 4-Noded Finite Element Containing a Singularity of Order Lambda." *STRUCTURAL ENGINEERING AND MECHANICS* 3 (4): 383–390.
742. Abdel Wahab, Magd, and G De Roeck. 1994. "Strain Energy Release Rate Calculation from 3-D Singularity Finite Elements." In *LOCALIZED DAMAGE III - COMPUTER-AIDED ASSESSMENT AND CONTROL*, ed by. MH Aliabadi, A Carpinteri, S Kalisky, and DJ Cartwright, 425–434. Southampton, UK: Computational Mechanics Publications Ltd.
743. Abdel Wahab, Magd, and G De Roeck. 1994. "3D Finite Element Computation of Strain Energy Release Rate Using Different Displacement and Stress Fields."

- ENGINEERING FRACTURE MECHANICS* 49 (5): 659–665. doi:10.1016/0013-7944(94)90030-2.
744. Abdel Wahab, Magd, M El Hawary, and A Ragab. 1991. “A Non-Linear Finite Element Study for Axisymmetric Elastomeric Bearings.” In *Arab Structural Engineering Conference, 4th, Proceedings, ?-?*
745. Abdel Wahab, Magd, and M El-Hawary. 1991. “Experimental Study for Elastomeric Bearings.” *CIVIL ENGINEERING RESEARCH MAGAZINE* 13 (6): ?-?