Raed Hashaikeh

List of Publications by Citations

105 papers	4,437 citations	30 h-index	64 g-index
112 ext. papers	5,380 ext. citations	6.6 avg, IF	6.52 L-index

#	Paper	IF	Citations
105	A review on membrane fabrication: Structure, properties and performance relationship. *Desalination*, **2013**, 326, 77-95	10.3	606
104	A review on electrospinning for membrane fabrication: Challenges and applications. *Desalination*, **2015**, 356, 15-30	10.3	602
103	Fabrication and characterization of polyvinylidenefluoride-co-hexafluoropropylene (PVDF-HFP) electrospun membranes for direct contact membrane distillation. *Journal of Membrane Science*, **2013**, 428, 104-115	9.6	258
102	Solar powered desalination Technology, energy and future outlook. *Desalination*, **2019**, 453, 54-76	10.3	198
101	Underwater superoleophobic cellulose/electrospun PVDFHFP membranes for efficient oil/water separation. *Desalination*, **2014**, 344, 48-54	10.3	185
100	Reverse osmosis pretreatment technologies and future trends: A comprehensive review. *Desalination*, **2019**, 452, 159-195	10.3	175
99	Nanocrystalline cellulose reinforced PVDF-HFP membranes for membrane distillation application. *Desalination*, **2014**, 332, 134-141	10.3	132
98	Electrically conductive polymeric membranes for fouling prevention and detection: A review. *Desalination*, **2016**, 391, 1-15	10.3	114
97	Energy for desalination: A state-of-the-art review. *Desalination*, **2020**, 491, 114569	10.3	113
96	Fog-harvesting potential of lubricant-impregnated electrospun nanomats. *Langmuir*, **2013**, 29, 13081-8	4	87
95	Electrically conductive membranes based on carbon nanostructures for self-cleaning of biofouling. *Desalination*, **2015**, 360, 8-12	10.3	81
94	Functional materials in desalination: A review. *Desalination*, **2019**, 468, 114077	10.3	70
93	Development of eco-efficient micro-porous membranes via electrospinning and annealing of poly (lactic acid). *Journal of Membrane Science*, **2013**, 436, 57-67	9.6	70
92	A review of efforts to reduce membrane fouling by control of feed spacer characteristics. *Desalination*, **2017**, 420, 384-402	10.3	69
91	Microfiltration membrane processes: A review of research trends over the past decade. *Journal of Water Process Engineering*, **2019**, 32, 100941	6.7	65
90	Hybrid technologies: The future of energy efficient desalination A review. *Desalination*, **2020**, 495, 114659	10.3	60
89	A novel in situ membrane cleaning method using periodic electrolysis. *Journal of Membrane Science*, **2014**, 471, 149-154	9.6	57

88	A review on the fabrication of zeolite and mesoporous inorganic nanofibers formation for catalytic applications. *Microporous and Mesoporous Materials*, **2016**, 236, 176-192	5.3	53
87	Electrospun cellulose/PEO fiber mats as a solid polymer electrolytes for Li ion batteries. *Renewable Energy*, **2013**, 56, 90-95	8.1	50
86	Nanocrystalline cellulose-reinforced composite mats for lithium-ion batteries: electrochemical and thermomechanical performance. *Journal of Solid State Electrochemistry*, **2013**, 17, 575-581	2.6	46
85	Preparation and characterization of electrospun PLA/nanocrystalline cellulose-based composites. *Journal of Applied Polymer Science*, **2013**, 130, 3345-3354	2.9	42
84	Gas sensing behavior of electrospun nickel oxide nanofibers: Effect of morphology and microstructure. *Sensors and Actuators B: Chemical*, **2016**, 227, 54-64	8.5	41
83	Mathematical and optimization modelling in desalination: State-of-the-art and future direction. *Desalination*, **2019**, 469, 114092	10.3	41
82	Nanocrystalline cellulose extraction process and utilization of the byproduct for biofuels production. *Carbohydrate Polymers*, **2013**, 93, 357-63	10.3	41
81	Acid mediated networked cellulose: Preparation and characterization. *Carbohydrate Polymers*, **2011**, 83, 1088-1094	10.3	40
80	Membrane-based detection of wetting phenomenon in direct contact membrane distillation. *Journal of Membrane Science*, **2017**, 535, 89-93	9.6	38
79	Electrospun nickel tungsten oxide composite fibers as active electrocatalysts for hydrogen evolution reaction. *Journal of Materials Science*, **2017**, 52, 7269-7281	4.3	37
78	Assessment of direct contact membrane distillation under different configurations, velocities and membrane properties. *Applied Energy*, **2017**, 185, 2058-2073	10.7	36
77	Electrospun zeolite-Y fibers: Fabrication and morphology analysis. *Microporous and Mesoporous Materials*, **2016**, 233, 78-86	5.3	34
76	Modified cellulose morphologies and its composites; SEM and TEM analysis. *Micron*, **2011**, 42, 751-61	2.3	34
75	Alternative heating techniques in membrane distillation: A review. *Desalination*, **2020**, 496, 114713	10.3	30
74	Numerical investigation of air gap membrane distillation (AGMD): Seeking optimal performance. *Desalination*, **2017**, 424, 122-130	10.3	29
73	Synthesis and morphology analysis of electrospun copper nanowires. *Journal of Materials Science*, **2014**, 49, 3052-3065	4.3	28
72	Hierarchical nano zeolite-Y hydrocracking composite fibers with highly efficient hydrocracking capability.. *RSC Advances*, **2018**, 8, 16703-16715	3.7	27
71	Nanocrystalline-cellulose-reinforced poly(vinylidenefluoride-co-hexafluoropropylene) nanocomposite films as a separator for lithium ion batteries. *Journal of Applied Polymer Science*, **2012**, 126, E442-E448	2.9	26

70	Electrically conductive spacers for self-cleaning membrane surfaces via periodic electrolysis. *Desalination*, **2017**, 416, 16-23	10.3	25
69	Fabrication of electrospun LTL zeolite fibers and their application for dye removal. *Journal of Materials Science*, **2016**, 51, 1133-1141	4.3	25
68	Controlling swelling behavior of poly (vinyl) alcohol via networked cellulose and its application as a reverse osmosis membrane. *Desalination*, **2014**, 336, 138-145	10.3	25
67	PEG based quasi-solid polymer electrolyte: Mechanically supported by networked cellulose. *Journal of Membrane Science*, **2012**, 421-422, 85-90	9.6	25
66	Electrospun metallic nanowires: Synthesis, characterization, and applications. *Journal of Applied Physics*, **2013**, 114, 171301	2.5	25
65	Microbundles of carbon nanostructures as binder free highly conductive matrix for LiFePO4 battery cathode. *Journal of Power Sources*, **2015**, 278, 314-319	8.9	24
64	Nickel oxide nanocrystals as a lithium-ion battery anode: structure-performance relationship. *Journal of Materials Science*, **2016**, 51, 6624-6638	4.3	24
63	Flux and salt rejection enhancement of polyvinyl(alcohol) reverse osmosis membranes using nano-zeolite. *Desalination*, **2019**, 470, 114104	10.3	23
62	A facile approach to fabricate superhydrophobic membranes with low contact angle hysteresis. *Journal of Membrane Science*, **2017**, 539, 144-151	9.6	23
61	Development of a dual-layered PVDF-HFP/cellulose membrane with dual wettability for desalination of oily wastewater. *Journal of Membrane Science*, **2019**, 570-571, 418-426	9.6	22
60	Electrically conductive membranes for in situ fouling detection in membrane distillation using impedance spectroscopy. *Journal of Membrane Science*, **2018**, 556, 66-72	9.6	20
59	Electropsun Ni-W/zeolite composite fibers for n-heptane hydrocracking and hydroisomerization. *Materials Chemistry and Physics*, **2017**, 200, 146-154	4.4	20
58	Breaking through the selectivity-permeability tradeoff using nano zeolite-Y for micellar enhanced ultrafiltration dye rejection application. *Separation and Purification Technology*, **2020**, 242, 116824	8.3	19
57	Cyclable membraneless redox flow batteries based on immiscible liquid electrolytes: Demonstration with all-iron redox chemistry. *Electrochimica Acta*, **2018**, 267, 41-50	6.7	19
56	Electrospinning of nickel oxide nanofibers: Process parameters and morphology control. *Materials Characterization*, **2014**, 95, 65-71	3.9	19
55	Fouling control in reverse osmosis membranes through modification with conductive carbon nanostructures. *Desalination*, **2019**, 470, 114118	10.3	18
54	Electrochemical water splitting using nano-zeolite Y supported tungsten oxide electrocatalysts. *Journal of Nanoparticle Research*, **2018**, 20, 1	2.3	18
53	Electrically conducting nanofiltration membranes based on networked cellulose and carbon nanostructures. *Desalination*, **2017**, 406, 60-66	10.3	18

52	Ni W/nano zeolite Y catalysts for n-heptane hydrocracking. *Materials Chemistry and Physics*, **2018**, 212, 87-94	4.4	17
51	Photoelectrochemical activity of electrospun WO3/NiWO4 nanofibers under visible light irradiation. *Journal of Materials Science*, **2018**, 53, 2208-2220	4.3	17
50	Isolation of a novel, crystalline cellulose material from the spent liquor of cellulose nanocrystals (CNCs). *Cellulose*, **2014**, 21, 3217-3229	5.5	17
49	Incorporation of nanosized LTL zeolites in dual-layered PVDF-HFP/cellulose membrane for enhanced membrane distillation performance. *Journal of Membrane Science*, **2020**, 611, 118298	9.6	16
48	Hydrocracking of Athabasca VR Using NiO-WO3 Zeolite-Based Catalysts. *Energy & Fuels*, **2018**, 32, 2224-2233	4.1	16
47	Obtaining high crystalline ball milled H-Y zeolite particles with carbon nanostructures as a damping material. *Microporous and Mesoporous Materials*, **2019**, 273, 19-25	5.3	16
46	Optimum loading level of nanoclay in PLA nanocomposites: Impact on the mechanical properties and glass transition temperature. *Journal of Thermoplastic Composite Materials*, **2014**, 27, 1461-1478	1.9	16
45	Enzymatic hydrolysis of cellulose and the use of TiO2 nanoparticles to open up the cellulose structure. *Biomass and Bioenergy*, **2011**, 35, 3970-3975	5.3	16
44	Enhanced performance of direct contact membrane distillation via selected electrothermal heating of membrane surface. *Journal of Membrane Science*, **2020**, 610, 118224	9.6	15
43	Insight into ball milling for size reduction and nanoparticles production of H-Y zeolite. *Materials Chemistry and Physics*, **2018**, 220, 322-330	4.4	15
42	Ternary polymer electrolyte with enhanced ionic conductivity and thermo-mechanical properties for lithium-ion batteries. *International Journal of Hydrogen Energy*, **2014**, 39, 2964-2970	6.7	14
41	Flexible carbon nanostructures with electrospun nickel oxide as a lithium-ion battery anode. *Ionics*, **2015**, 21, 2755-2762	2.7	14
40	Networked cellulose entrapped and reinforced PEO-based solid polymer electrolyte for moderate temperature applications. *Journal of Applied Polymer Science*, **2013**, 129, 2998-3006	2.9	14
39	Thermal efficiency enhancement of the direct contact membrane distillation: Conductive layer integration and geometrical undulation. *Applied Energy*, **2018**, 227, 7-17	10.7	13
38	Nanoscale Thermal Analysis of Multiphase Polymer Nanocomposites. *Journal of Physical Chemistry C*, **2012**, 116, 8849-8856	3.8	13
37	Electrospun copper oxide nanoparticles as an efficient heterogeneous catalyst for N-arylation of indole. *Tetrahedron Letters*, **2014**, 55, 5973-5975	2	12
36	Electro-ceramic self-cleaning membranes for biofouling control and prevention in water treatment. *Chemical Engineering Journal*, **2021**, 415, 128395	14.7	12
35	Novel technique for fabrication of electrospun membranes with high hydrophobicity retention. *Desalination*, **2018**, 436, 98-106	10.3	11

34	Facile Synthesis of Copper Oxide Nanoparticles via Electrospinning. *Journal of Nanomaterials*, **2014**, 2014, 1-7	3.2	10
33	Nanoscopic and Macro-Porous Carbon Nano-foam Electrodes with Improved Mass Transport for Vanadium Redox Flow Batteries. *Scientific Reports*, **2019**, 9, 17655	4.9	10
32	Superhydrophilic and underwater superoleophobic nano zeolite membranes for efficient oil-in-water nanoemulsion separation. *Journal of Water Process Engineering*, **2021**, 40, 101802	6.7	10
31	Periodic electrolysis technique for in situ fouling control and removal with low-pressure membrane filtration. *Desalination*, **2018**, 433, 10-24	10.3	9
30	Sulfated Cellulose/Polyvinyl Alcohol Composites as Proton Conducting Electrolyte for Capacitors. *Energy Procedia*, **2015**, 75, 1869-1874	2.3	7
29	Cellulose/PEO blends with enhanced water absorption and retention functionality. *Journal of Applied Polymer Science*, **2012**, 125, 2121-2127	2.9	7
28	Theoretical and experimental study of direct contact membrane distillation. *Desalination and Water Treatment*, **2016**, 57, 15660-15675		7
27	Electrochemical precipitation to reduce waste brine salinity. *Desalination*, **2021**, 498, 114796	10.3	7
26	Hierarchical underwater oleophobic electro-ceramic/carbon nanostructure membranes for highly efficient oil-in-water separation. *Separation and Purification Technology*, **2021**, 275, 119241	8.3	7
25	Electrically conductive membranes for contemporaneous dye rejection and degradation. *Chemical Engineering Journal*, **2022**, 428, 131184	14.7	7
24	Refinery processed water treatment via the low energy Direct Contact Membrane Distillation (DCMD). *Oil and Gas Science and Technology*, **2019**, 74, 3	1.9	6
23	Microcrystalline cellulose powder tableting via networked cellulose-based gel material. *Powder Technology*, **2012**, 217, 16-20	5.2	6
22	Low Energy Membrane Distillation: A Numerical Study on The Role of Conductive Spacers. *Energy Procedia*, **2017**, 142, 4056-4063	2.3	6
21	Nanocrystalline NiWO4-WO3-WO2.9 Composite Strings: Fabrication, Characterization and their Electrocatalytic Performance for Hydrogen Evolution Reaction. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2020**, 51, 1264-1274	2.3	6
20	Design and performance evaluation of a portable hybrid desalination unit using direct contact membrane distillation in dual configuration. *Energy Procedia*, **2019**, 158, 904-910	2.3	5
19	Catalytic Cracking of n-Hexadecane Using Carbon Nanostructures/Nano-Zeolite-Y Composite Catalyst. *Catalysts*, **2020**, 10, 1385	4	5
18	Photocatalytic activity of an electrophoretically deposited composite titanium dioxide membrane using carbon cloth as a conducting substrate. *RSC Advances*, **2016**, 6, 64219-64227	3.7	5
17	Low Energy Direct Contact Membrane Desalination: Conjugated Heat and High Fidelity Flow Simulation. *Energy Procedia*, **2015**, 75, 1722-1727	2.3	5

16	Selective electrochemical separation and recovery of calcium and magnesium from brine. *Separation and Purification Technology*, **2021**, 264, 118416	8.3	5
15	Carbon nanostructures modified LiFePO4 cathodes for lithium ion battery applications: optimized porosity and composition. *Materials Research Express*, **2016**, 3, 125008	1.7	5
14	Electrospun nickel oxide nanofibers: Microstructure and surface evolution. *Applied Surface Science*, **2015**, 357, 1333-1342	6.7	4
13	Electrospun copper oxide nanofibers as infrared photodetectors. *Applied Physics A: Materials Science and Processing*, **2015**, 118, 217-224	2.6	4
12	Nanomanifestations of Cellulose: Applications for Biodegradable Composites **2015**, 229-248		3
11	Direct contact membrane distillation: the role of membrane porosity100, 258-267		3
10	Enhancing DCMD vapor flux of PVDF-HFP membrane with hydrophilic silica fibers. *Separation and Purification Technology*, **2021**, 263, 118361	8.3	3
9	Numerical simulation and evaluation of spacer-filled direct contact membrane distillation module. *Applied Water Science*, **2020**, 10,	5	2
8	Evaluation of Thermal Efficiency of Membrane Distillation under Conductive Layer Integration. *Energy Procedia*, **2017**, 105, 4935-4942	2.3	2
7	Numerical simulation of membrane desalination in a conjugated heat transfer configuration: Role of spacers **2014**,		2
6	Thermoelectric heating and cooling for efficient membrane distillation. *Case Studies in Thermal Engineering*, **2021**, 28, 101540	5.6	2
5	Titanium coating on ultrafiltration inorganic membranes for fouling control. *Separation and Purification Technology*, **2021**, 119997	8.3	1
4	Intermittent direct joule heating of membrane surface for seawater desalination by air gap membrane distillation. *Journal of Membrane Science*, **2022**, 648, 120390	9.6	1
3	Shifting to transparent/hazy properties: The case of alginate/network cellulose all-polysaccharide composite films.. *Macromolecular Rapid Communications*, **2022**, e2200172	4.8	1
2	3D printed electrically conductive interdigitated spacer on ultrafiltration membrane for electrolytic cleaning and chlorination. *Journal of Applied Polymer Science*,52292	2.9	0
1	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	