

Publications

Chemical and Petroleum Engineering

Year 2019

Journals

Sulaiman Al-Zuhair

1. M. Abubaker, M. El-Naas, S. Al-Zuhair (2019) Electrocoagulation treatment of reject brine effluent from Solvay process. *Desalination and Water treatment (Desalination Publications)* 163: 325-335
2. A. Jabeen, B. Reeder, D. Svistunenko, S. Hisaindee, S. Ashraf, S. Al-Zuhair, S. Battah (2019) Effect of the photodynamic therapy applications with potent microalgae constituents on several types of tumor. *Innovation and Research in BioMedical Engineering (Elsevier)* – 40:51–61
3. R. Shomal, H. Hisham, A. Mlhem, R. Hassan, S. Al-Zuhair (2019) Simultaneous extraction-reaction process for biodiesel production from microalgae. *Energy Reports (Elsevier)* 5: 37–40
4. M. Al-Ameri and S. Al-Zuhair (2019) Using Switchable Solvents for Enhanced, Simultaneous Microalgae Oil Extraction-Reaction for Biodiesel Production. *Biochemical Engineering Journal (Elsevier)* 141: 217–224
5. H. Taher, E. Nashef, N. Anvar, S. Al-Zuhair (2019) Enzymatic production of biodiesel from waste oil in ionic liquids medium. *Biofuels (Taylor & Francis)*, 10: 463 – 472
6. S. AlKetbi, H. ElSayed, S. Al-Zuhair (2018) Gold extraction from biosolid sludge obtained by sewage treatment. *Environmental Technology (Taylor & Francis)*, 40: 2643-2648
7. Y. Abdi, R. Shomal, H. Taher, S. Al-Zuhair (2019) Improving Reusability of Immobilized Lipase-Ionic Liquid System for Biodiesel Production. *Biofuels (Taylor & Francis)*, 10: 635-641

Abdulrahman Alraeesi

1. Abdulrazag Y. Zekri*, Ali H. Al-Marzouqi, Adel A. Azzam, and Abdulrahman Y. Alraeesi, "Optimization of Supercritical Fluid Extraction of Hydrocarbons from a Contaminated Soil: An Experimental Approach", *International Journal of Environmental Science and Development*, October 2019, Vol. 10, No. 10
2. Khawla AlAmeri, Adewale Giwa, Lina Yousef, Abdulrahman Alraeesi, Hanifa Taher*, "Sorption and removal of crude oil spills from seawater using peat-derived biochar: An optimization study." *Journal of Environmental Management*; 2019 Aug 30, 250:109465. Doi 10.1016/j.jenvman.2019.109465.

Mamdouh Ghannam

1. Mamdouh T. Ghannam, Mohamed Y.E. Selim, Abdulrazag Y. Zekri and Nabil Esmail, "Flow characteristics of xanthan solutions and their crude oil emulsions in terms of thixotropic behaviour", *Petroleum Science and Technology* 37, 1279-1288 (2019).
2. Emad Elnajjar, Salah A.B. Al Omari, Mohammad O. Hamdan, Mamdouh T. Ghannam and Mohamed Y.E. Selim, "Characteristics of external furnace combustion of used lube oil with different percentages of diethyl ether additives burned with liquefied petroleum gas", *Biofuels*, DOI: 10.1080/17597269.2019.1608035, (2019).

Eyas Mahmoud

1. Mahmoud. E. et. al, "Valorization of spent coffee grounds into biofuels and value-added products: Pathway towards integrated bio-refinery", *Fuel*, Volume 254, 2019, 115640.
2. Mahmoud, E. et. al "Implementing Metal-Organic Frameworks for Natural Gas Storage." *Crystal*, Volume 9, 2019, 406.

Basim Abu Jdayil

1. Hittini, W., Mourad, A. H. I., & Abu-Jdayil, B., 2019. Cleaner production of thermal insulation boards utilizing buffing dust waste. *Journal of Cleaner Production*, 236, 117603.
2. Al-Azzawi, M., Mjalli, F. S., Al-Hashmi, A., Al-Wahaibi, T., & Abu-jdayil, B., 2019. Optimal liquid fuel extractive desulfurization in micro and mini-channels. *Chemical Engineering and Processing-Process Intensification*, 140, 43-51.

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- Abu-Jdayil, B., Hittini, W., & Mourad, A. H., 2019. "Development of Date Pit–Polystyrene Thermoplastic Heat Insulator Material: Physical and Thermal Properties", *International Journal of Polymer Science*, Volume 2019, Article ID 1697627, 10 pages.

Monwar Hossain

- Eman W. Hassan, O. Chaalala and Md Monwar Hossain* (2019). "A Simple Solution of Dissolved Ammonia Recovery Process in a Hollow-Fiber Membrane Contactor: Comparison with Experimental and Numerical Results" *J of Membrane Science & Technology*, 1-11, Published online, DOI:10.1080/19443994.2015.1129505.

Gamal Alusta

- Gamal Alusta, Rana Saqer and Hadel Mohsen " Effect of Well Completion, Slug Size and WAP Timing on the Performance of Polymer Flooding" - Research Article - *International Journal of Petrochemistry and Research (IJPR)*. 2019; 3(1): 280-285.doi: 10.18689/ijpr-1000148.
- HM. Sbiga and Gamal Alusta "Deriving a Correlation of Cementation Factor in Nubian Sandstone Formation (Upper and Lower Cretaceous), Sirt Basin"- Research Article - *International Journal of Petrochemistry and Research (IJPR)*. 2019; 3(1): 286-291.doi: 10.18689/ijpr-1000149.

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Mohamed AlMarzouqi

- E. Svinterikos, I. Zuburtikudis, M. Al Marzouqi, "The nanoscale dimension determines the carbonization outcome of electrospun lignin/PET fibers", *Chemical Engineering Science*, 202 (2019), 26–35.
- Farah Abu Hatab, Nadia Abdullatif, Sayed A.M. Marzouk, Mohamed H. Al-Marzouqi, "Experimental and modeling of CO2 removal from gas mixtures using membrane contactors packed with glass beads", *Separation and Purification Technology*, 217 (2019), 240-246.
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- Efstathios Svinterikos, Ioannis Zuburtikudis, and Mohamed Al-Marzouqi, "Carbon Nanomaterials for the Adsorptive Desulfurization of Fuels", *Journal of Nanotechnology*, Volume 2019, <https://doi.org/10.1155/2019/2809867>
- Zia Ur Rehman, Nayef Ghasem, Mohamed Al-Marzouqi, Nadia Abdullatif, "Enhancement of Carbon Dioxide Absorption using Nanofluids in Hollow Fiber Membrane Contactor", *Chinese Journal of Chemical Engineering*, 2019, Accepted

Hazim Al Attar

- Hazim Al-Attar, Farah Barkhad: "A Review of Unconventional Natural Gas Resources", Accepted for publication in the *Journal of Nature Science and Sustainable Technology (JNSST)*, Volume 12 Issue 4, Q4 2018, released in September 2019; Copy right 2019 Nova Science Publishers, Inc., ISSN: 1933-0324.
- Hazim Al-Attar, Hala Al Shadafan, Mariam Al Kaabi, Aysha Al-Hassani, and Shatha Al Mheri: "A General Design of Hydraulic Fracturing in Tight Gas Reservoirs", in progress.

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- ZU Rehman, Nayef Ghasem, M Al-Marzouqi, N Abdullatif, Enhancement of Carbon Dioxide Absorption using Nanofluids in Hollow Fiber Membrane Contactor. *Chinese Journal of Chemical Engineering*, in press.
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MD Mozumder

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2. Mozumder, M.S.*, Mourad, A.-H.I., Pervez, H., Riham, M.A., (2019) Recent Developments in Multifunctional Coatings for Solar Panel Applications: A Review. Solar Energy Materials and Solar Cells 189, 75-102.

Abdulrazak Zekri

1. ZEKRI, A. Y., AL-MARZOUQI, A., AZZAM, A., AND ALRAEESI, A., "OPTIMIZATION OF SUPERCRITICAL FLUID EXTRACTION OF HYDROCARBONS FROM A CONTAMINATED SOIL: AN EXPERIMENTAL APPROACH," INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND DEVELOPMENT, VOL. 10, NO. 10, OCT. 2019.
2. MAMDOUH T. GHANNAM, MOHAMED Y.E. SELIM, ABDULRAZAG Y. ZEKRI AND NABIL ESMAIL, 2019, "FLOW CHARACTERISTICS OF XANTHAN SOLUTIONS AND THEIR CRUDE OIL EMULSIONS IN TERMS OF THIXOTROPIC BEHAVIOUR", ACCEPTED PETROLEUM SCIENCE AND TECHNOLOGY (2019).

Md. Abdur Rauf

1. Ammar Bin Yousaf, Md Abdur Rauf, Syed Javaid Zaidi, "Fabrication of solid proton conducting high performance composite membranes for the application of hydrogen fuel cells", Desalination and Water Treatment, 2019 (vol: 150, pp. 84-90) <https://doi.org/10.5004/dwt.2019.23736>

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2. S. Al-Zuhair, S., H. Taher, H (2019) Design solvents for enhanced enzymatic biodiesel production. 7th Eur. Conf. Ren. Energy Sys., Madrid, Spain
3. E. Elnajjar, S. Hassan, S. Al-Zuhair, S. Al-Omari (2019) A parametric study exploring the effect of DS type, size and the methods of oil extraction of UAE date seed and its potential for energy production. 7th Eur. Conf. Ren. Energy Sys., Madrid, Spain

Mamdouh Ghannam

1. ZEKRI, A., G. AL-AUSTA, GHANNAM, M., ZEKRI, H., "OPTIMIZATION OF OIL-LOW SALINITY WATER- SURFACTANT MIXTURES AT HIGH TEMPERATURES AND PRESSURES," GLOBAL CHEMISTRY CONGRESS, 2019, ROME ITALY

Basim Abu Jdayil

2. Mohamed Saeed, Basim Abu-Jdayil and AbdelHamid Mourad, "Thermal Insulation Material Based on Poly Lactic Acid and Date-Pit Powder", 11th Annual International Workshop on Advanced Materials, February 24-26, 2019, RAK, UAE.
3. Mohamed Saeed and Basim Abu-Jdayil, "Thermal Insulation Material Based on Poly Lactic Acid and Date-Pit Powder", UAE GSRC 2019, April 16, 2019, Abu-Dhabi, UAE.

Gamal Alusta

1. A.A. Amtereg, Schlumberger Overseas S.A.; H.A. Algdamsi, A. Agnia, Schlumberger; G.A. Alusta, United Arab Emirates University "Evaluation of Probability Point Estimate Methods for Uncertainty Analysis of Hydrocarbon in Place as an Alternative Techniques to Monte Carlo Simulation" Paper Number: SPE-197487-MS, Presentation Type: Technical Session Presentation Type: Technical Session Presentation. SPE Abu Dhabi International Petroleum Exhibition & Conference 11-14 Nov. 2019. Abu Dhabi, UAE

Muhammad Iqbal

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4. Ahmed Abuibaid, Muhammad Z. Iqbal (2019) "Thermally Reduced Graphene/Polyethylene Nanocomposites: Study of Melt Crystallization" 11th Annual International Workshop on Advanced Materials (IWAM) 2019, Ras Al Kheimah, UAE.

Hazim Al Attar

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1. Nayef Ghasem, Modeling the absorption of CO₂ in solvents enhanced by nanoparticle in polymeric membranes. The 6th Global Conference on Polymer and Composite Materials (PCM 2019) will be held from July 8 -11, 2019 in Bangkok, Thailand.
2. Nayef Ghasem, Modeling and simulation of the diameter effects of the hollow fiber membrane on CO₂ absorption from natural gas. 26th Regional Symposium of Chemical Engineering, Kuala Lumpur, Oct 30-31, 2019.

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Book Chapters

Eyas Mahmoud

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Basim Abu Jdayil

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Taghreed Al-Khalid

1. Al-Khalid, T., R. Surkatti and M. H. El-Naas. Organic Contaminants in Industrial Wastewater: Prospects of Waste Management by Integrated Approaches. Chapter in the book "Combined Application of Physico-Chemical & Microbiological Process for Industrial Effluent Treatment", submitted in June, 2019 for publication by Springer.

Patents