



**Prof. Abdul-Ghani Olabi**

***Professor and Head of Sustainable and Renewable Energy Engineering  
Department***

**Academic Qualification:**

- PhD of Mech. Eng. (1991-1993), Dublin City University (Ireland).
- Master of Mech. Eng. (1989-1990), Dublin City University (Ireland).
- Degree of Mechanical Engineering (H), (1979-1984), Damascus University (Syria).

**Professional Experience:**

- 2018 Professor and Head of Department of Sustainable and Renewable Energy Engineering, University of Sharjah.
- 2013-2018 Professor of Mechanical Engineering at the University of the West of Scotland.
- 2013 Director of Institute of Engineering and Energy Technologies.
- Research Excellence Framework REF2014, Uo15 Leader (General Engineering).
- 2011-2012, Deputy Head of School of Mechanical Engineering.
- April 2008-2013, Associate Professor, Dublin City University, School of Mechanical and Manufacturing Engineering.
- Oct 2002-April 2008 Assistant Professor, Dublin City University, School of Mechanical and Manufacturing Engineering.
- 4 Years (1999- 2002) Research Centre of FIAT (CRF), Research Director, Research and Developments of the new engine feeding and injection systems with alternative fuel: LPG, CNG and H<sub>2</sub>.
- 5 Years (1994-1998) lecturer HIAST [Higher Institute of Applied Science and Technology, (Damascus, Syria)], lecturing in the following subjects: Materials, Manufacturing Processes, Supply Chain Supplement, CAD/CAM and FEM.
- 3 Years (1991-1993) working in a research project to obtain PhD. Degree.
- 2 Years (1989-1990) working in a research project to obtain M.Eng. Degree.
- 4 Years (1984-1988) Junior Engineer in R&D -Damascus, Syria.

**Responsibilities & Duties:**

- REF2021 Leader, “General Engineering”.
- Institute of Engineering and Energy Technologies, Director, (Since 2013), [www.uws.ac.uk/ieet](http://www.uws.ac.uk/ieet)
- REF2014 Uo15 Leader, “General Engineering”.
- Member of the Faculty Promotion Board (2013-2018).
- Chairman of Interviewing Panels (2013-2018).
- Member of Interviewing Panel (2013-2018)
- Member of School Board (Since 2013).
- Member of University Research Committee (2013-2014).
- Member of School Research Committee (Science 2014).
- Director of MSc Programme in Mech. & Manuf. Eng. (Sept 2011-March 2013)
- Deputy Head of School of Mechanical Engineering (2011-2012).
- International Director (Jan 2003 - March 2013).
- Director of Manuf. Eng. With Business Studies Programme (2005-2010)
- School Research Convenor: (Sept. 2007 to Sept 2010).
- School finance director (2005-2010).
- School Management Committee (2005-2010)
- Member of Faculty Research Committee “FRC”: (Sept. 2007 to Sept 2010).
- Member of Faculty Education Committee “FRC”: (Sept. 2011 – March 2013).
- Member of DCU Academic Council (2007-2012).

### **Teaching Experience:**

- CAD and Design
- Project Management
- Energy Management
- CAM
- CIM
- Renewable Energy Technologies
- Manufacturing Processes
- Supply Chain Management

### **PhD Supervision:**

1. Omar Alghoul, Development and Optimization of Anaerobic Digestion Using Waste Materials, August 2018.
2. Awotwe Tabbi Wilberforce, Design and Development of Innovative Proton Exchange Membrane Fuel Cell Using Open Pore Cellular Foam Material, July 2018.
3. Chukwuma Onumaegbu, Optimization of three different pre-treatment processes to enhance lipid extraction from microalgal biomass, June 2018.
4. Khalid Almazyed, Attitude of Employees Toward Organizational Productivity: A Comparative Analysis of Public and Private Construction and Manufacturing Companies in Kingdom of Saudi Arabia, January 2018.

5. Cristina Rodriguez, Enhanced Methane Production from Mixed Waste Organic Materials, September 2017.
6. Atinuke Modesola Oladoye, Design and Characterisation of Metallic Bipolar Plates for Proton Exchange Membrane Fuel Cells, August 2016.
7. Ahmed Al-Makky, Prediction of the Gas Emission and Movement from Soil Media with Concern of Energy and Environment, June 2016.
8. Maria Montingelli, Development and application of a mechanical pretreatment to increase the biogas produced from Irish macroalgal biomass. September 2015.
9. Leonard Ekpeni, Investigation of Biomasses in Improving Biogas Production through their Uses in High-Pressure Homogenizer (HPH), May 2015.
10. Abdalmonem Tamtam, University Students and Teaching Staff Attitudes toward Language of Instruction in Libyan Science and Engineering Education, January 2014.
11. Ahmad Baroutaji, Energy Absorption Through the Lateral Collapse of Thin-walled Single, Nested and Sandwich Tubes, October 2013.
12. Ayad Khalifa Mohamed Aboderheeba, Novel Approach to Pre-treats Agriculture Products/Residues and Food Waste to Improve Biogas Production and Optimization Analysis using Design of Experiment, August 2013.
13. Ali Abdullah Alghamdi, Magneto-Rheological Damper Design for Vehicle Suspension System, July 2013.
14. Silvia Tedesco, Hollander beater mechanical pre-treatment assessment to advance methane generation from Irish indigenous marine (macroalgal) biomass. July 2013.
15. Izwan Ismail, Stress-Resistance of Magnetorheological Fluid in Squeeze Mode, May 2013.
16. Muhammad Hasanuzzaman, Investigation of Porous Glasses Based On Sodium Borosilicate Glass System, April 2013.
17. Mustafa Sajjia, Developments of New Driveline Components, PhD, March 2013.
18. Abed Al-Aswad, Finite Element Application For Multi Layered T-Branch Hydroforming, PhD, Feb 2012
19. Marwa Ali, Developments of an Eco-friendly Composite Material for Engineering Applications, Jan 2012
20. Houssam Achour, Effects of Fuel Systems on Air Pollution, PhD, Feb 2012.
21. James Carton, Developments of PEM Fuel Cell, PhD, May 2011.
22. Hayat El-Tawahni, Optimization of the Laser Cutting Process for Ceramic Materials, PhD, Feb 2011.
23. Muhammad Rehan, Design Optimisation of Mechanical Structures, PhD, July 2010.
24. Vincent Lawler, Finite Element and Experiment on S.O. Fuel Cell, PhD, June 2010.
25. Nasser Ekreem, Electro-Magnetic Properties of Parts Magnetostrictive Materials, Jan 2009.
26. Saiful Amri Bin Mazlan, Magneto Rheological Fluid "MRF" Characteristics, PhD, June 2008.
27. Ezzeddin M. Hassan, Optimization of Dissimilar Welded Components, PhD, June 2008
28. Artur Grunwald, Design and Optimization of Magnetostrictive Actuator, Sept 2007
29. Lutfi El-Gammudi, Effects of Mechanical Properties, Product Quality and Marketing Implication Due to Utilization of Rejects, Sept 2007.
30. Khaled Ben Younis, Optimisation of Laser Welded Joints, Jan. 2007.
31. Edmund Morris, Computational Simulation of the Response of Nested Systems to Impact Loading, Sept. 2006.

32. M.M.Rahman, Modelling of Rheological Characteristics of Curing PMMA Bone Cement, March 2006.

### **M.Phil Supervision:**

1. A.Abulamasha, Strategy for the Development of CNG System, July 2005.
2. Khaled Saeed, CIM Implementation in Developed and Developing Countries, July 2005.
3. M.D. Din Islam, Experimental and Finite Element Study of the Hydroforming Bi-Layered Tubular components, July 2005.
4. A.Alsebaie, Characterisation of Alumina-Zirconia Nanocomposites, December 2005.
5. Hayat Tawahini, Optimization of Soft Magnetic Materials, April 2006.
6. M. Hasanuzzaman, Effects of Particle Size and Aspect Ratio on the Shrinkage Characteristics of Sintered Parts, Sept. 2006.
7. Habibulla Amin Chowdhury, Developments of Advanced CNG System, MEng, July 2008.
8. Andrew Clarke, Production and Optimization of Bio Fuel Energy, MEng, Aug. 2009.
9. Fatma A. Alfarjani, Design and Optimization of Process Parameters in Bio-Gas Production Systems, January 2012.
10. Esam Tabouli, Computer Intergrated Manufacturing in Prints Industry, August 2016.

### **Patents granted:**

- **Patent Number: GB2505693-A; WO2014037494-A2**, Membrane cell arrangement e.g. electrolyser for use in fuel stack used in electronic device, has two fuel cells that shares common gas distribution layer, which is provided with open pore cellular foam flow manifold
- Project: Design and Optimization of a Mechanical Device and Delivery System for Medical Applications, IP-2008-0529, sponsored by EI. We have managed to design innovative Delivery Actuator and implant for a Transcervical Sterilization Device, this innovation has been patented by “Trinitas Ventures Ltd” as have been agreed by the research contract.

### **Accreditation Chairman:**

- In 2018, Chairman of the Accreditation Panel to evaluate the Engineering Programme at Limerick Institute of Technology.
- In 2017, Chairman of the Accreditation Panel to evaluate the Engineering Programme at Tallaght Institute of Technology.
- In 2013, Chairman of the Accreditation Panel to evaluate the Engineering Programme at Limerick Institute of Technology.
- In 2012, Member of the Accreditation Panel to evaluate the Engineering Programme at Cork Institute of Technology.
- In 2009, Member of the Accreditation Panel to evaluate the Mechanical Engineering Programme at University of Limerick.
- In 2009, Preparing all accreditation documents for Manufacturing Engineering with Business Studies, Results: Accreditation Obtained

- In 2005, Preparing all accreditation documents for Manufacturing Engineering with Business Studies, Results: Accreditation Obtained.

### **Interview Panels:**

- Member of interview panel in August 2014 to appoint Reader/SL in Mech. Eng.
- Member of interview panel in August 2014 to appoint Lecturer in Mech. Eng.
- Member of interview panel in August 2014 to appoint Lecturer in Computing.
- Member of interview panel in January 2016 to appoint Lecturer in Chem. Eng.
- Chairman of interview panel in Oct 2015 to appoint KTP Associate.
- Chairman of interview panel in Dec 2015 to appoint KTP Associate.
- Chairman of interview panel in August 2016 to appoint KTP Associate.
- Chairman of interview panel in Dec 2016 to appoint KTP Associate.
- Member of interview panel in January 2016 to appoint Lecturer in Chem. Eng.
- Member of interview panel in January 2017 to appoint Lecturer in Chem. Eng.
- Member of interview panel in May 2017 to appoint Lecturer in Chem. Eng.
- Member of interview panel in June 2017 to appoint Lecturer in Mech. Eng.
- Member of interview panel in December 2017 to appoint Lecturer in Mech. Eng.

### **Promotion Panels:**

- Member of Faculty promotion panel April 2011.
- Member of School promotion panel Dec 2014.
- Member of School promotion panel Dec 2015.
- Member of School promotion panel Dec 2016.
- Member of School promotion panel Jan 2018.

### **Editorial:**

1. Associate Editors: Energy Journal, Elsevier, [http://www.elsevier.com/wps/find/journaleditorialboard.cws\\_home/483/editorialboard](http://www.elsevier.com/wps/find/journaleditorialboard.cws_home/483/editorialboard)
2. Subject Editor: Energy Journal, Elsevier for Hydrogen and Fuel Cell from Jan 2010.
3. Editor in Chief of Section Sustainable Energy-Energies [http://www.mdpi.com/journal/energies/sectioneditors/sustainable\\_energy](http://www.mdpi.com/journal/energies/sectioneditors/sustainable_energy)
4. Editorial Board, Area Editor: Simulation Modelling Practice and Theory, Elsevier [http://www.elsevier.com/wps/find/journaleditorialboard.cws\\_home/622330/editorialboard](http://www.elsevier.com/wps/find/journaleditorialboard.cws_home/622330/editorialboard)
5. Editorial Board: Journal of Sustainable Manufacturing and Renewable Energy, [https://www.novapublishers.com/catalog/editorial.php?products\\_id=11953](https://www.novapublishers.com/catalog/editorial.php?products_id=11953)
6. Editor in Chief of Encyclopedia in Smart Materials (Elsevier).
7. Subject Editor: Research in Candidate Materials, *Reference Module in Materials Science and Materials Engineering, Elsevier*.
8. Editorial Board: World Journal of Modelling and Simulation, <http://www.wjms.org.uk/>

### **National delegate:**

- Management committee of the European research project Action-COST-242 “High Performance Energy Storages for Mobile and Stationary Applications”.

[www.cost.esf.org/print/?type=afs&action\\_number=542](http://www.cost.esf.org/print/?type=afs&action_number=542)  
<http://www.cost.esf.org/index.php?id=251&IDAdd=178901>

- Management Committee of the European research project Action-COST-MP1004 “High Performance Energy Storages for Mobile and Stationary Applications”.
- European Association for Experimental Mechanics “EURASEM”.  
<http://www.soton.ac.uk/~eurasem/contacts54.html>

### **Conferences Chairman:**

- Sustainable Energy and Environmental Protection SEEP 2004, Dublin-Ireland.
- Sustainable Energy and Environmental Protection SEEP 2006, Dublin-Ireland.
- Sustainable Energy and Environmental Protection SEEP 2009, Dublin-Ireland.
- Sustainable Energy and Environmental Protection SEEP 2010, Bari-Italy.
- Sustainable Energy and Environmental Protection SEEP 2012, Dublin-Ireland.
- Sustainable Energy and Environmental Protection SEEP 2013, Maribor-Slovenia.
- Sustainable Energy and Environmental Protection SEEP 2014, Dubai-UAE.
- Sustainable Energy and Environmental Protection SEEP 2015, Paisley-UK.
- Sustainable Energy and Environmental Protection SEEP 2016, Turkey.
- Sustainable Energy and Environmental Protection SEEP 2017, Bled-Slovenia.
- Sustainable Energy and Environmental Protection SEEP 2018, Paisley-UK.
- Materials Science and Smart Materials MSSM 2018, Paisley-UK.

### **Conferences Co Chairman:**

- Advanced Materials & Processing Technology AMPT 2003.
- International Symposium on Engineering Education 2007.
- International Symposium on Engineering Education 2008.

### **International Evaluator:**

- Grant Funding of research proposals 2014-2017, National Center of Science and Technology Evaluation, Republic of Kazakhstan.
- Kuwait Research Fund proposal 2016-2017, Kuwait
- Assessment of Quality in Scientific Research 2004-2010, sponsored by MIUR (Italian Ministry for Research and Education).
- Evaluator for PRIN 2012 research funded project by MIUR (Italian Ministry for Research and Education).
- Evaluator for Futuro in Ricerca 2013 research funded project by MIUR (Italian Ministry for Research and Education).

### **PhD External Examiner:**

- PhD, 2018, On the thermodynamics and dynamics of coal and biomass combustion, University of Glasgow, UK.
- PhD, 2018, Modelling of Laser Surface Glazing for Metallic Materials by Finite Element Method, City University London, UK.

- PhD, 2018, Development of a global energy management system for non-energy intensive multi-site manufacturing organisations, National University of Ireland, Galway, Ireland.
- PhD, 2017, Numerical and Experimental Investigation of Multi-Pass Thermosyphon-Based Heat Exchanger, University of Brunel, UK.
- PhD, 2017, Investigation on Modelling and Optimization of the Cleanroom, Cork Institute of Technology, Ireland.
- PhD, 2017, Thermal Efficiency of Nanofluid-Based Flat Plate Solar Collector, University of Malaya, Malaysia.
- PhD, 2016, Analysis and modelling of Particulate Matter Filtration in Internal Combustion Engine Exhaust After treatment Systems, Università di Roma Tor Vergata, Italy
- PhD, 2015, Production of Biodiesel by Mixed Culture of Oleaginous Yeast *Rhodosporidium Toruloides* and Microalga *Chlorella Pyrenoidosa* from Wastewater, University of Macau, China.
- PhD, 2015, Modelling of the thermal behaviour of a two-phase closed thermosyphon, University of Brunel, UK.
- PhD, 2015, Experimental Investigation with CFD Modelling of Thermosyphon-Equipped Heat Exchangers Used For Recovery of Low-Grade Heat, University of South Wales, UK.
- PhD, 2015, Dyeing Process Parameters Optimization and Quality Characteristics Modeling for Viscose Blended Knitted Fabrics, University of Malaya, Malaysia.
- PhD, 2015, A Novel Magnetorheological Damper Using a Cooling System, Universiti Teknologi Malaysia, Malaysia.
- PhD, 2015, Study of Organic Rankine Cycle and its Modeling Incorporating District Heating System Vis-À-Vis Impacts on Environment and Society, Department of Mechanical Engineering, National Institute Of Technology, Agartala- India.
- PhD, 2014, Studies on Tribological Wear Behaviour for Optimization of Dual-Phase Steels, Visvesvaraya Technological University-India.
- M.Eng, 2013, Controllable Suspension Design Using MagnetoRheological Fluid, University of Pretoria, South Africa.
- PhD, 2013, Experimental Analysis of a Flat Plate Collector with Solar Tracking for Various Applications, Visvesvaraya Technological University-India.
- M.Eng., 2012, Development of Portable Tensile Tester and its Use in Characterising Mechanical Behaviour of Polymer Specimens, UCD, Dublin.
- PhD, 2011, Design and Optimization of PV Energy System, Visvesvaraya Technological University-India.
- PhD, 2010, Design of an Otto Cycle / Stirling Cycle Hybrid Engine based Combined Heat and Power Plant, DIT, Dublin
- MPhil, 2008, Design Developments and experimental investigation into an EloFlux Alkaline Fuel Cell “AFC”, DIT, Dublin
- PhD degree, 2008 thesis title: Analysis of Residual Stresses and Distortions in Circumferentially Welded Thin-Walled Cylinders, National University of Sciences & Technology, Pakistan.

### **Research Funding History:**

- 2017-2018, Co-Investigator, Algal Solutions for a Local Energy Economy (ASLEE)-Phase 2, funded by Local Energy Scotland.
- 2017-2018, Principal Investigator (PI), CFD and Prototype Developments for Tidal Energy, KTP with Linell, funded by Innovate UK.

- 2016-2018, Principal Investigator (PI), Hydrogen Cell Developments, KTP with PEAK Science, funded by Innovate UK.
- 2016-2017, Principal Investigator (PI), Design of Innovative Education Facilities, KTP with EME Furniture, funded by Innovate UK.
- 2016, Principal Investigator (PI), Energy Management “Report Review”, funded by Jabil, Livingston-UK.
- 2016, Principal Investigator (PI), Study on Heating, Cooling and Air Conditioning “HVAC”, funded by Mitsubishi Electronic, Livingston-UK.
- 2016-2017, Co-Investigator, Algal Solutions for a Local Energy Economy (ASLEE)-Phase 1, funded by Local Energy Scotland.
- 2016, Principal Investigator (PI), Using Waste Heat in Cooking Industries, funded by ETP.
- 2016, Principal Investigator (PI), Developments of Micro AD, funded by ETP.
- 2015-2016, Co-Investigator, Robust Thermal Engineering Approach for Generating Energy from Waste, funded by Scottish Funding Council “Interface – Food and Drink”.
- 2015, Principal Investigator (PI), Feasibility Study for Using Waste Heat in Cooking Industries, funded by Scottish Funding Council “Interface – Innovation Voucher”.
- 2015, Principal Investigator (PI), Energy Optimization for Medical Device, funded by Scottish Funding Council “Interface – Innovation Voucher”.
- 2014, Principal Investigator (PI), CPD Course on Gas and Oil Developments, funded by Saudi Gov.
- 2013-2014, Principal Investigator (PI), Teaching Project on: Design, Optimization and Experimental Verification of Advanced Engineering Components, funded by MIUR-Italy
- 2013-2014, Principal Investigator (PI), Capital Fund to build Renewable Energy Lab, funded by UWS.
- 2013-2014, Principal Investigator (PI), Design and Development of Fuel Cell, funded by Enterprise Ireland.
- 2012-2015, Principal Investigator (PI), Development and application of innovative mechanical pre-treatment to increase the bio-gas produced from algae, funded by Irish Research Council.
- 2012-2015, Principal Investigator (PI), Design and Optimization of PEM Flow Plate, funded by Irish Research Council.
- 2013, Principal Investigator (PI), Design of Water Collector, funded by Enterprise Ireland “Innovation Voucher”.
- 2012, Principal Investigator (PI), Design of Anti-Bedsore Mattress Using MRF Materials, funded by Enterprise Ireland “Innovation Voucher”.
- 2011-2012, Principal Investigator (PI), Capital Fund to build Renewable Energy facilities, funded by DCU.
- 2010-2013, Principal Investigator (PI), Novel Pre-treatment of Biomass to Advance Irish Indigenous Biofuel Generation, funded by Irish Research Council.
- 2010-2013, Principal Investigator (PI), Watching Brief technology Review: Hydrogen and Fuel Cell & Watching Brief technology Review: Solar Energy, funded by Sustainable Energy Authority Ireland.
- 2010-2011, Co-Investigator, Optimization of the Cutting Parameters of New Developed Laser Cutting Machine, funded by Adriatica Industriale-Italy.



- 2009-2011, Principal Investigator (PI), Tempus Project Nr.159165.2009, Accreditation Pathway to Quality Assurance, funded by EC.
- 2009-2010, Co-Investigator, A Mechanical Methods of Rupturing Cell Walls, funded by Enterprise Ireland.
- 2008-2010, Principal Investigator (PI), Design and Optimization of a Mechanical Device and Delivery System for Medical Applications, funded by Enterprise Ireland.
- 2008, Principal Investigator (PI), Evaluation of Bio-Diesel in Ireland, funded by Enterprise Ireland “Innovation Voucher”.
- 2006-2008, Co-Investigator, Study to Characterise the Performance of Micro Tubular Solid Oxide Fuel Cells by the Invention of an Avant Garde Experimental Apparatus and Computational Modelling, funded by Austrian Science fund (FWF) HITSIM.
- 2006-2008, Co-Investigator, Increased Renewable Energy recovery from Biomass by highly Efficient Disruption Process, funded by EU, Project FP6-2004-SME-COOP.
- 2004-2007, Principal Investigator (PI), Design and Optimization of Magnetostrictive Actuator, funded by GKN-Germany.
- E2004-2006, Principal Investigator (PI), Tempus Project Nr.18062.2003, Curricula Development In Mechanical Engineering According To Bologna Declaration Towards A Two Tier Structure (Undergraduate And Graduate Studies), funded by EC.
- 2005-2012, Principal Investigator (PI), 2 PhD projects on Magneto Rheology Fluids “MRF”, funded by Higher Education Authority-Malaysia.
- 2009-2013, Principal Investigator (PI), PhD projects on Magneto Rheology Fluids “MRF”, and PEM Fuel Cell, funded by Higher Education Authority-Saudi Arabia.
- 2006-2010, Principal Investigator (PI), 4 PhD projects on Renewable Energy, Materials and Manufacturing, funded by Higher Education Authority-Syria.
- 2003-2010, Principal Investigator (PI), 3PhD projects on Laser Welding and Cutting Characterisation, funded by Higher Education Authority-Libya.

### **Books Publications:**

1. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10<sup>th</sup> International Conference on Sustainable Energy and Environmental Protection: Bioenergy and Biofuels, ISBN-13: 978-961-286-048-6, DOI: <https://doi.org/10.18690/978-961-286-048-6>
2. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Combined and Hybrid Energy Systems, ISBN-13: 978-961-286-049-3, DOI: <https://doi.org/10.18690/978-961-286-049-3>
3. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Energy Efficiency, ISBN-13: 978-961-286-050-9, DOI: <https://doi.org/10.18690/978-961-286-050-9>
4. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Energy Management and Policies, ISBN-13: 978-961-286-051-6, DOI: <https://doi.org/10.18690/978-961-286-051-6>

5. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Energy Storage, ISBN-13: 978-961-286-052-3, DOI: <https://doi.org/10.18690/978-961-286-052-3>
6. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Environmental Management and Impact Assessment, ISBN-13: 978-961-286-053-0, DOI: <https://doi.org/10.18690/978-961-286-053-0>
7. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Hydrogen and Fuel Cells, ISBN-13: 978-961-286-054-7, DOI: <https://doi.org/10.18690/978-961-286-054-7>
8. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Marine and Hydro Power, ISBN-13: 978-961-286-055-4, DOI: <https://doi.org/10.18690/978-961-286-055-4>
9. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Modelling and Simulation, ISBN-13: 978-961-286-058-5, DOI: <https://doi.org/10.18690/978-961-286-058-5>
10. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Power Distribution, ISBN-13: 978-961-286-060-8, DOI: <https://doi.org/10.18690/978-961-286-060-8>
11. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Renewable Energy Sources, ISBN-13: 978-961-286-061-5, DOI: <https://doi.org/10.18690/978-961-286-061-5>
12. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Waste Energy and Management, ISBN-13: 978-961-286-063-9, DOI: <https://doi.org/10.18690/978-961-286-063-9>
13. J. Krope, A. G. Olabi, D. Goričanec, S. Božičnik, 2017, 10th International Conference on Sustainable Energy and Environmental Protection: Water and Air Quality, ISBN-13: 978-961-286-064-6, DOI: <https://doi.org/10.18690/978-961-286-064-6>
14. A.G. Olabi and A. Alaswad, 2015, State of the Art on Energy Developments, ISBN: 978-1-903978-52-8.
15. A.G. Olabi and A. Alaswad, 2015, [\*State of the Art on Environmental Protection\*](#), ISBN: 978-1-903978-51-1
16. J. Krope, A.G. Olabi & D. Goricanec. 2013, [\*6<sup>th</sup> International Conference on Sustainable Energy and Environmental Protection\*](#), ISBN: 978-961-248-379-1.
17. A.G. Olabi & K. Benyounis. 2012, [\*Environment & Clean Technologies\*](#), ISBN: 978-1-873769-10-2.
18. A.G. Olabi and K. Benyounis.2012, [\*Sustainable Energy Developments\*](#), ISBN: 978-1-873769-11-9.
19. M. Dassisti, A.G.Olabi and M. Chimienti. 2010, [\*Environmental Protection in the New Era\*](#), ISBN: 978-88-905185-4-6.
20. A.G.Olabi, S.Naher, M.Acquaviva. 2009, [\*Environmental Protection Beyond 2020\*](#), ISBN: 978-0-9555781-3-7.
21. A.G.Olabi, S.Naher, M.Dassisti. 2009, [\*Sustainable Energy Beyond 2020\*](#), ISBN: 978-0-9555781-2-0.
22. Abdul Ghani Olabi & Dermot Brabazon. 2008, [\*International Symposium for Engineering Education, ISEE-08\*](#), ISBN: 1872-327-737.
23. Abdul Ghani Olabi & Dermot Brabazon. 2007, [\*International Symposium for Engineering Education, ISEE-07\*](#), ISBN: 1872-327-64-8.

24. Abdul Ghani Olabi. 2006, [\*Vehicles Alternative Fuel Systems and Environmental Protection\*](#), ISBN: 1-872327-58-3.
25. Abdul Ghani Olabi. 2004, [\*Vehicles Alternative Fuel Systems and Environmental Protection\*](#), ISBN: 1-872327-47-8.
26. A.G.Olabi and M.S.J.Hashmi. 2003, [\*Advances in Materials and Processing Technology\*](#), ISBN: 1-8723-2739-7.

### **Selected Chapters Publications:**

1. Ruth C. Anyanwu, Cristina Rodriguez, Andy Durrant, Abdul G. Olabi, 2018, Microalgae Cultivation Technologies, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
2. Ruth Chinyere Anyanwu, Cristina Rodriguez, Andy Durrant, Abdul Ghani Olabi, 2018, Micro-Macroalgae Properties and Applications, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
3. M. Sajjia, A. Baroutaji, A. G. Olabi, 2017, The Introduction of Cobalt Ferrite Nanoparticles as a Solution for Magnetostrictive Applications, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
4. Muhammad Hasanuzzaman, Abu Raihan Mohammad Harunur Rashid, Abdul-Ghani Olabi, 2017, Characterization of Porous Glass and Ceramics by Mercury Intrusion Porosimetry, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
5. Ahmad Baroutaji, Mustafa Sajjia, Abdul-Ghani Olabi, 2017, Metallic Thin-Walled Tubes for Crashworthiness Applications: A Reference Guide, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
6. Mustafa Sajjia, Ahmad Baroutaji, Hussam Achour, Abdul G. Olabi, 2017, Transparent Conductive Oxides Thin Films for Radio Frequency Attenuation, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
7. A. G. Olabi, 2016, Research in Candidate Materials, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
8. Alaswad, A.G. Olabi, A. Palumbo, M. Dassisti, 2016, PEM Fuel Cell Cost Analysis during the Period (1998–2014), [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
9. A. Alaswad, K.Y. Benyounis, A.G. Olabi, 2016, Optimization Techniques in Material Processing, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
10. J. W. Newman, K. L. Newman, A. G. Olabi, 2016, Pitch, [\*Reference Module in Materials Science and Materials Engineering\*](#).
11. A. Baroutaji, J.G. Carton, M. Sajjia, A.G. Olabi, 2016, Materials in Fuel Cell, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
12. A. Alaswad, K. Y. Benyounis, O. Algoul, M. Dassisti, A. G. Olabi, 2016, Organic Materials in Biomass, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
13. R. Tenne, A. G. Olabi, 2016, Inorganic Nanotube Materials, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).
14. A-G Olabi, D. W. Lewis, 2016, Computer Modeling of Zeolites, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#).

15. M. Sajjia, M. Hasanuzzaman, A. Baroutaji, A. G. Olabi, 2016, Sintering Behavior of Cobalt Ferrite Nanoparticles Prepared by the Sol–Gel Technique, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
16. M. Hasanuzzaman, A. Rafferty, M. Sajjia, A. G. Olabi, 2016, Properties of Glass Materials, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
17. M. Hasanuzzaman, A. Rafferty, M. Sajjia, A. G. Olabi, 2016, Production and Treatment of Porous Glass Materials for Advanced Usage, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
18. A. Karma, A. G. Olabi, 2016, Phase Field Methods, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
19. B. Sundqvist, A. G. Olabi, 2016, Fullerites and Hard Carbons, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
20. H. Tamon, A. G. Olabi, 2016, Carbon Aerogels, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
21. A. Alaswad, A. Palumbo, M. Dassisi, A.G. Olabi, 2016, Fuel Cell Technologies, Applications, and State of the Art. A Reference Guide, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
22. H.A. Eltawahni, K.Y. Benyounis and A.G. Olabi, 2016, High Power CO<sub>2</sub> Laser Cutting for Advanced Materials – Review, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
23. A. Alaswad, K. Y. Benyounis, A. G. Olabi, 2016, Optimization Techniques in Material Processing, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
24. M. Sajjia, A. Baroutaji, M. Hasanuzzaman, A. G. Olabi, 2016, Magnetostrictive Cobalt Ferrite, Nanoparticles Preparation and Magnetic Characterization, [\*Reference Module in Materials Science and Materials Engineering, Elsevier\*](#)).
25. A.G. Olabi, G. Casalino, 2014, Chapter: 6.05 - Mathematical Modeling of Weld Phenomena, Part 1: Finite-Element Modeling, [\*Comprehensive Materials Processing, Elsevier\*](#), V 6, pp. 101-109, ISBN: 978-0-08-096533-8.
26. A.G. Olabi, A. Alaswad, K.Y. Benyounis, 2014, Chapter: 6.06 Mathematical Modeling of Weld Phenomena, Part 2: Design of Experiments and Optimization, [\*Comprehensive Materials Processing, Elsevier\*](#), V 6, pp. 111-124, ISBN: 978-0-08-096533-8.
27. A.G. Olabi, R. Lostado, K.Y. Benyounis, 2014, Chapter: 6.10 Review of Microstructures, Mechanical Properties, and Residual Stresses of Ferritic and Martensitic Stainless-Steel Welded Joints, [\*Comprehensive Materials Processing, Elsevier\*](#), V 6, pp. 181-192, ISBN: 978-0-08-096533-8.
28. A.G. Olabi, R. Lostado, K.Y. Benyounis, 2014, Chapter: 6.11 Quality Control in Welding Process, [\*Comprehensive Materials Processing, Elsevier\*](#), V 6, pp. 193-212, ISBN: 978-0-08-096533-8.
29. E.M. Anawa, A.G. Olabi, 2014, Development of Mathematical Models for Dissimilar Welding Pool Geometries, [\*Design and Computation of Modern Engineering Materials Advanced Structured Materials\*](#), V 54, pp 215-226, Springer, ISBN: 978-3-319-07382-8.
30. E.M. Anawa, A.G. Olabi, 2014, Developing and Optimization Models for Multi-mechanical Properties of Dissimilar Laser Welding Joints, [\*Design and Computation of Modern Engineering Materials Advanced Structured Materials\*](#), V 54, pp 273-285, Springer, ISBN: 978-3-319-07382-8

31. M.M. Ahsan, M. Hasanuzzaman, A.G. Olabi, M.S.J. Hashmi, 2014, Chapter: 13.23 - Review of the Reliability and Connectivity of Wireless Sensor Technology, [\*Comprehensive Materials Processing, Elsevier\*](#), V 6, pp. 193-212, ISBN: 978-0-08-096533-8.
32. R. Lostado-Lorza, R. Fernández-Martínez, B. J. Mac Donald, A. G. Olabi, 2014, Design and Optimization of Welded Products Using Genetic Algorithms, Model Trees and the Finite Element Method, [\*Advances in Intelligent Systems and Computing\*](#), pp279-288, Springer International Publishing, ISBN: 978-3-319-01853-9.
33. A. A. Alghamdi, R. Lostado, A.G.Olabi, 2014, Magneto-Rheological Fluid Technology, [\*Modern Mechanical Engineering-Materials Forming, Machining and Tribology\*](#), pp43-62, Springer Berlin Heidelberg, ISBN: 978-3-642-45175-1.
34. M. Hasanuzzaman and A. G. Olabi, 2014, Development of Alkali-Resistant Porous Glass Based on  $(69-x)\text{SiO}_2\text{-}25\text{B}_2\text{O}_3\text{-}6\text{Na}_2\text{O-xZrSiO}_4$  System, [\*Advances in Bioceramics and Porous Ceramics VI\*](#), pp133-143, Wiley, ISBN: 9781118807668.
35. F. Alfarjani, A.K.M. Aboderheeba, K. Benyounis, A.G. Olabi, 2013, Modelling Anaerobic Digestion Process for Grass Silage After Beating Treatment Using Design of Experiment, [\*Causes, Impacts and Solutions to Global Warming II\*](#), pp675-695. Springer New York, ISBN: 978-1-4614-7587-3.
36. L.E.N. Ekpeni and A.G.Olabi, 2013, A Change in the Transportation Needs Today, a Better Future for Tomorrow: Climate Change Review. [\*Causes, Impacts and Solutions to Global Warming II\*](#), pp933-947. Springer New York, ISBN: 978-1-4614-7587-3
37. A.Baroutaji and A.G. Olabi. 2012. Analysis of the Effect of the Elliptical Ratio in Tubular Energy Absorbers Under Quasi-Static Conditions. [\*Materials with Complex Behaviour II\*](#), pp323-336. Springer New York, ISBN: 978-1-4614-7587-3.
38. M. Rehan, J.E. Coleman and A.G. Olabi. 2011. Design, Development and Validation of a Novel Mechanical Occlusion Device for Transcervical Sterilization. [\*Electrical Engineering and Applied Computing\*](#), pp609-622. Springer Netherlands, ISBN: 978-94-007-1191-4.
39. E. Morris, A. G. Olabi, M. S. J. Hashmi and M. D. Gilchrist. 2007. Analysis of the Effect of the Elliptical Ratio in Tubular Energy Absorbers Under Quasi-Static Conditions. [\*Experimental Analysis of Nano and Engineering Materials and Structures\*](#), pp801-802. Springer Netherlands, ISBN: 978-1-4020-6238-4.

### **Journal Publications:**

1. C. Rodriguez, A. Alaswad, Z. El-Hassan, A.G. Olabi, 2018, Improvement of methane production from *P. canaliculata* through mechanical pretreatment, , [\*Renewable Energy\*](#), 119, pp. 73-78.
2. Ahmed Al Makky, A. Alaswad, D. Gibson, S. Song, A. G. Olabi, 2018, A numerical and experimental study of a new design of closed dynamic respiration chamber, [\*Computers and Electronics in Agriculture\*](#), 145, pp. 326-340.
3. C Onumaegbu, A Alaswad, C Rodriguez, A.G. Olabi, 2018, Optimization of Pre-Treatment Process Parameters to Generate Biodiesel from Microalga, [\*Energies\*](#), 11 (4), 806.
4. C. Rodriguez, A. Alaswad, Z. El-Hassan, A.G. Olabi, 2018, Waste paper and macroalgae co-digestion effect on methane production, [\*Energy\*](#), 154, pp. 119-125.
5. Fatemeh Afsarian, Aniseh Saber, Ali Pourzangbar, Abdul Ghani Olabi, Mohammad Ali Khanmohammadi, 2018, Analysis of recycled aggregates effect on energy conservation using M5' model tree algorithm, [\*Energy\*](#), , pp.

6. C. Onumaegbu, J. Mooney, A. Alaswad, A. G. Olabi, 2018, Pre-treatment methods for production of biofuel from microalgae biomass, [\*Renewable and Sustainable Energy Reviews\*](#), 93, 2, pp. 16-26.
7. I. Laib, A. Hamidat, M. Haddadi, N. Ramzan, A. G. Olabi, 2018, Study and simulation of the energy performances of a grid-connected PV system supplying a residential house in north of Algeria, [\*Energy\*](#), 152, pp. 445-454.
8. M. Ramadan, R. Murr1, M. Khaled1 and A.G. Olabi, 2018, Mixed Numerical - experimental approach to enhance the heat pump performance by drain water heat recovery, [\*Energy\*](#).
9. J.G. Carton and A.G. Olabi, 2017, Three-dimensional proton exchange membrane fuel cell model: Comparison of double channel and open pore cellular foam flow plates, [\*Energy\*](#), 136, pp. 185-195.
10. A. Baroutaji, M. Sajjia, A.G. Olabi, 2017, On the crashworthiness performance of thin-walled energy absorbers: Recent advances and future developments, [\*Thin-Walled Structures\*](#), 118, pp. 137–163.
11. C Rodriguez, A Alaswad, Z El-Hassan, AG Olabi, 2017, Mechanical pretreatment of waste paper for biogas production, [\*Waste Management\*](#), 168, pp. 157-164.
12. T. Wilberforce, Z. El-Hassan, F.N. Khatib, A. Al Makky, A. Baroutaji, J.G. Carton, J. Thompson, A.G. Olabi, 2017, Modelling and simulation of Proton Exchange Membrane fuel cell with serpentine bipolar plate using MATLAB, , [\*International Journal of Hydrogen Energy\*](#), 42, 40, pp. 25639-25662.
13. A Baroutaji, JG Carton, J Stokes, AG Olabi, 2017, Application of Open Pore Cellular Foam for air breathing PEM fuel cell, , [\*International Journal of Hydrogen Energy\*](#), 42, 20, pp. 25630-25638.
14. M.E. Montingelli, K.Y. Benyounis, B. Quilty, J. Stokes, A.G. Olabi, 2017, Influence of mechanical pretreatment and organic concentration of Irish brown seaweed for methane production, [\*Energy\*](#), 118, pp. 1079-1089.
15. A Baroutaji, JG Carton, AM Oladoye, J Stokes, B Twomey, A.G. Olabi, 2017, Ex-situ evaluation of PTFE coated metals in a proton exchange membrane fuel cell environment, [\*Surface & Coatings Technology\*](#), 323, pp. 10-17.
16. T. Wilberforce, Z. El-Hassan, F.N. Khatib, A. Al Makky, J. Mooney, A. Baroutaji, J.G. Carton, A.G. Olabi, 2017, Development of Bi-polar plate design of PEM fuel cell using CFD techniques , [\*International Journal of Hydrogen Energy\*](#), 42, 40, pp. 25663-25685.
17. T. Wilberforce, Z. El-Hassan, F.N. Khatib, A. Al Makky, A. Baroutaji, J.G. Carton, A.G. Olabi, 2017, Developments of electric cars and fuel cell hydrogen electric cars, [\*International Journal of Hydrogen Energy\*](#), 42, 40, pp. 25695-25734.
18. M.E. Montingelli, K.Y. Benyounis, B. Quilty, J. Stokes, A.G. Olabi, 2016, Optimisation of biogas production from the macroalgae *Laminaria* sp. at different periods of harvesting in Ireland, [\*Applied Energy\*](#), 177, pp. 671-682.
19. Ahmed AlMakky, A. Alaswad, Desmond Gibson, A.G. Olabi, 2016, Prediction of the gas emission from porous media with the concern of energy and environment, [\*Renewable and Sustainable Energy Reviews\*](#), 68, 2, pp. 1144-1156.
20. Ahmed AlMakky, A. Alaswad, Desmond Gibson, A.G. Olabi, 2016, Renewable energy scenario and environmental aspects of soil emission measurements, [\*Renewable and Sustainable Energy Reviews\*](#), 68, 2, pp. 1157-1173.
21. A.M. Oladoye, J.G. Carton, K. Benyounis, J. Stokes, A.G. Olabi, 2016, Optimisation of pack chromised stainless steel for proton exchange membrane fuel cells bipolar plates using response surface methodology, [\*Surface & Coatings Technology\*](#), 304, pp. 384–392.

22. Tabbi Wilberforce, A. Alaswad, A. Palumbo, M. Dassisti, A.G. Olabi, 2016, Advances in stationary and portable fuel cell applications, [\*International Journal of Hydrogen Energy\*](#), 41, pp. 16509-16522.
23. A. Alaswad, A. Baroutaji, H. Achour, J. Carton, Ahmed Al Makky, A.G. Olabi, 2016, Developments in fuel cell technologies in the transport sector, [\*International Journal of Hydrogen Energy\*](#), 41, pp. 16499-16508.
24. Cristina Rodriguez, A. Alaswad, K.Y. Benyounis, A.G. Olabi, 2016, Pretreatment techniques used in biogas production from grass, [\*Renewable and Sustainable Energy Reviews\*](#), 68, 2, pp. 1193-1204.
25. H. Achour, A.G. Olabi, 2016, Driving cycle developments and their impacts on energy consumption of transportation, [\*Journal of Cleaner Production\*](#), 112, 2, pp. 1778–1788.
26. M.E. Montingelli, K.Y. Benyounis, J. Stokes, A.G. Olabi, 2016, Pretreatment of macroalgal biomass for biogas production, [\*Energy Conversion and Management\*](#), 108, pp. 202–209.
27. L.E.N. Ekpeni, K.Y. Benyounis, J. Stokes, A.G. Olabi, 2016, Improving and optimizing protein concentration yield from homogenized baker's yeast at different ratios of buffer solution, [\*International Journal of Hydrogen Energy\*](#), 41, pp. 16414-16427.
28. A. Baroutaji, M.D. Gilchrist, A.G. Olabi, 2016, Quasi-static, impact and energy absorption of internally nested tubes subjected to lateral loading, [\*Thin-Walled Structures\*](#), 98, B, pp. 337–350.
29. K. Wang, H. Wu, D. Wang, Y. Wang, Z. Tong, F. Lin, A.G. Olabi, 2015, Experimental study on a coiled tube solar receiver under variable solar radiation condition, [\*Solar Energy\*](#), 122, pp. 1080-1090.
30. A. Alaswad, M. Dassisti, T. Prescott, A.G. Olabi, 2015, Technologies and developments of third generation biofuel production, [\*Renewable and Sustainable Energy Reviews\*](#), 51, pp. 1446–1460.
31. Jianqin Zhu, Kai Wang, Hongwei Wu, Dunjin Wang, Juan Du, A.G. Olabi, 2015, Experimental investigation on the energy and exergy performance of a coiled tube solar receiver, [\*Applied Energy\*](#), 156, pp. 519-527.
32. C. Rodriguez, A. Alaswad, J. Mooney, T. Prescott, A.G. Olabi, 2015, Pre-treatment techniques used for anaerobic digestion of algae, [\*Fuel Processing Technology\*](#), 138, pp. 765–779.
33. P. Leo, G. Renna, G. Casalino, A.G. Olabi, 2015, Effect of power distribution on the weld quality during hybrid laser welding of an Al–Mg alloy, [\*Optics & Laser Technology\*](#), 73, pp. 118–126.
34. J.G. Carton and A.G. Olabi, 2015, Representative model and flow characteristics of open pore cellular foam and potential use in proton exchange membrane fuel cells, [\*International Journal of Hydrogen Energy\*](#), 40, 16, pp. 5726–5738.
35. M.E. Montingelli, S. Tedesco, A.G. Olabi, 2015, Biogas production from algal biomass: A review, [\*Renewable & Sustainable Energy Reviews\*](#), 43, pp. 961-972.
36. Leonard E.N. Ekpeni, K.Y. Benyounis, Fehintola F. Nkem-Ekpeni, J. Stokes, A.G. Olabi, 2015, Underlying factors to consider in improving energy yield from biomass source through yeast use on high-pressure homogenizer (hph), [\*Energy\*](#), 81, pp. 74-83.
37. V. Lawlor, A.G. Olabi, 2015, Review of scientific research regarding PPO, tallow and RVO as diesel engine fuel, [\*Fuel\*](#), 145, pp. 25-38.
38. A.Baroutaji, M.D. Gilchrist, D. Smyth, A.G. Olabi, 2015, Crush analysis and multi-objective optimization design for circular tube under quasi-static lateral loading, [\*Thin-Walled Structures\*](#), 86, pp. 121-131.

39. A.Baroutaji, M.D. Gilchrist, D. Smyth, A.G. Olabi, 2015, Analysis and optimization of sandwich tubes energy absorbers under lateral loading, [\*International Journal of Impact Engineering\*](#), pp..
40. S. Tedesco, D. Mac Lochlainn, A.G. Olabi, 2014, Particle size reduction optimization of Laminaria spp. Biomass of enhanced methane production, [\*Energy\*](#), 76, pp. 857-862.
41. Leonard .E. N. Ekpeni1, Fehintola .F. Nkem-Ekpeni, K.Y. Benyounis, A. K. M. Aboderheebea, J. Stokes, A. G. Olabi, 2014, Yeast: A Potential Biomass Substrate for the Production of Cleaner Energy (Biogas), [\*Energy Procedia\*](#), 61, pp. 1718 – 1731.
42. Leonard .E. N. Ekpeni1, K.Y. Benyounis, Fehintola .F. Nkem-Ekpeni, J. Stokes, A. G. Olabi, 2014, Energy Diversity through Renewable Energy Source (RES) – A Case Study of Biomass, [\*Energy Procedia\*](#), 61, pp. 1740 – 1747.
43. A.M. Oladoye, J.G. Carton, and A.G. Olabi, 2014, Evaluation of CoBlast coated Titanium Alloy as Proton Exchange Membrane fuel Cells Bipolar plates. [\*Journal of Manufacturing\*](#), Article ID 914817, 10 pages.
44. A.M. Oladoye, J.G. Carton, A.G. Olabi, 2014, Characterization of Graphite Coating Produced by CoBlast Technology, [\*Journal of Materials\*](#), v 66, n 4, pp.602-607.
45. A.Baroutaji, J.G. Carton, J. Stokes, A. G. Olabi, 2014, Design and development of proton exchange membrane fuel cell using open pore cellular foam as flow plate material, [\*Journal of Energy Challenges and Mechanics\*](#), Volume 1, Issue 2, article 7
46. G. Casalino, M. Mortello, P. Leo, K.Y. Benyounis, A.G. Olabi, 2014, Study on arc and laser powers in the hybrid welding of AA5754 Al-alloy, [\*Materials & Design\*](#), 61, pp. 191-198.
47. A.Baroutaji, E. Morris, A.G. Olabi, 2014, Quasi-static response and multi-objective crashworthiness optimization of oblong tube under lateral loading, [\*Thin-Walled Structures\*](#), 82, pp. 262-277.
48. A.Baroutaji, A.G. Olabi, 2014, Lateral collapse of short-length sandwich tubes compressed by different indenters and exposed to external constraints, [\*Materialwissenschaft und Werkstofftechnik, Wiley-VCH Verlag\*](#) 45; 5, pp. 371-384.
49. M. Hasanuzzaman, A.G. Olabi, 2014, Development of alkali-resistant porous glass based on  $(69-x)\text{SiO}_2-25\text{B}_2\text{O}_3-6\text{Na}_2\text{O}-x\text{ZrSiO}_4$  system, [\*Ceramic Engineering and Science Proceedings\*](#), v 34, n 6, pp 133-143.
50. S. Tedesco, T. Marrero Barroso, A.G. Olabi, 2014, Optimization of mechanical pre-treatment of Laminariaceae spp. biomass-derived biogas, [\*Renewable Energy\*](#), 62, pp. 527-534.
51. M. Sajjia, M. Oubaha, M. Hasanuzzaman, A.G. Olabi, 2014, Developments of cobalt ferrite nanoparticles prepared by the sol–gel process, [\*Ceramics International\*](#), v 40, n 1, pp1147-1154.
52. M. Hasanuzzaman, A. Rafferty, A.G. Olabi, 2014, Effects of zircon on porous structure and alkali durability of borosilicate glasses, [\*Ceramics International\*](#), v 40, n 1, pp581-590.
53. V. Lawlor, K. Klein, C. Hochenauer, S. Griesser, S. Kuehn, A.G. Olabi, S. Cordiner, G. Buchinger, 2013, Experimental and Numerical Study of Various MT-SOFC Flow Manifold Techniques: Single MT-SOFC Analysis, [\*Journal Of Fuel Cell Science And Technology\*](#), 10, 1, Article Number: 011003
54. M. Hasanuzzaman, M. Sajjia, A. Rafferty, A.G. Olabi, 2013, Thermal behaviour of zircon/zirconia-added chemically durable borosilicate porous glass, [\*Thermochemica Acta\*](#), 555 , pp. 81-88.



55. S. Tedesco, K.Y. Benyounis, A.G. Olabi, 2013, Mechanical pretreatment effects on macroalgae-derived biogas production in co-digestion with sludge in Ireland, [\*Energy\*](#), 61, pp27-33.
56. M. Hagino, T. Inoue, A.G. Olabi, W. Aoki, F. Matsumoto, 2013, New machine tool on collecting cutting chips of CFRP for working environment improvement, [\*Advanced Materials Research\*](#), v 816-817, pp211-215.
57. H.A. Eltawahni, N.S. Rossini, M. Dassisti, K. Alrashed, T.A. Aldaham, K.Y. Benyounis, A.G. Olabi, 2013, Evaluation and optimization of laser cutting parameters for plywood materials, [\*Optics and Lasers in Engineering\*](#), v 51, n 9, pp. 1029-1043
58. I. Ismail, S.A. Mazlan, S.N. Aqida, A.G. Olabi, 2013, Full factorial design to study material parameters of magnetorheological fluid, [\*Key Engineering Materials\*](#) 543 , pp. 511-514
59. A.G. Olabi, F.O. Alsinani, A.A. Alabdulkarim, A. Ruggiero, L. Tricarico, K.Y. Benyounis, 2013, Optimizing the CO<sub>2</sub> laser welding process for dissimilar materials, [\*Optics and Lasers in Engineering\*](#), 51, 7 , pp. 832-839
60. I. Ismail, S.A. Mazlan, H. Zamzuri, A.G. Olabi, 2012. Investigation of mechanical performance of squeezed magnetorheological fluid using response surface method. [\*Advanced Materials Research\*](#), 445, pp542-547.
61. D. Russo, M. Dassisti, V. Lawlor, A.G. Olabi. 2012. State of the art of biofuels from pure plant oil. [\*Renewable & Sustainable Energy Reviews\*](#), 16, 6, pp4056-4070.
62. M.M. Rahman, A.G. Olabi, M.S.J. Hashmi, 2012. Finite element modelling of rheological property of curing PMMA bone cement. Part 2 effect of bone cement amount. [\*Journal Of Biomimetics, Biomaterials, And Tissue Engineering\*](#), 13, 1-2, pp69-73.
63. H.A. Eltawahni, M. Hagino, K.Y. Benyounis, T. Inoue, A.G. Olabi, 2012. Effect of CO<sub>2</sub> laser cutting process parameters on edge quality and operating cost of AISI316L. [\*Optics And Laser Technology\*](#), 44, 4, pp1068-1082.
64. I. Ismail, S.A. Mazlan, H. Zamzuri, A.G. Olabi, 2012. Fluid-particle separation of magnetorheological fluid in squeeze mode. [\*Japanese Journal Of Applied Physics Part 1\*](#), 51, 6
65. J.G. Carton, V. Lawlor, A.G. Olabi, C. Hochenauer, G. Zauner, 2012. Water droplet accumulation and motion in PEM (Proton Exchange Membrane) fuel cell mini-channels. [\*Energy\*](#), 39, 1, pp63-73.
66. M. Sajjia, K.Y. Benyounis, A.G. Olabi. 2012. The simulation and optimization of heat treatment of cobalt ferrite nanoparticles prepared by the sol-gel technique. [\*Powder Technology\*](#), 222,, pp143-151.
67. N.S. Rossini, M. Dassisti, K.Y. Benyounis, A.G. Olabi, 2012. Methods of measuring residual stresses in components. [\*Materials And Design\*](#), 35, pp572-588.
68. Rahman, M.M., Olabi, A.G., Hashmi, M.S.J. 2012. Finite element modelling of rheological property of curing PMMA bone cement. Part 1 : Effect of prosthesis insertion velocity. [\*Journal Of Biomimetics, Biomaterials, And Tissue Engineering\*](#), 12, 1-3, pp83-90.
69. A. Alaswad, K.Y. Benyounis, A.G. Olabi. 2012. Tube hydroforming process: A reference guide. [\*Materials And Design\*](#), 33, pp328-339.
70. M. Aly, M.S.J. Hashmi, A.G. Olabi, K.Y. Benyounis, M. Messeiry, E.F. Abadir, A.I. Hussain, 2012. Optimization of Alkaline Treatment Conditions of Flax Fiber Using Box-Behnken Method. [\*Journal of Natural Fibers\*](#), v9, n4, pp256-276.

71. M. Aly, M.S.J. Hashmi, A.G. Olabi, M. Messeiry, E.F. Abadir, A.I. Hussain, 2012. Effect of colloidal nano-silica on the mechanical and physical behaviour of waste-glass cement mortar. *Materials And Design*, 33, pp127-135.
72. A.Alaswad, K.Y. Benyounis, A.G. Olabi, 2011. Finite element comparison of single and bi-layered tube hydroforming processes. *Simulation Modelling Practice And Theory*, 19, 7, pp1584-1593.
73. A.Alaswad, K.Y. Benyounis, A.G. Olabi, 2011. Employment of finite element analysis and Response Surface Methodology to investigate the geometrical factors in T-type bi-layered tube hydroforming. *Advances In Engineering Software*, 42, 11, pp917-926.
74. A.Alaswad, A.G. Olabi, K.Y. Benyounis, 2011. Employment of finite element modelling and design of experiments to investigate the geometrical factors in T-type bi-layered tube hydroforming. *Key Engineering Materials*, 473,, pp775-782.
75. V. Lawlor, C. Hochenauer, S. Griesser, G. Zauner, G. Buchinger, D. Meissner, A.G. Olabi, A. Mariani, 2011. The use of a high temperature wind tunnel for MT-SOFC testing-Part II: Use of computational fluid dynamics software in order to study previous measurements. 9, 6, pp061019-.
76. A.G. Olabi, A. Alaswad, 2011. Experimental and finite element investigation of formability and failures in bi-layered tube hydroforming. *Advances In Engineering Software*, 42, 10, pp815-820.
77. M. Rehan, J.E. Coleman, A.G. Olabi, 2011. Design, development and validation of a novel mechanical occlusion device for transcervical sterilization. *Lecture Notes In Electrical Engineering*, 90 LNEE,, pp609-622.
78. A. Tamtam, F. Gallagher, A.G. Olabi, S. Naher, 2011. Higher education in Libya, system under stress. *Procedia - Social And Behavioral Sciences*, v29, pp742-751.
79. M. Aly, M.S.J. Hashmi, A.G. Olabi, M. Messeiry, A.I. Hussain. 2011. Effect of nano clay particles on mechanical, thermal and physical behaviours of waste-glass cement mortars. *Materials Science And Engineering A*, 528, 27, pp7991-7998.
80. H.Achour, J. Carton and A.G. Olabi. 2011. Estimating Vehicle Emission from Road Transport, case study: Dublin City. *Applied Energy*, 88, 5, pp1957-1964.
81. H.A. Eltawahni, A.G. Olabi, K.Y. Benyounis. 2011. Investigating the CO2 laser cutting parameters of MDF wood composite material. *Optics And Laser Technology*, 43, 3, pp648-659.
82. A.Alaswad, A.G. Olabi, K.Y. Benyounis. 2011. Integration of finite element analysis and design of experiments to analyse the geometrical factors in bi-layered tube hydroforming. *Materials And Design*, 32, 2, pp838-850.
83. A.Ruggiero, L. Tricarico, A.G. Olabi, K.Y. Benyounis. 2011. Weld-bead profile and costs optimisation of the CO2 dissimilar laser welding process of low carbon steel and austenitic steel AISI316. *Optics And Laser Technology*, 43, 1, pp82-90.
84. Clarke, T. Prescott, A. Khan, A.G. Olabi. 2010. Causes of breakage and disruption in a homogeniser. *Applied Energy*, 87, 12, pp3680-3690.
85. J.G.Carton & A.G.Olabi. 2010. Wind/hydrogen hybrid systems: Opportunity for Ireland's wind resource to provide consistent sustainable energy supply. *Energy*, 135, 12, pp4536-4544.
86. V.Lawlor, G.Zauner, C.Hochenauer, A.Mariani, S.Griesser, J.G.Carton, K.Klein, S.Kuehn, A.G.Olabi, S.Cordiner, D.Meissner, G.Buchinger. 2010. The Use of a High Temperature Wind Tunnel for MT-SOFC Testing, Part I: Detailed Experimental Temperature Measurement of an MT-SOFC Using an Avant-Garde High Temperature Wind Tunnel and Various Measurement Techniques. 7, 6, pp061016-1-061016-7.

87. H.A. Eltawahni, A.G. Olabi, K.Y. Benyounis. 2010. Effect of process parameters and optimization of CO<sub>2</sub> laser cutting of ultra high-performance polyethylene. [\*Materials And Design\*](#), 31, 8, pp4029-4038.
88. M. Rehan, J. Coleman, A.G. Olabi. 2010. Delivery Actuator for a Transcervical Sterilization Device. [\*Sensors And Actuators A-physical\*](#), 163, 1, pp343-355.
89. M. Sajjia, M. Oubaha, T. Prescott, A.G. Olabi. 2010. Development of cobalt ferrite powder preparation employing the sol-gel technique and its structural characterization. [\*Journal Of Alloys And Compounds\*](#), 506, 1, pp400-406.
90. Ismail, S.A. Mazlan, A.G. Olabi. 2010. Magnetic Circuit Simulation for Magnetorheological (MR) Fluids Testing Rig in Squeeze Mode. [\*Advanced Materials Research\*](#), 123-125, , pp991-994.
91. M. Rehan, J. Coleman, A.G. Olabi, 2010. Novel implant for transcervical sterilization. [\*Journal Of Bioscience And Bioengineering\*](#), 110, 2, pp242-249.
92. J.G. Carton, A.G. Olabi. 2010. Design of experiment study of the parameters that affect performance of three flow plate configurations of a proton exchange membrane fuel cell. [\*Energy\*](#), 35, 7, pp2796-2806.
93. V. Lawlor, S. Griesser, G. Buchinger, A.G. Olabi, S. Cordiner, D. Meissner. 2010. Corrigendum to 'Review of the micro-tubular solid oxide fuel cell: Part I. Stack design issues and research activities' [J. Power Sources 193/1 (2009) 387-399]. [\*Journal Of Power Sources\*](#), 195, 3
94. E.M. Anawa, A.G. Olabi, F.A. Elshukri. 2009. Modeling and optimization of tensile shear strength of Titanium/Aluminum dissimilar welded component. [\*Journal Of Physics : Conference Series\*](#), 181, 1
95. E.M. Anawa, O.M. Elmabrouk, A.G. Olabi, 2009. Optimization of dissimilar joining of titanium / aluminum. [\*IEEE International Conference on Industrial Engineering and Engineering Management\*](#), Article number 5373390, pp184-188
96. E. Morris, A.G. Olabi, M.S.J. Hashmi. 2009. Experimental and numerical analysis of slotted tube systems under quasi-static loading. [\*International Journal Of Computational Materials Science And Surface Engineering\*](#), 2, 1/2, pp137-145.
97. K.Y. Benyounis, A.G. Olabi, M.S.J. Hashmi. 2009. Mechanical properties, weld bead and cost universal approach for CO<sub>2</sub> laser welding process optimisation. [\*International Journal Of Computational Materials Science And Surface Engineering\*](#), 1, 1/2, pp99-109.
98. S.A. Mazlan, A. Issa, H.A. Chowdhury, A.G. Olabi. 2009. Magnetic circuit design for the squeeze mode experiments on magnetorheological fluids. [\*Materials And Design\*](#), 30, 6, pp1985-1993.
99. V. Lawlor, D. Meissner, C. Hochenauer, S. Griesser, S. Cordiner, A. Mariani, G. Zauner, A.G. Olabi, G. Buchinger. 2009. Micro-tubular SOFCs to measure the effects of cross flow on mass transfer rates around the perimeter of a cylindrical electrode. [\*Ecs Transactions\*](#), 25, 2, pp1283-1293.
100. V. Lawlor, S. Griesser, G. Buchinger, A.G. Olabi, S. Cordiner, D. Meissner. 2009. Review of the micro-tubular solid oxide fuel cell: Part I. Stack design issues and research activities. [\*Journal Of Power Sources\*](#), 193, 2, pp387-399.
101. H.A. Chowdhury, S.A. Mazlan, A.G. Olabi. 2009. A Simulation Study of Magnetostrictive Material Terfenol-D in Automotive CNG Fuel Injection Actuation. [\*Solid State Phenomena\*](#), 154, , pp41-46.
102. S.A. Mazlan, A. Issa, H.A. Chowdhury, A.G. Olabi. 2009. Tensile Stress-Strain Relationships of Magnetorheological Fluids under Various Factors. [\*Solid State Phenomena\*](#), 154, , pp127-132.

103. A.Rafferty, A.M. Alsebaie, A.G. Olabi, T. Prescott. 2009. Properties of zirconia-toughened-alumina prepared via powder processing and colloidal processing routes. [\*Journal Of Colloid And Interface Science\*](#), 329, 2, pp310-315.
104. A.G. Olabi and A. Grunwald. 2008. Design and application of magnetostrictive materials. [\*Materials And Design\*](#), 29, 2, pp469-483.
105. E.M. Anawa, A.G. Olabi, M.S.J. Hashmi. 2008. Application of Taguchi method to optimise dissimilar laser welded components. [\*International Journal Of Manufacturing Technology And Management\*](#), 15, 2, pp219-227.
106. M. Hasanuzzaman, A. Rafferty, A.G. Olabi, T. Prescott. 2008. Sintering and characterisation of nano-sized yttria-stabilised zirconia. [\*International Journal Of Nanoparticles\*](#), 1, 1, pp50-65.
107. M. Hasanuzzaman, A. Rafferty, A.G. Olabi, T. Prescott. 2008. Approach for sintering nano-sized yttria-stabilised zirconia. [\*International Journal Of Nanomanufacturing\*](#), 1, 4, pp524-536.
108. M.D. Islam, A.G. Olabi, M.S.J. Hashmi. 2008. Mechanical stresses in the multilayered T-branch hydroforming: numerical simulation. [\*International Journal Of Manufacturing Technology And Management\*](#), 15, 2, pp238-245.
109. A.G. Olabi, A. Grunwald, 2008. Design of magneto-rheological (MR) valve. [\*Sensors And Actuators A-physical\*](#), 148, 1, pp211-223.
110. A.G. Olabi, A. Grunwald. 2008. Computation of magnetic field in an actuator. [\*Simulation Modelling Practice And Theory\*](#), 16, 10, pp1728-1736.
111. E.M. Anawa, A.G. Olabi. 2008. Control of welding residual stress for dissimilar laser welded materials. [\*Journal Of Materials Processing Technology\*](#), 204, 1-3, pp22-33.
112. E.M. Anawa, A.G. Olabi. 2008. Optimization of tensile strength of ferritic/austenitic laser-welded components. [\*Optics And Lasers In Engineering\*](#), 46, 8, pp571-577.
113. H.A. Chowdhury, S.A. Mazlan, A.G. Olabi. 2008. Implementation of Magnetostrictive Material Terfenol-D in CNG Fuel Injection Actuation. [\*Advanced Materials Research\*](#), 47-50, , pp630-633.
114. K.Y. Benyounis and A.G. Olabi. 2008. Optimization of different welding processes using statistical and numerical approaches ; A reference guide,. [\*Advances In Engineering Software\*](#), 39, 6, pp483-496.
115. S.A. Mazlan, A. Issa, A.G. Olabi. 2008. Magnetorheological Fluids Behaviour in Tension Loading Mode. [\*Advanced Materials Research\*](#), 47-50, , pp242-245.
116. A.Grunwald, A.G. Olabi. 2008. Design of a magnetostrictive (MS) actuator. [\*Sensors And Actuators A-physical\*](#), 144, 1, pp161-175.
117. S.A. Mazlan, N.B. Ekreem, A.G. Olabi. 2008. An investigation of the behaviour of magnetorheological fluids in compression mode. [\*Journal Of Materials Processing Technology\*](#), 201, 1-3, pp780-785.
118. S.A.Mazlan, N.B.Ekreem, A.G.Olabi. 2008. Apparent stress-strain relationships in experimental equipment where magnetorheological fluids operate under compression mode. [\*Journal Of Physics D-applied Physics\*](#), 41, 9
119. E.M. Anawa and A.G. Olabi. 2008. Using Taguchi method to optimize welding pool of dissimilar laser-welded components. [\*Optics And Laser Technology\*](#), 40, 2, pp379-388.
120. K.Y. Benyounis, A.G. Olabi and M.S.J. Hashmi. 2008. Multi-response optimization of CO2 laser-welding process of austenitic stainless steel. [\*Optics And Laser Technology\*](#), 40, 1, pp76-87.
121. A.G. Olabi, E. Morris, M.S.J. Hashmi and M.D. Gilchrist. 2008. Optimised design of nested oblong tube energy absorbers under lateral impact loading. [\*International Journal Of Impact Engineering\*](#), 35, 1, pp10-26.

122. A.G. Olabi, E. Morris, M.S.J. Hashmi and M.D. Gilchrist. 2008. Optimised design of nested circular tube energy absorbers under lateral impact loading. [\*International Journal Of Mechanical Sciences\*](#), 50, 1, pp104-116.
123. A.G. Olabi and A. Grunwald. 2007. Design and application of magneto-rheological fluid,. [\*Materials And Design\*](#), 28, 10, pp2658-2664.
124. A.G. Olabi, G. Casalino, K.Y. Benyounis and A. Rotondo. 2007. Minimisation of the residual stress in the heat affected zone by means of numerical methods. [\*Materials And Design\*](#), 28, 8, pp2295-2302.
125. G. Casalino, A.G. Olabi, N. Cipriani, A. Rotondo. 2007. Investigation on the residual stress of AISI 4047 low alloy steel laser welded. [\*Key Engineering Materials\*](#), 344, , pp715-722.
126. S.A.Mazlan, N.B.Ekreem, A.G.Olabi. 2007. The performance of magnetorheological fluid in squeeze mode. [\*Smart Materials And Structures\*](#), 16, 5, pp1687-1682.
127. E.M.Anawa and A.G.Olabi. 2007. The Application of the Hole Drilling Method to Define the Residual Stress of Dissimilar Laser Welded Components. [\*Applied Mechanics And Materials\*](#), 7-8, , pp133-138.
128. E. Morris, A.G. Olabi and M.S.J. Hashmi. 2007. Lateral crushing of circular and non-circular tube systems under quasi-static conditions. [\*Journal Of Materials Processing Technology\*](#), 191, 1-3, pp132-135.
129. K.Y. Benyounis, A.G. Olabi, J.H. Abboud. 2007. Assessment and Minimization of the Residual Stress in Dissimilar Laser Welding. [\*Applied Mechanics And Materials\*](#), 7-8, , pp139-144.
130. N.B. Ekreem, A.G. Olabi, T. Prescott, A. Rafferty and M.S.J. Hashmi. 2007. An overview of magnetostriction, its use and methods to measure these properties. [\*Journal Of Materials Processing Technology\*](#), 191, 1-3, pp96-101.
131. A.G. Olabi, Edmund Morris and M.S.J. Hashmi. 2007. Metallic tube type energy absorbers: A synopsis. [\*Thin-walled Structures\*](#), 45, 7-8, pp706-726.
132. A.G. Olabi, K.Y. Benyounis, M.S.J. Hashmi. 2007. Application of response surface methodology in describing the residual stress distribution in CO2 laser welding of AISI304. [\*Strain\*](#), 43, 1, pp37-46.
133. J.H. Abboud, K.Y. Benyounis, A.G. Olabi and M.S.J. Hashmi. 2007. Laser surface treatments of iron-based substrates for automotive application. [\*Journal Of Materials Processing Technology\*](#), 182, 1-3, pp427-431.
134. A.G. Olabi, G. Casalino, K.Y. Benyounis and M.S.J. Hashmi. 2006. An ANN and Taguchi algorithms integrated approach to the optimization of CO2 laser welding. [\*Advances In Engineering Software\*](#), 37, 10, pp643-648.
135. E. Morris, A.G. Olabi and M.S.J. Hashmi. 2006. Analysis of nested tube type energy absorbers with different indenters and exterior constraints. [\*Thin-walled Structures\*](#), 44, 8, pp872-885.
136. E. M. Anawa and A. G. Olabi,. 2006. Effects of Laser Welding Conditions on Toughness of Dissimilar Welded Components. [\*Applied Mechanics And Materials\*](#), 5-6, , pp375-380.
137. M.D. Islam, A.G. Olabi and M.S.J. Hashmi. 2006. Feasibility of multi-layered tubular components forming by hydroforming and finite element simulation. [\*Journal Of Materials Processing Technology\*](#), 174, 1-3, pp394-398.
138. E.Morris, A.G.Olabi and M.S.J.hashmi. 2005. Experimental and numerical analysis of the static lateral compression of tube type energy absorbers with different indenters. 59, , pp505-510.

139. E. Morris, A.G. Olabi and M.S.J. Hashmi. 2005. Plastic response of Nested Systems under static and dynamic loading conditions using FE and Experimental techniques. *Applied Mechanics And Materials*, 3-4, , pp377-382.
140. K.Y. Benyounis, A.G. Olabi and M. S. J Hashmi. 2005. Residual Stresses Prediction for CO2 laser Butt- welding of AISI304 Stainless Steel. *Applied Mechanics And Materials*, 3-4, pp125-130.
141. K.Y. Benyounis, O.M.A. Fakron, J.H. Abboud, A.G. Olabi and M.J.S. Hashmi. 2005. Surface melting of nodular cast iron by Nd-YAG laser and TIG. *Journal Of Materials Processing Technology*, 170, pp127-132.
142. K.Y. Benyounis, A.G. Olabi and M.S.J. Hashmi. 2005. Optimizing the laser-welded butt joints of medium carbon steel using RSM. *Journal Of Materials Processing Technology*, 164-165, , pp986-989.
143. K.Y. Benyounis, A.G. Olabi and M.S.J. Hashmi. 2005. Effect of laser welding parameters on the heat input and weld-bead profile. *Journal Of Materials Processing Technology*, 164-165, , pp978-985.
144. M. Ricco, S. De Mattheis and A. G. Olabi. 2004. Simulation of the magnetic properties for common rail electro-injector. *Journal Of Materials Processing Technology*, 155-156, , pp1611-1615.
145. A.G.Olabi and M.S.Hashmi. 1998. Effects of the stress relief conditions on a martensite welded components. *Journal Of Materials Processing Technology*, 77, , pp216-225.
146. A.G.Olabi and M.S.Hashmi. 1996. Stress relief procedures for low carbon steel (1020) welded components. *Journal of Materials Processing Technology*. *Journal Of Materials Processing Technology*, 56, pp552-562.
147. A.G.Olabi and M.S.Hashmi. 1996. The microstructure and mechanical properties of low carbon steel welded components after the application of PWHTs. *Journal Of Materials Processing Technology*, 56, pp88-97.
148. A.G.Olabi and M.S.Hashmi. 1995. The effect of post weld heat treatment on the mechanical properties and residual stresses mapping in welded structural steel. *Journal Of Materials Processing Technology*, 55, pp117-122.
149. A.G.Olabi and M.S.Hashmi. 1993. Effects of post weld heat treatment soaking temperature on mechanical properties and residual stresses for martensite stainless steel welded components. *Journal Of Materials Processing Technology*, 38, pp387-398.

### **Conference Publications:**

1. C. Rodriguez, Z. El-Hassan, A.G. Olabi, “Enhanced methane production from waste paper through anaerobic co-digestion with macroalgae”, in: Proc. 10h Int. Conf. Sustain. Energy Environ. Prot., Bled, Slovenia, 2017. <https://doi.org/10.18690/978-961-286-048-6>.
2. C. Rodriguez, A. Alaswad, Z. El-Hassan, A. Olabi, “Optimization of Anaerobic Digestion for Mechanically Pretreated Waste Paper”, 11th Conf. Sustain. Dev. Energy, Water Environ. Syst., Lisbon, Portugal. 2016: p. 0678 1-13.
3. C. Rodriguez, A. Alaswad, Z. El-Hassan, A. Olabi, “Optimization of the anaerobic digestion process of mechanically pretreated algae”, 11th Conf. Sustain. Dev. Energy, Water Environ. Syst., Lisbon, Portugal. 2016: p. 0679 1-12.

4. C. Rodriguez, A. Alaswad, T. Prescott, A.G. Olabi, "Effects of Mechanical Pretreatment on Biogas Production from Waste Paper", in: Proc. 8th Int. Conf. Sustain. Energy Environ. Prot. - Part 1, Paisley, UK. 2015: pp. 1–6.
5. A.M. Oladoye, J.G. Carton, and A.G. Olabi, 2014, Improvement on the Corrosion Behaviour and Surface Conductivity of CoBlast Coatings by Pack Cementation, presented at the International Conference on Metallurgical coatings and thin films (ICMCTF 2014), San Diego, California.
6. M. E. Montingelli, J. Stokes, A. G. Olabi, 2014, Application of Physical Pretreatment Methods for the Conversion of Algal Biomass into Biogas, SEEP2014, 23-25 Nov, Dubai.
7. J. G. Carton, A. Baroutaji, J. Stokes, A. G. Olabi, 2014, Development of a PEM Fuel Cell Stack with Open Pore Cellular Foam as Flow Plate Material, SEEP2014, 23-25 Nov, Dubai.
8. J. G. Carton, A. Baroutaji, J. Stokes, A. G. Olabi, 2014, Renewable Energy & The Need For Energy Storage, SEEP2014, 23-25 Nov, Dubai.
9. H. Achour, K.Y. Benyounis, J. Stokes And A.G. Olabi, 2014, Simulation And Modelling Of Vehicle Emissions- A Review Paper, SEEP2014, 23-25 Nov, Dubai.
10. A. Baroutaji, J.G. Carton, J. Stokes, A. G. Olabi, 2014, Effect of the Cathode Housing Design on The Performance of a PEM Fuel Cell with Open Pore Cellular Foam as Flow Plate Material, SEEP2014, 23-25 Nov, Dubai.
11. D. Maizak, A.G.Olabi, V. Gheorghiu, A.S. Radhakrishnan, 2014, Development of a Low Temperature Exhaust after-Treatment Device for SCR Applications, SEEP2014, 23-25 Nov, Dubai.
12. H. Achour and A.G. Olabi, Monitoring On-Road Vehicle Emissions And Its Impact On Air Quality, 6<sup>th</sup> International Conference On Sustainable Energy And Environmental Protection, 20-Aug-13 -23aug-13, Maribor-Slovenia, 315-321
13. A.M. Oladoye, J.G. Carton and A.G. Olabi, Corrosion and Contact Resistance of Coated Titanium Alloy for Proton Exchange Membrane Fuel Cell Bipolar Plates, 6<sup>th</sup> International Conference On Sustainable Energy And Environmental Protection, 20-Aug-13 -23aug-13, Maribor-Slovenia, 15-20
14. A.M. Oladoye, J.G. Carton and A.G. Olabi, Evaluation of Graphite Coated Metals as Bipolar Plates for Proton Exchange Membrane "PEM" Fuel Cell, 6<sup>th</sup> International Conference On Sustainable Energy And Environmental Protection, 20-Aug-13 -23aug-13, Maribor-Slovenia, 15-20
15. S. Tedesco, M.E. Montingelli and A.G. Olabi, Holand Beater Operational Parameters Effect on MacroAlgal Biogas Production, 6<sup>th</sup> International Conference On Sustainable Energy And Environmental Protection, 20-Aug-13 -23aug-13, Maribor-Slovenia, 532-537
16. A.A. Alghamdi, A.G. Olabi, Novel Design Concept Of Magneto Rheological Damper In Squeeze Mode, *15th International Conference on Experimental Mechanics*, 22-JUL-12 - 27-JUL-12, Porto-Portugal, 2607-1 - 2607-16
17. F. Alfarjani, A. K. Mohamed, K. Y. Benyounis, A.G. Olabi, Modeling Anaerobic Digestion Process For Grass Silage After Beating Treatment Using Design Of Experiment (Doe), *In: Ibrahim Dincer ed.GCGW-2012, 08-JUL-12 - 12-JUL-12, Istanbul,Turkey*, 281 - 289
18. L. Ekpeni, A.G. Olabi, A Change In The Transportation Needs Today, A Better Future For Tomorrow Climate Change Review., *In: Ibrahim Dincer ed.GCGW-2012, 08-JUL-12 - 12-JUL-12, Istanbul,Turkey*, 1414 - 1423

19. Mohamed, F. Alfarjani, A.G. Olabi, Beating Treatment To Enhance Digestibility Of Fresh Grass, *In: Ibrahim Dincer ed.GCGW-2012, 08-JUL-12 - 12-JUL-12, Istanbul,Turkey*, 260 - 268
20. M. Hasanuzzaman, A. G. Olabi, Effect Of Nucleation Temperature And Time On Crystallization Behavior Of Zirconia/ Zircon Added Borosilicate Glass, *Eccm15 - 15th European Conference On Composite Materials,, 24-JUN-12 - 28-JUN-12, Venice, Italy*, 1 - 8
21. M.E. Montingelli, S. Tedesco, M. Dassisti And A. G. Olabi, Review Of Mechanical And Physical Biomass Pretreatment To Increase The Biogas Yield, *5th International Conference on Sustainable Energy & Environmental Protection, 05-JUN-12 - 08-JUN-12, Dublin-Ireland*, 47 - 53
22. A.M. Oladoye, J. Carton And A.G. Olabi, An Overview Of The Role Of The Deposition Process On Coated Metallic Bipolar Plates For Proton Exchange Membrane Fuel Cells, *5th International Conference on Sustainable Energy & Environmental Protection, 05-JUN-12 - 08-JUN-12, Dublin-Ireland*, 275 - 280
23. K. M. Aboderheeba, F. Alfarjani, A. G. Olabi, The Relationship Between Degree Of Beating And Biogas Production From Maize Silage Anaerobically Digested After Beating Treatment, *5th International Conference on Sustainable Energy & Environmental Protection, 05-JUN-12 - 08-JUN-12, Dublin-Ireland*, 107 - 112
24. L.E.N. Ekpeni, K.Y. Benyounis And A.G. Olabi, Gap Sizes Effects On Homogenized Yeast And Its Efficiency On Biogas Production, *5th International Conference on Sustainable Energy & Environmental Protection, 05-JUN-12 - 08-JUN-12, Dublin-Ireland*, 83 - 88
25. S. Tedesco, M.E. Montingelli, K.Y. Benyounis, A.G. Olabi, Mechanical Pre-Treatment Effects Investigation On Biogas Yields From Different Species Of Macroalgal Biomass, *5th International Conference on Sustainable Energy & Environmental Protection, 05-JUN-12 - 08-JUN-12, Dublin-Ireland*, 17 - 22
26. M. Dassisti, M. Foglia, A.G. Olabi, Manufacturing Sustainability Of Wood T-Joints For Naval Substructures: A New Process With Different Adhesives, *SEEP 2012, 05-JUN-12 - 08-JUN-12, Dublin-Ireland*, 406 - 413
27. H. Achour and A.G. Olabi, Driving Cycle Developments And Their Impacts On Energy Consumption Of Transportation, *SEEP 2012, 05-JUN-12 - 08-JUN-12, Dublin-Ireland*, 14 - 19
28. L. Ekpeni and A.G.Olabi, Biogas Improvement through Yeast Use in High Pressure Homogenizer (HPH), *SEM2011, 26-OCT-11 - 28-OCT-11, Zagreb, Croatia*, 7 - 13
29. Alaswad, K. Y. Benyounis and A.G.Olabi, Investigation of the production cost minimization in bi- layered tube hydroforming process design, *IMC-28, 30-AUG-11 - 01-SEP-11, Dublin-Ireland*
30. Mohamed, F. Alfarjani, K. Benyounis, T. Prescott and A.G. Olabi, , Mechanical Pre-treatment to Enhance Anaerobic Digestion Process, *ECOS 2011, 04-JUL-11 - 07-JUL-11, Novi Sad, Serbia*, 3573 - 3582
31. F. Alfarjani, A. Mohamed, K. Benyounis, T. Prescott and A.G. Olabi, Application of mechanical pre-treatment to produce methane from maize, *ECOS 2011, 04-JUL-11 - 07-JUL-11, Novi Sad, Serbia*, 3595 - 3602
32. S. Tedesco and A.G. Olabi , Review of Lignocellulosic Biomass as Bioenergy Sources with Applications to Anaerobic Digestion and CHP, *In: Umberto Dessideri ed.International Conference on Applied Energy, 16-MAY-11 - 18-MAY-11, Perugia-Italy*, 513 - 522



33. M.Rehan, J.Coleman, A.G.Olabi, Novel Mechanical Occlusion Device for Transcervical Sterilization, *World Congress on Engineering 2010, 30-JUN-10 - 02-JUL-10, Imperial College, London, UK*, 566 - 571
34. V. Lawlor, G. Zauner, C. Hochenauer, A. Mariani, S. Griesser, J. Carton, K. Klein, S. Kuehn, A. Olabi, S. Cordiner, D. Meissner, G. Buchinger, , The Use of CFD to Investigate the Properties of MT-SOFCs with Various Fuel and Oxidant Manifolding Techniques., *In: Prof. Michele Dassisti ed. SEEP 2010, 29-JUN-10 - 02-JUL-10, Bari-Italy*, 387 - 399
35. M. Aly, M.S.J. Hashmi, A.G. Olabi, M. Messeiry, E.F. Abadir, A.I. Hussain , Effect of Alkaline Treatment on behaviour of Flax Fiber Reinforced Cement Mortar , *SEEP 2010, 29-JUN-10 - 02-JUL-10, Bari-Italy*, 121 - 130
36. A.G.Olabi and A.Alaswad, An Analytical Comparison of Single and Bi-layered Tube Hydroforming Systems Using Finite Element Method, *10th International Conference on Numerical Methods in Industrial Forming Processes, 13-JUN-10 - 17-JUN-10, Pohang, South Korea*, 1047 - 1054
37. V.Lawlor, G.Zauner, C.Hochenauer, S.Griesser, D. Meissner, G.Buchinger, A.Mariani, S.Cordiner, J.Carton, A.G.Olabi, S.Kuehn Katrin Klein, A Study to Investigate Methods to Measure the Temperature of a MT-SOFC in a High Temperature Wind Tunnel, *European Fuel Cell Technology and Applications Conf., 15-DEC-09 - 18-DEC-09, Rome-Italy*
38. H. Achour, A.G. Olabi and A. Marashly, Development of a practical driving cycle for simulation of car emissions: a case study in Aleppo city, Syria, *In: Prof. N.Lior ed.5th Dubrovnik Conference on Sustainable Development of Energy Water and Environment Systems, 29-SEP-09 - 03-OCT-09, Dubrovnik, Croatia*
39. V.Lawlor, G.Zauner, A.Mariani, C.Hochenauer, J.Carton, S.Griesser, K.Klein, S.Kuehn, D.Meissner, A.G.Olabi, S.Cordiner, G.Buchinger, Micro-tubular SOFC: Towards a power pack for automotive and auxiliary power supply use, *Elevent Grove Fuel Cell Symposiun, 22-SEP-09 - 24-SEP-09, Queen Elizabeth II Conference Centre, Westminster, London, UK*
40. A.Alaswad and A.G.Olabi, A NUMERICAL STUDY OF THE EFFECT OF PROCESS PARAMETERS ON BI-LAYERED TUBE HYDROFORMING, *26th International Conference, 02-SEP-09 - 04-SEP-09, Dublin-Ireland*, 295 - 302
41. V.Lawlor, A.Mariani, C.Hochenauer, G.Zauner, S.Griesser, D.Meissner, A.G.Olabi, S.Cordiner, G. Buchinger, -, A micro tubular SOFC and stack testing apparatus to provide a means of developing highly efficient portable and auxiliary power packs for the future, *SEEP 2009, 12-AUG-09 - 15-AUG-09, Dublin-Ireland*, 2 - 7
42. M.Dassisti , A.G. Olabi and S. Tedesco, PROCESS OPTIMISATION FOR REPLASTIC COMPONENTS VIA STATISTICAL EXPERIMENTATION, *3rd International Conference on Sustainable Energy and Environmental Protection, 12-AUG-09 - 15-AUG-09, Dublin-Ireland*, 345 - 349
43. J.G. Carton & A.G. Olabi, DEVELOPING ENERGY STORAGE & A FUEL CELL SYSTEM IN CONJUNCTION WITH RENEWABLE WIND ENERGY SYSTEMS TO PROVIDE CONSISTENT SUSTAINABLE ENERGY SUPPLY, *3rd International Conference on Sustainable Energy and Environmental Protection, 12-AUG-09 - 15-AUG-09, Dublin-Ireland*, 14 - 19
44. H. Achour and A.G. Olabi, Comparison between measured and estimated vehicle emissions from road transport, *In: Dr A.G.Olabi ed.3rd International Conference on Sustainable Energy & Environmental Protection, 12-AUG-09 - 15-AUG-09, Dublin-Ireland*, 24 - 29

45. M.Rehan and A.G.Olabi, Parametric design optimization by integrating CAD systems and optimization tools, *Third Manufacturing Engineering Society International Conference, MESIC-09, 17-JUN-09 - 19-JUN-09, Alcoy, Spain*, 681 - 692
46. V.Lawlor, C.Hochenauer, G.Zauner, S.Griesser, A.G.Olabi, D.Meissner, G.Buchinger, Towards an optimised Micro-tubular SOFC reactor core design, *3rd Symposium of Austrian Universities of Applied Sciences, 15-APR-09 - 16-APR-09, Fachhochschule Kärnten, Villach, Austria*, 288 - 293
47. H. Achour and A.G.Olabi, Estimating on-road emissions using a special driving cycle for Dublin, *International Conference on Simulation Based Engineering and Sciences, 16-OCT-08 - 17-OCT-08, Venice, Italy*
48. A.Clarke, A.G.Olabi, T. Prescott, A. Rafferty, K.Benyounis, Finite Element Analysis of Homogeniser, *Ansys/Enginsoft Conference on Simulation Based Engineering and Science, 16-OCT-08 - 17-OCT-08, Venice, Italy*
49. N. B. Ekreem, A. Rafferty, S. A. Mazlan, T. Prescott, and A.G. Olabi, Prediction of Strong Magnetic Fields Using Computational FEMM Modelling, *International Conference on Simulation Based Engineering and Sciences, 16-OCT-08 - 17-OCT-08, Venice, Italy*
50. S.A. Mazlan, A. Issa, H.A. Chowdhury and A.G. Olabi,, Tensile Stress-Strain Relationships of Magnetorheological Fluids under Various Factors, *the European Materials Research Society (E-MRS) Fall Meeting, 15-SEP-08 - 19-SEP-08, Warsaw University of Technology, Poland*
51. A. Clarke and A.G. Olabi, Bologna Treaty from the view of students and graduates, *In: Dr D. Brabazon and Dr A.G. Olabi ed. ISEE 2008, 08-SEP-08 - 10-SEP-08, Dublin-Ireland*
52. J. G. Carton & A. G. Olabi, OPTIMISATION OF A PROTON EXCHANGE MEMBRANE FUEL CELL: FLOW PLATE DESIGN & TESTING, *25th International Manufacturing Conference, 03-SEP-08 - 05-SEP-08, Dublin-Ireland*, 511 - 518
53. M. Rehan and A. G. Olabi, AUTOMATED CAD SYSTEM BASED DESIGN OPTIMIZATION METHODOLOGY, *25th International Manufacturing Conference, 03-SEP-08 - 05-SEP-08, Dublin-Ireland*, 377 - 385
54. H. A. Eltawahni and A. G. Olabi, HIGH POWER LASER CUTTING OF DIFFERENT MATERIALS- A LITERATURE REVIEW, *25th International Manufacturing Conference, 03-SEP-08 - 05-SEP-08, Dublin-Ireland*, 81 - 86
55. E. M. Anawa and A. G. Olabi, Optimization of Tensile strength of Aluminum / Steel Dissimilar Welding Components, *25th International Manufacturing Conference, 03-SEP-08 - 05-SEP-08, Dublin-Ireland*, 113 - 126
56. H.A.Chowdhury and A.G.Olabi, A finite element approach for the implementation of magnetostrictive material Terfenol-D in CNG fuel injection actuation, *2008 Proceedings of the ASME International Design Engineering Technical Conferences and Computers and Information in Engineering Conference, DETC 2008, 03-AUG-08 - 06-AUG-08, New York City, NY, United states*, 749 - 756
57. S.A. Mazlan, A. Issa and A.G. Olabi, Magnetorheological Fluids Behaviour in Tension Loading Mode, *International Conference on Multifunctional Materials and Structures, 28-JUL-08 - 31-JUL-08, Hong Kong, China*
58. V.Lawlor, C.Hochenauer, G.Buchinger, S.Griesser, A.G.Olabi, D.Meissner, Numerical Simulation and Experimental Validation to Design an Optimised Micro-Tubular Solid Oxide Fuel Cell Reactor, *Tagungsband 2. Forschungsforum der Österreichischen Fachhochschulen, 26-MAR-08 - 27-MAR-08, Wels, Austria*, 327 - 334

59. V.Lawlor, C.Hochenauer, G.Buchinger, S.Griesser, A.G.Olabi, D.Meissner, Towards a micro-tubular SOFC reactor with C.F.D, validation, experiments and a high temperature wind tunnel, *11th annual Sir Bernard Crossland Symposium, 02-MAR-08 - 03-MAR-08, Limerick, Ireland*
60. J.G. Carton and A.G. Olabi, A Study of the Future Transport Industry; Fuel Cells Versus ICEs, *European Fuel Cell Technology and Applications Conf., 11-DEC-07 - 14-DEC-07, Rome-Italy*, 187 - 188
61. S.A. Mazlan, N.B. Ekreem and A.G. Olabi, An Investigation of the Magnetorheological Fluids in Compression Mode, *In: Y. çT. Im ed.10th International Conference on Advances in Materials and Processing Technologies, 07-OCT-07 - 11-OCT-07, Daejeon, Korea*
62. A.G.Olabi, Engineering Programme Structure Requirements for Bologna Compliance, *ISEE-2007, 17-SEP-07 - 19-SEP-07, Dublin-Ireland*, 35 - 38
63. L.F. Elgammudi, A.G. Olabi, K.Y. Benyounis, Effects of Recycling Stages and Moulding Parameters on Yield Strength of Polypropylene, *IMC24, 29-AUG-07 - 31-AUG-07, Waterford-Ireland*, 109 - 117
64. J.G. Carton and A.G. Olabi, Developments of Fuel Cell Technology, *IMC24, 29-AUG-07 - 31-AUG-07, Waterford-Ireland*, 273 - 280
65. S.A. Mazlan and A.G. Olabi, Investigation of the Performance of Magnetorheological Fluid in Squeeze Mode, *IMC24, 29-AUG-07 - 31-AUG-07, Waterford-Ireland*, 847 - 854
66. N- E. M. Anawa and A. G. Olabi, Impact Strength of Dissimilar Laser Welded Joint, *IMC24, 29-AUG-07 - 31-AUG-07, Waterford-Ireland*, 611 - 619
67. N. Ekreem, A.G. Olabi, T. Prescott and A. Rafferty, Design Optimization for Generating a High Static Magnetic Field, *IMC24, 29-AUG-07 - 31-AUG-07, Waterford-Ireland*, 329 - 336
68. S.A. Mazlan, N.B. Ekreem and A.G. Olabi, Mechanical Properties of Magnetorheological Fluids under Compression Mode, *In: W. Ostachowicz, J. Holnicki-Szulc and C. M. Soares ed.Smart Structures and Materials, III ECCOMAS Thematic Conference, 09-JUL-07 - 11-JUL-07, Gdansk, Poland*
69. S.A. Mazlan, N.B. Ekreem and A.G. Olabi, Magnetorheological fluid in squeeze mode under different instantaneous magnetic field, *The 10th Magnetism & Magnetic Materials conference, 07-JAN-07 - 11-JAN-07, Biltimore, Maryland-USA*
70. L.F. Elgammudi, A.G. Olabi and M.S.J. Hashmi, Effects of the Recycling Process on the Marketing of Plastic Materials, *IMC 23, 30-AUG-06 - 02-SEP-06, Belfast-N. Ireland*, 75 - 82
71. K. Y. Benyounis, A.G. Olabi and M. S. J Hashmi, Mechanical Properties, Weld-bead and Cost Universal Approach for CO<sub>2</sub> Laser Welding Process Optimization, *IMC23, 30-AUG-06 - 02-SEP-06, Belfast-N. Ireland*, 233 - 240
72. Md.Din Islam, A.G. Olabi and M.S.J. Hashmi, Mechanical Stresses in The Multi Layered T-Branch Hydroforming: Numerical Simulation, *IMC23, 30-AUG-06 - 02-SEP-06, Belfast-N. Ireland*, 315 - 322
73. M Hasanuzzaman, A Rafferty, AG Olabi and T Prescott, Approach for Sintering Nano-Sized Ytria-Stabilized Zirconia, *IMC23, 30-AUG-06 - 02-SEP-06, Belfast-N. Ireland*, 413 - 426
74. E Morris, AG Olabi and MSJ Hashmi, Experimental and Numerical Analysis of Slotted Tube Systems Under Quasi-Static Loading, *IMC23, 30-AUG-06 - 02-SEP-06, Belfast-N. Ireland*, 323 - 330

75. E. M. Anawa, A. G. Olabi and M. S. J. Hashmi, The Application of Taguchi Method to Optimize Dissimilar Laser Welded Components, *IMC23, 30-AUG-06 - 02-SEP-06, Belfast-N. Ireland*, 241 - 248
76. A.G.Olabi, J.H.Abboud, K.A.Abou-El-Hossein and K.Y.Benyounis, Optimising the Multipurpose CNG/LPG Solenoid Actuator Using Response Surface Methodology, *In: Dr A.G.Olabi ed.VAFSEP2006, 22-AUG-06 - 25-AUG-06, Dublin-Ireland*, 143 - 147
77. H.A.Chowdhury and A.G.Olabi, Recent CNG Developments and its Implications for Heavy-Duty Vehicles, *In: Dr A.G.Olabi ed.VAFSEP 2006, 22-AUG-06 - 25-AUG-06, Dublin-Ireland*, 75 - 89
78. Md.Din Islam, A.G. Olabi and M.S.J. Hashmi, Effect of process parameters on the formability of bi-layered tubular component: Experimental work and finite element simulation, *Advances in Materials and Processing Technology, 30-JUL-06 - 03-AUG-06, Las Vegas-USA*
79. E. M. Anawa, A. G. Olabi and M. S. J. Hashmi, Optimization of Ferritic / Austenitic Laser Welded Components, *Advances in Materials and Processing Technology, 30-JUL-06 - 03-AUG-06, Las Vegas-USA*
80. K. Y. Benyounis, A.G. Olabi and M. S. J Hashmi, Optimization of tensile-shear strength of AISI304 lap joint in CO2 laser welding, *Advances in Materials and Processing Technology, 30-JUL-06 - 03-AUG-06, Las Vegas-USA*
81. L.F. Elgammudi, A.G. Olabi and M.S.J. Hashmi, Optimization of the Moulding Process of Recycled Plastic Materials, *Advances in Materials and Processing Technology, 30-JUL-06 - 03-AUG-06, Las Vegas-USA*
82. M.M.Rahman, A.G.Olabi and M.S.J.Hashmi, Finite element modelling of rheological property of curing PMMA bone cement:analysis of cement flow in total hip replacement, *Advances in Materials and Processing Technology, 30-JUL-06 - 02-AUG-06, Las Vegas-USA*
83. G. Olabi and H. A. Eltawahni, Finite Element Analysis for Electro-Magnetic Solenoid Used In Medical Devices, *Int. Conf on Scientific and Clinical Applications of Magnetic Carriers, 17-MAY-06 - 20-MAY-06, Krems-Austria*
84. M. Hasanuzzaman, A. Rafferty, A. G. Olabi, T. Prescott, Characterization of Nano-Sized Yttria-Stabilized Zirconia, *MED, 22-MAR-06 - 24-MAR-06, DIT-Dublin-Ireland*, 477 - 485
85. L.F. Elgammudi, A.G. Olabi and M.S.J. Hashmi, Effects of Moulding Parameters on mechanical properties of polypropylene plastic materials,, *MED, 22-MAR-06 - 24-MAR-06, DIT-Dublin-Ireland*, 96 - 105
86. Alsebaie, A. G. Olabi, A. Rafferty and T. Prescott, Characterization of Al<sub>2</sub>O<sub>3</sub>-ZrO<sub>2</sub> composites prepared by traditional powder processing, and colloidal processing methods, *ACMS-IV, 4th Arab Congress on material science, 26-SEP-05 - 28-SEP-05, Tripoli-Libya*, 390 - 401
87. K. Y. Benyounis, A.G. Olabi and M. S. J Hashmi, Microstructure and weld-bead geometry investigation of laser beam welding of AISI304, *ACMS-IV, 4th Arab Congress on material science, 26-SEP-05 - 28-SEP-05, Tripoli-Libya*, 113 - 119
88. K.A.Saeed, A.G.Olabi and M.S.J. Hashmi, JUSTIFYING CIM IMPLEMENTATION IN DEVELOPED AND DEVELOPING COUNTRIES, *4th DAAAM International Conference on Advanced Technologies for Developing Countries , 21-SEP-05 - 24-SEP-05, Slavonski Brod, Croatia*
89. K.Saeed, A.G.Olabi and M.S.J.Hashmi, Implementation of CIM for Developed and Developing Countries, *ICMR-2005, 06-SEP-05 - 08-SEP-05, Cranfield-UK*

90. Edmund Morris, A.G. Olabi, M.S.J. Hashmi, Post Collapse Response of Nested Tube Systems with Side Constraints, *In: John Vickery ed.IMC-22, 31-AUG-05 - 02-SEP-05, Dublin-Ireland*, 693 - 700
91. K. Y. Benyounis, A. G. Olabi, M. S. J. Hashmi, Estimation of Mechanical Properties of Laser Welded Joints using RSM, *In: John Vickery ed.IMC-22, 31-AUG-05 - 02-SEP-05, Dublin-Ireland*, 565 - 572
92. A.G. Olabi, A. Grunwald, Development of Magneto Rheological Fluid, *In: John Vickery ed.IMC-22, 31-AUG-05 - 02-SEP-05, Dublin-Ireland*, 551 - 558
93. L.F. Elgammudi, A.G. Olabi, M.S.J. Hashmi, A Study- Effect of Recycling Process on the Productivity of Plastic Materials, *In: John Vickery ed.IMC-22, 31-AUG-05 - 02-SEP-05, Dublin-Ireland*, 755 - 764
94. M. Abulamosha, A. G. Olabi and M. S. J. Hashmi., Development of Compressed Natural Gas (CNG) System for Vehicles, *TSCE05, 15-APR-05 - 18-APR-05, El-Minia-Egypt*, 264 - 272
95. K.Y.Benyounis, A.H.Bettamer, A.G.Olabi and M.S.J.Hashmi, Predicting the Impact Strength of Spiral-Welded Pipe Joints In Submerged Arc Welding Of Low Carbon Steel, *In: Pat Phelan ed.IMC-21, 01-SEP-04 - 03-SEP-04, Limerick-Ireland*, 200 - 207
96. M.M.Rahman, A.G.Olabi and M.S.J.Hashmi, Thermal properties of curing acrylic bone cement mixed at different vacuum level, *12th International conference on Experimental Mechanics, 29-AUG-04 - 02-SEP-04, Bari-Italy*
97. N.M.Zarroug, A.G.Olabi and M.S.J.Hashmi, Elastic-Plastic Behaviour of Mild Steel (En8) At Different Strain Rates Under Combined Tension-Torsion Loading, *ICEM12, 29-AUG-04 - 02-SEP-04, Bari-Italy*, 599 - 606
98. E.P.Morris, A.G.Olabi and M.S.J.Hashmi, FE Simulation and Experimentation of Nested Systems Under Static and Impact Loading Conditions, *ICEM12, 29-AUG-04 - 02-SEP-04, Bari-Italy*, 196 - 203
99. M.T.Cunningham and A.G.Olabi, Developing a Compresses Natural Gas Electro-Injector, *In: A.G.Olabi ed.VAFSEP2004, 06-JUL-04 - 09-JUL-04, Dublin-Ireland*, 260 - 265
- 100.E.J.Conway, A.G.Olabi, A.Grunwald and W.Krude, Electromagnetic Actuator For A TMD In Automotive Driveline, *VAFSEP2004, 06-JUL-04 - 09-JUL-04, Dublin-Ireland*
- 101.A.Abulamosha, S.Scally, A.G.Olabi and M.S.J.Hashmi, Strategy of CNG Application in Ireland, *In: A.G.Olabi ed.VAFSEP2004, 06-JUL-04 - 09-JUL-04, Dublin-Ireland*, 159 - 164
- 102.N.M.Zarroug, A.G.Olabi and M.S.J.Hashmi, Finite Element Simulation of the Deformation Behaviour of Mild Steel Rod Subjected to Combined Torque and Tension, *In: Matthew Cotterell ed.IMC20, 03-SEP-03 - 05-SEP-03, CIT-Cork*, 679 - 686
- 103.N.M.Zarroug, A.G.Olabi and M.S.J.Hashmi, Mild Steel (En8) Thin-Walled Tube Subjected To Combined Tension-Torsion Loading, *In: M.S.J.Hashmi and A.G.Olabi ed.AMPT'03, 08-JUL-03 - 11-JUL-03, Dublin City University*, 603 - 607
- 104.M.RICCO, S.De Matthaëis and A.G.Olabi, Electro-Magnetic and structural Modelling For Off- Road Common Rail Application, *AMPT'03, 08-JUL-03 - 11-JUL-03, Dublin-Ireland*
- 105.A.G.Olabi and M.Ricco, Optimisation of Multi-Purpose Solenoid Actuator Used for Automotive Application, *AMPT'01, 18-SEP-01 - 21-SEP-01, Madrid-Spain*
- 106.A.G.Olabi and M.S.Hashmi, The optimum condition for post weld heat treatment of welded structural steel component, *Advances in Materials and Manufacturing Technology 1995, 08-AUG-95 - 12-AUG-95, Dublin-Ireland*

107. A.G.Olabi and M.S.Hashmi, Finite element modeling for studying the effects of residual stresses on martensite stainless steel welded component, *IMC-11, 31-AUG-94 - 02-SEP-94, Belfast-UK*
108. A.G.Olabi and M.S.Hashmi, Optimization of post weld heat treatment conditions for martensite stainless steel welded component, *SE 94, 07-MAR-94 - 10-MAR-94, Adelaide-Australia*
109. A.G.Olabi and M.S.Hashmi, The optimum condition for PWHT of welded structural steel component, *IMC-10, 08-SEP-93 - 10-SEP-93, Galway-Ireland*
110. A.G.Olabi and M.S.Hashmi, Review of methods for measuring residual stresses in components, *9th NCMR, 07-SEP-93 - 09-SEP-93, Bath-UK*
111. A.G.Olabi and M.S.Hashmi, The effect of post weld heat treatment in weld repaired components of AISI410 Materials. Proceedings of international conference of sheet metal, *Sheet Metal 92, 07-APR-92 - 09-APR-92, Birmingham-UK*