

# Azam Marjani

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

1,111  
citations

361388

20  
h-index

454934

30  
g-index

57  
all docs

57  
docs citations

57  
times ranked

541  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | A novel and facile green synthesis method to prepare LDH/MOF nanocomposite for removal of Cd(II) and Pb(II). <i>Scientific Reports</i> , 2021, 11, 1609.   | 3.3  | 67        |
| 2  | Implementation of the Finite Element Method for Simulation of Mass Transfer in Membrane Contactors. <i>Chemical Engineering and Technology</i> , 2012, 35, 1077-1084.  | 1.5  | 54        |
| 3  | Diminishing vortex intensity and improving heat transfer by applying magnetic field on an injectable slip microchannel containing FMWNT/water nanofluid. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 144, 2235-2246.                    | 3.6  | 43        |
| 4  | Synthesis, molecular dynamics simulation and adsorption study of different pollutants on functionalized mesosilica. <i>Scientific Reports</i> , 2021, 11, 1967.  | 3.3  | 41        |
| 5  | Efficient oxidation/mineralization of pharmaceutical pollutants using a novel Iron (III) oxyhydroxide nanostructure prepared via plasma technology: Experimental, modeling and DFT studies. <i>Journal of Hazardous Materials</i> , 2021, 411, 125074. | 12.4 | 40        |
| 6  | Development of a Group Contribution Method Based on UNIFAC Groups for the Estimation of Vapor Pressures of Pure Hydrocarbon Compounds. <i>Chemical Engineering and Technology</i> , 2013, 36, 483-491.   | 1.5  | 36        |
| 7  | Modification of polyethersulfone membrane using MWCNT-NH <sub>2</sub> nanoparticles and its application in the separation of azeotropic solutions by means of pervaporation. <i>PLoS ONE</i> , 2020, 15, e0236529.                                     | 2.5  | 35        |
| 8  | High-performance hybrid modeling chemical reactors using differential evolution based fuzzy inference system. <i>Scientific Reports</i> , 2020, 10, 21304.   | 3.3  | 34        |
| 9  | Performance and application analysis of ANFIS artificial intelligence for pressure prediction of nanofluid convective flow in a heated pipe. <i>Scientific Reports</i> , 2021, 11, 902.  | 3.3  | 34        |
| 10 | ANFIS grid partition framework with difference between two sigmoidal membership functions structure for validation of nanofluid flow. <i>Scientific Reports</i> , 2020, 10, 15395.   | 3.3  | 34        |
| 11 | Influence of number of membership functions on prediction of membrane systems using adaptive network based fuzzy inference system (ANFIS). <i>Scientific Reports</i> , 2020, 10, 16110.  | 3.3  | 33        |
| 12 | Prediction of turbulence eddy dissipation of water flow in a heated metal foam tube. <i>Scientific Reports</i> , 2020, 10, 19280.  | 3.3  | 33        |
| 13 | Pattern recognition of the fluid flow in a 3D domain by combination of Lattice Boltzmann and ANFIS methods. <i>Scientific Reports</i> , 2020, 10, 15908.   | 3.3  | 32        |
| 14 | Chloroquine (antimalaria medication with anti SARS-CoV activity) solubility in supercritical carbon dioxide. <i>Journal of Molecular Liquids</i> , 2021, 322, 114539.  | 4.9  | 31        |
| 15 | Using static method to measure tolmetin solubility at different pressures and temperatures in supercritical carbon dioxide. <i>Scientific Reports</i> , 2020, 10, 19595.   | 3.3  | 29        |
| 16 | Functional input and membership characteristics in the accuracy of machine learning approach for estimation of multiphase flow. <i>Scientific Reports</i> , 2020, 10, 17793.   | 3.3  | 29        |
| 17 | Computational Modeling of Transport in Porous Media Using an Adaptive Network-Based Fuzzy Inference System. <i>ACS Omega</i> , 2020, 5, 30826-30835.   | 3.5  | 28        |
| 18 | Flow visualization and analysis of thermal distribution for the nanofluid by the integration of fuzzy c-means clustering ANFIS structure and CFD methods. <i>Journal of Visualization</i> , 2020, 23, 97-110.  | 1.8  | 26        |

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|----|--|-----|-----------|
| 19 | Experimental and thermodynamic modeling decitabine anti cancer drug solubility in supercritical carbon dioxide. Scientific Reports, 2021, 11, 1075.  | 3.3 | 24        |
| 20 | Artificial intelligence simulation of suspended sediment load with different membership functions of ANFIS. Neural Computing and Applications, 2021, 33, 6819-6833.  | 5.6 | 22        |
| 21 | High performance ozone based advanced oxidation processes catalyzed with novel argon plasma treated iron oxyhydroxide hydrate for phenazopyridine degradation. Scientific Reports, 2021, 11, 964.                    | 3.3 | 22        |
| 22 | Fabrication of PVA coated PES/PVDF nanocomposite membranes embedded with in situ formed magnetite nanoparticles for removal of metal ions from aqueous solutions. New Journal of Chemistry, 2017, 41, 6405-6414.     | 2.8 | 21        |
| 23 | Separation of copper ions by nanocomposites using adsorption process. Scientific Reports, 2021, 11, 1676.  | 3.3 | 20        |
| 24 | Synthesis of multi-organo-functionalized fibrous silica KCC-1 for highly efficient adsorption of acid fuchsine and acid orange II from aqueous solution. Scientific Reports, 2021, 11, 2716.                         | 3.3 | 20        |
| 25 | Influence of machine learning membership functions and degree of membership function on each input parameter for simulation of reactors. Scientific Reports, 2021, 11, 1891.   | 3.3 | 19        |
| 26 | Tenoxicam (Mobiflex) Solubility in Carbon Dioxide under Supercritical Conditions. Journal of Chemical & Engineering Data, 2021, 66, 990-998.   | 1.9 | 19        |
| 27 | Thermal prediction of turbulent forced convection of nanofluid using computational fluid dynamics coupled genetic algorithm with fuzzy interface system. Scientific Reports, 2021, 11, 1308.                         | 3.3 | 18        |
| 28 | Intensification of CO <sub>2</sub> absorption using MDEA-based nanofluid in a hollow fibre membrane contactor. Scientific Reports, 2021, 11, 2649.   | 3.3 | 17        |
| 29 | Investigation on performance of particle swarm optimization (PSO) algorithm based fuzzy inference system (PSOFIS) in a combination of CFD modeling for prediction of fluid flow. Scientific Reports, 2021, 11, 1505. | 3.3 | 17        |
| 30 | Preparation of cellulose acetate membrane coated by PVA/Fe <sub>3</sub> O <sub>4</sub> nanocomposite thin film: an in situ procedure. Colloid and Polymer Science, 2018, 296, 1213-1223.                             | 2.1 | 16        |
| 31 | Supercritical Process for Preparation of Nanomedicine: Oxaprozin Case Study. Chemical Engineering and Technology, 2021, 44, 208-212.   | 1.5 | 16        |
| 32 | Controlled release evaluation of paracetamol loaded amine functionalized mesoporous silica KCC1 compared to microcrystalline cellulose based tablets. Scientific Reports, 2021, 11, 535.                             | 3.3 | 15        |
| 33 | Prediction of gas velocity in two-phase flow using developed fuzzy logic system with differential evolution algorithm. Scientific Reports, 2021, 11, 2380.   | 3.3 | 15        |
| 34 | Velocity prediction of nanofluid in a heated porous pipe: DEFIS learning of CFD results. Scientific Reports, 2021, 11, 1209.   | 3.3 | 14        |
| 35 | Evaluation of Supercritical Technology for the Preparation of Nanomedicine: Etoricoxib Analysis. Chemical Engineering and Technology, 2021, 44, 559-564.   | 1.5 | 13        |
| 36 | Evaluation of product of two sigmoidal membership functions (psigmf) as an ANFIS membership function for prediction of nanofluid temperature. Scientific Reports, 2020, 10, 22337.                                   | 3.3 | 13        |

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|----|---|-----|-----------|
| 37 | Molecular dynamics performance for coronavirus simulation by C, N, O, and S atoms implementation dreiding force field: drug delivery atomic interaction in contact with metallic Fe, Al, and steel. Computational Particle Mechanics, 2021, 8, 737-749.       | 3.0 | 11        |
| 38 | Liquid temperature prediction in bubbly flow using ant colony optimization algorithm in the fuzzy inference system as a trainer. Scientific Reports, 2020, 10, 21884.   | 3.3 | 11        |
| 39 | Multidimensional machine learning algorithms to learn liquid velocity inside a cylindrical bubble column reactor. Scientific Reports, 2020, 10, 21502.  | 3.3 | 10        |
| 40 | Pressure and temperature predictions of Al <sub>2</sub> O <sub>3</sub> /water nanofluid flow in a porous pipe for different nanoparticles volume fractions: combination of CFD and ACOFIS. Scientific Reports, 2021, 11, 60.                                  | 3.3 | 10        |
| 41 | Predicting Air Superficial Velocity of Two-Phase Reactors Using ANFIS and CFD. ACS Omega, 2021, 6, 239-252.   | 3.5 | 10        |
| 42 | An insight into the estimation of relative humidity of air using artificial intelligence schemes. Environment, Development and Sustainability, 2021, 23, 10194-10222.   | 5.0 | 9         |
| 43 | Alkali metal doping of black phosphorus monolayer for ultrasensitive capture and detection of nitrogen dioxide. Scientific Reports, 2021, 11, 842.  | 3.3 | 9         |
| 44 | Mechanistic modeling and numerical simulation of axial flow catalytic reactor for naphtha reforming unit. PLoS ONE, 2020, 15, e0242343.   | 2.5 | 9         |
| 45 | Surface modification of a cellulose acetate membrane using a nanocomposite suspension based on magnetic particles. Cellulose, 2019, 26, 7995-8006.  | 4.9 | 7         |
| 46 | Molecular separation of ibuprofen and 4-isobutylacetophenone using octanol organic solution by porous polymeric membranes. PLoS ONE, 2020, 15, e0237271.  | 2.5 | 7         |
| 47 | Extraction of ingredients from tea leaves using oxidative enzymatic reaction and optimization of extraction conditions. Scientific Reports, 2021, 11, 4094.   | 3.3 | 7         |
| 48 | Computational modeling of drug separation from aqueous solutions using octanol organic solution in membranes. Scientific Reports, 2020, 10, 19133.  | 3.3 | 6         |
| 49 | In situ Polymerized FDU-12/Poly(methyl methacrylate) and FDU-12/polyamide-6 Nanocomposites for Cd <sup>2+</sup> Adsorption. Chemical Engineering and Technology, 2021, 44, 431-440.   | 1.5 | 6         |
| 50 | gbell Learning function along with Fuzzy Mechanism in Prediction of Two-Phase Flow. ACS Omega, 2020, 5, 25882-25890.  | 3.5 | 6         |
| 51 | Simulation of liquid flow with a combination artificial intelligence flow field and Adams's "Bashforth method. Scientific Reports, 2020, 10, 16719.   | 3.3 | 4         |
| 52 | Treatment of Shazand Petrochemical Co. Effluent using Electro-Fenton Method Modified with Iron Nanoparticles and Anodic Aluminum Oxide Electrode: A Comparison. Iranian Journal of Science and Technology, Transaction A: Science, 2019, 43, 2799-2806.       | 1.5 | 3         |
| 53 | Simultaneous geological CO <sub>2</sub> sequestration and gas production from shale gas reservoirs: brief review on technology, feasibility, and numerical modeling. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-18.      | 2.3 | 3         |
| 54 | Cellulose Acetate Mixed Matrix Membranes Coated with PEG/TiO <sub>2</sub> for Removal of Pb(II) Ions from Aqueous Solutions: Combined Experimental and Quantum Chemical Modeling Investigation. Journal of Non-Equilibrium Thermodynamics, 2019, 44, 193-202. | 4.2 | 1         |

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|----|--|-----|-----------|
| 55 | Development of computational methods for estimation of current efficiency and cell voltage in a Chlor-alkali membrane cell. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-14.                          | 2.3 | 1         |
| 56 | INVESTIGATING THE EFFECTS OF THE EXTERNAL ELECTRIC FIELD ON OSMABENZYNE IN THE GROUND (S0) AND FIRST EXCITED SINGLET (S1) STATES: INSIGHT INTO STRUCTURES, ENERGY, AND PROPERTIES. Journal of Structural Chemistry, 2020, 61, 1691-1699. | 1.0 | 1         |
| 57 | Study on novel modified large mesoporous silica FDU-12/polymer matrix nanocomposites for adsorption of Pb(II). PLoS ONE, 2021, 16, e0245583.   | 2.5 | 0         |