## **Arshad Ahmad**

## List of Publications by Year in descending order

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84 papers 2,330 citations

257450 24 h-index 223800 46 g-index

85 all docs

85 docs citations

85 times ranked 3200 citing authors

#	Article	IF	CITATIONS
1	CO <sub>2</sub> methanation over heterogeneous catalysts: recent progress and future prospects. Green Chemistry, 2015, 17, 2647-2663.	9.0	576
2	Renewable hydrogen production from bio-oil derivative via catalytic steam reforming: An overview. Renewable and Sustainable Energy Reviews, 2017, 79, 347-357.	16.4	156
3	The challenges and prospects of palm oil based biodiesel in Malaysia. Energy, 2015, 81, 255-261.	8.8	107
4	Role of 3-aminopropyltriethoxysilane in the preparation of mesoporous silica nanoparticles for ibuprofen delivery: Effect on physicochemical properties. Microporous and Mesoporous Materials, 2013, 180, 235-241.	4.4	91
5	Accident modelling and analysis in process industries. Journal of Loss Prevention in the Process Industries, 2014, 32, 319-334.	3.3	75
6	State-of-the-Art Technologies for Separation of Azeotropic Mixtures. Separation and Purification Reviews, 2015, 44, 308-330.	5 <b>.</b> 5	75
7	A new optimization method: Electro-Search algorithm. Computers and Chemical Engineering, 2017, 103, 1-11.	3.8	71
8	Improved Methanol Barrier Property of Nafion Hybrid Membrane by Incorporating Nanofibrous Interlayer Self-Immobilized with High Level of Phosphotungstic Acid. ACS Applied Materials & Samp; Interfaces, 2015, 7, 17008-17015.	8.0	62
9	Dispersion modelling and analysis of hydrogen fuel gas released in an enclosed area: A CFD-based approach. Fuel, 2016, 184, 192-201.	6.4	55
10	Membrane-Based Electrolysis for Hydrogen Production: A Review. Membranes, 2021, 11, 810.	3.0	51
11	Accident modelling and safety measure design of a hydrogen station. International Journal of Hydrogen Energy, 2014, 39, 20362-20370.	7.1	50
12	n-Heptane isomerization over mesostructured silica nanoparticles (MSN): Dissociative-adsorption of molecular hydrogen on Pt and Mo sites. Applied Catalysis A: General, 2016, 516, 135-143.	4.3	45
13	Self-Organizing Map Based Fault Diagnosis Technique for Non-Gaussian Processes. Industrial & Diagnosis Technique for Non-Gaussian Processes. Industrial & Diagnosis Engineering Chemistry Research, 2014, 53, 8831-8843.	3.7	43
14	Fibrous spherical Niâ€M/ZSMâ€5 (M: Mg, Ca, Ta, Ga) catalysts for methane dry reforming: The interplay between surface acidityâ€basicity and coking resistance. International Journal of Energy Research, 2020, 44, 5696-5712.	4.5	42
15	4-Lump kinetic model for vacuum gas oil hydrocracker involving hydrogen consumption. Korean Journal of Chemical Engineering, 2010, 27, 1099-1108.	2.7	39
16	Phase separated nanofibrous anion exchange membranes with polycationic side chains. Journal of Materials Chemistry A, 2017, 5, 15326-15341.	10.3	39
17	Comparative Analysis of the Calorific Fuel Properties of Empty Fruit Bunch Fiber and Briquette. Energy Procedia, 2014, 52, 466-473.	1.8	36
18	Elucidation of acid strength effect on ibuprofen adsorption and release by aluminated mesoporous silica nanoparticles. RSC Advances, 2015, 5, 30023-30031.	3.6	33

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19	Accident prevention approach throughout process design life cycle. Chemical Engineering Research and Design, 2014, 92, 412-422.	5.6	32
20	A semicontinuous approach for heterogeneous azeotropic distillation processes. Computers and Chemical Engineering, 2015, 73, 183-190.	3.8	31
21	Parametric study on catalytic cracking of LDPE to liquid fuel over ZSM-5 zeolite. Energy Conversion and Management, 2016, 122, 428-438.	9.2	29
22	Multicomponent devolatilization kinetics and thermal conversion of Imperata cylindrica. Applied Thermal Engineering, 2016, 105, 931-940.	6.0	28
23	Improving the redox flow battery performance of low-cost thin polyelectrolyte membranes by layer-by-Layer Surface assembly. Journal of Power Sources, 2019, 413, 182-190.	7.8	28
24	Rotary cement kiln coating estimator: Integrated modelling of kiln with shell temperature measurement. Canadian Journal of Chemical Engineering, 2011, 89, 116-125.	1.7	26
25	Excretory over-expression of Bacillus sp. G1 cyclodextrin glucanotransferase (CGTase) in Escherichia coli: Optimization of the cultivation conditions by response surface methodology. Enzyme and Microbial Technology, 2007, 40, 1256-1263.	3.2	25
26	Preparation and characterization of phosphoric acid composite membrane by radiation induced grafting of 4â€vinylpyridine onto poly(ethyleneâ€ <i>co</i> â€tetrafluoroethylene) followed by phosphoric acid doping. Journal of Applied Polymer Science, 2013, 128, 549-557.	2.6	23
27	Synthesis of pyrano[2,3-c]pyrazoles by ionic liquids under green and eco-safe conditions. Research on Chemical Intermediates, 2017, 43, 717-728.	2.7	23
28	Highly conductive anion exchange membranes based on polymer networks containing imidazolium functionalised side chains. Scientific Reports, 2021, 11, 3764.	3.3	22
29	Enhancement of fuel cell performance with less-water dependent composite membranes having polyoxometalate anchored nanofibrous interlayer. Journal of Power Sources, 2016, 326, 482-489.	7.8	21
30	Optimization of reaction parameters of radiation induced grafting of 1-vinylimidazole onto poly(ethylene-co-tetraflouroethene) using response surface method. Radiation Physics and Chemistry, 2011, 80, 1222-1227.	2.8	19
31	A risk-based method for determining passive fire protection adequacy. Fire Safety Journal, 2013, 58, 160-169.	3.1	19
32	Hydrogen Production from Acetic Acid Steam Reforming over Bimetallic Ni-Co on La <sub>2</sub> O <sub>3</sub> Catalyst-Effect of the Catalyst Dilution. Applied Mechanics and Materials, 0, 493, 39-44.	0.2	19
33	Modeling a Pilot Fixed-Bed Hydrocracking Reactor via a Kinetic Base and Neuro-Fuzzy Method. Journal of Chemical Engineering of Japan, 2010, 43, 174-185.	0.6	18
34	Thermogravimetric Analysis of the Fuel Properties of Empty Fruit Bunch Briquettes. Jurnal Teknologi (Sciences and Engineering), 2014, 67, .	0.4	18
35	High refractive index materials: A structural property comparison of sulfide―and sulfoxide ontaining polyamides. Journal of Polymer Science Part A, 2015, 53, 2867-2877.	2.3	17
36	Analysis of the Pyrolytic Fuel Properties of Empty Fruit Bunch Briquettes. Journal of Applied Sciences, 2012, 12, 2527-2533.	0.3	17

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37	Fabrication and characterization of supported dual acidic ionic liquids for polymer electrolyte membrane fuel cell applications. Arabian Journal of Chemistry, 2019, 12, 1011-1023.	4.9	15
38	Self-assembled heteropolyacid on nitrogen-enriched carbon nanofiber for vanadium flow batteries. Nanoscale, 2018, 10, 13212-13222.	5.6	15
39	An optimisation approach for increasing the profit of a commercial VGO hydrocracking process. Canadian Journal of Chemical Engineering, 2013, 91, 1077-1091.	1.7	14
40	Platinumâ€promoted fibrous silica Y zeolite with enhanced mass transfer as a highly selective catalyst for <i>n</i> â€dodecane hydroisomerization. International Journal of Energy Research, 2019, 43, 4201-4216.	4.5	14
41	Phosphoric acid doped composite proton exchange membrane for hydrogen production in medium-temperature copper chloride electrolysis. International Journal of Hydrogen Energy, 2020, 45, 22209-22222.	7.1	14
42	Gasification of Empty Fruit Bunch Briquettes in a Fixed Bed Tubular Reactor for Hydrogen Production. Applied Mechanics and Materials, 0, 699, 534-539.	0.2	12
43	Crosslinked composite membrane by radiation grafting of 4-vinylpyridine/triallyl-cyanurate mixtures onto poly(ethylene- co -tetrafluoroethylene) and phosphoric acid doping. International Journal of Hydrogen Energy, 2017, 42, 9333-9341.	7.1	12
44	Environmentally benign and highly regioselective ring opening of epoxides accelerated by ultrasound irradiation. Green Chemistry Letters and Reviews, 2016, 9, 76-84.	4.7	11
45	Improved Multi-model Predictive Control to Reject Very Large Disturbances on a Distillation Column. International Journal of Technology, 2016, 7, 962.	0.8	10
46	$6 ext{-Lump}$ Kinetic Model for a Commercial Vacuum Gas Oil Hydrocracker. International Journal of Chemical Reactor Engineering, 2010, $8 ext{,}$ .	1.1	9
47	Modeling and optimization aspects of radiation induced grafting of 4-vinylpyridene onto partially fluorinated films. Radiation Physics and Chemistry, 2014, 94, 123-128.	2.8	9
48	Biohydrogen production from Imperata cylindrica bio-oil using non-stoichiometric and thermodynamic model. International Journal of Hydrogen Energy, 2017, 42, 9011-9023.	7.1	9
49	Mathematical modeling of a single stage ultrasonically assisted distillation process. Ultrasonics Sonochemistry, 2015, 24, 184-192.	8.2	8
50	An Optimized Covalent Immobilization of Glucamine on Electrospun Nanofibrous Poly(vinylidene) Tj ETQq0 0 0 rg 2018, 19, 1694-1705.	BT /Overlo 2.1	ock 10 Tf 50 8
51	Thermogravimetric and Kinetic Analyses of Oil Palm Empty Fruit Bunch (OPEFB) Pellets Using the Distributed Activation Energy Model. Journal of Physical Science, 2016, 27, 67-83.	0.9	8
52	Optimization and kinetics of phosphoric acid doping of poly(1-vinylimidazole)-graft-poly(ethylene-co-tetrafluorethylene) proton conducting membrane precursors. Journal of Membrane Science, 2013, 446, 422-432.	8.2	7
53	Kinetic behaviour of graft copolymerisation of nitrogenous heterocyclic monomer onto EB-irradiated ETFE films. Journal of Radioanalytical and Nuclear Chemistry, 2015, 304, 1225-1234.	1.5	7
54	Dynamic Simulation of a Pilot Scale Vacuum Gas Oil Hydrocracking Unit by the Space-Time CE/SE Method. Chemical Engineering and Technology, 2012, 35, 919-928.	1.5	6

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55	GASIFICATION OF OIL PALM EMPTY FRUIT BUNCHES (OPEFB) BRIQUETTES FOR BIO-SYNGAS PRODUCTION. Jurnal Teknologi (Sciences and Engineering), 2016, 78, .	0.4	6
56	Intensifying radiation induced grafting of 4-vinylpyridine/glycidyl methacrylate mixtures onto poly(ethylene-co-tetrafluoroethylene) films using ultrasound. Radiation Physics and Chemistry, 2017, 134, 56-61.	2.8	6
57	Effect of Cr 2 O 3 loading on the properties and cracking activity of Pt/Cr 2 O 3 -ZrO 2. Applied Catalysis A: General, 2017, 541, 77-86.	4.3	6
58	Preparation and characterization of highly stable protic-ionic-liquid membranes. International Journal of Hydrogen Energy, 2019, 44, 30732-30742.	7.1	6
59	Vapor-liquid equilibrium of ethanol/ethyl acetate mixture in ultrasonic intensified environment. Korean Journal of Chemical Engineering, 2014, 31, 875-880.	2.7	5
60	Separation of Azeotropic Mixture Using Multi-stage Ultrasound-Assisted Flash Distillation. Chemical Product and Process Modeling, 2015, 10, 237-242.	0.9	5
61	Comparative Analysis on Semi-empirical Models of Jet Fire for Radiant Heat Estimation. Process Integration and Optimization for Sustainability, 2019, 3, 285-305.	2.6	5
62	Comparison of Lumping Approaches to Predict the Product Yield in a Dual Bed VGO Hydrocracker. International Journal of Chemical Reactor Engineering, 2012, 9, .	1.1	4
63	Process Simulation for Removing Impurities From Wastewater Using Sour Water 2-Strippers system via Aspen Hysys. Chemical Product and Process Modeling, 2016, 11, 315-321.	0.9	4
64	A Simplified Model for Gasification of Oil Palm Empty Fruit Bunch Briquettes. Jurnal Teknologi (Sciences and Engineering), $2014, 69, .$	0.4	3
65	Design of a Bubbling Fluidized Bed Gasifier for the Thermochemical Conversion of Oil Palm Empty Fruit Bunch Briquette. Applied Mechanics and Materials, 0, 493, 3-8.	0.2	3
66	STABILITY AND PERFORMANCE EVALUATION OF ION-EXCHANGE MEMBRANES FOR VANADIUM REDOX FLOW BATTERY. Jurnal Teknologi (Sciences and Engineering), 2016, 78, .	0.4	3
67	Failure Analysis Using Functional Model and Bayesian Network. Chemical Product and Process Modeling, 2016, 11, 265-272.	0.9	3
68	Composite Membranes Based on Heteropolyacids and Their Applications in Fuel Cells., 2017,, 99-131.		3
69	Preliminary torrefaction of oil palm empty fruit bunch pellets. E3S Web of Conferences, 2019, 90, 01014.	0.5	3
70	Main geometrical features of horizontal buoyant jet fire and associated radiative fraction. Process Safety Progress, 2020, 39, e12124.	1.0	3
71	Kinetic Study on a Commercial Amorphous Hydrocracking Catalyst by Weighted Lumping Strategy. International Journal of Chemical Reactor Engineering, $2010,8,\ldots$	1.1	2
72	Effect of Lump Partitioning on the Accuracy of a Commercial Vacuum Gas Oil Hydrocracking Model. International Journal of Chemical Reactor Engineering, 2012, 10, .	1.1	2

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73	Modelling pressure distribution in sonicated ethanol solution using COMSOL simulation. E3S Web of Conferences, 2019, 90, 02003.	0.5	2
74	Alternative Prediction Models for Data Scarce Environment. Computer Aided Chemical Engineering, 2015, 37, 665-670.	0.5	2
75	Thermogravimetric Analysis of Char Waste from the Air Gasification of Empty Fruit Bunch Briquette MATEC Web of Conferences, 2014, 13, 02004.	0.2	1
76	Ultrasonic Enhancement of Separation Azeotropic Mixtures via Single Distillation Column. Advanced Materials Research, 0, 909, 83-87.	0.3	1
77	Thermal Decomposition Kinetics of Torrefied Oil Palm Empty Fruit Bunch Briquettes. Chemistry and Chemical Technology, 2016, 10, 325-328.	1.1	1
78	Fundamental Theories and Kinetic Models for the Pyrolysis of Lignocellulosic Biomass Wastes. Advances in Environmental Engineering and Green Technologies Book Series, 2020, , 123-151.	0.4	1
79	New insight into the kinetic study on the different loadings of the CuO/CNT catalyst and its optimization for <i>p</i> -chloroaniline photodegradation. Nanoscale Advances, 2022, 4, 2836-2843.	4.6	1
80	Simulation and Analysis of Process Behavior of Ultrasonic Distillation System for Separation Azeotropic Mixtures. Applied Mechanics and Materials, 0, 625, 677-679.	0.2	0
81	Aspen Plus Simulation of Ultrasound Assisted Distillation for Separating Azeotropic Mixture. Advanced Materials Research, 2015, 1113, 710-714.	0.3	0
82	Grey Model for Accident Prediction in Data-Scarce Environment. , 2015, , 411-418.		0
83	Modelling ultrasound waves bubble formation in ethanol/ethyl acetate azeotrope mixture. E3S Web of Conferences, 2019, 90, 02005.	0.5	0
84	Surface-modified fibrous membranes for fuel cell application. E3S Web of Conferences, 2019, 90, 01005.	0.5	0