

A glowing lightbulb is the central focus, emitting a vibrant trail of blue and red particles that radiate outwards. The background is a deep, dark blue, creating a sense of depth and mystery. The lightbulb's filament is visible, and the base shows the characteristic screw threads. The overall aesthetic is futuristic and high-tech.

**HIGH IMPACT
JOURNAL
PUBLICATION
(2017-2018)**

List of Q1 Publication 2017

(Source: www.ukm.my/epenerbitan, Date: 11th February 2019)

1. Farhad Bin Ashraf, Touhidul Alam and Mohammad Tariqul Islam. 2017. A Printed Xi-Shaped Left-Handed Metamaterial on Low-Cost Flexible Photo Paper. *Materials* 10: 1-9. IF 2.728
2. M A Hannan, Jamal Abd Ali, Azah Mohamed, Mohammad Nasir Uddinn. 2017. A Random Forest Regression Based Space Vector PWM Inverter Controller for the Induction Motor Drive. *IEEE Transactions on Industrial Electronics* 64: 2689-2699. IF 6.383
3. Tahereh Jafary, Wan Ramli Wan Daud, Mostafa Ghasemi, Byung Hong Kim, Alessandro A. Carmona Martinez, Mimi Hani Abu Bakar, Jamaliah Md Jahim, Manal Ismail. 2017. A comprehensive study on development of a biocathode for cleaner production of hydrogen in a microbial electrolysis cell. *Journal of Cleaner Production* 164: 1135-1144. IF 4.959
4. Amir Hosein Sakhaei, Prakash Thamburaja. 2017. A finite-deformation-based constitutive model for high-temperature shape-memory alloys. *Mechanics of Materials* 109: 114-134. IF 2.636.
5. Abdulla Amin Aburomman, Mamun Bin Ibne Reaz. 2017. A novel weighted support vector machines multiclass classifier based on differential evolution for intrusion detection system. *Information Sciences* 414: 225-246. IF 3.364
6. K.F. Mustafa, S. Abdullah, M.Z. Abdullah, K. Sopian. 2017. A review of combustion-driven thermoelectric (TE) and thermophotovoltaic (TPV) power systems. *Renewable and Sustainable Energy Reviews* 71: 572-584. IF 6.798
7. M. A. Hannan, M. S. H. Lipu, A. Hussain and A. Mohamed. 2017. A review of lithium-ion battery state of charge estimation and management system in electric vehicle applications: challenges and recommendations. *Renewable and Sustainable Energy Reviews* 78: 834-854. IF 6.798
8. Naz Niamul Islam, M A Hannan, Hussein Shareef, Azah Mohamed. 2017. An application of backtracking search algorithm in designing power system stabilizers for large multi-machine system. *Neurocomputing* 237: 175-184. IF 2.392
9. Mohammad Shakeri, Mohsen Shayestegan, Hamza Abunima, S.M. Salim Reza, M. Akhtaruzzaman, A.R.M. Alamoud, Kamaruzzaman Sopian, Nowshad Amin. 2017. An intelligent system architecture in home energy management systems (HEMS) for efficient demand response in smart grid. *Energy and Buildings* 138: 154-164. IF 2.973
10. Mohamad Azuwa Mohamed, Muhazri Abd Mutalib, Zul Adlan Mohd Hir, M.F. M. Zain, Abu Bakar Mohamad, Lorna Jeffery Minggu, Nor Asikin Awang, W.N. W. Salleh. 2017. An overview on cellulose-based material in tailoring bio-hybrid nanostructured photocatalysts for water treatment and renewable energy applications. *International Journal of Biological Macromolecules* 103: 1232-1256. IF 3.138

11. Yehia Menawi, Victor Kochkodan, A.W. Mohammad, Muataz Ali Atieh. 2017. Arabic gum as a novel pore-forming and hydrophilic agent in polysulfone membranes. *Journal of Membrane Science* 529: 95-104. IF 5.557
12. Mohamed H. Mussa, Azrul A. Mutalib, Roszilah Hamid, Sudharshan R. Naidu, Noor Azim Mohd Radzi, Masoud Abedini. 2017. Assessment of damage to an underground box tunnel by a surface explosion. *Tunnelling and Underground Space Technology* 66: 64-76. IF 1.741
13. Tahereh Jafary, Wan Ramli Wan Daud, Mostafa Ghasemi, Byung Hong Kim, Mimi Hani Abu Bakar, Jamaliah Md Jahim, Manal Ismail, Ibdal Satar, Mohd Aidil Kamaruzzaman. 2017. Assessment of recirculation batch mode of operation in bioelectrochemical system: a way forward for cleaner production of energy and waste treatment. *Journal of Cleaner Production* 142: 2544-2555. IF 4.959.
14. Mahmuda Akhtar, M.A. Hannan, R.A. Begum, Hassan Basri, Edgar Scavino. 2017. Backtracking search algorithm in CVRP models for efficient solid waste collection and route optimization. *Waste Management* 61: 117-128. IF 3.829.
15. M.M. Hoque, M.A. Hannan, A. Mohamed, A. Ayob. 2017. Battery charge equalization controller in electric vehicle applications: A review. *Renewable and Sustainable Energy Reviews* 75: 1363-1385. IF 6.798.
16. Nur Hasiba Kamaruddin, Ahmad Ashrif A Bakar, Nadhratun Naiim Mobarak, Mohd Saiful Dzulkefly Zan, Norhana Arsad. 2017. Binding Affinity of a Highly Sensitive Au/Ag/Au/Chitosan-Graphene Oxide Sensor Based on Direct Detection of Pb²⁺ and Hg²⁺ Ions. *Sensors* 17: 1-16. IF 2.033.
17. Swee Su Lim, Eileen Hao Yu, Wan Ramli Wan Daud, Byung Hong Kim, Keith Scott. 2017. Bioanode as a limiting factor to biocathode performance in microbial electrolysis cells. *Bioresour Technol* 238: 313-324. IF 4.917
18. Asia Fadhile Almansoori, Hassimi Abu Hasan, Mushrifah Idris, Siti Rozaimah Sheikh Abdullah, Nurina Anuar, & El Mubarak Musa Tibin. 2017. Biosurfactant production by the hydrocarbon-degrading bacteria (HDB) *Serratia marcescens*: Optimization using central composite design (CCD). *Journal of Industrial and Engineering* 47: 272-280. IF 4.179
19. Fakhriah Muhsin, Wardah Fatimah Mohammad Yusoff, Mohd Farid Mohamed, Abdul Razak Sapian. 2017. CFD modeling of natural ventilation in a void connected to the living units of multi-storey housing for thermal comfort. *Energy and Buildings* 144: 1-16. IF 2.973
20. S.A. Muhammed Ali, Mustafa Anwar, Abdalla M. Abdalla, Mahendra Rao Somalu, Andanastuti Muchtar. 2017. Ce_{0.80}Sm_{0.10}Ba_{0.05}Er_{0.05}O_{2-d} multi-doped ceria electrolyte for intermediate temperature solid oxide fuel cells. *Ceramics International*. 43: 1265-1271. IF 2.758.
21. Lily Siong Mahmud, Andanastuti Muchtar, Mahendra Rao Somalu. 2017. Challenges in fabricating planar solid oxide fuel cells: A review. *Renewable & Sustainable Energy Reviews* 72: 105-116. IF 6.798
22. Ali M Al Saegh, A Sali, JS Mandeep, Fernando Perez Fontan. 2017. Channel Measurements Characterization and Modeling for Land Mobile Satellite Terminals in Tropical Regions at Ku band. *IEEE Transactions on Vehicular Technology* 66: 897-911. IF 2.243
23. Yehia Manawi, Viktor Kochkodan, Ebrahim Mahmoudi, Daniel J. Johnson, Abdul Wahab Mohammad, & Muataz Ali Atieh. 2017. Characterization and separation performance of a novel polyethersulfone membrane blended with acacia gum. *Scientific Reports* 7: 1-12. IF 5.228
24. Charn Loong Ng, Mamun Bin Ibne Reaz. 2017. Characterization of Textile-Insulated Capacitive Biosensors. *Sensors* 17: 1-14. IF 2.033
25. S.M Buhari, M. Abdullah, T. Yokoyama, Y.Otsuka, M. Nishioka, A.M Hasbi, S.A Bahari and T.Tsugawa. 2017. Climatology of successive equatorial plasma bubbles observed by GPS ROTI over Malaysia climatology. *Journal of Geophysical Research: Space Physics* 122: 1-11. IF 3.318
26. N.S.Syamsul, S.K.Kamarudin, N.A.Rahman. 2017. Conversion of bio-oil to bio gasoline via pyrolysis and hydrothermal: A review. *Renewable and Sustainable Energy Reviews* 80: 538-549. IF 6.798
27. Tam Dao, Yuichi Otsuka, Kazuo Shiokawa, Michi Nishioka, Mamoru Yamamoto, Suhaila M. Buhari, Mardina Abdullah and Asnawi husin. 2017. Coordinated observations of postmidnight irregularities

- and thermospheric neutral winds and temperatures at low latitudes. *Journal of Geophysical Research: Space Physics* 122: 7504-7518. IF 3.318
28. M. Rizal , J.A.Ghani , M.Z.Nuawi, C.H.C.Haron. 2017. Cutting tool wear classification and detection using multi-sensor signals and Mahalanobis-Taguchi System. *Wear*. IF 2.323
 29. Rui Ren Ang, Lee Tin Sin, Soo-Tueen Bee, Tiam-Ting Tee, A.A.H. Kadhum, A.R. Rahmat, Bilal A. Wasmi. 2017. Determination of zinc glutarate complexes synthesis factors affecting production of propylene carbonate from carbon dioxide and propylene oxide. *Chemical Engineering Journal*. IF 6.34
 30. Ying Tao Chung, Ebrahim Mahmoudi, Abdul Wahab Mohammad, Abdelbaki Benamor, Daniel Johnson, Nidal Hilal. 2017. Development of polysulfone-nanohybrid membranes using ZnO-GO composite for enhanced antifouling and antibacterial control. *Desalination* 402: 123-132. IF 4.412
 31. B Rashid, Z Leman, M Jawaid, MJ Ghazali, MR Ishak, MA Abdelgnei. 2017. Dry sliding wear behavior of untreated and treated sugar palm fiber filled phenolic composites using factorial technique. *Wear* 380-381. IF 2.323.
 32. M.R. Karim a,b,M.M. Hossain a,M.F.M. Zain a, M. Jamil a, F.C. Lai c. 2017. Durability properties of a non-cement binder made up of pozzolans with sodium hydroxide. *Construction and Building Materials* 138: 174-184. IF 2.421
 33. Bushra Rashid, Mohammed Zulkiflle Leman, Mohammad Jawaid, Mariyam Jameelah Ghazali, Mohamad Ridzwan Ishak. 2017. Dynamic Mechanical Analysis of Treated and Untreated Sugar Palm Fibre-based Phenolic Composites. *Bioresources* 12: 3448-3462. IF 1.334
 34. Abdul Amir H. Kadhum and Mohamad Najeeb Shamm. 2017. Edible lipids modification processes a review. *Critical Reviews in food science and nutrition* 57: 48-58. IF 5.492
 35. Norsyahida Mohammad, Abu Bakar Mohamad, Abdul Amir H. Kadhum, Kee Shyuan Loh. 2017. Effect of silica on the thermal behaviour and ionic conductivity of mixed salt solid acid composites. *Journal of Alloys and Compounds* 690: 896-902. IF 3.014
 36. J. A. Wahab,M. J. Ghazali, Z. Sajuri, Y. Otsuka, M. Jayaprakash, S. Nakamura, A. F. S. Baharin. 2017. Effects of micro-grooves on tribological behaviour of plasma-sprayed alumina-13% titania coatings. *Ceramic International* 43: 6410-6416. IF 2.758
 37. Gaaz, TS., Sulong, A.B., Ansari, M.N.M., Kadhum, A.A.H., Al-Amiery, A.A., Nassir, M.H.. 2017. Effects of starch loading on the thermo mechanical and morphological properties of polyurethane composites. *Materials* 10: 1-14. IF 2.728
 38. Waheb A. Jabbar, Mahamod Ismail, and Rosdiadee Nordin. 2017. Energy and Mobility Conscious Multipath Routing Scheme for Route Stability and Load Balancing in MANETs. *Simulation Modelling Practice and Theory* 77: 245-271. IF 1.482
 39. Badiea S. Babaqi, Mohd S. Takriff, Siti K. Kamarudina, Nur Tantiyani A. Othmana, Muneer M. Ba-Abbada. 2017. Energy optimization for maximum energy saving with optimal modification in Continuous Catalytic Regeneration Reformer Process. *Energy* 170 774-784. IF 4.292.
 40. Haider Mahmood Jawad, Rosdiadee Nordin, Sadik Kamel Gharghan, Aqeel Mahmood Jawad, and Mahamod Ismail. 2017. Energy-efficient wireless sensor networks for precision agriculture: a review. *Sensors* 17. IF 2.033.
 41. Ramez A. Al-Mansob, Amiruddin Ismail, Nur Izzi Md. Yusoff, Riza Atiq O. K. Rahmat,Muhamad Nazri Borhan, Shaban Ismael Albrka, Che Husna Azhari, Mohamed Rehan Karim. 2017. Engineering characterisation of epoxidized natural rubber-modified hot-mix asphalt. *PLoS One* 12: 1-16. IF 3.057.
 42. Jude Santanaraj, Mohd Shaiful Sajab, Abdul Wahab Mohammad, Shuhaida Harun, Chin Hua Chia, Sarani Zakaria, Hatika Kaco. 2017. Enhanced delignification of oil palm empty fruit bunch fibers with in situ Fenton-oxidation. *Bioresources* 12: 5223-5235. IF 1.334.
 43. Abdul Azim Jais, S.A. Muhammed Ali, Mustafa Anwar, Mahendra Rao Somalu, Andanastuti Muchtar, Wan Nor Roslam Wan Isahak, Chou Yong Tan, Ramesh Singh, Nigel P. Brandon. 2017. Enhanced ionic conductivity of scandia-ceria-stabilized-zirconia (10Sc1CeSZ) electrolyte synthesized by the microwave-assisted glycine nitrate process.

- Ceramics International* 43: 8119-8125. IF 2.758.
44. N. Yahya, S.K. Kamarudin, N.A. Karim, M.S. Masdar and K.S. Loh. 2017. Enhanced performance of a novel anodic PdAu/VGCF catalyst for electro-oxidation in a glycerol fuel cell. *Nanoscale Research Letter* 12: 1-11. IF 2.584.
45. Noor Azwen Noor Azmy, Ahmad Ashrif A Bakar, Norhana Arsad, Sarada Idris, Abdul Rahman Mohamad, Aidil Abdul Hamid. 2017. Enhancement of ZnO-rGO nanocomposite thin films by gamma radiation for E. coli sensor. *Applied Surface Science* 392: 1134-1143. IF 3.15.
46. Muhammed Ali S.A., Mustafa Anwar, Mahendra Rao Somalu, Andanastuti Muchtar. 2017. Enhancement of the interfacial polarization resistance of La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3-d} cathode by microwave-assisted combustion method. *Ceramics International* 43: 4647-4654. IF 2.758.
47. Hasan Balfaqih, Malak T. Al-Nory, Zulkifli Mohd Nopiah, Nizaroyani Saibani. 2017. Environmental and economic performance assessment of desalination supply chain. *Desalination* 406: 2-9. IF 4.412
48. Muhammad Hidayat Muhamad Daud, Yew Hsu Zenn, Jasmina Qamaruz Zaman, Norziha Yahaya, Andanastuti Muchtar. 2017. Evaluation of shear bond strength of a novel nano-zirconia and veneering ceramics. *Ceramics International* 43:1272-1277. IF 2.605.
49. Mohd Reza Azmi, Mohd Yazmil Md Yatim, Aziza Esa, Wan Hamidon Wan Badaruzzaman. 2017. Experimental Studies on Perforated Plate Girders with Inclined Stiffeners. *Thin-Walled Structures* 117: 247-256. IF 2.063.
50. N. Abdullah, S. K. Kamarudin, L. K. Shyuan, N. A. Karim. 2017. Fabrication and characterization of new composite tio₂ carbon nanofiber anodic catalyst support for direct methanol fuel cell via electrospinning method. *Nanoscale Research Letters* 12 1-11. IF 2.584.
51. Joelle C.W. Mah, Andanastuti Muchtar, Mahendra R. Somalu, Mariyam J. Ghazali, Jarot Raharjo. 2017. Formation of sol-gel derived (Cu,Mn,Co)₃O₄ spinel and its electrical properties. *Ceramics International* 43: 7641-7646. IF 2.758.
52. Siew Xian Chin, Soon Wei Chook, Chin Hua Chia, Kam Sheng Lau, Sarani Zakaria, Siti Masrinda Tasirin. 2017. Graphene Oxide as Support and Regenerative Substrate for Lead Ions in Catalytic Conversion of Lactic Acid. *BioResources* 12: 7133-7144. IF 1.334.
53. N. Shaari, S.K. Kamarudin. 2017. Graphene in electrocatalyst and proton conducting membrane in fuel cell applications: An overview. *Renewable and Sustainable Energy Reviews* 69: 862-870. IF 6.798.
54. Khairun Nisa Minhad, Sawal Hamid Md Ali, Mamun Bin Ibne Reaz. 2017. Happy anger emotions classifications from electrocardiogram signal for automobile driving safety and awareness. *Journal of Transport and Health* 7: 75-89. IF 2.05.
55. Haitham Abdulmohsin Afan, Behrooz Keshtegar, Wan Hanna Melini Wan Mohtar, Ahmed El-Shafie. 2017. Harmonize input selection for sediment transport prediction. *Journal of Hydrology* 552:366-375. IF 3.443.
56. K.G. Tiew, N.E.A. Basri, S.M. Zain, A.C. Er. 2017. Higher Educational Institutions' waste recycling initiatives in Malaysia. *Waste Management* 63: 1-3. IF 3.829.
57. Ibdal Satar, Wan Ramli Wan Daud, Byung Hong Kim, Mahendra Rao Somalu, Mostafa Ghasemi. 2017. Immobilized mixed-culture reactor (IMcR) for hydrogen and methane production from glucose. *Energy* 139: 1188-1196. IF 4.292.
58. Yu-Loong Loow, Ta Yeong Wu, Yung Shen Lim, Khang Aik Tan, Lee Fong Siow, Jamaliah Md. Jahim, Abdul Wahab Mohammad. 2017. Improvement of xylose recovery from the stalks of oil palm fronds using inorganic salt and oxidative agent. *Energy Conversion and Management* 138: 248-260. IF 4.801.
59. Woon Chan Chong, Ebrahim Mahmoudi, Ying Tao Chung, Chai Hoon Koo, Abdul Wahab Mohammada, Kamrul Fakir Kamarudin. 2017. Improving performance in algal organic matter filtration using polyvinylidene fluoride graphene oxide nanohybrid membranes. *Algal Research* 27: 32-42. IF 4.694
60. Bushra Rashid, Zulkiflle Leman, Mohammad Jawaid, Mariyam Jameelah Ghazali, Mohamad Ridzwan Ishak. 2017. Influence of Treatments on the Mechanical and Thermal Properties of Sugar Palm Fibre Reinforced Phenolic Composites. *Bioresources* 12: 1447-1462. IF 1.334

61. SH Hamdan, WWF Chong, J-H Ng, MJ Ghazali, RJK Wood. 2017. Influence of fatty acid methyl ester composition on tribological properties of vegetable oils and duck fat derived biodiesel. *Tribology International* 113: 76-82. IF 2.259.
62. Sarada Idris, Ahmad Ashrif A Bakar, Nur Hasiba Kamaruddin, Sahbudin Shaari. 2017. Influence of gamma irradiation on polymerization of pyrrole and glucose oxidase immobilization onto poly (pyrrole)/poly (vinyl alcohol) matrix. *Applied Surface Science* 400: 118-158. IF 3.15.
63. Nurul Akidah Baharuddin, Andanastuti Mughtar, Mahendra Rao Somalu, Mohadeseh Seyednezhad. 2017. Influence of mixing time on the purity and physical properties of SrFe_{0.5}Ti_{0.5}O_{3-d} powders produced by solution combustion. *Powder Technology* 313: 382-388. IF 2.759.
64. T. Kian-Ghee, A.C. Er. Malaysian Government solid waste recycling management initiatives. *Waste Management* 67: 1-2. IF 3.829.
65. N.N.R. Ahmad, C.P. Leo, A.W. Mohammad, A.L. Ahmad. 2017. Modification of gas selective SAPO zeolites using imidazolium ionic liquid to develop polysulfone mixed matrix membrane for CO₂ gas separation. *Microporous and Mesoporous Materials* 244: 21-30. IF 3.349.
66. Hamidah Abdullah, Md. Maksudur Rahman Khan, Huei Ruey Ong, Zahira Yaakob. 2017. *Journal of CO₂ Utilization* 22: 15-32. IF 4.764.
67. T.T. Suhariyanto, D.A. Wahab, M.N. Ab. Rahman. 2017. Multi-Life Cycle Assessment for sustainable products: A systematic review. *Journal of Cleaner Production* 165: 677-696. IF 4.959.
68. Jeng Yih Law, Abdul Wahab Mohammad. 2017. Multiple solute salts as draw solution for osmotic concentration of succinate feed by forward osmosis. *Journal of Industrial and Engineering Chemistry* 51: 264-270. IF 4.179.
69. Siti Nur Hidayah Jaafar, Lorna Jeffery Minggu, Khuzaimah Arifin, Mohammad B. Kassim, Wan Ramli Wan Daud. 2017. Natural dyes as TiO₂ sensitizers with membranes for photoelectrochemical water splitting: An overview. *Renewable and Sustainable Energy Reviews* 78: 698-709
70. Shahinuzzaman, M., Zahira Yaakob, Yunus Ahmed. 2017. Non-sulphide zeolite catalyst for bio-jet-fuel conversion. *Renewable and Sustainable Energy Reviews* 77: 1375-1384. IF 6.798
71. Ho Kah Chun, Teow Yeit Haan, Ang Wei Lun, Abdul Wahab Mohammad. 2017. Novel GO/OMWCNTs mixed-matrix membrane with enhanced antifouling property for palm oil mill effluent treatment. *Separation and Purification Technology* 177: 337-349. IF 3.299.
72. Zaher Mundher Yaseen, Isa Ebtehaj, Hossein Bonakdari, Ravinesh C. Deo, Ali Danandeh Mehr, Wan Hanna Melini Wan Mohtar, Lamine Diop, Ahmed El-shafie, Vijay P. Singh. 2017. Novel approach for streamflow forecasting using a hybrid ANFIS-FFA model. *Journal of Hydrology* 554 : 63-273. IF 3.043.
73. Nazlina Haiza Mohd Yasin, Azusa Ikegami, Thomas K. Wood Chang-Ping Yu, Tetsuya Haruyama, Mohd Sobri Takriff, Toshinari Maeda. 2017. Oceans as bioenergy pools for methane production using activated methanogens in waste sewage sludge. *Applied Energy* 202: 399-407. IF 5.746.
74. Manoj Pudukudya, Zahira Yaakob, Mohd Zulhamizan Mazuki, Mohd Sobri Takriff, Seri Suriani Jahaya. 2017. One-pot sol-gel synthesis of MgO nanoparticles supported nickel and iron catalysts for undiluted methane decomposition into CO_x free hydrogen and nanocarbon. *Applied Catalysis B: Environmental* 218: 298-316. IF 8.328.
75. Tengku Juhana Tengku Hashim, Azah Mohamed. 2017. Optimal coordinated voltage control in active distribution networks using backtracking search algorithm. *PLoS One* 12: 1-20. IF 3.057.
76. Ibrahim Anwar Ibrahim, Tamer Khatib, Azah Mohamed. 2017. Optimal sizing of a standalone photovoltaic system for remote housing electrification using numerical algorithm and improved system models. *Energy* 126: 392-403. IF 4.292.
77. Shi Mei Choong, Ahmed ElShafie, Wan Hanna Melini Wan Mohtar. 2017. Optimisation of Multiple Hydropower Reservoir Operation Using Artificial Bee Colony Algorithm. *Water Resources Management* 31: 1397-1411. IF 2.437.
78. W.R.W. Daud, R.E. Rosli, E.H. Majlan, S.A.A. Hamid, R. Mohamed, T. Husaini. 2017. PEM fuel cell system control: a review. *Renewable Energy* 113. IF 4.9.

79. Nur Syakina Jamali, Jamaliah Md Jahim, Wan Nor Roslam Wan Isahak, Peer Mohamed Abdul. 2017. Particle size variations of activated carbon on biofilm formation in thermophilic biohydrogen production from palm oil mill effluent. *Energy Conversion and Management* 141: 354-366. IF 4.801.
80. N.A. Karim, S.K. Kamarudin, K.S. Loh. 2017. Performance of a novel non-platinum cathode catalyst for direct methanol fuel cells. *Energy Conversion and Management* 145: 293-307. IF 4.801.
81. Mohamad Azuwa Mohamed, W.N. W. Salleh, Juhana Jaafar, A.F. Ismail, Muhazri Abd Mutalib, Abu Bakar Mohamad, M.F. M. Zain, Nor Asikin Awang, Zul Adlan Mohd Hir. 2017. Physicochemical characterization of cellulose nanocrystal and nanoporous self-assembled CNC membrane derived from Ceiba pentandra. *Carbohydrate Polymers*. 157: 1892-1902. IF 4.219.
82. Zhao Kang Tee, Jamaliah Md Jahim, Jian Ping Tan, Byung Hong Kim. 2017. Preeminent productivity of 1,3-propanediol by *Clostridium butyricum* JKT37 and the role of using calcium carbonate as pH neutraliser in glycerol fermentation. *Bioresource Technology* 233: 296-304. IF 4.917.
83. N.H. Kasmuri, S.K. Kamarudin, S.R.S. Abdullah, H.A. Hasan, A.Md. Som. 2017. Process system engineering aspect of bio-alcohol fuel production from biomass via pyrolysis: An overview. *Renewable and Sustainable Energy Reviews* 79: 914-923. IF 6.798.
84. Abdualati Ibrahim Al-Tabib, Najeeb Kaid Nasser Al-Shorgani, Hassimi Abu Hasan, Aidil Abdul Hamid and Mohd Sahaid Kalil. 2017. Production of acetone- butanol and ethanol (ABE) by *Clostridium acetobutylicum* YM1 from pretreated palm kernel cake in batch culture fermentation. *BioResources* 12: 3371-3386. IF 1.334.
85. Najeeb Kaid Nasser Al-Shorgani, Abdualati Ibrahim and Mohd Sahaid Kalil. 2017. Production of butanol from acetyl chloride-treated deoiled rice bran by *Clostridium acetobutylicum* ym1. *BioResources* 12: 8505-8518. IF 1.334.
86. Armin Rajabi, Mariyam J. Ghazali. 2017. Quantitative analyses of TiC nanopowders via mechanical alloying method. *Ceramics International* 43: 14233-14242. IF 2.758.
87. Maytham S. Ahmed , Azah Mohamed , Tamer Khatib , Hussain Shareef , Raad Z. Homod , Jamal Abd Ali. 2017. Real time optimal schedule controller for home energy management system using new binary backtracking search algorithm. *Energy and Buildings* 138: 215-227. IF 2.973.
88. P.Y. You dan S.K. Kamarudin. 2017. Recent progress of carbonaceous materials in fuel cell applications: An overview. *Chemical Engineering Journal* 309: 489-502. IF 5.31.
89. T.E. Putra, S. Abdullah, D. Schramm, M.Z. Nuawi, T. Bruckmann. 2017. Reducing cyclic testing time for components of automotive suspension system utilising the wavelet transform and the Fuzzy C-Means. *Mechanical Systems and Signal Processing* 90: 1-14. IF 2.771.
90. Ahmed W. Al Zand, W.H. Wan Badaruzzaman, Azrul A. Mutalib, Salam J. Hilo. 2017. Rehabilitation and Strengthening of High-Strength Rectangular CFST Beams Using A Partial Wrapping Scheme of CFRP Sheets: Experimental and Numerical Study. *Thin-Walled Structures* 114: 80-91. IF 2.063.
91. M.A. Hannan, M.M. Hoque, A. Mohamed, A. Ayob. 2017. Review of energy storage systems for electric vehicle applications: Issues and challenges. *Renewable and Sustainable Energy Reviews* 69: 771-789. IF 6.798.
92. D.M. Fadzillah, M.I. Rosli, M.Z.M. Talib, S.K. Kamarudin, W.R.W. Daud. 2017. Review on microstructure modelling of a gas diffusion layer for proton exchange membrane fuel cells. *Renewable and Sustainable Energy Reviews* 77: 1001-1009. IF 6.798.
93. Mahendra R. Somalu, Andanastuti Muchtar, Wan Ramli Wan Daud, Nigel P. Brandon. 2017. Screen-printing inks for the fabrication of solid oxide fuel cell films: a review. *Renewable and Sustainable Energy Reviews* 75: 426-439. IF 6.798.
94. Mohammed Shadi S. Abujazar, S. Fatimah, A.E. Kabeel. 2017. Seawater desalination using inclined stepped solar still with copper trays in a wet tropical climate. *Desalination* 423: 141-148. If 4.412.
95. Intan Fadhlina Mohamed, Takahiro Masuda, Seungwon Lee, Kaveh Edalati, Zenji Horita, Shoichi Hirosawa, Kenji Matsuda, Daisuke Terada, Mohd Zaidi Omar. 2017. Strengthening of A2024 alloy by high

- pressure torsion and subsequent aging. *Journal of Materials Science and Engineering A* 704: 112-118. IF 2.647.
96. Majid Niaz Akhtar, A. Rahman, A.B. Sulong, Muhammad Azhar Khan. 2017. Structural, spectral, dielectric and magnetic properties of Ni_{0.5}MgxZn_{0.5-x}Fe₂O₄ nanosized ferrites for microwave absorption and high frequency applications. *Ceramics International* 43: 4357-4365. IF 2.758.
97. Nidal W. Elshereksi, Mariyam Jameelah Ghazali, Andanastuti Muchtar, Che Husna Azhari. 2017. Studies on the effects of titanate and silane coupling agents on the performance of poly (methyl methacrylate)/barium titanate denture base nanocomposites. *Journal of Dentistry* 56: 121-132. IF 3.109.
98. Chun Yik Wong, Wai Yin Wong, Kee Shyuan Loh, Abu Bakar Mohamad. 2017. Study of the plasticising effect on polymer and its development in fuel cell application. *Renewable and Sustainable Energy Reviews* 79: 794-805. IF 6.798.
99. Rahima Khatun, Mohammad Imam Hasan Reza, M. Moniruzzaman, Zahira Yaakob. 2017. Sustainable oil palm industry: The possibilities. *Renewable and Sustainable Energy Reviews* 76: 608-619. IF 6.798.
100. Joy Wei Yi Liew, Kee Shyuan Loh, Azizan Ahmad, Kean Long Lim, Wan Ramli Wan Daud. 2017. Synthesis and characterization of modified kappa-carrageenan for enhanced proton conductivity as polymer electrolyte membrane. *PLoS One* 12: 1-15. IF 3.057.
101. KY Leong, KZ Ku Ahmad, Hwai Chyuan Ong, MJ Ghazali, Azizah Baharum. 2017. Synthesis and thermal conductivity characteristic of hybrid nanofluids: A review. *Renewable & Sustainable Energy Reviews* 75: 868-878. IF 6.798.
102. Wan Hanna Melini Wan Mohtar, Siti Aminah Bassa Nawang, Khairul Nizam Abdul Maulud, Yannie Anak Benson, Wan Ahmad Hafiz Wan Ahmad Azhary. 2017. Textural characteristics and sedimentary environment of sediment at eroded and deposited regions in the severely eroded coastline of Batu Pahat, Malaysia. *Science of The Total Environment* 598: 525-537. IF 3.976.
103. Nabilah Afiqah Mohd Radzuan, Mohd Yusuf Zakaria, Abu Bakar Sulong, Jaafar Sahari. 2017. The Effect of Milled Carbon Fibre Filler on Electrical Conductivity In Highly Conductive Polymer Composites. *Composites Part B: Engineering* 110: 153-160 IF 3.85.
104. Mohd Radzi Abu Mansor; Mahmood Merzah Abbood; Taib Iskandar Mohamad. 2017. The influence of varying hydrogen-methane-diesel mixture ratio on the combustion characteristics and emissions of a direct injection diesel engine. *Fuel* 190: 281-291. IF 3.611.
105. T.E. Putra, S. Abdullah, D. Schramm, M.Z. Nuawi, T. Bruckmann. The need to generate realistic strain signals at an automotive coil spring for durability simulation leading to fatigue life assessment. *Mechanical Systems and Signal Processing* 94: 432-447. IF 2.771.
106. Ramez A. Al-Mansob, Amiruddin Ismail, Riza Atiq O.K. Rahmat, Muhamad Nazri Borhan, Jamal M.A. Alsharif, Shaban Ismael Albrka & Mohamed Rehan Karim. 2017. The performance of Exposed Natural Rubber modified asphalt using nano-alumina as additive. *Construction and Building Materials* 155: 680-687. IF 2.421.
107. Q.A. Hasan, W.H. Wan Badaruzzaman, Ahmed W. Al-Zand, Azrul A. Mutalib. 2017. The state of the art of steel and steel concrete composite straight plate girder bridges. *Thin-Walled Structures* 119: 988-1020. IF 2.063.
108. M.Abdullah dan S.K.Kamarudin. 2017. Titanium dioxide nanotubes (TNT) in energy and environmental applications: An overview. *Renewable and Sustainable Energy Reviews* 76: 212-225. IF 6.798.
109. A.H.Musfirah, J.A.Ghani, C.H.Che Haron. 2017. Tool wear and surface integrity of Inconel 718 In dry and cryogenic coolant at high cutting speed. *Wear* 376-377 125-133. IF 2.323.
110. Tayser Sumer Gaaz, Abdul Amir H Kadhum, Patina Kiah Anak Michael, Ahmed Al AMiery, Abu bakar Sulong, Abu Bakar Sulong, Mohamed H Nassir, Ahmed Hameed Jaaz. 2017. Unique Halloysite Nanotubes Polyvinyl Alcohol Polyvinylpyrrolidone Composite Complemented with Physico Chemical Characterization. *Polymers* 9: 207-222. IF 2.944.

List of Q1 Publication 2018

(Source: www.ukm.my/epenerbitan, Date: 11th February 2019)

1. Md. Samsuzzaman, Mohammad Tariqul Islam, Mandeep Jit Singh. 2018. A compact printed monopole antenna with wideband circular polarization. *IEEE Access* 6. IF 3.244.
2. Mohammad Tariqul Islam, Farhad Bin Ashraf, Touhidul Alam, Norbahiah Misran and Kamarulzaman Bin Mat. 2018. A compact ultrawideband antenna based on hexagonal split-ring resonator for pH sensor application. *Sensors* 18. IF 2.677.
3. Kamarul Azrul Aris, Kazi Sajedur Rahman, Ameen M. Ali, Badariah Bais, Iskandar Bin Yahya, Md. Akhtaruzzaman, Halina Misran, Siti Fazlili Abdullah, Mohammad A. Alghoul, Nowshad Amin. 2018. A comparative study on thermally and laser annealed copper and silver doped CdTe thin film solar cells. *Solar Energy* 173. IF 4.018.
4. Touhidul Alam and Mohammad Tariqul Islam. 2018. A dual-band antenna with dual-circular polarization for nanosatellite payload application. *IEEE Access* 6. IF 3.244.
5. Mohammad Tariqul Islam, Md. Samsuzzaman, Md. Tarikul Islam, Salehin Kibria and Mandeep Jit Singh. 2018. A homogeneous breast phantom measurement system with an improved modified microwave imaging antenna sensor. *Sensors* 18. IF 2.677.
6. Ahasanul Hoque, Mohammad Tariqul Islam, Ali F. Almutairi, Touhidul Alam, Mandeep Jit Singh and Nowshad Amin. 2018. A polarization independent quasi-TEM metamaterial absorber for X and Ku band sensing applications. *Sensor* 18. IF 2.677.
7. Mahammad A. Hannan, Jamal Abd Ali, Aini Hussain, Fazida Hanim Hashim, Ungku Anisa Ungku Amirulddin, Mohammad Nasir Uddin, Frede Blaabjerg. 2018. A quantum lightning search algorithm-based fuzzy speed controller for induction motor drive. *IEEE Access* 6: 1214-1223. IF 3.244.
8. Chin Boon Ong, Law Yong Ng, Abdul Wahab Mohammad. 2018. A review of ZnO nanoparticles as solar photocatalysts: Synthesis, mechanisms and applications. *Renewable & Sustainable Energy Reviews* 81: 536-551. IF 8.05.
9. Siti Nur Hatika Abu Bakar, Hassimi Abu Hasan, Abdul Wahab Mohammad, Siti Rozaimah Sheikh Abdullah, Teow Yeit Haan, Rahmat Ngteni and Khairul Muis Mohamed. 2018. A review of moving-bed biofilm reactor technology for palm oil mill effluent treatment. *Journal of Cleaner Production* 171: 1532-1545. IF 5.715.
10. W.S.W. Harun, M.S.I.N. Kamariah, N.Muhamad, S.A.C. Ghani, F. Ahmad, Z. Mohamed. 2018. A review of powder additive manufacturing processes for metallic biomaterials. *Powder Technology* 327. IF 2.942.
11. M.S. Hossain Lipu, M. A. Hannan, Aini Hussain, M. M. Hoque, Pin J. Ker, M. H. M. Saad, Afida Ayob. 2018. A review of state of health and remaining useful life estimation methods for lithium ion battery in electric vehicles: Challenges and recommendations. *Journal of Cleaner Production* 205. IF 5.715.
12. M.A. Alghoul, S.A. Shahahmadi, Bitu Yeganeh, Nilofar Asim, A.M. Elbreki, K. Sopian, S.K. Tiong, N. Amin. 2018. A review of thermoelectric power generation systems: Roles of existing test rigs/ prototypes and their associated cooling units on output performance. *Energy Conversion and Management* 174. IF 5.589.
13. D.A. Wahab, E. Blanco-Davis, A.K. Ariffin, J. Wang. A review on the applicability of remanufacturing in extending the life cycle of marine or offshore components and structures. *Ocean Engineering* 169. IF 1.894.
14. Touhidul Alam, Mohammad Tariqul Islam, Md. Amanath Ullah and Mengu Cho. 2018. A solar panel-integrated modified planner inverted F antenna for low earth orbit remote sensing nanosatellite communication system. *Sensors* 18. IF 2.677.

15. Yasir Talib Hameed, Azni Idris, Siti Aslina Hussain, Norhafizah Abdullah, Hasfalina Che Man, Fatihah Suja. 2018. A tannin based agent for coagulation and flocculation of municipal wastewater as a pretreatment for biofilm process. *Journal of Cleaner Production* 182. IF 5.715.
16. Sadik Kamel Gharghan, Rosdiadee Nordin, Aqeel Mahmood Jawad, Haider Mahmood Jawad, and Mahamod Ismail. 2018. Adaptive neural fuzzy inference system for accurate localization of wireless sensor network in outdoor and indoor cycling applications. *IEEE Access* 6. IF 3.244.
17. Dinesh Ragurajan, Mohsen Golieskardi, Meenaloshini Satgunam, Md Enamul Hoque, Angela Min Hwei Ng, Mariyam Jameelah Ghazali, Ahmad Kamal Ariffin. 2018. Advanced 3Y-TZP bioceramic doped with Al₂O₃ and MnO₂ particles potentially for biomedical applications: study on mechanical and degradation properties. *Journal of Materials Research and Technology* 7. IF 2.359.
18. M. A. Hannan, I. Hussin, P. J. Ker, M. M. Hoque, M. S. Hossain Lipu, A. Hussain, M. S. Abd. Rahman, C. W. M. Faizal & F. Blaabjerg. 2018. Advanced control strategies of VSC based HVDC transmission system: issues and potential recommendations. *IEEE Access* 6. IF 3.244.
19. Noraida Azura Darom, Hawa Hishamuddin, Rizauddin Ramli, Zulkifli Mat Nopiah. 2018. An inventory model of supply chain disruption recovery with safety stock and carbon emission consideration. *Journal of Cleaner Production* 197. IF 5.715.
20. Maher G. M. Abdolrasol, Mahammad A. Hannan, Azah Mohamed, Ungku Anisa Ungku Amiruldin, Izhah Bin Zainal Abidin, Mohammad Nasir Uddin. 2018. An optimal scheduling controller for virtual power plant and microgrid integration using binary backtracking search algorithm. *IEEE Transactions on Industry Applications* 54. IF 2.937.
21. Fathiyah Mohd Zainudin, Hassimi Abu Hasan, Siti Rozaimah Sheikh Abdullah. 2018. An overview of the technology used to remove trihalomethane (THM), trihalomethane precursors, and trihalomethane formation potential (THMFP) from water and wastewater. *Journal of Industrial and Engineering Chemistry* 57: 1-14. IF 4.179.
22. Mohsen Shayestegan, Mohammad Shakeri, Hamza Abunima, S.M. Salim Reza, M. Akhtaruzzaman, Badariah Bais, Sohif Mat, Kamaruzzaman Sopian, Nowshad Amin. 2018. An overview on prospects of new generation single-phase transformerless inverters for grid-connected photovoltaic (PV) systems. *Renewable & Sustainable Energy Reviews* 82: 515-530. IF 8.05.
23. Salah Alden Ghasimi, Rizauddin Ramli, Nizaroyani Saibani, Khashayar Danesh Narooei. 2018. An uncertain mathematical model to maximize profit of the defective goods supply chain by selecting appropriate suppliers. *Journal of Intelligent Manufacturing* 29. IF 3.035.
24. Alfonsi, L., Povero, G., Luca, S., Cesaroni, C., Forte, B., Mitchell, C. N., Burston, R., Veettil, S. V., Aquino, M., Klausner, V., Muella, M. T. A. H., Pezzopane M., Giuntini A., Hunstad, I., Franceschi, G. D., Musico, E., Pini, M. & nine others. 2018. Analysis of the regional ionosphere at low latitudes in support of the biomass ESA mission. *IEEE Transactions on Geoscience and Remote Sensing* 56. IF 4.942.
25. Zaher Mundheer Yaseen, Minglei Fu, Chen Wang, Wan Hanna Melini Wan Mohtar, Ravinesh. C. Dao, Ahmed El-Shafie . 2018. Application of the hybrid artificial neural network coupled with rolling mechanism and grey model algorithms for streamflow forecasting over multiple time horizons. *Water Resources Management* 32: 1883-1899. IF 2.848.
26. Mahammad A. Hannan, Naz Niamul Islam, Azah Mohamed, Molla S. Hossain Lipu, Pin Jern Ker, Muhammad Mahbubur Rashid and Hussain Shareef. 2018. Artificial intelligent based damping controller optimization for the multi-machine power system: a review. *IEEE Access* 6. IF 3.244.
27. Qian Wen Yean, Abu Bakar Sulong, Soon Huat Tan. 2018. Asymmetric membrane containing electrospun Cu-BTC/poly(vinyl alcohol) for pervaporation dehydration of 1,4-dioxane. *Separation and Purification Technology* 192. IF 3.359.
28. W Mimi Diyana W Zaki, Marizuana Mat Daud, Siti Raihanah Abdani, Aini Hussain & Haliza Abdul Mutalib. 2018. Automated pterygium detection method of anterior segment photographed images. *Computer Methods and Programs in Biomedicine* 154: 71-78. IF 2.503.

29. Md. Samsuzzaman, Mohammad Tariqul Islam, Salehin Kibria, Mengu Cho. 2018. BIRDS-1 cubeSat constellation using compact UHF patch antenna. *IEEE Access* 6. IF 3.244.
30. Mohd Najib Muhamed, Mohd Zaidi Omar, Shahrum Abdullah, Zainuddin Sajuri, Wan Fathul Hakim Wan Zamri and Mohd Faizal Abdullah. 2018. Brazed joint interface bonding strength of AR500 steel and AA7075 aluminium alloy. *Metals* 8. IF 1.984.
31. Harizah Bajunaid Hariz, Mohd Sobri Takriff, Muneer M. Ba-Abbad, Nazlina Haiza Mohd Yasin, Noor Irma Nazashida Mohd Hakim. 2018. CO₂ fixation capability of *Chlorella* sp. and its use in treating agricultural wastewater. *Journal of Applied Phycology* 30. IF 2.616.
32. Kemal Maulana Alhasa, Mohd Shahrul Mohd Nadzir, Popoola Olalekan, Mohd Talib Latif, Yusri Yusup, Mohammad Rashed Iqbal Faruque, Fatimah Ahamad, Haris Hafizal Abd. Hamid, Kadaruddin Aiyub, Sawal Hamid Md Ali, Md Firoz Khan, Azizan Abu Samah, Imran Yusuff. 2018. Calibration model of a low-cost air quality sensor using an adaptive neuro-fuzzy inference system. *Sensors* 18. IF 2.677.
33. M.A. Hannan, Mahmuda Akhtar, R.A. Begum, H. Basri, A. Hussain, Edgar Scavino. 2018. Capacitated vehicle-routing problem model for scheduled solid waste collection and route optimization using PSO algorithm. *Waste Management* 71: 31-41. IF 4.03.
34. Kushairi Mohd Salleh, Sarani Zakaria, Mohd Shaiful Sajab, Sinyee Gan, Chin Hua Chia, Sharifah Nabihah Syed Jaafar, Umar Adli Amran. 2018. Chemically crosslinked hydrogel and its driving force towards superabsorbent behaviour. *International Journal of Biological Macromolecules* 118. IF 3.671.
35. Md. Samsuzzaman and Mohammad Tariqul Islam. 2018. Circularly polarized broadband printed antenna for wireless applications. *Sensors* 18. IF 2.677.
36. Asmah Hamim, Nur Izzi Md. Yusoff, Halil Ceylan, Sri Atmaja P. Rosyidi dan Ahmed Elshafie. 2018. Comparative study on using static and dynamic finite element models to develop FWD measurement on flexible pavement structures. *Construction and Building Materials* 176. IF 3.169.
37. Siti Mariam Daud, Wan Ramli Wan Daud, Byung Hong Kim, Mahendra Rao Somalu, Mimi Hani Abu Bakar, Andanastuti Muchtar, Jamaliah Md Jahim, Swee Su Lim, In Seop Chang. 2018. Comparison of performance and ionic concentration gradient of two chamber microbial fuel cell using ceramic membrane (CM) and cation exchange membrane (CEM) as separators. *Electrochimica Acta* 259: 365-376. IF 4.798.
38. Mohd Syakir Fathillah, Kalaivani Chellappan, Rabani Remli, Rosmina Jaafar, Wan Asyraf Wan Zaidi. 2018. Computerized Recognition of Epileptic Discharge (CREED) algorithm and its clinical application. *Clinical Neurophysiology* 129. IF 3.866.
39. Mohamad Azuwa Mohamed, Juhana Jaafar, M.F.M. Zain, Lorna Jeffery Minggu, Mohammad B. Kassim, Mohd Nur Ikhmal Salehmin, Mohamad Saufi Rosmi, W.N. W. Salleh, Mohd Hafiz Dzarfan Othman. 2018. Concurrent growth, structural and photocatalytic properties of hybridized C, N co-doped TiO₂ mixed phase over g-C₃N₄ nanostructured. *Scripta Materialia* 142: 143-147. IF 3.305.
40. Mohamad Azuwa Mohamed, M.F. M. Zain, Lorna Jeffery Minggu, Mohammad B. Kassim, Nor Aishah Saidina Amin, W.N. W. Salleh, Mohd Nur Ikhmal Salehmin, Mohd Faizal Md Nasir, Zul Adlan Mohd Hir. 2018. Constructing bio-templated 3D porous microtubular C-doped g-C₃N₄ with tunable band structure and enhanced charge carrier separation. *Applied Catalysis B: Environmental* 236. IF 9.446.
41. Yu-Loong Loow, Ta Yeong Wu, Ge Hoa Yang, Lin Yang Ang, Eng Kein New, Lee Fong Siow, Jamaliah Md Jahim, Abdul Wahab Mohammad, Wen Hui Teoh. 2018. Deep eutectic solvent and inorganic salt pretreatment of lignocellulosic biomass for improving xylose recovery. *Bioresource Technology* 249: 818-825. IF 5.651.
42. Touhidul Alam, Mohammad Tariqul Islam, Md. Amanath Ullah, Rahmi Rahmatillah, Kateryna Aheieva, Chow Chee Lap, Mengu Cho. 2018. Design and compatibility analysis of a solar panel integrated UHF antenna for nanosatellite space mission. *PLoS One* 13. IF 2.806.
43. Mohammad Tariqul Islam, Md. Naimur Rahman, Mandeep Singh Jit Singh, Md. Samsuzzaman. 2018. Detection of salt and sugar contents in water on the basis of dielectric properties using microstrip antenna-based sensor. *IEEE Access* 6. IF 3.244.

44. Hend Ali Omar, Nur Izzi Md. Yusoff, Halil Ceylan, Irman Abdul Rahman, Zainuddin Sajuri, Fauzan Mohd Jakarni, Amiruddin Ismail. 2018. Determining the water damage resistance of nano-clay modified bitumens using the indirect tensile strength and surface free energy methods. *Construction and Building Materials* 167: 391-402. IF 3.169.
45. S.N. Kamaruzzaman, E.C.W. Lou, P.F. Wong, R. Wood, A.I. Che-Ani. 2018. Developing weighting system for refurbishment building assessment scheme in Malaysia through AHP approach. *Energy Policy* 112: 280-290. IF 4.14.
46. A.Rajabi, M.J. Ghazali, E. Mahmoudi, S. Azizkhani, N.H. Sulaiman, A.W. Mohammad, N.M. Mustafah, H. Ohnmar, A.S. Naicker. 2018. Development and antibacterial application of nanocomposites: Effects of molar ratio on Ag₂O-CuO nanocomposite synthesised via the microwave-assisted route. *Ceramics International* 44. IF 2.986.
47. A. Ismail, S.K. Kamarudin, W.R.W. Daud, S. Masdar, U.A. Hasran. 2018. Development of 2D multiphase non-isothermal mass transfer model for DMFC system. *Energy* 152. IF 4.52.
48. Ho Kah Chun, Teow Yeit Haan. Abdul Wahab Mohammad, Ang Wei Lun, Lee Pak Hoe. 2018. Development of graphene oxide (GO)/ multi-walled carbon nanotubes (MWCNTs). Nano composite conductive membranes for electrically enhanced fouling mitigation. *Journal of Membrane Science* 552. IF 6.035.
49. Emad Hosseinpour, Shahrizan Baharom, Wan Hamidon W. Badaruzzaman, Mahdi Shariati and Abdolrahim Jalali. 2018. Direct shear behavior of concrete filled hollow steel tube shear connector for slim-floor steel beams. *Steel and Composite Structures* 26. IF 3.198.
50. Md. Mehedi Hasan, Mohammad Rashed Iqbal Faruque, Mohammad Tariqul Islam. 2018. Dual Band Metamaterial Antenna For LTE/ Bluetooth/WiMAX System. *Scientific Reports* 8: 1-17. IF 4.259.
51. Marliyana Mokhtar, Edy Herianto Majlan, Azizan Ahmad, Siti Masrinda Tasirin, Wan Ramli Wan Daud. 2018. Effect of ZnO filler on PVA-alkaline solid polymer electrolyte for aluminum-air battery applications. *The Electrochemical Society Journals* 165. IF 3.259.
52. Azim Fitri Zainul Abidin, Kee Shyuan Loh, Wai Yin Wong, Abu Bakar Mohamad, Ifa Puspasari. 2018. Effect of carbon precursor and initial pH on cobalt-doped carbon xerogel for oxygen reduction. *International Journal of Hydrogen Energy* 43. IF 3.582.
53. Amilia Aminuddin, Isabella Tan, Mark Butlin, Alberto P. Avolio, Hosen Kiat, Edward Barin, Nor Anita Megat Mohd Nordin, Kalaivani Chellappan. 2018. Effect of increasing heart rate on finger photoplethysmography fitness index (PPGF) in subjects with implanted cardiac pacemakers. *PLoS One* 13. IF 2.806.
54. N.A. Khan, K.S. Rahman, K.A. Aris, A.M. Ali, Halina Misran, M. Akhtaruzzaman, S.K. Tiong, N. Amin. 2018. Effect of laser annealing on thermally evaporated CdTe thin films for photovoltaic absorber application. *Solar Energy* 173. IF 4.018.
55. Mohd Ikram Ramli, Abu Bakar Sulong, Norhamidi Muhamad, Andanastuti Muchtar, Amir Arifin, Farhana Mohd Foudzi, Mohannad Saleh Hammadi Al-Furjan. 2018. Effect of sintering parameters on physical and mechanical properties of powder injection moulded stainless steel-hydroxyapatite composite. *PLoS One* 13. IF 2.806.
56. A. Jemat, M.J. Ghazali, M. Razali, Y. Otsuka, A. Rajabi. 2018. Effects of TiO₂ on microstructural, mechanical properties and in-vitro bioactivity of plasma sprayed yttria stabilised zirconia coatings for dental application. *Ceramics International* 44: 4271-4281. IF 2.986
57. Nabilah Afiqah Mohd Radzuan, Abu Bakar Sulong, Mahendra Rao Somalu, Edy Herianto Majlan, Teuku Husaini and Masli Irwan Rosli. 2018. Effects of die configuration on the electrical conductivity of polypropylene reinforced milled carbon fibers: an application on a bipolar plate. *Polymers* 10. IF 3.364.
58. Pei-Ling Tang, Peer Mohamed Abdul, Nurul Sakinah Engliman, Osman Hassan. 2018. Effects of pretreatment and enzyme cocktail composition on the sugars production from oil palm empty fruit bunch fiber (OPEFBF). *Cellulose* 25. IF 3.417.
59. Abdullah Abdul Samat, Abdul Azim Jais, Mahendra Rao Somalu, Nafisah Osman, Andanastuti Muchtar, Kean Long Lim. 2018. Electrical and electrochemical characteristics of La_{0.6}Sr_{0.4}CoO_{3-d} cathode materials synthesized by a modified citrate-EDTA sol-gel method assisted with activated carbon for proton-conducting. *Journal of Sol-Gel Science and Technology* 86. IF 1.575.

60. E.H. Majlan, D. Rohendi, W.R.W. Daud, T. Husaini, M.A. Haque. 2018. Electrode for proton exchange membrane fuel cells: A review. *Renewable and Sustainable Energy Reviews* 89. IF 8.05.
61. Ahmad Fudholi, Muhammad Zohri, Goh Li Jin, Adnan Ibrahim, Chan Hoy Yen, Mohd Yusof Othman, Mohd Hafidz Ruslan & Kamaruzzaman Sopian. 2018. Energy and exergy analyses of photovoltaic thermal collector with V-Groove. *Solar Energy* 159: 742-750. IF 4.018.
62. Nurul Syakirah Nazri, Ahmad Fudholi, Bardia Bakhtyar, Can Hoy Yen, Adnan Ibrahim, Mohd hafidz Ruslan, Sohif Mat, Kamaruzzaman Sopian. 2018. Energy economic analysis of photovoltaic-thermal-thermoelectric (PVT-TE) air collectors. *Renewable and Sustainable Energy Reviews* 92. IF 8.05.
63. Javad Safaei, Habib Ullah, Nurul Aida Mohamed, Mohamad Firdaus Mohamad Noh, Mohd Fairuz Soh, Asif Ali Tahir, Norasikin Ahmad Ludin, Mohd Adib Ibrahim, Wan Nor Roslam Wan Isahak, Mohd Asri Mat Teridi. 2018. Enhanced photoelectrochemical performance of Z-scheme g-C₃N₄/BiVO₄ photocatalyst. *Applied Catalysis B: Environmental* 234. IF 9.446.
64. Woon Chan Chong, Ying Tao Chung, Yeit Haan Teow, Masniroszaima Md Zain, Ebrahim Mahmoudi, Abdul Wahab Mohammad. 2018. Environmental impact of nanomaterials in composite membranes: life cycle assessment of algal membrane photoreactor using polyvinylidene fluoride - composite membrane. *Journal of Cleaner Production* 202. IF 5.715.
65. Norzaura Abd Rahman, Nur Shazwani Muhammad & Wan Hanna Melini Wan Mohtar. 2018. Evolution of research on water leakage control strategies: where are we now? *Urban Water Journal* 15. IF 2.658.
66. Mohammad Tariqul Islam, Md Samsuzzaman, Md Tarikul Islam and Salehin Kibria. 2018. Experimental breast phantom imaging with metamaterial-inspired nine-antenna sensor array. *Sensors* 18. IF 2.677.
67. Md Tarikul Islam, Md Samsuzzaman, Salehin Kibria and Mohammad Tariqul Islam. 2018. Experimental breast phantoms for estimation of breast tumor using microwave imaging systems. *IEEE Access* 6. IF 3.244.
68. Javad Safaei, Nurul Aida Mohamed, Mohamad Firdaus Mohamad Noh, Mohd Fairuz Soh, Muhammad Arif Riza, Nurul Syafiqah Mohamed Mustakim, Norasikin Ahmad Ludin, Mohd Adib Ibrahim, Wan Nor Roslam Wan Isahak, Mohd Asri Mat Teridi. 2018. Facile fabrication of graphitic carbon nitride, (g-C₃N₄) thin film. *Journal of Alloys and Compounds* 769. IF 3.133.
69. Shaw Yong Toh, Kee Shyuan Loh, Siti Kartom Kamarudin, Wan Ramli Wan Daud. 2018. Facile preparation of ultra-low Pt loading graphene-immobilized electrode for methanol oxidation reaction. *International Journal of Hydrogen Energy* 43. IF 4.229.
70. A.B.M.A. Kaish, M. Jamil, S.N. Raman, M.F.M. Zain, Lutfun Nahar. 2018. Ferrocement composites for strengthening of concrete columns: A review. *Construction and Building Materials* 160: 326-340. IF 3.169.
71. Mohammad Tariqul Islam, Touhidul Alam, Iskandar Yahya and Mengu Cho. 2018. Flexible radio-frequency identification (RFID) tag antenna for sensor applications. *Sensors* 18. IF 2.677.
72. Ahmed W. Al Zand, Wan Hamidon W. Badaruzzaman, Azrul A. Mutalib and Salam J. Hilo. 2018. Flexural behaviour of CFST beams partially strengthened with unidirectional CFRP sheets: experimental and theoretical study. *Journal of Composites for Construction - ASCE* 22. IF 2.648.
73. Mohd Suffian Yusoff, Hamidi Abdul Aziz, Mohd Faiz Muaz Ahmad Zamri, Fatimah Suja, Ahmad Zuhairi Abdullah, Noor Ezlin Ahmad Basri. 2018. Floc behavior and removal mechanisms of cross-linked Durio zibethinus seed starch as a natural flocculant for landfill leachate coagulation-flocculation treatment. *International Journal of Integrated Waste Management, Science and Technology* 74: 362-372. IF 4.03.
74. Jazuri Abdullah, Nur Shazwani Muhammad, Pierre Y. Julien, Junaidah Ariffin, Atikah Shafie. 2018. Flood flow simulations and return period calculation for the Kota Tinggi watershed, Malaysia. *Journal of Flood Risk Management* 11: 766-782. IF 3.121.
75. Shareena Fairuz Abdul Manaf, Jamaliah Md Jahim, Shuhaida Harun, Abdullah Amru Indera Luthfi. 2018. Fractionation of oil palm fronds (OPF) hemicellulose using dilute nitric acid for fermentative production of xylitol. *Industrial Crops and Products* 115: 6-15. IF 3.181.

76. Sarada Idris, Nur Hidayah Azeman, Noor Azwen Noor Azmy, Chantara They Ratnam, Mohd Adzir Mahdi and Ahmad Ashrif A. Bakar. 2018. Gamma irradiated Py/PVA for GOx immobilization on tapered optical fiber for glucose biosensing. *Sensors and Actuators B: Chemical* 273. IF 5.401.
77. Javad Safaei, Nurul Aida Mohamed, Mohamad Firdaus Mohamad Noh, Mohd Fairuz Soh, Norasikin Ahmad Ludin, Mohd Adib Ibrahim, Wan Nor Roslam Wan Isahak and Mohd Asri Mat Teridi. 2018. Graphitic carbon nitride (g-C₃N₄) electrodes for energy conversion and storage: a review on photoelectrochemical water splitting, solar cells and supercapacitors. *Journal of Materials Chemistry A* 6. IF 8.867.
78. Azianabiha A Halip Khalida, Zahira Yaakob, Siti Rozaimah SheikhAbdullah, Mohd SobriTakriff. 2018. Growth improvement and metabolic profiling of native and commercial *Chlorella sorokiniana* strains acclimatized in recycled agricultural wastewater. *Bioresource Technology* 247: 930-939. IF 5.651.
79. Caiyan He, Junbin Fang, Yanan Zhang, Yu Yang, Jianhui Yu, Jun Zhang, Heyuan Guan, Wentao Qiu, Pengjun Wu, Jiangli Dong, Huihui Lu, Jieyuan Tang, Wenguo Zhu, N. Arsad, Yi Xiao and Zhe Chen. 2018. High performance all-fiber temperature sensor based on coreless side-polished fiber wrapped with polydimethylsiloxane. *Optics Express* 26. IF 3.307.
80. Mohammad Shakeri, Mohsen Shayestegan, S.M. Salim Reza, Iskandar Yahya, Badariah Bais, Md Akhtaruzzaman, Kamaruzzaman Sopian, Nowshad Amin. 2018. Implementation of a novel home energy management system (HEMS) architecture with solar photovoltaic system as supplementary source. *Renewable Energy* 125: 108-120. IF 4.357.
81. Islam, M., Shareef, H., Mohamed, A. 2018. Improved approach for electric vehicle rapid charging station placement and sizing using Google maps and binary lightning search algorithm. *PLoS One* 12: 1-20. IF 3.057.
82. Wan Shafrina Wan Mohd Jaafar, Iain Hector Woodhouse, Carlos Alberto Silva, Hamdan Omar, Khairul Nizam Abdul Maulud, Andrew Thomas Hudak, Carine Klauberg, Adrián Cardil and Midhun Mohan. 2018. Improving individual tree crown delineation and attributes estimation of tropical forests using airborne LiDAR data. *Forests* 9. IF 1.951.
83. Mohamad Azuwa Mohamed, Juhana Jaafar, M.F. M. Zain, Lorna Jeffery Minggu, Mohammad B. Kassim, Mohamad Saufi Rosmi, Nur Hashimah Alias, Nor Azureen Mohamad Nor, W.N. W. Salleh, Mohd Hafiz Dzarfan Othman. 2018. In-depth understanding of core-shell nanoarchitecture evolution of g-C₃N₄@C, N co-doped anatase/rutile: Efficient charge separation and enhanced visible-light photocatalytic performance. *Applied Surface Science* 436. IF 3.387.
84. Jian Ping Tan, Abdullah Amru Indera Luthfi, Shareena Fairuz Abdul Manaf, Ta Yeong Wu, Jamaliah Md. Jahim. 2018. Incorporation of CO₂ during the production of succinic acid from sustainable oil palm frond juice. *Journal of CO₂ Utilization* 26. IF 4.292.
85. Wan Hanna Melini Wan Mohtar, Haitham Afan, Ahmed El-Shafie, Charles Hin Joo Bong & Aminuddin Ab. Ghani. 2018. Influence of bed deposit in the prediction of incipient sediment motion in sewers using artificial neural networks. *Urban Water Journal* 15. IF 2.658.
86. S.A.Muhammed Ali, Mustafa Anwar, Nurul Ashikin, Andanastuti Muchtar, Mahendra Rao Somalu. 2018. Influence of oxygen ion enrichment on optical, mechanical, and electrical properties of LSCF perovskite nanocomposite. *Ceramics International* 44. IF 2.986.
87. Khalefa A. Faneer, Rosiah Rohani, Abdul Wahab Mohammad. 2018. Influence of pluronic addition on polyethersulfone membrane for xylitol recovery from biomass fermentation solution. *Journal of Cleaner Production* 171: 995-1005. IF 4.959.
88. Chuin Hao Chin, Andanastuti Muchtar, Che Husna Azhari, Masfueh Razali & Mohamed Aboras. 2018. Influences of the processing method and sintering temperature on the translucency of polycrystalline yttria-stabilized tetragonal zirconia for dental applications. *Ceramics International* 44. IF 2.986.
89. N.N.R. Ahmad, C.P. Leo, A.W. Mohammad, A.L. Ahmad. 2018. Interfacial sealing and functionalization of polysulfone/SAPO-34 mixed matrix membrane using acetate-based ionic liquid in post-impregnation for CO₂ capture. *Separation and Purification Technology* 197. IF 3.359.
90. Fareeza Jasmi, Nur Hidayah Azeman, Ahmad Ashrif A. Bakar, Mohd Saiful Dzulkefly Zan,

- Khairiah Haji Badri, Mohd Sukor Su'ait. 2018. Ionic conductive polyurethane-graphene nanocomposite for performance enhancement of optical fiber bragg grating temperature sensor. *IEEE Access* 6. IF 3.244.
91. Eistiak Ahamed, Md. Mehedi Hasan, Mohammad Rashed Iqbal Faruque, Mohd Fais Bin Mansor, Sabirin Abdullah, Mohammad Tariqul Islam. 2018. Left-handed metamaterial inspired by joint TD geometry on flexible NiAl₂O₄ substrate. *PLoS One* 13. IF 2.806.
92. Nur Adilla Che Samsuddin, Md Firoz Khan, Khairul Nizam Abdul Maulud, Ahmad Hazuwan Hamid, Fahia Tarannum Munna, Muhammad Aizat Ab Rahim, Mohd Talib Latif, Md. Akhtaruzzaman. 2018. Local and transboundary factors impacts on trace gases and aerosol during haze episode in 2015 El Nino in Malaysia. *Science of the Total Environment* 630:1502-1514. IF 4.9.
93. Waheb A. Jabbar, Wasan Kadhim Saad, and Mahamod Ismail. 2018. MEQSA-OLSRv2: a multicriteria-based hybrid multipath protocol for energy-efficient and QoS-aware data routing in MANET-WSN convergence scenarios of IoT. *IEEE Access* 6. IF 3.244.
94. M. N. Mohammed, M. Z. Omar, Salah Al-Zubaidi, K. S. Alhawari and M. A. Abdelgnei. 2018. Microstructure and mechanical properties of thixowelded AISI D2 tool steel. *Metals* 8. IF 1.984.
95. Abdolali Fayyaz, Norhamidi Muhamad, Abu Bakar Sulong. 2018. Microstructure and physical and mechanical properties of micro cemented carbide injection. *Powder Technology* 326: 151-158. IF 2.942.
96. Md. Zulfiker Mahmud, Mohammad Tariqul Islam, Norbahiah Misran, Salehin Kibria, Md. Samsuzzaman. 2018. Microwave imaging for breast tumor detection using uniplanar AMC based CPW -fed microstrip antenna. *IEEE Access* 6. IF 3.244.
97. Mohammad Tariqul Islam, Md. Amanath Ullah, Touhidul Alam, Mandeep Jit Singh and Mengu Cho. 2018. Microwave imaging sensor using low profile modified stacked type planar inverted f antenna. *Sensors* 18. IF 2.677.
98. Majid Niaz Akhtar, Abu Bakar Sulong, A. Umer, Ammar Bin Yousaf, Muhammad Azhar Khan. 2018. Multi-component MWCNT/NG/EP-based bipolar plates with enhanced mechanical and electrical characteristics fabricated by compression moulding. *Ceramics International* 44. IF 2.986.
99. Mohd Asyraf Zulkifley, Niki Trigoni. 2018. Multiple-model fully convolutional neural networks for single object tracking on thermal infrared video. *IEEE Access* 6. IF 3.244.
100. Mahammad A. Hannan, Molla S. Hossain Lipu, Aini Hussain, Mohamad H. Saad, Afida Ayob. 2018. Neural network approach for estimating state of charge of lithium-ion battery using backtracking search algorithm. *IEEE Access* 6: 10069-10079. IF 3.244.
101. Kian-Ghee Tiew, Noor Ezlin Ahmad Basri, Kohei Watanabe. 2018. Non-governmental organizations solid waste recycling initiatives in Peninsular Malaysia. *Waste Management* 75. IF 4.03.
102. Mustafa M. Ali, S.A. Osman, O.A. Husam and Ahmed W. Al-Zand. 2018. Numerical study of the cyclic behavior of steel plate shear wall systems (SPSWs) with differently shaped openings. *Steel and Composite Structures* 26: 361-373. IF 3.198.
103. Buthainah Ali, Siti Masrinda Tasirin, Payam Aminayi, Zahira Yaakob, Nur Tantiyani Ali, Wadhah Noori. 2018. Non-supported nickel-based coral sponge-like porous magnetic alloys for catalytic production of syngas and carbon bio-nanofilaments via a biogas decomposition approach. *Nanomaterials* 8. IF 3.553.
104. Mustafa M. Ali, S.A. Osman, O.A. Husam and Ahmed W. Al-Zand. 2018. Numerical study of the cyclic behavior of steel plate shear wall systems (SPSWs) with differently shaped openings. *Steel and Composite Structures* 26: 361-373. IF 3.198.
105. Muhammed Ali S. A., Mustafa Anwar, Nor Fatina Raduwan, Andanastuti Muchtar, Mahendra Rao Somalu. 2018. Optical, mechanical and electrical properties of LSCF-SDC composite cathode prepared by sol-gel assisted rotary evaporation technique. *Journal of Sol-Gel Science and Technology* 86. IF 1.575.
106. Yusuf Nazir, Shuwahida Shuib, Mohd Sahaid Kalil, Yuanda Song & Aidil Abdul Hamid. 2018. Optimization of culture conditions for enhanced growth, lipid and Docosahexaenoic Acid (DHA) production of aurantiochytrium SW1 by response surface methodology. *Scientific Reports* 8. IF 4.259.

107. N. Sulaiman, M.A. Hannan, A. Mohamed, P.J. Ker, E.H. Majlan, W.R. Wan Daud. 2018. Optimization of energy management system for fuel-cell hybrid electric vehicles: issues and recommendations. *Applied Energy* 228. IF 7.182.
108. M.A.Hannan, Jamal A.Ali, Azah Mohamed, Aini Hussain. 2018. Optimization techniques to enhance the performance of induction motor drives: A review. *Renewable and Sustainable Energy Reviews* 81: 1611-1626. IF 8.05.
109. Daniel James Johnson, Wafa Ali Suwaileh, Abdul Wahab Mohammed, Nidal Hilal. 2018. Osmotic's potential: An overview of draw solutes for forward osmosis. *Desalination* 434. IF 5.527.
110. Andrew Tanny Liem, I-Shyan Hwang, AliAkbar Nikoukar, Cheng Zen Yang, Mohammad Syuhaimi Ab-Rahman and Ching-Hu Lu. 2018. P2P live-streaming application-aware architecture for QoS enhancement in the EPON. *IEEE System Journal* 12: 648-658. IF 3.882.
111. Md. Amanath Ullah, Mohammad Tariqul Islam, Touhidul Alam and Farhad Bin Ashraf. 2018. Paper-based flexible antenna for wearable telemedicine applications at 2.4 GHz ISM band. *Sensors* 18. IF 2.677.
112. Mohammad Jakir Hossain, Mohammad Rashed Iqbal Faruque, Mohammad Tariqul Islam. 2018. Perfect metamaterial absorber with high fractional bandwidth for solar energy harvesting. *PLoS One* 13. IF 2.806.
113. Mohammed Shadi S. Abujazara, S. Fatihah, E.R. Lotfy, A.E. Kabeeld, Suraya Sharil. 2018. Performance evaluation of inclined copper-stepped solar still in a wet tropical climate. *Desalination* 425: 94-103. IF 5.527.
114. N. Shaari, S.K. Kamarudin. 2018. Performance of crosslinked sodium alginate/ sulfonated graphene oxide as polymer electrolyte membrane in DMFC application: RSM optimization approach. *International Journal Of Hydrogen Energy* 43. IF 3.582.
115. Y. Arij, S. Fatihah, A.R. Rakmi. 2018. Performance of pilot scale anaerobic biofilm digester (ABD) for the treatment of leachate from a municipal waste transfer station. *Bioresource Technology* 260. IF 5.651.
116. Ibdal Satar, Wan Ramli Wan Daud, Byung Hong Kim, Mahendra Rao Somalu, Mostafa Ghasemi, Mimi Hani Abu Bakar, Tahereh Jafary, Sharifah Najjha Timmiati. 2018. Performance of titanium-nickel (Ti/Ni) and graphite felt-nickel (GF/Ni) electrodeposited by Ni as alternative cathodes for microbial fuel cells. *Journal of the Taiwan Institute of Chemical Engineers* 89. IF 4.217.
117. Md Firoz Khan, Khairul Nizam Abdul Maulud, Mohd Talib Latif, Jing Xiang Chung, Norhaniza Amil, Azwani Alias, Mohd Shahrul Mohd Nadzir, Mazrura Sahani, Maznorizan Mohammad, Mohd Firdaus Jahaya, Hanashriah Hassan, Farah Jeba, Norhayati Md Tahir, Sharifah. 2018. Physicochemical factors and their potential sources inferred from long-term rainfall measurements at an urban and a remote rural site in tropical areas. *Science of The Total Environment* 613-614: 1401-1416. IF 4.9.
118. Abudukeremu Kadier, Mohd Sahaid Kalil, Manoj Pudukudy, Hassimi Abu Hasan, Azah Mohamed and Aidil Abdul Hamid. 2018. Pico hydropower (PHP) development in Malaysia: Potential, present status, barriers and future perspectives. *Renewable and Sustainable Energy Reviews* 81: 2796-2805. IF 6.798.
119. M. Hasbullah Mazlan, Ehab Ali, Athirah M. Ramly, Rosdiadee Nordin, Mahamod Ismail, A. Sali. 2018. Pilot decontamination using coordinated wiener predictor in massive-MIMO system. *IEEE Access* 6. IF 3.244.
120. T Dutta, A Chauniyal, I Singh, R Narasimhan, P Thamburaja and U Ramamurty. Plastic deformation and failure mechanisms in nano-scale notched metallic glass specimens under tensile loading. *Journal of the Mechanics and Physics of Solids* 111: 393-413. IF 4.255.
121. Nadiyah Khairul Zaman, Rosiah Rohani, Abdul Wahab Mohammad, Arun Mohan Isloor. 2018. Polyimide-graphene oxide nanofiltration membrane: Characterizations and application in enhanced high concentration salt removal. *Chemical Engineering Science* 177. IF 2.895.
122. Haider Mahmood Jawad, Rosdiadee Nordin, Sadik Kamel Gharghan, Aqeel Mahmood Jawad, Mahamod Ismail, and Mahmood Jawad Abu-AlShaeer. 2018. Power reduction with sleep/wake on redundant data (SWORD) in a wireless sensor network for energy-efficient precision agriculture. *Sensors* 18. IF 2.677.
123. Md Atiqur Rahman, Eistiak Ahamed, Mohammad Rashed Iqbal Faruque, Mohammad Tariqul Islam. 2018. Preparation of NiAl₂O₄-based flexible

- substrates for metamaterials with negative dielectric properties. *Scientific Reports* 8. IF 4.259.
124. Noor Faeizah Amat, Andanastuti Muchtar, Muhammad Sufiyan Amril, Mariyam Jameelah Ghazali and Norziha Yahaya. 2018. Preparation of presintered zirconia blocks for dental restorations through colloidal dispersion and cold isostatic pressing. *Ceramics International* 44: 6409-6416. IF 2.986.
 125. Mohamed Shadi S. Abujazar, Suja Fatimah, Ibrahim Anwar Ibrahim, A.E. Kabeel, SURaya Shareel. 2018. Productivity modelling of a developed inclined stepped solar still system based on actual performance and using a cascaded forward neural network model. *Journal of Cleaner Production* 170: 147-159. IF 5.715.
 126. Norasikin Ahmad Ludin, Nur Ifthitah Mustafa, Marlia M. Hanafiah, Mohd Adib Ibrahim, Mohd Asri Mat Teridi, Suhaila Sepeai, Azami Zaharim, Kamaruzzaman Sopian. 2018. Prospects of life cycle assessment of renewable energy from solar photovoltaic technologies: A review. *Renewable and Sustainable Energy Reviews* 96. IF 8.05.
 127. M. M. Elgaud, Ahmad Ashrif A Bakar, Abdulfatah Abushagur Ghaith, Nani Fadzlina Naim, Norhana Arsad, Mohd Hadri Hafiz Mokhtar, Nur Hidayah Azeman, Mohd Saiful Dzulkefly Zan. 2018. Pulse compressed time domain multiplexed fiber Bragg grating sensor: a comparative study. *IEEE Access* 6. IF 3.244.
 128. Emad Hosseinpour, Shahrizan Baharom, W. H. W. Badaruzzaman, Ahmed W. Al Zand. 2018. Push-out test on the web opening shear connector for a slim-floor steel beam: Experimental and analytical study. *Engineering Structures* 163: 137-152. IF 1.719.
 129. Mahammad A. Hannan , Jamal A. Ali, Azah Mohamed, Ungku Anisa Ungku Amirulddin, Nadia Mei Lin Tan , Mohammad Nasir Uddin. 2018. Quantum-behaved lightning search algorithm to improve indirect field oriented fuzzy PI control for IM drive. *IEEE Transactions on Industry Applications* 54. IF 2.937.
 130. Yusor Rafid Bahar Al-Mayouf, Nor Fadzilah Abdullah, Omar Adil Mahdi, Suleman Khan , Mahamod Ismail, Mohsen Guizani, and Syed Hassan Ahmed. 2018. Real-time intersection-based segment aware routing algorithm for urban vehicular networks. *IEEE Transactions on Intelligent Transportation Systems* 19. IF 3.724.
 131. Mohammad Tariqul Islam, Md. Naimur Rahman, Md. Samsuzzaman, Mohd Fais Mansor and Norbahiah Misran. 2018. Resonator-inspired metamaterial sensor: design and experimental validation for measuring thickness of multi-layered structures. *Sensors* 18. IF 2.677.
 132. Nurull Muna Daud, Siti Rozaimah Sheikh Abdullah, Hassimi Abu Hasan. 2018. Response surface methodological analysis for the optimization of acid catalysed transesterification biodiesel wastewater pretreatment using coagulation flocculation process. *Process Safety and Environmental Protection* 113: 184-192. IF 2.905.
 133. M. A. Hannan, R. A. Begum, M. G. Abdolrasol, M. S. Hossain Lipu, A. Mohamed, M. M. Rashid. 2018. Review of baseline studies on energy policies and indicators in Malaysia for future sustainable energy development. *Renewable and Sustainable Energy Reviews* 94. IF 8.05.
 134. Mohammad Faisal, Mahammad A. Hannan, Pin Jern Ker, Aini Hussain, Muhamad Bin Mansor and Frede Blaabjerg. 2018. Review of energy storage system technologies in microgrid applications: issues and challenges. *IEEE Access* 6. IF 3.244.
 135. Hussain Shareef, Maytham S. Ahmed, Azah Mohamed, Eslam Al Hassan. 2018. Review on home energy management system considering demand responses, smart technologies, and intelligent controllers. *IEEE Access* 6. IF 3.244.
 136. S. Mahalingam, H. Abdullah, A. Manap. 2018. Role of acid-treated CNTs in chemical and electrochemical impedance study of dye-sensitised solar cell. 2018. *Electrochimica Acta* 364: 275-283. IF 4.798.
 137. Ying, Y.P., Kamarudin, S.K. Masdar, M.S. 2018. Silica-related membranes in fuel cell applications: an overview. *International Journal of Hydrogen Energy* 43. IF 3.582.
 138. Javad Zareei, Abbas Rohani, Wan Mohd Faizal Wan Mahmood. 2018. Simulation of a hydrogen/natural gas engine and modelling of engine operating parameters. *International Journal of Hydrogen Energy* 43. IF 3.582.
 139. Nik Muhammad Hafiz, Mohd Radzi Abu Mansor, Wan Mohd Faizal Wan Mahmood. 2018. Simulation of the combustion process

- for a CI hydrogen engine in an argon-oxygen atmosphere. *International Journal of Hydrogen Energy* 43. IF 3.582.
140. Tahereh Jafary, Wan Ramli Wan Daud, Saad A. Aljlil, Ahmad Fauzi Ismail, Abdullah Al-Mamun, Mahad S. Baawain, Mostafa Ghasemi. 2018. Simultaneous organics, sulphate and salt removal in a microbial desalination cell with an insight into microbial communities. *Desalination* 445. IF 5.527.
141. Rahmat, N., Yaakob, Z., Pudukudy, M., Rahman, N.A., Jahaya, S.S. 2018. Single step solid-state fusion for MgAl₂O₄ spinel synthesis and its influence on the structural and textural properties. *Powder Technology* 329: 409-419. IF 2.942.
142. Molla S. Hossain Lipu, Mahammad A. Hannan, Aini Hussain, Mohamad H. M. Saad, Afida Ayob and Frede Blaabjerg. 2018. State of charge estimation for lithium-ion battery using recurrent NARX neural network model based lighting search algorithm. *IEEE Access* 6. IF 3.244.
143. Mahammad A. Hannan, Md. Murshadul Hoque, Aini Hussain, Yushaizad Yusof & Pin Jern Ker. 2018. State-of-the-art and energy management system of lithium-ion batteries in electric vehicle applications: Issues and recommendations. *IEEE Access* 6. IF 3.244.
144. Gabriele Gradoni, Johannes Russer, Mohd Hafiz Baharuddin, Michael Haider, Peter Russer, Christopher Smartt, Stephen C. Creagh, Gregor Tanner, David W. P. Thomas. 2018. Stochastic electromagnetic field propagation measurement and modelling. *Philosophical Transactions. Series A, Mathematical, Physical, and Engineering Sciences* 376. IF 2.97.
145. Mustafa Anwar, Muhammed Ali S.A., Nurul Akidah Baharuddin, Nor Fatina Raduwan, Andanastuti Muchtar, Mahendra Rao Somalu. 2018. Structural, optical and electrical properties of Ce_{0.8}Sm_{0.2-x}Er_xO_{2-d} (x=0-0.2) Co-doped ceria electrolytes. *Ceramics International* 44. IF 2.986.
146. N.S. Shamsul, S.K. Kamarudin, N.A. Rahmana. 2018. Study on the physical and chemical composition of agro wastes for the production of 5-hydroxymethylfurfural. *Bioresource Technology* 247: 821-828. IF 5.651.
147. Abudukeremu Kadier, Mohd Sahaid Kalil, Kuppam Chandrasekhar, Gunda Mohanakrishna, Ganesh Dattatraya Saratale, Rijuta Ganesh Saratale, Gopalakrishnan Kumar, Arivalagan Pugazhendhi and Periyasamy Sivagurunathan. 2018. Surpassing the current limitations of high purity H₂ production in microbial electrolysis cells (MECs): Strategies for inhibiting the growth of methanogens. *Bioelectrochemistry* 119: 211-219. IF 3.346.
148. Mahammad A. Hannan, Jamal Abd Ali, Pin Jern Ker, Azah Mohamed, Molla S. H. Lipu, Aini Hussain. 2018. Switching techniques and intelligent controllers for induction motor drive: issues and recommendations. *IEEE Access* 6. IF 3.244.
149. Mohammed Falah Allawi, Othman Jaafar, Mohammad Ehteram, Firdaus Mohamad Hamzah, Ahmed El-Shafie. 2018. Synchronizing artificial intelligence models for operating the dam and reservoir system. *Water Resources Management* 32. IF 2.848.
150. Masniroszaim Md Zain, Abdul Wahab Mohammad, Shuhaida Harun, Nurul Aina Fauzi, Nur Hanis Hayati Hairom. 2018. Synergistic effects on process parameters to enhance enzymatic hydrolysis of alkaline oil palm fronds. *Industrial Crops & Products* 122. IF 3.181.
151. N.H. Sulaiman, M.J. Ghazali, J. Yunas, A. Rajabi, B.Y. Majlis, M. Razali. 2018. Synthesis and characterization of CaFe₂O₄ nanoparticles via co-precipitation and auto-combustion methods. *Ceramic International* 44: 46-50. IF 2.986.
152. Muneer M. Ba-Abbad, Mohd S. Takriff, Abdelbaki Benamor, Mustafa S. Nasser, Ebrahim Mahmoudi, Abdul Wahab Mohammad. 2018. Synthesis and characterization of Sm³⁺ doped ZnO nanoparticles via a sol gel method and their photocatalytic application. *Journal of Sol-Gel Science and Technology* 85. IF 1.575.
153. Jacob Lok Guan Lim, Sudharshan N. Raman, Fook Chuan Lai, Muhammad Fauzi Mohd. Zain, Roszilah Hamid. 2018. Synthesis of nano cementitious additives from agricultural wastes for the production of sustainable concrete. *Journal of Cleaner Production* 171: 1150-1160. IF 5.715.
154. Ameen M. Ali, Yulisa Yusoff, Lamy M. Ali, Halina Misran, Md. Akhtaruzzaman, Mohammad A. Alghoul, Kamaruzzaman Sopian, Shahidan Radiman, Nowshad Amin. 2018. Synthesis of sphere-like-crystal CdS powder and thin films using chemical residue

- in chemical bath deposition (CBD) for thin film solar cell application. *Solar Energy* 173. IF 4.018.
155. Muhamad Nazri Borhan, Ahmad Nazrul Hakimi Ibrahim, Affan Aziz, Muhamad Razuhanfi Mat Yazid. 2018. The relationship between the demographic, personal, and social factors of Malaysian motorcyclists and risk taking behavior at signalized intersections. *Accident Analysis & Prevention* 121. IF 2.685.
156. H.M.C.C. Somarathna, S.N. Raman, D. Mohotti, A.A. Mutalib, K.H. Badri. 2018. The use of polyurethane for structural and infrastructural engineering applications: a state-of-the-art review. *Construction and Building Materials* 190. IF 3.169.
157. Kin Yuen Leong, Idayu Razali, K.Z. Ku Ahmad, Hwai Chyuan Ong, M.J. Ghazali, Mohd Rosdzimin Abdul Rahman. 2018. Thermal conductivity of an ethylene glycol/water-based nanofluid with copper-titanium dioxide nanoparticles: An experimental approach. *International Communications in Heat and Mass Transfer* 90: 23-28. IF 3.718.
158. Zakaria, I., Mohamed, W.A.N.W., Azmi, WE.H., Mamat, A.M.I., Mamat, R. & Daud, W.R.W. 2018 . Thermo-electrical performance of PEM fuel cell using Al₂O₃ nanofluids. *International Journal of Heat and Mass Transfer* 119. IF 3.458.
159. Kian-Ghee Tiew, Noor Ezlin Ahmad Basri, Kohei Watanabe. 2018. Tourism hotspot and festive solid waste recycling initiatives in Malaysia. *Waste Management* 77. IF 4.03.
160. Nishata Royan Rajendran Royan, Abu Bakar Sulong, Nor Yuliana Yuhana, Ruey Shan Chen, Mohd Hafizuddin Ab Ghani, Sahrim Ahmad. 2018. UV/O₃ treatment as a surface modification of rice husk towards preparation of novel biocomposites. *PLoS One* 13. IF 2.806.
161. Md. Zulfiker Mahmud, Mohammad Tariqul Islam, Norbahiah Misran, Ali F. Almutairi and Mengu Cho. 2018. Ultra-wideband (UWB) antenna sensor based microwave breast imaging: a review. *Sensors* 18. IF 2.677.
162. P. Sushitha Menon, Fairus Atida Said, Gan Siew Mei, Dilla Duryha Berhanuddin, Akrajas Ali Umar, Sahbudin Shaari, Burhanuddin Yeop Majlis. 2018. Urea and creatinine detection on nano-laminated gold thin film using Kretschmann-based surface plasmon resonance biosensor. *PLoS One* 13. IF 2.806.
163. Mahmoud Alawi, Raed Alsaqour, Mahamod Ismail, Elankovan Sundararajan, Maha Abdelhaq. 2018. Vehicular wi-fi offloading in heterogeneous vehicular networks: techniques and challenges. *Mobile Networks and Applications* 23. IF 3.259.

