

Arshad Hussain

List of Publications by Year in descending order

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Version: 2024-02-01

75
papers

2,469
citations

331538

21
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214721

47
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76
all docs

76
docs citations

76
times ranked

2735
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparation and characterization of PVA/nanocellulose/Ag nanocomposite films for antimicrobial food packaging. Carbohydrate Polymers, 2018, 184, 453-464.	5.1	302
2	A feasibility study of CO ₂ capture from flue gas by a facilitated transport membrane. Journal of Membrane Science, 2010, 359, 140-148.	4.1	203
3	Carbon dioxide capture using liquid absorption methods: a review. Environmental Chemistry Letters, 2021, 19, 77-109.	8.3	165
4	Synergistic effect on co-pyrolysis of rice husk and sewage sludge by thermal behavior, kinetics, thermodynamic parameters and artificial neural network. Waste Management, 2019, 85, 131-140.	3.7	157
5	A review on modification methods of adsorbents for elemental mercury from flue gas. Chemical Engineering Journal, 2018, 346, 692-711.	6.6	147
6	A review on coal fly ash-based adsorbents for mercury and arsenic removal. Journal of Cleaner Production, 2020, 267, 122143.	4.6	106
7	Development of Anti-bacterial PVA/Starch Based Hydrogel Membrane for Wound Dressing. Journal of Polymers and the Environment, 2018, 26, 235-243.	2.4	94
8	Coating materials for slow release of nitrogen from urea fertilizer: a review. Journal of Plant Nutrition, 2020, 43, 1510-1533.	0.9	87
9	Removal of elemental mercury from flue gas using red mud impregnated by KBr and KI reagent. Chemical Engineering Journal, 2018, 341, 483-494.	6.6	84
10	PVA/starch/propolis/anthocyanins rosemary extract composite films as active and intelligent food packaging materials. Journal of Food Safety, 2020, 40, e12725.	1.1	81
11	In-vitro and in-vivo study of superabsorbent PVA/Starch/g-C ₃ N ₄ /Ag@TiO ₂ NPs hydrogel membranes for wound dressing. European Polymer Journal, 2020, 130, 109650.	2.6	75
12	Photocatalytic, electrocatalytic and photoelectrocatalytic conversion of carbon dioxide: a review. Environmental Chemistry Letters, 2021, 19, 941-967.	8.3	68
13	Synthesis of carbon nanomaterials from different pyrolysis techniques: a review. Materials Research Express, 2018, 5, 052002.	0.8	61
14	Recent developments on gas-liquid heterogeneous oxidation removal of elemental mercury from flue gas. Environmental Chemistry Letters, 2019, 17, 19-47.	8.3	53
15	Two-Stage Membrane System for Post-combustion CO ₂ Capture Application. Energy & Fuels, 2015, 29, 6664-6669.	2.5	46
16	Enhancing the Thermal, Mechanical and Swelling Properties of PVA/Starch Nanocomposite Membranes Incorporating g-C ₃ N ₄ . Journal of Polymers and the Environment, 2020, 28, 100-115.	2.4	37
17	Catalytic Pyrolysis Of Botryococcus Braunii (microalgae) Over Layered and Delaminated Zeolites For Aromatic Hydrocarbon Production. Energy Procedia, 2017, 142, 381-385.	1.8	32
18	Effect Analysis of Nickel Ferrite (NiFe ₂ O ₄) and Titanium Dioxide (TiO ₂) Nanoparticles on CH ₄ /CO ₂ Gas Permeation Properties of Cellulose Acetate Based Mixed Matrix Membranes. Journal of Polymers and the Environment, 2019, 27, 1449-1464.	2.4	29

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19	Synthesis and effect of metal-organic frame works on CO ₂ adsorption capacity at various pressures: A contemplating review. Energy and Environment, 2020, 31, 367-388.	2.7	29
20	Synthesis and characterization of zinc-coated urea fertilizer. Journal of Plant Nutrition, 2018, 41, 1625-1635.	0.9	26
21	Preparation, characterization, and applicability of novel calix[4]arene-based cellulose acetate membranes in gas permeation. Journal of Applied Polymer Science, 2014, 131, .	1.3	25
22	Development of high performance amine functionalized zeolitic imidazolate framework (ZIF-8) for CO ₂ /CH ₄ separation. International Journal of Energy Research, 2020, 44, 7989-7999.	2.2	23
23	Investigation of cellulose acetate/gamma-cyclodextrin MOF based mixed matrix membranes for CO ₂ /CH ₄ gas separation. , 2021, 11, 313-330.		23
24	Effect of ultra-violet cross-linking on the properties of boric acid and glycerol co-plasticized thermoplastic starch films. Food Packaging and Shelf Life, 2019, 19, 184-192.	3.3	21
25	Slow-release urea fertilizer from sulfur, gypsum, and starch-coated formulations. Journal of Plant Nutrition, 2019, 42, 1218-1229.	0.9	21
26	Adsorption of CO ₂ on amine-functionalized green metal-organic framework: an interaction between amine and CO ₂ molecules. Environmental Science and Pollution Research, 2019, 26, 36214-36225.	2.7	20
27	Improving gas barrier properties with boron nitride nanosheets in polymer-composites. Results in Physics, 2019, 12, 1535-1541.	2.0	19
28	Carbon capture from natural gas using multi-walled CNTs based mixed matrix membranes. Environmental Technology (United Kingdom), 2019, 40, 843-854.	1.2	19
29	Phosphorylated nanocellulose fibrils/PVA nanocomposite membranes for biogas upgrading at higher pressure. Separation Science and Technology, 2020, 55, 1524-1534.	1.3	19
30	Comparison of silica and novel functionalized silica-based cellulose acetate hybrid membranes in gas permeation study. Journal of Polymer Research, 2015, 22, 1.	1.2	18
31	CO ₂ adsorption using TiO ₂ composite polymeric membranes: A kinetic study. Journal of Environmental Sciences, 2015, 35, 163-171.	3.2	17
32	The effect of graphene nanosheets on the mechanical properties of polyvinylchloride. Polymer Composites, 2016, 37, 1572-1576.	2.3	17
33	Optimization analysis of polyurethane based mixed matrix gas separation membranes by incorporation of gamma-cyclodextrin metal organic frame work. Chemical Papers, 2020, 74, 3527-3543.	1.0	17
34	Experimental Study of Solubility of Natural Gas Components in Aqueous Solutions of Ethylene Glycol at Low-Temperature and High-Pressure Conditions. Journal of Chemical & Engineering Data, 2007, 52, 1741-1746.	1.0	16
35	Effect of Concentration of Surfactant on the Exfoliation of Graphite to Graphene in Aqueous Media. Nanomaterials and Nanotechnology, 2016, 6, 14.	1.2	16
36	A Single Stage Membrane Process for CO ₂ Capture from Flue Gas by a Facilitated Transport Membrane. Separation Science and Technology, 2012, 47, 1857-1865.	1.3	15

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37	Synthesis, Characterization and NH ₃ /N ₂ Gas Permeation Study of Nanocomposite Membranes. Journal of Polymers and the Environment, 2017, 25, 46-55.	2.4	14
38	A Computational Fluid Dynamics Approach for the Modeling of Gas Separation in Membrane Modules. Processes, 2019, 7, 420.	1.3	14
39	Cellulose acetate/sericin blend membranes for use in dialysis. Polymer Bulletin, 2018, 75, 3935-3950.	1.7	13
40	Numerical and experimental study of wave shaper effects on detonation wave front. Defence Technology, 2018, 14, 45-50.	2.1	13
41	Enhancement in the selectivity of O ₂ /N ₂ via ZIF-8/CA mixed-matrix membranes and the development of a thermodynamic model to predict the permeability of gases. Environmental Science and Pollution Research, 2020, 27, 24413-24429.	2.7	12
42	Fabrication and characterization of microfiltration blended membranes. Desalination and Water Treatment, 2014, 52, 1833-1840.	1.0	11
43	Effects of selected size of graphene nanosheets on the mechanical properties of polyacrylonitrile polymer. Fibers and Polymers, 2014, 15, 2040-2044.	1.1	11
44	Performance Analysis of Blended Membranes of Cellulose Acetate with Variable Degree of Acetylation for CO ₂ /CH ₄ Separation. Membranes, 2021, 11, 245.	1.4	11
45	A comprehensive overview of dual-layer composite membrane for air (O ₂ /N ₂) separation. Polymers and Polymer Composites, 2021, 29, S1630-S1640.	1.0	11
46	Experimental investigation of polysulfone modified cellulose acetate membrane for CO ₂ /H ₂ gas separation. Korean Journal of Chemical Engineering, 2022, 39, 189-197.	1.2	11
47	Influence of Amphiphilic Plasticizer on Properties of Thermoplastic Starch Films. Polymer-Plastics Technology and Engineering, 2018, 57, 17-27.	1.9	10
48	Optimization study of polyethylene glycol and solvent system for gas permeation membranes. International Journal of Polymer Analysis and Characterization, 2018, 23, 483-492.	0.9	10
49	Fabrication of Cellulose Acetate/Polyaziridine Blended Flat Sheet Membranes for Dialysis Application. BioNanoScience, 2019, 9, 256-265.	1.5	10
50	Electrochemical study of magnetic nanogel designed for controlled release of chlorhexidine gluconate. Electrochimica Acta, 2019, 295, 113-123.	2.6	10
51	Fabrication and characterization of cellulose acetate/hydroxyapatite composite membranes for the solute separations in Hemodialysis. Polymer Bulletin, 2018, 75, 1197-1210.	1.7	10
52	Blending of TiO ₂ nanoparticles with cellulose acetate polymer: to study the effect on morphology and gas permeation of blended membranes. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 543-551.	0.8	9
53	Synthesis and gas permeation analysis of TiO ₂ nanotube-embedded cellulose acetate mixed matrix membranes. Chemical Papers, 2020, 74, 821-828.	1.0	9
54	Gas barrier properties evaluation for boron nitride nanosheets-polymer (polyethylene-terephthalate) composites. Applied Nanoscience (Switzerland), 2021, 11, 91-99.	1.6	9

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55	Computational fluid dynamics (CFD) modeling of heat transfer in a polymeric membrane using finite volume method. <i>Journal of Thermal Science</i> , 2016, 25, 564-570.	0.9	8
56	Steam gasification of municipal solid waste for hydrogen production using Aspen Plus® simulation. <i>Discover Chemical Engineering</i> , 2021, 1, 1.	1.1	8
57	Fabrication, characterization and permeation study of ultrafiltration dialysis membranes. <i>Desalination and Water Treatment</i> , 2016, 57, 24799-24806.	1.0	7
58	Lightweight protective configurations against blast and fragments impact: Experimental and numerical studies. <i>AIP Advances</i> , 2020, 10, 095221.	0.6	7
59	Computational Fluid Dynamics (CFD) Modeling and Simulation of Flow Regulatory Mechanism in Artificial Kidney Using Finite Element Method. <i>Membranes</i> , 2020, 10, 139.	1.4	6
60	Effects of Coagulation Residence Time on the Morphology and Properties of Poly (vinyl) Alcohol (PVA) Asymmetric Membrane via NIPS Method for O ₂ /N ₂ Separation. <i>Journal of Polymers and the Environment</i> , 2020, 28, 2810-2822.	2.4	6
61	Green synthesized nano-cellulose polyethylene imine-based biological membrane. <i>Food and Chemical Toxicology</i> , 2022, 160, 112773.	1.8	5
62	The effect of large area graphene oxide (LAGO) nanosheets on the mechanical properties of polyvinyl alcohol. <i>Journal of Polymer Engineering</i> , 2016, 36, 399-405.	0.6	4
63	Influence of carboxylic acids on mechanical properties of thermoplastic starch by spray drying. <i>Fibers and Polymers</i> , 2017, 18, 64-73.	1.1	4
64	Role of Catalysis in Biofuels Production Process – A Review. <i>ChemBioEng Reviews</i> , 2021, 8, 417-438.	2.6	4
65	TECHNO-ECONOMIC ANALYSIS OF CO ₂ CAPTURE FROM FLUE GAS BY AMINE ABSORPTION AND MEMBRANE TECHNOLOGY. <i>International Journal of Energy for A Clean Environment</i> , 2013, 14, 257-273.	0.6	3
66	A computational fluid dynamics (CFD) approach for the modeling of flux in a polymeric membrane using finite volume method. <i>Mechanics and Industry</i> , 2017, 18, 406.	0.5	3
67	Quantitative analysis of product quality of naphtha reforming process under uncertain process conditions. <i>Chemical Engineering Communications</i> , 2020, 207, 1092-1102.	1.5	3
68	Computational Fluid Dynamics (CFD) Simulation and Comparison for Different Numbers of Baffles to Reduce Concentration Polarization Effects in Membrane Tubes. <i>Journal of Engineering and Technological Sciences</i> , 2017, 49, 114-131.	0.3	3
69	The influence of polymer concentration on the morphology and mechanical properties of asymmetric polyvinyl alcohol (PVA) membrane for O ₂ /N ₂ separation. <i>Polymers and Polymer Composites</i> , 2022, 30, 096739112210900.	1.0	3
70	Environmental treatment and remediation using h-BN based smart and hybrid membrane. <i>Chemosphere</i> , 2022, 305, 135466.	4.2	3
71	Mixed and single gas permeation performance analysis of amino-modified ZIF based mixed matrix membrane. <i>Polymers and Polymer Composites</i> , 2021, 29, S707-S718.	1.0	2
72	Thickness Effect on Permeance of CO ₂ /CH ₄ Gases in CA Coated PVDF Composite Membranes. <i>Transactions of the Indian Ceramic Society</i> , 0, , 1-7.	0.4	2

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73	Fabrication, characterisation and CO ₂ /N ₂ gas permeance study of novel blended membrane. International Journal of Global Warming, 2015, 7, 532.	0.2	1
74	Comparative CO ₂ Adsorption Analysis in Pure and Amine-Modified Composite Membranes. Polymer-Plastics Technology and Engineering, 2017, 56, 1158-1166.	1.9	1
75	SYNTHESIS AND CHARACTERIZATION OF POLYMER MEMBRANES FOR HEMODIALYSIS. Journal of Porous Media, 2016, 19, 557-565.	1.0	0