

# Naef A A Qasem

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

2,606  
citations

257357

24  
h-index

197736

49  
g-index

59  
all docs

59  
docs citations

59  
times ranked

2109  
citing authors

#	ARTICLE	IF	CITATIONS
1	Removal of heavy metal ions from wastewater: a comprehensive and critical review. Npj Clean Water, 2021, 4, .	3.1	511
2	Carbon capture by physical adsorption: Materials, experimental investigations and numerical modeling and simulations – A review. Applied Energy, 2016, 161, 225-255.	5.1	498
3	An efficient CO <sub>2</sub> adsorptive storage using MOF-5 and MOF-177. Applied Energy, 2018, 210, 317-326.	5.1	151
4	Performance evaluation of a novel hybrid humidification-dehumidification (air-heated) system with an adsorption desalination system. Desalination, 2019, 461, 37-54.	4.0	96
5	Humidification-dehumidification desalination systems driven by thermal-based renewable and low-grade energy sources: A critical review. Renewable and Sustainable Energy Reviews, 2020, 125, 109817.	8.2	86
6	An efficient temperature swing adsorption (TSA) process for separating CO <sub>2</sub> from CO <sub>2</sub> /N <sub>2</sub> mixture using Mg-MOF-74. Energy Conversion and Management, 2018, 156, 10-24.	4.4	83
7	Energy and productivity efficient vacuum pressure swing adsorption process to separate CO <sub>2</sub> from CO <sub>2</sub> /N <sub>2</sub> mixture using Mg-MOF-74: A CFD simulation. Applied Energy, 2018, 209, 190-202.	5.1	71
8	Compact and microchannel heat exchangers: A comprehensive review of air-side friction factor and heat transfer correlations. Energy Conversion and Management, 2018, 173, 555-601.	4.4	69
9	MHD Hybrid Nanofluid Mixed Convection Heat Transfer and Entropy Generation in a 3-D Triangular Porous Cavity with Zigzag Wall and Rotating Cylinder. Mathematics, 2022, 10, 769.	1.1	63
10	Adsorption breakthrough and cycling stability of carbon dioxide separation from CO <sub>2</sub> /N <sub>2</sub> /H <sub>2</sub> O mixture under ambient conditions using 13X and Mg-MOF-74. Applied Energy, 2018, 230, 1093-1107.	5.1	60
11	Novel and efficient integration of a humidification-dehumidification desalination system with an absorption refrigeration system. Applied Energy, 2020, 263, 114659.	5.1	52
12	Techno-economic assessment of electrodialysis and reverse osmosis desalination plants. Separation and Purification Technology, 2021, 272, 118875.	3.9	52
13	Solar-powered ejector-based adsorption desalination system integrated with a humidification-dehumidification system. Energy Conversion and Management, 2021, 238, 114113.	4.4	42
14	Improving ice productivity and performance for an activated carbon/methanol solar adsorption ice-maker. Solar Energy, 2013, 98, 523-542.	2.9	39
15	Synthesis, characterization, and CO <sub>2</sub> breakthrough adsorption of a novel MWCNT/MIL-101(Cr) composite. Journal of CO <sub>2</sub> Utilization, 2017, 22, 238-249.	3.3	39
16	Carbon dioxide capture in the presence of water by an amine-based crosslinked porous polymer. Journal of Materials Chemistry A, 2018, 6, 6455-6462.	5.2	39
17	Carbon dioxide adsorption separation from dry and humid CO <sub>2</sub> /N <sub>2</sub> mixture. Computers and Chemical Engineering, 2018, 117, 221-235.	2.0	35
18	Improvement in design of electrodialysis desalination plants by considering the Donnan potential. Desalination, 2018, 441, 62-76.	4.0	35

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19	A Comprehensive Review of Saline Water Correlations and Data: Part II "Thermophysical Properties. Arabian Journal for Science and Engineering, 2021, 46, 1941-1979.	1.7	33
20	Multicomponent and multi-dimensional modeling and simulation of adsorption-based carbon dioxide separation. Computers and Chemical Engineering, 2017, 99, 255-270.	2.0	31
21	Enhancing the thermal and economic performance of supercritical CO <sub>2</sub> plant by waste heat recovery using an ejector refrigeration cycle. Energy Conversion and Management, 2020, 224, 113340.	4.4	30
22	A Microporous Organic Copolymer for Selective CO <sub>2</sub> Capture under Humid Conditions. ACS Sustainable Chemistry and Engineering, 2019, 7, 13941-13948.	3.2	29
23	The significance of modeling electro dialysis desalination using multi-component saline water. Desalination, 2020, 496, 114347.	4.0	29
24	Thermal design and management towards high capacity CO <sub>2</sub> adsorption systems. Energy Conversion and Management, 2020, 212, 112796.	4.4	26
25	The impact of thermodynamic balancing on performance of a desiccant-based humidification-dehumidification system to harvest freshwater from atmospheric air. Energy Conversion and Management, 2019, 199, 112011.	4.4	24
26	Improving the performance of thermal management system for electric and hybrid electric vehicles by adding an ejector. Energy Conversion and Management, 2019, 201, 112133.	4.4	23
27	Thermal analysis and modeling study of an activated carbon solar adsorption icemaker: Dhahran case study. Energy Conversion and Management, 2015, 100, 310-323.	4.4	22
28	Analytical and numerical schemes for thermodynamically balanced humidification-dehumidification desalination systems. Energy Conversion and Management, 2019, 200, 112052.	4.4	22
29	A Comprehensive Review of Saline Water Correlations and Data-Part I: Thermodynamic Properties. Arabian Journal for Science and Engineering, 2020, 45, 8817-8876.	1.7	21
30	Adsorption characterization and CO <sub>2</sub> breakthrough of MWCNT/Mg-MOF-74 and MWCNT/MIL-100(Fe) composites. International Journal of Energy and Environmental Engineering, 2018, 9, 169-185.	1.3	20
31	Generalized air-side friction and heat transfer correlations for wavy-fin compact heat exchangers. International Journal of Refrigeration, 2019, 97, 21-30.	1.8	20
32	The impact of thermodynamic potentials on the design of electro dialysis desalination plants. Energy Conversion and Management, 2020, 205, 112448.	4.4	19
33	Exergoeconomic assessment of the ejector-based battery thermal management system for electric and hybrid-electric vehicles. Energy, 2022, 245, 123252.	4.5	19
34	Thermodynamic balancing of the regeneration process in a novel liquid desiccant cooling/desalination system. Energy Conversion and Management, 2018, 176, 86-98.	4.4	18
35	A comprehensive thermal-hydraulic assessment of solar flat-plate air heaters. Energy Conversion and Management, 2020, 215, 112922.	4.4	17
36	On a thermodynamically-balanced humidification-dehumidification desalination system driven by a vapor-absorption heat pump. Energy Conversion and Management, 2021, 238, 114142.	4.4	16

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37	A design procedure to size thermodynamically-balanced humidification-dehumidification desalination systems. <i>Energy Conversion and Management</i> , 2020, 224, 113357.	4.4	14
38	Different configurations of humidification-dehumidification desalination systems: Thermal and economic assessment. <i>Energy Conversion and Management</i> , 2022, 258, 115470.	4.4	14
39	Exergy-based entropy-generation analysis of electrodialysis desalination systems. <i>Energy Conversion and Management</i> , 2020, 220, 113119.	4.4	13
40	Waste-heat recovery from a vapor-absorption refrigeration system for a desalination plant. <i>Applied Thermal Engineering</i> , 2021, 195, 117199.	3.0	13
41	Enhancement of adsorption carbon capture capacity of 13X with optimal incorporation of carbon nanotubes. <i>International Journal of Energy and Environmental Engineering</i> , 2017, 8, 219-230.	1.3	11
42	An innovative hybridization of electrodialysis with reverse osmosis for brackish water desalination. <i>Energy Conversion and Management</i> , 2021, 245, 114589.	4.4	11
43	Novel integration of a parallel-multistage direct contact membrane distillation plant with a double-effect absorption refrigeration system. <i>Applied Energy</i> , 2022, 323, 119572.	5.1	11
44	Explicit prediction models for brackish water electrodialysis desalination plants: Energy consumption and membrane area. <i>Energy Conversion and Management</i> , 2022, 261, 115656.	4.4	8
45	An assessment of the optimal air-side thermal-hydraulic performance of wavy-fin compact heat exchangers. <i>International Journal of Refrigeration</i> , 2018, 96, 117-130.	1.8	7
46	Enhancing CO <sub>2</sub> Adsorption Capacity and Cycling Stability of Mg-MOF-74. <i>Arabian Journal for Science and Engineering</i> , 2021, 46, 6219-6228.	1.7	7
47	Experimental and numerical investigation on innovative masonry walls for industrial and residential buildings. <i>Applied Energy</i> , 2020, 276, 115496.	5.1	7
48	Hydrothermal and Entropy Investigation of Nanofluid Mixed Convection in Triangular Cavity with Wavy Boundary Heated from below and Rotating Cylinders. <i>Nanomaterials</i> , 2022, 12, 1469.	1.9	7
49	Selectively capturing carbon dioxide from mixed gas streams using a new microporous organic copolymer. <i>Microporous and Mesoporous Materials</i> , 2020, 305, 110391.	2.2	6
50	Oxy-fuel Combustion in a 600 MW Gaseous Fuel Tangentially Fired Boiler. <i>Energy &amp; Fuels</i> , 2017, 31, 12540-12551.	2.5	5
51	Exergoeconomic Optimization of an Integrated Supercritical CO <sub>2</sub> Power Plant and Ejector-Based Refrigeration System for Electricity and Cooling Production. <i>Arabian Journal for Science and Engineering</i> , 2022, 47, 9137-9149.	1.7	5
52	An assessment of optimal airside heat transfer per unit friction power characteristics of compact heat exchangers. <i>International Journal of Refrigeration</i> , 2019, 99, 479-489.	1.8	4
53	Normalized sensitivity analysis of electrodialysis desalination plants for mitigating hypersalinity. <i>Separation and Purification Technology</i> , 2021, 257, 117858.	3.9	3
54	Entropy generation analysis of electrodialysis desalination using multi-component groundwater. <i>Desalination</i> , 2021, 500, 114858.	4.0	3

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55	Effect of Radiation Heat Transfer on Naturally Driven Flow Through Parallel-Plate Vertical Channel. Arabian Journal for Science and Engineering, 2017, 42, 1817-1829.	1.7	2
56	Assessment of Appropriate Geometry for Thermally Efficient CO2 Adsorption Beds. Applied Sciences (Switzerland), 2022, 12, 5726.	1.3	2
57	Investigation of the Effect of the Top and the Bottom Temperatures on the Performance of Humidification Dehumidification Desalination Systems. , 2016, , .		0
58	Addressing Mismatch Between the Peripheral and Local Nusselt Number for Non-Axisymmetric Flow Conditions: Redefining the Mean Temperature. Heat Transfer Engineering, 2021, 42, 387-408.	1.2	0