

Ali Altaee

List of Publications by Year in descending order

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125
papers

4,335
citations

85707

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133910

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g-index

133
all docs

133
docs citations

133
times ranked

4415
citing authors

#	ARTICLE	IF	CITATIONS
1	The application of pressure-driven ceramic membrane technology for the treatment of industrial wastewaters – A review. <i>Separation and Purification Technology</i> , 2018, 200, 198-220.	8.1	252
2	Carbon Quantum Dots for Energy Applications: A Review. <i>ACS Applied Nano Materials</i> , 2021, 4, 6515-6541.	5.2	177
3	Comparison between Forward Osmosis-Reverse Osmosis and Reverse Osmosis processes for seawater desalination. <i>Desalination</i> , 2014, 336, 50-57.	8.3	148
4	Graphitic carbon nitride based nanocomposites for the photocatalysis of organic contaminants under visible irradiation: Progress, limitations and future directions. <i>Science of the Total Environment</i> , 2018, 633, 546-559.	8.2	130
5	Recent developments in forward osmosis membranes using carbon-based nanomaterials. <i>Desalination</i> , 2020, 482, 114375.	8.3	126
6	Photocatalytic removal of perfluoroalkyl substances from water and wastewater: Mechanism, kinetics and controlling factors. <i>Chemosphere</i> , 2017, 189, 717-729.	8.4	121
7	Pressure retarded osmosis: advancement in the process applications for power generation and desalination. <i>Desalination</i> , 2015, 356, 31-46.	8.3	98
8	Graphene-Based Membranes for Water and Wastewater Treatment: A Review. <i>ACS Applied Nano Materials</i> , 2021, 4, 3274-3293.	5.2	90
9	Application of artificial neural network and multiple linear regression in modeling nutrient recovery in vermicompost under different conditions. <i>Bioresource Technology</i> , 2020, 303, 122926.	9.7	88
10	Pressure retarded osmosis for power generation and seawater desalination: Performance analysis. <i>Desalination</i> , 2014, 344, 108-115.	8.3	87
11	Visible and UV photocatalysis of aqueous perfluorooctanoic acid by TiO ₂ and peroxymonosulfate: Process kinetics and mechanistic insights. <i>Chemosphere</i> , 2020, 243, 125366.	8.4	85
12	Nanomaterials in the advancement of hydrogen energy storage. <i>Heliyon</i> , 2020, 6, e04487.	3.3	83
13	Process development for the degradation of textile azo dyes (mono-, di-, poly-) by advanced oxidation process - Ozonation: Experimental & partial derivative modelling approach. <i>Journal of Environmental Management</i> , 2020, 265, 110397.	7.9	83
14	Techno-economic and environmental impact assessment of hydrogen production processes using bio-waste as renewable energy resource. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 156, 111991.	16.7	83
15	Machine learning modeling and analysis of biohydrogen production from wastewater by dark fermentation process. <i>Bioresource Technology</i> , 2022, 343, 126111.	9.7	76
16	Combined influence of temperature and flow rate of feeds on the performance of forward osmosis. <i>Desalination</i> , 2016, 398, 98-105.	8.3	73
17	High recovery rate NF ₂ -FO-RO hybrid system for inland brackish water treatment. <i>Desalination</i> , 2015, 363, 19-25.	8.3	69
18	Evaluation of forward osmosis as a pretreatment process for multi stage flash seawater desalination. <i>Desalination</i> , 2019, 461, 22-29.	8.3	67

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19	Modeling water flux in osmotic membrane bioreactor by adaptive network-based fuzzy inference system and artificial neural network. <i>Bioresource Technology</i> , 2020, 310, 123391.	9.7	65
20	A novel Forward osmosis membrane pretreatment of seawater for thermal desalination processes. <i>Desalination</i> , 2013, 326, 19-29.	8.3	64
21	A Review of Fouling Mechanisms, Control Strategies and Real-Time Fouling Monitoring Techniques in Forward Osmosis. <i>Water (Switzerland)</i> , 2019, 11, 695.	2.8	64
22	Improved photocatalysis of perfluorooctanoic acid in water and wastewater by Ga ₂ O ₃ /UV system assisted by peroxymonosulfate. <i>Chemosphere</i> , 2020, 239, 124722.	8.4	63
23	Forward osmosis pretreatment of seawater to thermal desalination: High temperature FO-MSF/MED hybrid system. <i>Desalination</i> , 2014, 339, 18-25.	8.3	59
24	Updated review on emerging technologies for PFAS contaminated water treatment. <i>Chemical Engineering Research and Design</i> , 2022, 182, 667-700.	5.7	58
25	Alternative design to dual stage NF seawater desalination using high rejection brackish water membranes. <i>Desalination</i> , 2011, 273, 391-397.	8.3	56
26	Computational model for estimating reverse osmosis system design and performance: Part-one binary feed solution. <i>Desalination</i> , 2012, 291, 101-105.	8.3	56
27	Draw solutions for Forward Osmosis process: Osmotic pressure of binary and ternary aqueous solutions of magnesium chloride, sodium chloride, sucrose and maltose. <i>Journal of Food Engineering</i> , 2015, 155, 10-15.	5.3	54
28	Integration and optimization of pressure retarded osmosis with reverse osmosis for power generation and high efficiency desalination. <i>Energy</i> , 2016, 103, 110-118.	9.0	53
29	Evaluation of FO-RO and PRO-RO designs for power generation and seawater desalination using impaired water feeds. <i>Desalination</i> , 2015, 368, 27-35.	8.3	52
30	Development in forward Osmosis-Membrane distillation hybrid system for wastewater treatment. <i>Separation and Purification Technology</i> , 2022, 286, 120498.	8.1	49
31	Performance evaluation of reverse osmosis process in the post-treatment of mining wastewaters: Case study of Costerfield mining operations, Victoria, Australia. <i>Journal of Water Process Engineering</i> , 2020, 34, 101116.	5.7	47
32	Feasibility of brackish water and landfill leachate treatment by GO/MoS ₂ -PVA composite membranes. <i>Science of the Total Environment</i> , 2020, 745, 141088.	8.2	45
33	Enhancement of Cd ²⁺ removal from aqueous solution by multifunctional mesoporous silica: Equilibrium isotherms and kinetics study. <i>Separation and Purification Technology</i> , 2019, 224, 199-208.	8.1	44
34	Stability of quantum dot-sensitized solar cells: A review and prospects. <i>Nano Energy</i> , 2022, 94, 106854.	16.5	43
35	Pressure retarded osmosis process for power generation: Feasibility, energy balance and controlling parameters. <i>Applied Energy</i> , 2017, 206, 303-311.	10.3	42
36	Effective modelling of hydrogen and energy recovery in microbial electrolysis cell by artificial neural network and adaptive network-based fuzzy inference system. <i>Bioresource Technology</i> , 2020, 316, 123967.	9.7	41

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37	A conceptual design of low fouling and high recovery FO“MSF desalination plant. <i>Desalination</i> , 2014, 343, 2-7.	8.3	40
38	Challenges and potentials of forward osmosis process in the treatment of wastewater. <i>Critical Reviews in Environmental Science and Technology</i> , 2020, 50, 1339-1383.	13.5	40
39	Single and dual stage closed-loop pressure retarded osmosis for power generation: Feasibility and performance. <i>Applied Energy</i> , 2017, 191, 328-345.	10.3	39
40	A hybrid forward osmosis/reverse osmosis process for the supply of fertilizing solution from treated wastewater. <i>Journal of Water Process Engineering</i> , 2019, 32, 100975.	5.7	39
41	Dual-stage forward osmosis/pressure retarded osmosis process for hypersaline solutions and fracking wastewater treatment. <i>Desalination</i> , 2014, 350, 79-85.	8.3	38
42	Preparation of novel high permeability and antifouling polysulfone-vanillin membrane. <i>Desalination</i> , 2020, 496, 114759.	8.3	35
43	Effective remediation of heavy metals in contaminated soil by electrokinetic technology incorporating reactive filter media. <i>Science of the Total Environment</i> , 2021, 794, 148668.	8.2	35
44	Organic Fouling in Forward Osmosis: A Comprehensive Review. <i>Water (Switzerland)</i> , 2020, 12, 1505.	2.8	35
45	A state-of-the-art protocol to minimize the internal concentration polarization in forward osmosis membranes. <i>Desalination</i> , 2020, 480, 114355.	8.3	33
46	The feasibility of decontamination of reduced saline sediments from copper using the electrokinetic process. <i>Journal of Environmental Management</i> , 2008, 88, 1611-1618.	7.9	32
47	Aquaporin“graphene interface: relevance to point-of-care device for renal cell carcinoma and desalination. <i>Interface Focus</i> , 2018, 8, 20170066.	3.2	32
48	Comparison of Nanofiltration with Reverse Osmosis in Reclaiming Tertiary Treated Municipal Wastewater for Irrigation Purposes. <i>Membranes</i> , 2021, 11, 32.	3.0	32
49	Application of Vibratory System to Improve the Critical Flux in Submerged Hollow Fiber MF Process. <i>Separation Science and Technology</i> , 2009, 45, 28-34.	2.5	31
50	Treatment of biologically treated landfill leachate with forward osmosis: Investigating membrane performance and cleaning protocols. <i>Science of the Total Environment</i> , 2020, 744, 140901.	8.2	31
51	Preparation of fouling resistant and highly perm-selective novel PSf/GO-vanillin nanofiltration membrane for efficient water purification. <i>Journal of Hazardous Materials</i> , 2022, 421, 126744.	12.6	31
52	Energy efficiency of RO and FO“RO system for high-salinity seawater treatment. <i>Clean Technologies and Environmental Policy</i> , 2017, 19, 77-91.	4.1	30
53	Pressure retarded osmosis: Advancement, challenges and potential. <i>Journal of Water Process Engineering</i> , 2021, 40, 101950.	5.7	30
54	Energy efficiency of hollow fibre membrane module in the forward osmosis seawater desalination process. <i>Journal of Membrane Science</i> , 2019, 587, 117165.	8.3	29

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55	Modelling and optimization of modular system for power generation from a salinity gradient. <i>Renewable Energy</i> , 2019, 141, 139-147.	9.0	28
56	High-Gradient Magnetic Separator (HGMS) combined with adsorption for nitrate removal from aqueous solution. <i>Separation and Purification Technology</i> , 2019, 212, 650-659.	8.1	28
57	The effect of energy recovery device and feed flow rate on the energy efficiency of reverse osmosis process. <i>Chemical Engineering Research and Design</i> , 2020, 158, 12-23.	5.7	26
58	Copper removal from contaminated soil through electrokinetic process with reactive filter media. <i>Chemosphere</i> , 2020, 252, 126607.	8.4	26
59	Progress in osmotic membrane bioreactors research: Contaminant removal, microbial community and bioenergy production in wastewater. <i>Bioresource Technology</i> , 2021, 330, 124998.	9.7	26
60	Ultrasound-assisted membrane technologies for fouling control and performance improvement: A review. <i>Journal of Water Process Engineering</i> , 2021, 43, 102268.	5.7	26
61	Evaluation of machine learning algorithms to predict internal concentration polarization in forward osmosis. <i>Journal of Membrane Science</i> , 2022, 646, 120257.	8.3	26
62	Desalination by the forward osmosis: Advancement and challenges. <i>Science of the Total Environment</i> , 2023, 886, 163901.	8.2	26
63	Optimization of module pressure retarded osmosis membrane for maximum energy extraction. <i>Journal of Water Process Engineering</i> , 2019, 32, 100935.	5.7	25
64	Enhanced copper removal from contaminated kaolinite soil by electrokinetic process using compost reactive filter media. <i>Journal of Hazardous Materials</i> , 2021, 402, 123891.	12.6	25
65	Dual stage PRO process for power generation from different feed resources. <i>Desalination</i> , 2014, 352, 118-127.	8.3	24
66	A novel empirical method for predicting concentration polarization in forward osmosis for single and multicomponent draw solutions. <i>Desalination</i> , 2020, 494, 114668.	8.3	24
67	XGBoost model as an efficient machine learning approach for PFAS removal: Effects of material characteristics and operation conditions. <i>Environmental Research</i> , 2022, 215, 114286.	7.7	23
68	Dilution of seawater using dewatered construction water in a hybrid forward osmosis system. <i>Journal of Cleaner Production</i> , 2018, 195, 365-373.	9.5	22
69	Surface modification of nanofiltration membrane with kappa-carrageenan/graphene oxide for leachate wastewater treatment. <i>Journal of Membrane Science</i> , 2022, 659, 120776.	8.3	22
70	Comparison of dual stage ultrafiltration and hybrid ultrafiltration-forward osmosis process for harvesting microalgae (<i>Tetraselmis</i> sp.) biomass. <i>Chemical Engineering and Processing: Process Intensification</i> , 2020, 157, 108112.	3.7	21
71	Machine learning-based modeling and analysis of PFOS removal from contaminated water by nanofiltration process. <i>Separation and Purification Technology</i> , 2022, 289, 120775.	8.1	20
72	Design optimization of high performance dual stage pressure retarded osmosis. <i>Desalination</i> , 2015, 355, 217-224.	8.3	19

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73	Caspian seawater desalination and whey concentration through forward osmosis (FO)-reverse osmosis (RO) and FO-FO-RO hybrid systems: Experimental and theoretical study. <i>Journal of Water Process Engineering</i> , 2020, 37, 101492.	5.7	19
74	Heterostructures of 2D materials-quantum dots (QDs) for optoelectronic devices: challenges and opportunities. <i>Emergent Materials</i> , 2021, 4, 901-922.	5.7	19
75	Feasibility of H ₂ O ₂ cleaning for forward osmosis membrane treating landfill leachate. <i>Journal of Environmental Management</i> , 2021, 294, 113024.	7.9	19
76	Optimization of a Small Wind Turbine for a Rural Area: A Case Study of Deniliquin, New South Wales, Australia. <i>Energies</i> , 2020, 13, 2292.	3.2	18
77	Techno-economic assessment of forward osmosis as a pretreatment process for mitigation of scaling in multi-stage flash seawater desalination process. <i>Separation and Purification Technology</i> , 2023, 309, 123007.	8.1	18
78	Process design of a treatment system to reduce conductivity and ammoniacal nitrogen content of landfill leachate. <i>Journal of Water Process Engineering</i> , 2019, 31, 100806.	5.7	14
79	Exploring the use of cheap natural raw materials to reduce the internal concentration polarization in thin-film composite forward osmosis membranes. <i>Chemical Engineering Journal</i> , 2020, 398, 125483.	13.0	14
80	Theoretical study on feed water designs to reverse osmosis pressure vessel. <i>Desalination</i> , 2013, 326, 1-9.	8.3	13
81	Dual stage PRO power generation from brackish water brine and wastewater effluent feeds. <i>Desalination</i> , 2016, 389, 68-77.	8.3	12
82	A Hybrid NF-FO-RO Process for the Supply of Irrigation Water from Treated Wastewater: Simulation Study. <i>Membranes</i> , 2021, 11, 191.	3.0	12
83	High-Performance mild annealed CNT/GO-PVA composite membrane for brackish water treatment. <i>Separation and Purification Technology</i> , 2022, 285, 120361.	8.1	11
84	Forward osmosis process for supply of fertilizer solutions from seawater using a mixture of draw solutions. <i>Desalination and Water Treatment</i> , 2016, 57, 28025-28041.	1.0	10
85	Novel Thermal Desalination Brine Reject-Sewage Effluent Salinity Gradient for Power Generation and Dilution of Brine Reject. <i>Energies</i> , 2020, 13, 1756.	3.2	10
86	A facile and efficient approach to increase the magnetic property of MOF-5. <i>Solid State Sciences</i> , 2020, 106, 106292.	3.2	10
87	Wastewater Hydroponics for Pollutant Removal and Food Production: Principles, Progress and Future Outlook. <i>Water (Switzerland)</i> , 2023, 15, 2614.	2.8	10
88	Performance of the Pressure Assisted Forward Osmosis-MSF Hybrid Desalination Plant. <i>Water (Switzerland)</i> , 2021, 13, 1245.	2.8	9
89	Facet dependent catalytic activity of Pd nanocrystals for the remedy of organic Pollutant: A mechanistic study. <i>Applied Surface Science</i> , 2021, 570, 150775.	6.3	9
90	Innovative capacitive deionization-degaussing approach for improving adsorption/desorption for macadamia nutshell biochar. <i>Journal of Water Process Engineering</i> , 2022, 47, 102786.	5.7	9

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91	Investigating the effects of polypropylene-TiO ₂ loading on the performance of polysulfone/polyetherimide ultrafiltration membranes for azo dye removal: Experimental and molecular dynamics simulation. <i>Journal of Water Process Engineering</i> , 2023, 56, 104317.	5.7	9
92	A conceptual NF/RO arrangement design in the pressure vessel for seawater desalination. <i>Desalination and Water Treatment</i> , 2015, 54, 624-636.	1.0	8
93	Enhanced Performance Dual Stage Pressure Retarded Osmosis. <i>Energy Procedia</i> , 2017, 142, 4182-4197.	1.8	8
94	Brine reject dilution with treated wastewater for indirect desalination. <i>Journal of Cleaner Production</i> , 2021, 322, 129129.	9.5	8
95	Cobalt-iron decorated tellurium nanotubes for high energy density supercapacitor. <i>Materials Today Chemistry</i> , 2022, 24, 100871.	3.8	8
96	Process simulation of ion exchange desalination treatment of coal seam gas associated water. <i>Journal of Water Process Engineering</i> , 2019, 27, 89-98.	5.7	7
97	Improving Formaldehyde Removal from Water and Wastewater by Fenton, Photo-Fenton and Ozonation/Fenton Processes through Optimization and Modeling. <i>Water (Switzerland)</i> , 2021, 13, 2754.	2.8	7
98	Investigation of methods for fuel desulfurization wastewater treatment. <i>Chemical Engineering Research and Design</i> , 2023, 190, 198-219.	5.7	7
99	Design and fabrication of cobalt-nickel(1-x) telluride microfibers on nickel foam for battery-type supercapacitor and oxygen evolution reaction study. <i>Materials Today Chemistry</i> , 2023, 30, 101557.	3.8	6
100	Impact of membrane orientation on the energy efficiency of dual stage pressure retarded osmosis. <i>Journal of Water Process Engineering</i> , 2019, 30, 100621.	5.7	5
101	Application of buoyancy-power generator for compressed air energy storage using a fluid-air displacement system. <i>Journal of Energy Storage</i> , 2019, 26, 100926.	8.3	5
102	Evaluation of wind resource potential using statistical analysis of probability density functions in New South Wales, Australia. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 0, 1-18.	2.4	5
103	Impact of hydrodynamic conditions on optimum power generation in dual stage pressure retarded osmosis using spiral-wound membrane. <i>Energy Nexus</i> , 2022, 5, 100030.	7.8	5
104	Feasibility of Poly (Vinyl Alcohol)/Poly (Diallyldimethylammonium Chloride) Polymeric Network Hydrogel as Draw Solute for Forward Osmosis Process. <i>Membranes</i> , 2022, 12, 1097.	3.0	5
105	Hybrid and enhanced electrokinetic system for soil remediation from heavy metals and organic matter. <i>Journal of Environmental Sciences</i> , 0, 147, 424-450.	6.3	5
106	Two-stage FO-BWRO/NF treatment of saline waters. <i>Desalination and Water Treatment</i> , 2016, 57, 4842-4852.	1.0	4
107	Numerical and Physical Modeling of the Effect of Roughness Height on Cavitation Index in Chute Spillways. <i>International Journal of Civil Engineering</i> , 2020, 18, 539-550.	2.0	4
108	Process design of coal seam gas associated water treatment plants to facilitate beneficial reuse. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104255.	6.9	4

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109	Process simulation of high pH reverse osmosis systems to facilitate reuse of coal seam gas associated water. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104122.	6.9	4
110	Sodium docusate as a cleaning agent for forward osmosis membranes fouled by landfill leachate wastewater. <i>Chemosphere</i> , 2022, 308, 136237.	8.4	4
111	Dual stage PRO process: impact of the membrane materials of the process performance. <i>Desalination and Water Treatment</i> , 2016, 57, 6172-6183.	1.0	3
112	Forward osmosis feasibility and potential future application for desalination. , 2018, , 35-54.		3
113	Functionalized Nanomaterials (FNMs) for Environmental Applications. , 2021, , 109-134.		3
114	Assessing the Waterâ€“Energyâ€“Food Nexus and Resource Sustainability in the Ardabil Plain: A System Dynamics and HWA Approach. <i>Water (Switzerland)</i> , 2023, 15, 3673.	2.8	3
115	Nanofiltration separation of highly concentrated multivalent electrolyte draw solution; a pilot plant study. <i>Desalination and Water Treatment</i> , 2016, 57, 20237-20247.	1.0	2
116	Synthesis of Functionalized Nanomaterial (FNM)â€“Based Catalytic Materials. , 2021, , 135-168.		2
117	Osmotic Power Plant: Process Innovation and Future Potential. <i>Recent Advances in Petrochemical Science</i> , 2018, 4, .	0.1	2
118	Iron slag permeable reactive barrier for PFOA removal by the electrokinetic process. <i>Journal of Hazardous Materials</i> , 2023, 460, 132360.	12.6	2
119	Gravity-driven composite cellulose acetate/activated carbon aluminium-based hydrogel membrane for landfill wastewater treatment. <i>Chemical Engineering Research and Design</i> , 2023, 200, 682-692.	5.7	2
120	Polymer-based nano-enhanced forward osmosis membranes. , 2022, , 471-501.		1
121	Novel Approach to Landfill Wastewater Treatment Fouling Mitigation: Air Gap Membrane Distillation with Tin Sulfide-Coated PTFE Membrane. <i>Membranes</i> , 2023, 13, 483.	3.0	1
122	Machine learning-based modeling and analysis of perfluoroalkyl and polyfluoroalkyl substances controlling systems in protecting water resources. <i>Current Opinion in Chemical Engineering</i> , 2023, 42, 100983.	8.0	1
123	Advanced Functional Materials for the Detection of Perfluorinated Compounds in Water. <i>Energy, Environment, and Sustainability</i> , 2022, , 257-269.	0.0	0
124	Innovative stimuli-responsive membrane MSF brine rejection dilution by tertiary treated sewage effluent. <i>Journal of Environmental Management</i> , 2024, 365, 121517.	7.9	0
125	Performance and analysis of kappa-carrageenan hydrogel for PFOA-contaminated soil remediation wastewater treatment. <i>Chemosphere</i> , 2024, 365, 143371.	8.4	0