

# Mohamed Abdelgaied

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3566191/publications.pdf>

Version: 2024-02-01

78  
papers

3,470  
citations

117625  
34  
h-index

149698  
56  
g-index

78  
all docs

78  
docs citations

78  
times ranked

1118  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving the performance of solar still by using PCM as a thermal storage medium under Egyptian conditions. <i>Desalination</i> , 2016, 383, 22-28.	8.2	213
2	Observational study of modified solar still coupled with oil serpentine loop from cylindrical parabolic concentrator and phase changing material under basin. <i>Solar Energy</i> , 2017, 144, 71-78.	6.1	180
3	Modified pyramid solar still with v-corrugated absorber plate and PCM as a thermal storage medium. <i>Journal of Cleaner Production</i> , 2017, 161, 881-887.	9.3	158
4	Enhancing the performance of single basin solar still using high thermal conductivity sensible storage materials. <i>Journal of Cleaner Production</i> , 2018, 183, 20-25.	9.3	135
5	The performance of a modified solar still using hot air injection and PCM. <i>Desalination</i> , 2016, 379, 102-107.	8.2	130
6	Improving the performance of trays solar still using wick corrugated absorber, nano-enhanced phase change material and photovoltaics-powered heaters. <i>Journal of Energy Storage</i> , 2021, 40, 102782.	8.1	113
7	Performance enhancement of pyramid-shaped solar stills using hollow circular fins and phase change materials. <i>Journal of Energy Storage</i> , 2020, 31, 101610.	8.1	105
8	Effect of graphite mass concentrations in a mixture of graphite nanoparticles and paraffin wax as hybrid storage materials on performances of solar still. <i>Renewable Energy</i> , 2019, 132, 119-128.	8.9	102
9	Performance enhancement of a photovoltaic panel with reflectors and cooling coupled to a solar still with air injection. <i>Journal of Cleaner Production</i> , 2019, 224, 40-49.	9.3	101
10	Enhancement of hemispherical solar still productivity using iron, zinc and copper trays. <i>Solar Energy</i> , 2021, 216, 295-302.	6.1	98
11	Improving the tubular solar still performance using square and circular hollow fins with phase change materials. <i>Journal of Energy Storage</i> , 2021, 38, 102564.	8.1	92
12	Enhancement of pyramid-shaped solar stills performance using a high thermal conductivity absorber plate and cooling the glass cover. <i>Renewable Energy</i> , 2020, 146, 769-775.	8.9	89
13	A comprehensive review of tubular solar still designs, performance, and economic analysis. <i>Journal of Cleaner Production</i> , 2020, 246, 119030.	9.3	85
14	Study of a solar-driven membrane distillation system: Evaporative cooling effect on performance enhancement. <i>Renewable Energy</i> , 2017, 106, 192-200.	8.9	80
15	Reverse osmosis desalination systems powered by solar energy: Preheating techniques and brine disposal challenges – A detailed review. <i>Energy Conversion and Management</i> , 2022, 251, 114971.	9.2	75
16	Performance assessment of solar PV-driven hybrid HDH-RO desalination system integrated with energy recovery units and solar collectors: Theoretical approach. <i>Energy Conversion and Management</i> , 2021, 239, 114215.	9.2	69
17	Augmentation of a developed tubular solar still productivity using hybrid storage medium and CPC: An experimental approach. <i>Journal of Energy Storage</i> , 2020, 28, 101203.	8.1	64
18	Augmentation of diurnal and nocturnal distillate of modified tubular solar still having copper tubes filled with PCM in the basin. <i>Journal of Energy Storage</i> , 2020, 32, 101992.	8.1	63

#	ARTICLE	IF	CITATIONS
19	A comprehensive investigation of the optimization cooling technique for improving the performance of PV module with reflectors under Egyptian conditions. Solar Energy, 2019, 186, 257-263.	6.1	62
20	Performance of the modified tubular solar still integrated with cylindrical parabolic concentrators. Solar Energy, 2020, 204, 181-189.	6.1	61
21	Numerical and experimental investigation of a novel configuration of indirect evaporative cooler with internal baffles. Energy Conversion and Management, 2016, 126, 526-536.	9.2	60
22	Experimental evaluation of a two-stage indirect solar dryer with reheating coupled with HDH desalination system for remote areas. Desalination, 2018, 425, 22-29.	8.2	60
23	Performance improvement of a tubular solar still using V-corrugated absorber with wick materials: Numerical and experimental investigations. Solar Energy, 2021, 217, 187-199.	6.1	59
24	Augmenting the productivity of stepped distiller by corrugated and curved liners, CuO/paraffin wax, wick, and vapor suctioning. Environmental Science and Pollution Research, 2021, 28, 56955-56965.	5.3	54
25	Performance enhancement of modified solar still using multi-groups of two coaxial pipes in basin. Applied Thermal Engineering, 2017, 118, 23-32.	6.0	53
26	Performance evaluation of a solar energy assisted hybrid desiccant air conditioner integrated with HDH desalination system. Energy Conversion and Management, 2017, 150, 382-391.	9.2	53
27	Improving the thermo-economic performance of hemispherical solar distiller using copper oxide nanofluids and phase change materials: Experimental and theoretical investigation. Solar Energy Materials and Solar Cells, 2022, 238, 111596.	6.2	53
28	Hybrid system of an indirect evaporative air cooler and HDH desalination system assisted by solar energy for remote areas. Desalination, 2018, 439, 162-167.	8.2	48
29	A thermodynamic review on solar stills. Solar Energy, 2022, 237, 377-413.	6.1	45
30	A mathematical model for predicting the performance of the solar energy assisted hybrid air conditioning system, with one-rotor six-stage rotary desiccant cooling system. Energy Conversion and Management, 2014, 77, 129-142.	9.2	44
31	Experimental study of a novel integrated system of indirect evaporative cooler with internal baffles and evaporative condenser. Energy Conversion and Management, 2017, 138, 518-525.	9.2	40
32	Solar energy assisted desiccant air conditioning system with PCM as a thermal storage medium. Renewable Energy, 2018, 122, 632-642.	8.9	39
33	Performance of novel solar dryer. Chemical Engineering Research and Design, 2016, 102, 183-189.	5.6	38
34	Productivity enhancement of hemispherical solar still using Al <sub>2</sub> O <sub>3</sub> -water-based nanofluid and cooling the glass cover. Applied Nanoscience (Switzerland), 2021, 11, 1127-1139.	3.1	37
35	Effect of inter-cooling on the performance and economics of a solar energy assisted hybrid air conditioning system with six stages one-rotor desiccant wheel. Energy Conversion and Management, 2014, 78, 882-896.	9.2	33
36	Optimal concentration of El Oued sand grains as energy storage materials for enhancement of hemispherical distillers performance. Journal of Energy Storage, 2021, 36, 102415.	8.1	33

#	ARTICLE	IF	CITATIONS
37	Performance improvement of modified tubular solar still by employing vertical and inclined pin fins and external condenser: an experimental study. Environmental Science and Pollution Research, 2021, 28, 13504-13514.	5.3	32
38	Performances of pyramid-shaped solar still with different glass cover angles: Experimental study. , 2016, , .		30
39	Performance improvement of desiccant air conditioner coupled with humidification-dehumidification desalination unit using solar reheating of regeneration air. Energy Conversion and Management, 2019, 198, 111808.	9.2	30
40	Comparative study of hemispherical solar distillers iron-fins. Journal of Cleaner Production, 2021, 292, 126071.	9.3	30
41	Performance improvement of a hybrid air conditioning system using the indirect evaporative cooler with internal baffles as a pre-cooling unit. AEJ - Alexandria Engineering Journal, 2017, 56, 395-403.	6.4	28
42	Experimental study on improving the yield of hemispherical distillers using CuO nanoparticles and cooling the glass cover. Solar Energy Materials and Solar Cells, 2022, 235, 111482.	6.2	28
43	A comparative study of hemispherical solar stills with various modifications to obtain modified and inexpensive still models. Environmental Science and Pollution Research, 2021, 28, 55667-55677.	5.3	27
44	Optimal size of black gravel as energy storage materials for performance improvement of hemispherical distillers. Journal of Energy Storage, 2021, 43, 103196.	8.1	26
45	Performance enhancement of a v-corrugated basin hemispherical solar distiller combined with reversed solar collector: An experimental approach. Renewable Energy, 2022, 190, 330-337.	8.9	25
46	Performance evaluation of continuous solar still water desalination system. Journal of Thermal Analysis and Calorimetry, 2021, 144, 907-916.	3.6	23
47	Productivity enhancement of traditional solar still by using sandbags of El Oued, Algeria. Heat Transfer, 2021, 50, 768-783.	3.0	23
48	Finest concentration of phosphate grains as energy storage medium to improve hemispherical solar distillate: An experimental study. AEJ - Alexandria Engineering Journal, 2022, 61, 5573-5583.	6.4	23
49	Experimental investigation on the performance improvement of tubular solar still using floating black sponge layer. Environmental Science and Pollution Research, 2021, 28, 34968-34978.	5.3	21
50	Assessment of an innovative hybrid system of PVT-driven RO desalination unit integrated with solar dish concentrator as preheating unit. Energy Conversion and Management, 2022, 258, 115558.	9.2	21
51	Improving the performance of solar powered membrane distillation systems using the thermal energy storage mediums and the evaporative cooler. Renewable Energy, 2020, 157, 1046-1052.	8.9	19
52	A comprehensive review of technologies used to improve the performance of PV systems in a view of cooling mediums, reflectors design, spectrum splitting, and economic analysis. Environmental Science and Pollution Research, 2021, 28, 7955-7980.	5.3	18
53	Enhancement of the performance of hemispherical distiller via phosphate pellets as energy storage medium. Environmental Science and Pollution Research, 2021, 28, 32386-32395.	5.3	18
54	Performance improvement of pyramid solar distillers using a novel combination of absorber surface coated with CuO nano black paint, reflective mirrors, and PCM with pin fins. Renewable Energy, 2021, 180, 494-501.	8.9	18

#	ARTICLE	IF	CITATIONS
55	Performance assessment of the hemispherical solar distillers with the extended cylindrical iron fins: An experimental investigation. AEJ - Alexandria Engineering Journal, 2022, 61, 11149-11157.	6.4	17
56	A new configuration of the desiccant dehumidifier with cut-segmental silica-gel baffles and water cooling for air conditioning coupled with HDH desalination system. International Journal of Refrigeration, 2019, 103, 155-162.	3.4	16
57	Thermal performance improvement of the modified evacuated U-tube solar collector using hybrid storage materials and low-cost concentrators. Journal of Energy Storage, 2020, 29, 101394.	8.1	16
58	A comparative study of the effect of internal reflectors on a performance of hemispherical solar distillers: Energy, exergy, and economic analysis. Sustainable Energy Technologies and Assessments, 2021, 47, 101465.	2.7	15
59	Improving the performance of a modified hemispherical solar distiller using a double-faces absorbing solar thermal receiver integrated with a solar concentrator. Solar Energy, 2022, 241, 335-342.	6.1	15
60	Experimental investigation on a modified design of hemispherical solar distiller with v-corrugated iron trays and wick materials for improving freshwater production. Environmental Science and Pollution Research, 2022, 29, 83756-83769.	5.3	15
61	Optimal configurations of hemispherical solar distillers using the higher conductivity extended hollow cylindrical fins filled with latent heat storage materials. Journal of Energy Storage, 2022, 50, 104706.	8.1	14
62	Performance Evaluation of Modified Solar Still Using Aluminum Foil Sheet as Absorber Cover – A Comparative Study. Journal of Testing and Evaluation, 2021, 49, 3565-3576.	0.7	11
63	Optimization of the hemispherical solar distiller performance assisted by high thermal conductivity metal trays incorporated with reflective mirrors. Environmental Science and Pollution Research, 2022, 29, 38248-38257.	5.3	11
64	Study on the effect of alumina nano-fluid on sharp-edge orifice flow characteristics in both cavitations and non-cavitations turbulent flow regimes. AEJ - Alexandria Engineering Journal, 2016, 55, 1099-1106.	6.4	10
65	Enhancing the hemispherical solar distiller performance using internal reflectors and El Oued sand grains as energy storage mediums. Environmental Science and Pollution Research, 2022, 29, 21451-21464.	5.3	9
66	Performance improvement of modified stepped solar distillers using three effective hybrid optimization modifications. Sustainable Energy Technologies and Assessments, 2022, 51, 101936.	2.7	9
67	Recent technological advancements in membrane distillation and solar stills: preheating techniques, heat storage materials, and nanomaterials – a detailed review. Environmental Science and Pollution Research, 2022, 29, 38879-38898.	5.3	9
68	An Innovative solar water collector using heat pipe with inner rings. International Journal of Ambient Energy, 2014, , 1-13.	2.5	6
69	Overall heat transfer coefficient and pressure drop in a typical tubular exchanger employing alumina nano-fluid as the tube side hot fluid. Heat and Mass Transfer, 2016, 52, 1417-1424.	2.1	6
70	Performance optimization of the hybrid HDH desalination system powered by photovoltaic-thermal modules using solar dish concentrators. International Journal of Energy Research, 2022, 46, 14946-14963.	4.5	6
71	Experimentally evaluation of split air conditioner integrated with humidification-dehumidification desalination unit for better thermal comfort, produce freshwater, and energy saving. Journal of Thermal Analysis and Calorimetry, 2022, 147, 4197-4207.	3.6	5
72	Non-Darcian immiscible two-phase flow through porous materials (Darcy–Forchheimer–Brinkman) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.7	5

#	ARTICLE	IF	CITATIONS
73	Energy saving potential of a solar assisted desiccant air conditioning system for different types of storage. Environmental Progress and Sustainable Energy, 2018, 37, 1448-1454.	2.3	3
74	Minimizing energy consumption in reverse osmosis desalination using renewable energy sources: A review. , 2019, , .		3
75	Performance of the novel design thermoelectric cooling system. Heat Transfer, 2020, 49, 4134-4152.	3.0	3
76	An innovative solar water collector using heat pipe with inner rings. , 2014, , .		2
77	Performance improvement of a solar assisted desiccant air conditioning coupled with condenser for water production. , 2018, , .		0
78	Experimental study of a hybrid system of air conditioning coupled with the distillate water production unit. AIP Conference Proceedings, 2019, , .	0.4	0