Hassan A Arafat

List of Publications by Year
in descending order

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126 papers	9,352 citations	34493 54 h-index	46524 93 g-index
128 all docs	128 docs citations	128 times ranked	9507 citing authors

#	Article	IF	Citations
1	3D printed photocatalytic feed spacers functionalized with Î²-FeOOH nanorods inducing pollutant degradation and membrane cleaning capabilities in water treatment. Applied Catalysis B: Environmental, 2022, 300, 120318.	10.8	49
2	Polydopamine-coated graphene oxide nanosheets embedded in sulfonated poly(ether sulfone) hybrid UF membranes with superior antifouling properties for water treatment. Chemical Engineering Journal, 2022, 433, 133526.	6.6	29
3	Porous Ti₃C₂T_x MXene Membranes for Highly Efficient Salinity Gradient Energy Harvesting. ACS Nano, 2022, 16, 792-800.	7.3	60
4	A mixed matrix polyimide ultrafiltration membrane for efficient removal of bentazon from water. Chemical Engineering Journal, 2022, 433, 134596.	6.6	10
5	Utilizing Buckingham Pi theorem and multiple regression analysis in scaling up direct contact membrane distillation processes. Desalination, 2022, 528, 115606.	4.0	8
6	Negative Pressure Membrane Distillation for Excellent Gypsum Scaling Resistance and Flux Enhancement. Environmental Science & Technology, 2022, 56, 1405-1412.	4.6	26
7	Fouling mechanisms in ultrafiltration under constant flux: Effect of feed spacer design. Chemical Engineering Journal, 2022, 446, 136563.	6.6	12
8	Hybrid NF and UF membranes tailored using quaternized polydopamine for enhanced removal of salts and organic pollutants from water. Desalination, 2022, 539, 115954.	4.0	10
9	Fouling resistant, high flux, charge tunable hybrid ultrafiltration membranes using polymer chains grafted graphene oxide for NOM removal. Chemical Engineering Journal, 2021, 408, 127300.	6.6	27
10	Polyvinylidene fluoride (PVDF)-Î±-zirconium phosphate (Î±-ZrP) nanoparticles based mixed matrix membranes for removal of heavy metal ions. Chemosphere, 2021, 267, 128896.	4.2	57
11	Antiscaling 3D printed feed spacers via facile nanoparticle coating for membrane distillation. Water Research, 2021, 189, 116649.	5.3	25
12	The sociopolitical factors impacting the adoption and proliferation of desalination: A critical review. Desalination, 2021, 498, 114798.	4.0	25
13	Comparative assessment of the effects of 3D printed feed spacers on process performance in MD systems. Desalination, 2021, 503, 114940.	4.0	17
14	Liquification of 2,2,4-trimethyl-1,3-pentanediol into hydrophobic eutectic mixtures: A multi-criteria design for eco-efficient boron recovery. Chemical Engineering Journal, 2021, 426, 131342.	6.6	24
15	Multifunctional hybrid UF membrane from poly(ether sulfone) and quaternized polydopamine anchored reduced graphene oxide nanohybrid for water treatment. Journal of Membrane Science, 2021, 639, 119779.	4.1	14
16	CFD-based genetic programming model for liquid entry pressure estimation of hydrophobic membranes. Desalination, 2020, 476, 114231.	4.0	25
17	High-Flux, Antifouling Hydrophilized Ultrafiltration Membranes with Tunable Charge Density Combining Sulfonated Poly(ether sulfone) and Aminated Graphene Oxide Nanohybrid. ACS Applied Materials & Interfaces, 2020, 12, 1617-1627.	4.0	67
18	Impacts of feed spacer design on UF membrane cleaning efficiency. Journal of Membrane Science, 2020, 616, 118571.	4.1	14

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19	Novel static mixers based on triply periodic minimal surface (TPMS) architectures. Journal of Environmental Chemical Engineering, 2020, 8, 104289.	3.3	42
20	Recent Developments in the Rational Fabrication of Thin Film Nanocomposite Membranes for Water Purification and Desalination. ACS Omega, 2020, 5, 3792-3800.	1.6	53
21	Macro-corrugated and nano-patterned hierarchically structured superomniphobic membrane for treatment of low surface tension oily wastewater by membrane distillation. Water Research, 2020, 174, 115600.	5.3	73
22	Synergistic effect of humic acid on alkali pretreatment of sugarcane bagasse for the recovery of lignin with phenomenal properties. Biomass and Bioenergy, 2020, 134, 105486.	2.9	19
23	Boron extraction from aqueous medium using novel hydrophobic deep eutectic solvents. Chemical Engineering Journal, 2020, 395, 125173.	6.6	54
24	Thin film deposition techniques for polymeric membranesâ€“ A review. Journal of Membrane Science, 2020, 610, 118258.	4.1	77
25	Implementation of two multiphase flow methods in modeling wetting of microporous hydrophobic membranes. Science of the Total Environment, 2019, 691, 1251-1261.	3.9	6
26	3D printed spacers for organic fouling mitigation in membrane distillation. Journal of Membrane Science, 2019, 581, 331-343.	4.1	73
27	3D printed spacers based on TPMS architectures for scaling control in membrane distillation. Journal of Membrane Science, 2019, 581, 38-49.	4.1	62
28	Comparative performance assessment of flat sheet and hollow fiber DCMD processes using CFD modeling. Separation and Purification Technology, 2019, 212, 709-722.	3.9	29
29	PVDF/magnetite blend membranes for enhanced flux and salt rejection in membrane distillation. Desalination, 2018, 436, 69-80.	4.0	64
30	Covalent surface entanglement of polyvinylidene fluoride membranes with carbon nanotubes. European Polymer Journal, 2018, 100, 153-164.	2.6	10
31	Poly(vinylidene fluoride)â€Based Membranes for Microalgae Filtration. Chemical Engineering and Technology, 2018, 41, 1305-1312.	0.9	15
32	Estimation of liquid entry pressure in hydrophobic membranes using CFD tools. Journal of Membrane Science, 2018, 552, 68-76.	4.1	40
33	A review of polymeric membranes and processes for potable water reuse. Progress in Polymer Science, 2018, 81, 209-237.	11.8	483
34	3D printed feed spacers based on triply periodic minimal surfaces for flux enhancement and biofouling mitigation in RO and UF. Desalination, 2018, 425, 12-21.	4.0	122
35	Fabrication of blend polyvinylidene fluoride/chitosan membranes for enhanced flux and fouling resistance. Separation and Purification Technology, 2018, 190, 68-76.	3.9	61
36	Computational fluid dynamics modeling for performance assessment of permeate gap membrane distillation. Journal of Membrane Science, 2018, 568, 55-66.	4.1	17

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37	CNT/PVP blend PVDF membranes for the removal of organic pollutants from simulated treated wastewater effluent. Journal of Environmental Chemical Engineering, 2018, 6, 6733-6740.	3.3	33
38	An integrated framework for sustainability assessment of seawater desalination. Desalination, 2018, 447, 1-17.	4.0	30
39	Mass transfer analysis of ultrafiltration using spacers based on triply periodic minimal surfaces: Effects of spacer design, directionality and voidage. Journal of Membrane Science, 2018, 561, 89-98.	4.1	64
40	3D printed triply periodic minimal surfaces as spacers for enhanced heat and mass transfer in membrane distillation. Desalination, 2018, 443, 256-271.	4.0	135
41	Advanced Material-Ordered Nanotubular Ceramic Membranes Covalently Capped with Single-Wall Carbon Nanotubes. Materials, 2018, 11, 739.	1.3	5
42	Wind-powered desalination for strategic water storage: Techno-economic assessment of concept. Desalination, 2017, 408, 36-51.	4.0	51
43	Optimization of lignin recovery from sugarcane bagasse using ionic liquid aided pretreatment. Cellulose, 2017, 24, 3191-3207.	2.4	63
44	Feedstock Availability, Composition, New Potential Resources for Biohydrogen, Biomethane, and Biobutanol Production via Biotechnological Routes. , 2017, , 261-276.		0
45	Activation of PVDF membranes through facile hydroxylation of the polymeric dope. Journal of Materials Research, 2017, 32, 4219-4231.	1.2	11
46	Functional groups docking on PVDF membranes: Novel Piranha approach. European Polymer Journal, 2017, 96, 414-428.	2.6	26
47	Photocatalytic hollow fiber membranes for the degradation of pharmaceutical compounds in wastewater. Journal of Environmental Chemical Engineering, 2017, 5, 5014-5024.	3.3	88
48	Reversing membrane wetting in membrane distillation: comparing dryout to backwashing with pressurized air. Environmental Science: Water Research and Technology, 2017, 3, 930-939.	1.2	47
49	Tunable separation via chemical functionalization of polyvinylidenefluoride membranes using piranha reagent. Journal of Membrane Science, 2017, 541, 567-579.	4.1	26
50	Nanoporous hollow fiber polyethersulfone membranes for the removal of residual contaminants from treated wastewater effluent: Functional and molecular implications. Separation and Purification Technology, 2017, 189, 20-31.	3.9	25
51	Membrane distillation research & implementation: Lessons from the past five decades. Separation and Purification Technology, 2017, 189, 108-127.	3.9	174
52	One-dimensional modeling of pervaporation systems using a semi-empirical flux model. Separation and Purification Technology, 2017, 174, 502-512.	3.9	19
53	Photothermal Membrane Distillation for Seawater Desalination. Advanced Materials, 2017, 29, 1603504.	11.1	422
54	The effects of iCVD film thickness and conformality on the permeability and wetting of MD membranes. Journal of Membrane Science, 2017, 523, 470-479.	4.1	43

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55	Reverse electrodialysis powered greenhouse concept for water- and energy-self-sufficient agriculture. Applied Energy, 2017, 187, 390-409.	5.1	61
56	Poly (sodium-4-styrenesulfonate) assisted ultrafiltration for methylene blue dye removal from simulated wastewater: Optimization using response surface methodology. Journal of Environmental Chemical Engineering, 2016, 4, 2008-2022.	3.3	54
57	A systematic study of the impact of hydrophobicity on the wetting of MD membranes. Journal of Membrane Science, 2016, 520, 850-859.	4.1	69
58	When plasmonics meets membrane technology. Journal of Physics Condensed Matter, 2016, 28, 363003.	0.7	75
59	Interplay of food security, agriculture and tourism within GCC countries. Global Food Security, 2016, 9, 1-9.	4.0	37
60	Understanding wetting phenomena in membrane distillation and how operational parameters can affect it. Journal of Membrane Science, 2016, 515, 163-174.	4.1	119
61	Energy efficiency of permeate gap and novel conductive gap membrane distillation. Journal of Membrane Science, 2016, 502, 171-178.	4.1	119
62	Combining air recharging and membrane superhydrophobicity for fouling prevention in membrane distillation. Journal of Membrane Science, 2016, 505, 241-252.	4.1	87
63	Leaching of PVP from PVDF/PVP blend membranes: impacts on membrane structure and fouling in membrane bioreactors. Journal of Materials Science, 2016, 51, 4328-4341.	1.7	54
64	Development of PVDF membranes for membrane distillation via vapour induced crystallisation. European Polymer Journal, 2016, 77, 164-173.	2.6	37
65	Reduction of food waste generation in the hospitality industry. Journal of Cleaner Production, 2016, 132, 129-145.	4.6	205
66	A comparative study of image analysis and porometry techniques for characterization of porous membranes. Journal of Materials Science, 2016, 51, 2017-2032.	1.7	66
67	A new vacuum membrane distillation system using an aspirator: concept modeling and optimization. Desalination and Water Treatment, 2016, 57, 12915-12928.	1.0	9
68	Decreasing membrane fouling during Chlorella vulgaris broth filtration via membrane development and coagulant assisted filtration. Algal Research, 2015, 9, 55-64.	2.4	31
69	Household-level determinants of residential solid waste generation rates: a study from Nablus-Palestine. Journal of Material Cycles and Waste Management, 2015, 17, 725-735.	1.6	6
70	Eggshell: A green adsorbent for heavy metal removal in an MBR system. Ecotoxicology and Environmental Safety, 2015, 121, 57-62.	2.9	54
71	Techno-economic analysis of MED and RO desalination powered by low-enthalpy geothermal energy. Desalination, 2015, 365, 277-292.	4.0	100
72	Membrane structure and surface morphology impact on the wetting of MD membranes. Journal of Membrane Science, 2015, 483, 94-103.	4.1	81

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73	Raw Juice Concentration by Osmotic Membrane Distillation Process with Hydrophobic Polymeric Membranes. Food and Bioprocess Technology, 2015, 8, 2146-2158.	2.6	49
74	Shrinkage, defect and membrane distillation performance of composite PVDF membranes. Desalination, 2015, 376, 62-72.	4.0	44
75	Nanofiltration based water reclamation from tannery effluent following coagulation pretreatment. Ecotoxicology and Environmental Safety, 2015, 121, 22-30.	2.9	35
76	Flux stabilization in membrane distillation desalination of seawater and brine using corrugated PVDF membranes. Journal of Membrane Science, 2015, 495, 404-414.	4.1	70
77	Simple and effective corrugation of PVDF membranes for enhanced MBR performance. Journal of Membrane Science, 2015, 475, 91-100.	4.1	44
78	Environmental performance and energy recovery potential of five processes for municipal solid waste treatment. Journal of Cleaner Production, 2015, 105, 233-240.	4.6	186
79	Scaling and fouling in membrane distillation for desalination applications: A review. Desalination, 2015, 356, 294-313.	4.0	607
80	Water security in the GCC countries: challenges and opportunities. Journal of Environmental Studies and Sciences, 2014, 4, 329-346.	0.9	59
81	Pore structure control of PVDF membranes using a 2-stage coagulation bath phase inversion process for application in membrane distillation (MD). Journal of Membrane Science, 2014, 452, 470-480.	4.1	104
82	Nanocrystalline cellulose reinforced PVDF-HFP membranes for membrane distillation application. Desalination, 2014, 332, 134-141.	4.0	153
83	Solid waste management in the hospitality industry: A review. Journal of Environmental Management, 2014, 146, 320-336.	3.8	124
84	Capital cost estimation of RO plants: GCC countries versus southern Europe. Desalination, 2014, 347, 103-111.	4.0	48
85	Membrane technology in microalgae cultivation and harvesting: A review. Biotechnology Advances, 2014, 32, 1283-1300.	6.0	255
86	Membrane fouling and cleaning in long term plant-scale membrane distillation operations. Journal of Membrane Science, 2014, 468, 360-372.	4.1	146
87	Modeling and comparative assessment of municipal solid waste gasification for energy production. Waste Management, 2013, 33, 1704-1713.	3.7	108
88	Numerical models of solar distillation device: Present and previous. Desalination, 2013, 311, 173-181.	4.0	26
89	Comparative Life Cycle Assessment (LCA) of streetlight technologies for minor roads in United Arab Emirates. Energy for Sustainable Development, 2013, 17, 438-450.	2.0	30
90	Effect of temperature-dependent microstructure evolution on pore wetting in PTFE membranes under membrane distillation conditions. Journal of Membrane Science, 2013, 429, 282-294.	4.1	157

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91	Reclamation of contaminated groundwater using cooking oils in a novel, eco-friendly and high-efficiency solvent extraction process. Desalination, 2013, 321, 9-21.	4.0	4
92	Preparation of Biodegradable Poly(lactic Acid) Electrospun Membrane with Decreased Pore Size by Post Heat Treatment. Key Engineering Materials, 2013, 594-595, 260-269.	0.4	0
93	Life cycle assessment of natural gas combined cycle integrated with CO2 post combustion capture using chemical solvent. International Journal of Greenhouse Gas Control, 2013, 19, 441-452.	2.3	28
94	Ultrafiltration versus sedimentation-based pretreatment in Fujairah-1 RO plant: Environmental impact study. Desalination, 2013, 317, 55-66.	4.0	37
95	Effect of dry-out on the fouling of PVDF and PTFE membranes under conditions simulating intermittent seawater membrane distillation (SWMD). Journal of Membrane Science, 2013, 438, 126-139.	4.1	114
96	Development of eco-efficient micro-porous membranes via electrospinning and annealing of poly (lactic acid). Journal of Membrane Science, 2013, 436, 57-67.	4.1	84
97	Fabrication and characterization of polyvinylidenefluoride-co-hexafluoropropylene (PVDF-HFP) electrospun membranes for direct contact membrane distillation. Journal of Membrane Science, 2013, 428, 104-115.	4.1	301
98	Analytical techniques for boron quantification supporting desalination processes: A review. Desalination, 2013, 310, 9-17.	4.0	47
99	Boron removal in new generation reverse osmosis (RO) membranes using two-pass RO without pH adjustment. Desalination, 2013, 310, 50-59.	4.0	68
100	Utilisation of drinking water from rainwater-harvesting cisterns in the Palestinian territories: assessment of contamination risk. International Journal of Environment and Waste Management, 2012, 9, 358.	0.2	2
101	Economic evaluation of stand-alone solar powered membrane distillation systems. Desalination, 2012, 299, 55-62.	4.0	122
102	Effects of membrane properties on water production cost in small scale membrane distillation systems. Desalination, 2012, 306, 60-71.	4.0	77
103	How green solar desalination really is? Environmental assessment using life-cycle analysis (LCA) approach. Desalination, 2012, 287, 123-131.	4.0	68
104	Technical evaluation of stand-alone solar powered membrane distillation systems. Desalination, 2012, 286, 332-341.	4.0	136
105	Energy efficiency comparison of single-stage membrane distillation (MD) desalination cycles in different configurations. Desalination, 2012, 290, 54-66.	4.0	182
106	Towards Sustainable Water Quality: Management of Rainwater Harvesting Cisterns in Southern Palestine. Water Resources Management, 2011, 25, 1721-1736.	1.9	37
107	Development of antifouling thin-film-composite membranes for seawater desalination. Journal of Membrane Science, 2011, 367, 110-118.	4.1	155
108	The application of in situ formed mixed iron oxides in the removal of strontium and actinides from nuclear tank waste. AICHE Journal, 2010, 56, 3012-3020.	1.8	7

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109	A review of residential solid waste management in the occupied Palestinian Territory: a window for improvement?. Waste Management and Research, 2010, 28, 481-488.	2.2	12
110	Enhanced solid waste management by understanding the effects of gender, income, marital status, and religious convictions on attitudes and practices related to street littering in Nablus â€“ Palestinian territory. Waste Management, 2009, 29, 449-455.	3.7	73
111	Chemical and microbiological quality of desalinated water, groundwater and rain-fed cisterns in the Gaza strip, Palestine. Desalination, 2009, 249, 1165-1170.	4.0	30
112	Preparation of thin-film-composite polyamide membranes for desalination using novel hydrophilic surface modifying macromolecules. Journal of Membrane Science, 2008, 325, 166-175.	4.1	165
113	Ultrafiltration of polysaccharideâ€“protein mixtures: Elucidation of fouling mechanisms and fouling control by membrane surface modification. Separation and Purification Technology, 2008, 63, 558-565.	3.9	134
114	Influence of socio-economic factors on street litter generation in the Middle East: effects of education level, age, and type of residence. Waste Management and Research, 2007, 25, 363-370.	2.2	62
115	Simple physical treatment for the reuse of wastewater from textile industry in the Middle East. Journal of Environmental Engineering and Science, 2007, 6, 115-122.	0.3	9
116	Trends and problems of solid waste management in developing countries: A case study in seven Palestinian districts. Waste Management, 2007, 27, 1910-1919.	3.7	100
117	Effects of prevailing conditions during second Palestinian uprising on solid waste management system in Nablus city in Palestine. International Journal of Environmental Health Research, 2006, 16, 281-287.	1.3	3
118	On the Adsorption of Aromatics on Oxygenated Activated Carbon in Nonaqueous Adsorption Media. Separation Science and Technology, 2005, 39, 43-62.	1.3	14
119	Title is missing!. Adsorption, 2003, 9, 311-319.	1.4	60
120	Experimental Verification of Causticâ€Side Solvent Extraction for Removal of Cesium from Tank Waste. Solvent Extraction and Ion Exchange, 2003, 21, 505-526.	0.8	27
121	Decomposition of hazardous organic materials in the solidification/stabilization process using catalytic-activated carbon. Waste Management, 2001, 21, 343-356.	3.7	12
122	Effect of chemical surface heterogeneity on the adsorption mechanism of dissolved aromatics on activated carbon. Carbon, 2000, 38, 1807-1819.	5.4	408
123	Immobilization of phenol in cement-based solidified/stabilized hazardous wastes using regenerated activated carbon: role of carbon. Journal of Hazardous Materials, 1999, 70, 139-156.	6.5	21
124	Immobilization of phenol in cement-based solidified/stabilized hazardous wastes using regenerated activated carbon: leaching studies. Journal of Hazardous Materials, 1999, 70, 117-138.	6.5	56
125	Leaching Behavior of Selected Aromatics in Cement-Based Solidification/Stabilization under Different Leaching Tests. Environmental Engineering Science, 1999, 16, 451-463.	0.8	19
126	Effect of Salt on the Mechanism of Adsorption of Aromatics on Activated Carbonâ€. Langmuir, 1999, 15, 5997-6003.	1.6	105