

# Publications

## Mechanical Engineering Department

Year 2017

### *Journals*

#### [Activating Carbon Fibers and Date Pits for Use in Liver Toxin Adsorption](#)

A Seyedzadeh, A Mwafy, WK Ahmed, K Pandurangan, A Hilal-Alnaqbi  
Poisoning: From Specific Toxic Agents to Novel Rapid and Simplified ...

#### [Biodegradable Scaffolds for Gastric Tissue Regeneration](#)

Y Greish, S Pulikkot, AHI Mourad, SM Karam

Scaffolds in Tissue Engineering Materials, Technologies and Clinical ...

#### [Method For Treating A Biological Fluid](#)

AH Alnaqbi, AH Mourad, AA Alshehhi, MS Almarzooqi, RY Aljaberi, ...

US Patent App. 15/490,594

#### [Mixture model for biomagnetic separation in microfluidic systems](#)

SA Khashan, A Alazzam, B Mathew, M Hamdan

Journal of Magnetism and Magnetic Materials 442, 118-127

#### [Improving the performance and emission characteristics of a diesel engine fueled by jojoba methyl ester-diesel-ethanol ternary blends](#)

HE Saleh, MYE Selim

Fuel 207, 690-701

#### [Using PCM embedded in building material for thermal management: performance assessment study](#)

E Elnajjar

Energy and Buildings 151, 28-34

#### [Time and frequency analyses of dual-fuel engine block vibration](#)

FK Omar, MYE Selim, SA Emam

Fuel 203, 884-893

#### [Dielectrophoresis based focusing in microfluidic devices](#)

A Alazzam, F Alnaimat, A Hilal-Alnaqbi, W Waheed, B Mathew

2017 IEEE Regional Symposium on Micro and Nanoelectronics (RSM), 207-211

#### [Serviceable bioreactor](#)

AA Hilal-Alnaqbi, AHI Mourad

US Patent 9,718,029

#### [Experimental assessment of a direct-contact water in a cooler liquid gallium bath heat exchanger bubbling hot](#)

SAB Al Omari, AAK Bashir, MI Al Hammadi, FJ Al Hamalawi, E Elnajjar, ...

INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER 86, 71-80

#### [Experimental assessment of a direct-contact heat exchanger bubbling hot water in a cooler liquid gallium bath](#)

SAB Al Omari, AAK Bashir, MI Al Hammadi, FJ Al Hamalawi, E Elnajjar, ...

International Communications in Heat and Mass Transfer 86, 71-80

#### [Polymeric nanobiocomposites for biomedical applications](#)

MS Mozumder, A Mairpady, AHI Mourad

Journal of Biomedical Materials Research Part B: Applied Biomaterials 105 (5 ...

#### [Flight Dynamics and control using folding wingtips: an experimental study](#)

J Mills, R Ajaj  
Aerospace 4 (2), 19  
[Design and Verification of a Blood Cell Separation Microfluidic Device.](#)  
A Gawanmeh, A Alazzam, B Mathew  
International Journal of Online Engineering 13 (6)  
[Visualization and quantification of oil in single microalgal cells](#)  
M Al Ahmad, S Al-Zuhair, A Hilal-Alnaqbi, F Mustafa  
Journal of applied phycology 29 (3), 1195-1202  
[Smart drill guide device for muscle training of hand drilling operations](#)  
AHI Mourad, AA Alshehhi, MS Al Kaabi  
US Patent App. 14/947,372  
[Metal chips compactor](#)  
AHI Mourad, E Al Ali, RA Al Ali, KA Al Houqani, YA Al Nuaimi, ...  
US Patent App. 15/351,665  
[Load testing system and device for sustain load measurement over time in different environmental conditions](#)  
AI Mourad, AH Alnaqbi  
US Patent App. 14/942,110  
[Photo-thermal characteristics of water-based Fe<sub>3</sub>O<sub>4</sub>@ SiO<sub>2</sub> nanofluid for solar-thermal applications](#)  
S Khashan, S Dagher, S Al Omari, N Tit, E Elnajjar, B Mathew, ...  
Materials Research Express 4 (5), 055701  
[Production simulator system for flexible routing optimization in flexible manufacturing systems](#)  
JE Abu Qudeiri  
Proceedings of the Institution of Mechanical Engineers, Part B: Journal of ...  
[Simple bottom-up hierarchical control strategy for heaving wave energy converters](#)  
A Wahyudie, MA Jama, TB Susilo, O Saeed, CSA Nandar, K Harib  
International Journal of Electrical Power & Energy Systems 87, 211-221  
[Adsorption Study of Albumin Bound Bilirubin Over Date Pits Activated Carbon](#)  
A Hilal-Alnaqbi, AHI Mourad  
Advanced Science Letters 23 (5), 4251-4253  
[Microdevice for continuous flow magnetic separation for bioengineering applications](#)  
SA Khashan, S Dagher, A Alazzam, B Mathew, A Hilal-Alnaqbi  
Journal of Micromechanics and Microengineering 27 (5), 055016  
[Lab-on-chip for liquid biopsy \(LoC-LB\) based on dielectrophoresis](#)  
B Mathew, A Alazzam, S Khashan, M Abutayeh  
Talanta 164, 608-611  
[Novel microfluidic device for the continuous separation of cancer cells using dielectrophoresis](#)  
A Alazzam, B Mathew, F Alhammadi  
Journal of separation science 40 (5), 1193-1200  
[Flight Dynamics and Control of a Morphing UAV: Bio inspired by Natural Fliers](#)  
R Ajaj  
UNIVERSITY OF SOUTHAMPTON SOUTHAMPTON United Kingdom  
[On the injection molding processing parameters of HDPE-TiO<sub>2</sub> nanocomposites](#)  
AH Mourad, M Mozumder, A Mairpady, H Pervez, U Kannuri  
Materials 10 (1), 85  
[Comparative Study of Non-Productive Tool Path Length for Contour Parallel Machining](#)  
H Abdullah, R Ramli, DA Wahab, JA Qudeiri

Journal of Mechanical Engineering, 211-220  
[Cancer and Biotechnology: A Matchup that Should Never Slowdown](#)  
B Baig, A Hilal-Alnaqbi, A Amin  
Biotechnology and Production of Anti-Cancer Compounds, 73-97  
[Microfluidic platforms for bio-applications](#)  
A Alazzam, B Mathew, S Khashan  
Advanced Mechatronics and MEMS Devices II, 253-282  
[3D culture of mouse gastric stem cells using porous microcarriers.](#)  
R AlKhatib, A Hilal-Alnaqbi, M Naciri, R Al-Majmaie, P Saseedharan, ...  
Frontiers in bioscience (Scholar edition) 9, 172-179  
[Mechanical Engineering Department, College of Engineering, United Arab Emirates University, PO Box 15551, Al-Ain, UAE, 2 School of Chemical and Bioprocess Engineering ...](#)  
R AlKhatib, A Hilal-Alnaqbi, M Naciri, R Al-Majmaie, P Saseedharan, ...  
Frontiers in Bioscience 9, 172-179  
[Multilayers polyethylene film for crop protection in harsh climatic conditions](#)  
A Dehbi, B Youssef, C Chappey, AHI Mourad, P Picuno, D Statuto  
Advances in Materials Science and Engineering 2017

#### *Conferences*

[Thermomechanical Characteristics of Compacted and Non-Compacted Plain Weave Woven Laminated Composites](#)  
MH Al Kuwaiti, AHI Mourad  
ASME 2017 Pressure Vessels and Piping Conference, V03AT03A024-V03AT03A024  
[Tribological Analysis of Thermal Spray Coatings of Ni and Al<sub>2</sub>O<sub>3</sub> With Dispersion of Solid Lubricants in Wear Modes](#)  
JV Christy, AHI Mourad, S Tiwari  
ASME 2017 Pressure Vessels and Piping Conference, V06AT06A034-V06AT06A034  
[Fabrication and wear analysis of aluminium matrix composite reinforced by SiC micro and nano particles](#)  
AH Idrisi, AHI Mourad  
ASME 2017 Pressure Vessels and Piping Conference, V06AT06A033-V06AT06A033  
[Analysis of dielectrophoresis based 3D-focusing in microfluidic devices with planar electrodes](#)  
A Hilal-Alnaqbi, A Alazzam, S Dagher, B Mathew  
2017 39th Annual International Conference of the IEEE Engineering in ...  
[Factors Affecting How the Engineering Students Select Their Discipline at UAE University: A Case Study](#)  
MYE Selim, AHI Mourad  
European Conference of Education ECE2017, June 30 – July 1st, 2017, Brighton ...  
[Board# 148: MAKER: Generations of NC Machining through Laboratory Work](#)  
S Sivaloganathan, R Ganithi  
2017 ASEE Annual Conference & Exposition  
[Investigation of DNA Sequences Utilizing Frequency-Selective Nanopore Structures](#)  
A Hilal-Alnaqbi, M Al Ahmad, TA Rizvi, F Mustafa  
International Conference on Bioinformatics and Biomedical Engineering, 3-11

[Adsorption of Bilirubin Toxin in Liver by Chitosan Coated Activated Carbon Prepared from Date Pits](#)  
A Mwafy, A Seyedzadeh, WK Ahmed, BA Ahmad, B Mathew, ...  
International Conference on Bioinformatics and Biomedical Engineering, 247-260

[Dynamic modeling and simulation for virtual evaluation of inverted wheeled robot controllers](#)  
KH Harib, KAF Moustafa, S Al Hebsi  
2017 7th International Conference on Modeling, Simulation, and Applied ...

[Reducing NOx emissions from small LPG furnace by direct water injection](#)  
SAB Al Omari, S Aljailani, A Al, E Alansari, M Alzaabi, O Al Jallad  
ICTEA: International Conference on Thermal Engineering 2017

[Chaotic Mixing Using Vortex in a CylindricalL Micromixer](#)  
A Safi, E Elnajjar, A Hussain  
ICTEA: International Conference on Thermal Engineering 2017

[The Effect of Date Seeds size and Type on the Oil Extraction Percentage](#)  
E Elnajjar, S Al-Zuhair, S Al Omari, A Alnaqbi, S Hassan  
ICTEA: International Conference on Thermal Engineering 2017

[A framework for the selection of heavy construction equipment](#)  
E Zaneldin, S Sivaloganathan  
Proceedings of the International Annual Conference of the American Society ...

[Evidence needed to destroy and replace machining capability](#)  
S Sivaloganathan, E Zaneldin, R Ganithi  
Proceedings of the International Annual Conference of the American Society ...

[Using FMEA Analysis for Assessing Air Conditioners Remanufacturing Processes](#)  
B Salah, M Alkahtani, A Ziout  
Proceedings of the International Conference on Industrial Engineering and ...

*Book Chapters*

*Patents*