البحوث المنشورة في سنة 2019

- 1- Ghassan A Hammadi, Khalid B Najim (2019) "Rheological Properties and Mechanical strength of Recycled Concrete Aggregate SCC" 12th International Conference Developments in eSystems Engineering 2019 Robotics, Sensors and Industry 4.0, Special Session: Sustainable Engineering and Environmental Technologies 7th-10th October 2019At: Kazan, Russia.
- 2- Saif S Mansoor, Khalid B Najim, Abdulkarim-Talaq Mohammad (2019) "Investigating the Use of Cement Kiln Dust (CKD) in Producing Alkali Activated Concrete" 12th International Conference Developments in eSystems Engineering 2019 Robotics, Sensors and Industry 4.0, Special Session: Sustainable Engineering and Environmental Technologies 7th-10th October 2019At: Kazan, Russia
- 3- Ayad Sulibi, Model Simulation of Cs-137 Contaminate at Al-Tuwaitha Site, Journal of Engineering and Applied Sciences ISSN: 1816-949X, 14 (3), 2019, 684-692
- 4- Jebur, A.A., Atherton, W., Al Khaddar, R.M., Aljanabi, K.R. (2019) "Performance analysis of an evolutionary LM algorithm to model the load-settlement response of steel piles embedded in sandy soil", Measurement: Journal of the International Measurement Confederation, Vol. 140, PP 622-635
- 5- Awad, H.A. and Parry, T., 2019, September. Applying Random Parameters Model to Evaluate the Impact of Traffic, Geometric and Pavement Condition Characteristics on Accident Frequencies Occurred at A-Roads Networks in the UK. In Scientific And Technical Conference Transport Systems Theory And Practice (pp. 3-19). Springer, Cham
- 6- Improvement of Inspection System for Damages in Reinforced Concrete Bridge by Using Knowledge-Based System (KBS), Developments in eSystems Engineering (DESE), International IEEE Conference.
- 7- Mahmoud k., Production and optimization of eco-efficient self-compacting concrete SCC with limestone and PET, Construction and Building Materials Journal, 2019.

- 8- Ahmed, Taher M., Hussain Al-Khalid, and Thamer Y. Ahmed. "Review of Techniques, Approaches and Criteria of Hot-Mix Asphalt Fatigue." Journal of Materials in Civil Engineering 31.12 (2019): 03119004
- 9- Ahmed, Taher M., Hussain Al-Khalid, and Thamer Y. Ahmed. "Review of Techniques, Approaches and Criteria of Hot-Mix Asphalt Fatigue." Journal of Materials in Civil Engineering 31.12 (2019): 03119004
- **10-** Farhan, A. H., A. Dawson and N. Thom (**2019**). "Behaviour of rubberised cement-bound aggregate mixtures containing different stabilisation levels under static and cyclic flexural loading." Road Materials and Pavement Design: **1-20**
- 11- Yasir Al-Ani, Ahmed Rahomi Rajab, Zainab Malik Ismael. A Novel Composite Polymer for Chemical Oxygen Demand and Total Suspended Solids Removal. 12th International Conference Developments in e Systems Engineering, Russia, Kazan, 2019
- 12- Saeed, F. et al., 2019. A Fuzzy Inference System Based Asphalt Surface Deterioration Prediction Model Due To Combined Interaction of Dynamic Loading-Water-Pavement. In TRB Annual Meeting
- 13- Adham, A., Wesseling, J. G., Riksen, M.J.P.M., Ouessar, M., Abed R. and Ritsema, C. J. (2019). Assessing the Impact of Climate Change on Rainwater Harvesting in the Oum Zessar Watershed in southeastern Tunisia. Agricultural Water Management 221, 131-140
- 14- Wesseling, J.G., A. Adham, M.J.P.M. Riksen, C.J. Ritsema and A.H. Heidema (submitted). A Microsoft Excel application to simulate and optimise water harvesting in a catchment. Submitted to Computers and Geosciences
- 15- Yasir Al-Ani, Ahmed Rahomi Rajab, Zainab Malik Ismael, 2019 "A Novel Composite Polymer for Chemical Oxygen Demand and Total Suspended Solids Removal", DeSE2019 conference
- **16-** Khalaf J. & Huang Z. (2019). 'The bond behaviour of reinforced concrete members at elevated temperatures
- 17- Ahmed A. Abbas, Hamza Gerçekcioğlu,, H. Haldun Göktaş, "Collimated and Focused Gaussian Laser Beam Scintillation in Weakly Turbulent "The 3rd

- International Conference on Computing, Communications, and Information Technology (CCIT 2019)
- **18-** Naser Al-Falahy; Mohammed AlMahamdy; Ali M Mahmood; "Performance Analysis of Millimeter Wave **5**G Networks for Outdoor Environment: Propagation Perspectives"; presented at the CCIT in the University of Anbar **2019**
- 19- Yousif I. Al Mashhadany, "Muscles Activity Detection from EMG signal of human leg posture afflicted by foot drop disease', Journal of Engineering and Applied Sciences (acceptance 2019 Vol. 15). (Scopus)
- 20- fabricated solar cell from ZnO/a-Si/polymers, EH Sabbar, MH Saleh, SM Salih, International Journal of Advanced Science and Technology 44, 89-98
- 21- Reversible island nucleation and growth with anomalous diffusion, EH Sabbar, JG Amar, Surface Science 664, 38-44
- 22- Analysis Study In Principles Of Operation Of DC Machine
- 23- Dynamic inverse controller with Matrix Converter Drive Feed Three Phase Induction Motor
- 24- Three Phase Induction Motor Torque Ripple Minimization Based On a Novel Nonlinear Dynamic Inverse Controller
- 25- Nonlinear Dynamic Inverse Controller Based In Field Oriented With SVPWM Current Control
- 26- Robust Dynamic Inverse Controller For Spacecraft Model VOLTAGE CONTROL OF DC GENERATORS USIN LOAD CHARACTERISTIC SIMULATION OF THREE-PHASE SALIENT POLE GENERATOR UNDER OPERATING CONDITIONS SPEED CONTROL OF DIRECT CURRENT MOTOR USING MECHANICAL
- 27- N. Al-falahy and O. Y. K. Alani, "Millimetre Wave Frequency Band as a Candidate Spectrum for 5G Network Architecture : A Survey," Elsevier Phys. Commun., vol. 32, no. DOI:10.1016/j.phycom.2018.11.003, pp. 120–244, 2019
- 28- N. Al-falahy and O. Y. K. Alani, "Coverage and Capacity Improvement of Millimetre Wave 5G Networks Using Remote Radio Heads," IET Networks, pp. 1–17, 2019

- 29- Fractional Order PID Controller Tuned By Bat Algorithm For Robot Trajectory control: in 3rd international conference on computing ,communications ,and information technology (CCIT 2019)
- **30-** Saeed, A. T., Taha, M. Q., & Abdullah, K. A. (2019). Tracking technique for the sudden change of PV inverter load. International Journal of Power Electronics and Drive Systems, **10**(4), **2076**
- **31-** Hamdi E. Ahmed, B.H. Salman, A. Sh. Kerbeet, Heat transfer enhancement of turbulent forced nanofluid flow in a duct using triangular rib, International Journal of Heat and Mass Transfer **134** (2019) **30–40**
- **32-** Priority-Based Decision Support System (PBDSS) by Genetic Algorithm as a Tool for Network Problem
- 33- Decision making in materials selection: an integrated approach with AHP
- 34- Nonlinear Vibration and Dynamic Analysis of Functionally Graded Graphene-Reinforced Eccentrically Stiffened Imperfection Composite Cylindrical Shell Panels
- 35- Fuzzy Nanofluid Model Investigation of Heat Transfer Performance
- 36- Integration Sustainability Water System Performance and Customer Satisfaction Based on Quality Function Deployment .
- 37- Optimal Refrigerant by Integrated Operational and Environmental Criteria in Air Conditioner.
- 38- A Maintenance Management -based Decision Support System for Multicriteria using AHP Methodology for Power Plants
- 39- A Simulation Model for Productivity Efficiency Improvement Using Pro-Model: Case Study of Pip Factory, AUS Journal, Vol. 26, No. 1, 133 142, 2019
- **40-** Mohanad A. Alfellag, H.E. Ahmed, O. T. Fadhil, A. Sh. Kherbeet, Optimal hydrothermal design of microchannel heat sink using trapezoidal cavities and solid/slotted oval pins, Applied Thermal Engineering **158** (2019) **113765**
- **41-** Khamis Naba Sayl & Nur Shazwani Muhammad & Ahmed El-Shafie" Identification of potential sites for runoff water harvesting" Water Management doi.org/10.1680/jwama.16.00109 ICE Publishing.

- **42-** Khamis Sayl, **2019** "GIS and Remote Sensing-based Approach for Desert Risk Reduction" Advances in Science, Technology &Innoviation doi.org/10.1007/978-3-030-01440-7.
- 43- Sadeq Oleiwi Sulaiman, Ammar Hatem Kamel, Khamis Naba Sayl Mohammed Yousif 2019"Waterresources management and sustainability over the Western desert of Iraq Environmental Earth Sciences (2019)
- 44- Sadeq Oleiwi Sulaiman, Ammar Hatem Kamel, Khamis Naba Sayl, Mohammed Yousif Alfadhel "Water resources management and sustainability over the Western desert of Iraq", Environmental Earth Sciences (2019) 78:495, Springer-Verlag GmbH Germany, part of Springer Nature 2019
- **45-** Alani, A. H., Bunnori, N. M., Noaman, A. T., & Majid, T. A. (2019). Durability performance of a novel ultra-high-performance PET green concrete (UHPPGC). Construction and Building Materials, 209, 395-405.
- **46-** H. A. Alasmari, B.H. Abu Bakar, A. T. Noaman, (2019) A Comparative Study on the Flexural Behaviour of Rubberized and Hybrid Rubberized Reinforced Concrete Beams, Civil Engineering Journal, Vol. 5, No. 5.
- 47- Al-Hadithi, A. I., Noaman, A. T., & Mosleh, W. K. (2019). Mechanical Properties and Impact Behavior of PET fiber reinforced Self-Compacting Concrete (SCC). Composite Structures, Volume 224, 111021
- 48- Noaman, A. T., Bakar, B. A., & Akil, H. M., (2019). Experimental evaluation of flexural impact resistance of steel fibre rubberized concrete. AUS Journal (Versión on-line ISSN 0718-7262/Versión impresa ISSN 0718-204X), Año: 2019, Edición especial: 26-1
- 49- FRP Strengthening of Web Panels of Steel Plate Girders against Shear Buckling Part-II: Fatigue Study and Cyclic Series of Tests, Composite Structures, 210 (2019).
- 50- Utilizing Recycled Concrete and Stone Aggregate as Replacement for Natural and Crushed Virgin Aggregate, International Journal of Engineering & Technology (UAE) 7 (4.37) 2018, 90-97.
- **51-** Finite Element Modelling of High-Strength Fibre Reinforced Concrete Columns Under Eccentric Loading, Third International Conference on Computing, Communications and Information Technology, CCIT **2019**, Ramadi, Iraq.

- **52-** Effect of High Temperature on Bond Strength of Concrete Reinforced with **180°** Hooked Bars, Third International Conference on Computing, Communications and Information Technology, CCIT **2019**, Ramadi, Iraq.
- 53- A Non-Linear Composite Finite Element Model for a New FRP Strengthening Technique Against Shear Buckling of Steel Plate Girders, International Conference on Civil and Environmental Engineering (I2C2E), Montreal, July 2019
- 54- Sulphate resistance of cement mortar contains glass powder. Journal of King Saud University Engineering Sciences. Saudi Arabia. 2019
- 55- Mahmood, N. S., Coffman, R.A., (2019). "Effect of Stress Path on Saturated Clay Moduli." Acta Geotechnica. In Preparation.
- 56- Zhao, Y., Mahmood, N.S., Coffman, R.A., (2019). "Small-strain and Large-strain Modulus Measurements with a Consolidation Device." Journal of Testing and Evaluation, Vol. 47, No. 2, pp. 1454-1478, https://doi.org/10.1520/JTE20160331
- 57- Mohammed T. Nawar, Noor A. Rajab, Sheelan M. Hamah "Experimental Investigation on the Efficacy of Polyethylene Aggregate on Impact Resistance of Concrete Slab". Anbar Journal of Engineering Sciences. Vol. (8), 2019. 9-15
- 58- Sheelan M. Hama, Alhareth M. Abdulghafor, Mohammed T. Nawar. "Fresh, Mechanical Properties and Impact Resistance Behavior of Eco-Friend Self-Compacted Concrete". NJES is an open access Journal with ISSN 2521-9154 and eISSN 2521-9162
- 59- Diyar I. Ahmed, S. Kasolang, Basim A. Khidhir, B. F. Yousif. Application of Response Surface Methodology to Predict Oil-Film Friction in Journal Bearing. International Conference on Advances in Mechanical Engineering, (ICAME), Malaysia. (Proceeding, ISI).
- 60- Diyar I. Ahmed, M. Z. Yusoff, Al-Falahi Amir, and S. Kasolang. High speed flow characteristics in gun tunnel, AIP Conf. Proc. 1440, 330. (Proceeding, ISI).
- 61- Diyar I. Ahmed, M. Z. Yusoff, Al-Falahi Amir, and S. Kasolang. High Speed Flow Characteristics in Gun Tunnel", 4TH INTERNATIONAL MEETING OF ADVANCES IN THERMOFLUIDS (IMAT 2011), PT 1 AND 2 Book Series: AIP Conference Proceedings Volume: 1440 Pages: 330-340. (Proceeding, ISI).

- 62- Diyar I. Ahmed, Yusoff M. Z & Al-Falahi Amir. An Experimental Comparison of Shock Wave Speed in a Conventional Gun Tunnel and Shock Tunnel, Proceeding of International Conference on Recent and Emerging Advanced technologies in Engineering (iCREAT2009). (Proceeding, ISI).
- 63- Diyar I. Ahmad, Yusoff M. Z & Al-Falahi Amir. Numerical Investigation of Initial Operating Conditions of UNITEN Shock Tunnel, Proceeding of Malaysian Science and Technology Congress Kuala Lumpur (MSTC), ALAYSIA. (Proceeding, ISI).
- **64-** Diyar I. Ahmed, Yusoff M. Z & Al-Falahi Amir. Numerical Study to Investigate Viscous Transient Flows in Shock Tunnel, Proceeding of the International Conference on Construction and Building Technology ICCBT.
- 65- Diyar I. Ahmed, Yusoff M. Z & Al-Falahi Amir.. Numerical Study to Investigate Pressure, Temperature and Velocity Histories inside Shock Tunnel, Proceeding of student conference on research and development SCOReD.
- 66- Sufuan Fadhil (2019)." Nanofiltration membranes for toxic lead removal-contribution of various mass transfer mechanisms on membrane performance". Indian chemical engineer. Under press
- 67- Sufyan Fadhil, Marino, T., Hassan F. Makki, Qusay F. Alsalhy, Blefari, S., Macedonio, F., Giorno, L., Enrico Drioli, , Alberto Figoli. (2019). Seawater desalination using PVDF-HFP membrane in DCMD process: Assessment of operating condition by Response Surface Method. Chemical Engineering Communications. Vol 2. 237-246