

# Ali Hussein Abdulzahra Alwaeli

## List of Publications by Year in descending order

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Version: 2024-02-01

68  
papers

3,402  
citations

172443

29  
h-index

144002

57  
g-index

72  
all docs

72  
docs citations

72  
times ranked

1917  
citing authors

#	ARTICLE	IF	CITATIONS
1	Long-term power forecasting using FRNN and PCA models for calculating output parameters in solar photovoltaic generation. Heliyon, 2022, 8, e08803.	3.2	12
2	Performance enhancement of double pass photovoltaic/thermal solar collector using asymmetric compound parabolic concentrator (PV/T-ACPC) for façade application in different climates. Case Studies in Thermal Engineering, 2022, 34, 101998.	5.7	11
3	Effect of dust and cleaning methods on mono and polycrystalline solar photovoltaic performance: An indoor experimental study. Solar Energy, 2022, 236, 626-643.	6.1	35
4	Effect of CuO-water-ethylene glycol nanofluids on the performance of photovoltaic/thermal energy system: an experimental study. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 3673-3691.	2.3	3
5	Nano-Iron Oxide-Ethylene Glycol-Water Nanofluid Based Photovoltaic Thermal (PV/T) System with Spiral Flow Absorber: An Energy and Exergy Analysis. Energies, 2022, 15, 3870.	3.1	10
6	Assessment Cooling of Photovoltaic Modules Using Underground Water. Arab Gulf Journal of Scientific Research, 2022, , 151-169.	0.6	3
7	A comparison of dust impacts on polycrystalline and monocrystalline solar photovoltaic performance: an outdoor experimental study. Environmental Science and Pollution Research, 2022, 29, 88788-88802.	5.3	8
8	A review of photovoltaic thermal systems: Achievements and applications. International Journal of Energy Research, 2021, 45, 1269-1308.	4.5	32
9	Investigation of a nanofluid-based photovoltaic thermal system using single-wall carbon nanotubes: An experimental study. International Journal of Energy Research, 2021, 45, 10285-10303.	4.5	17
10	Nano enhanced fluids and latent heat storage material for photovoltaic modules: A case study and parametric analysis. International Journal of Energy Research, 2021, 45, 12944-12967.	4.5	5
11	Comparison and evaluation of solar photovoltaic thermal system with hybrid collector: An experimental study. Thermal Science and Engineering Progress, 2021, 22, 100845.	2.7	13
12	Numerical and experimental evaluation of nanofluids based photovoltaic/thermal systems in Oman: Using silicone-carbide nanoparticles with water-ethylene glycol mixture. Case Studies in Thermal Engineering, 2021, 26, 101009.	5.7	21
13	Controlling the melting and solidification points temperature of PCMs on the performance and economic return of the water-cooled photovoltaic thermal system. Solar Energy, 2021, 224, 1344-1357.	6.1	36
14	Energetic and exergetic analysis of a new double pass solar air collector with fins and phase change material. Solar Energy, 2021, 226, 260-271.	6.1	29
15	Solar adsorption air conditioning system “Recent advances and its potential for cooling an office building in tropical climate. Case Studies in Thermal Engineering, 2021, 27, 101275.	5.7	7
16	Mathematical and neural network modeling for predicting and analyzing of nanofluid-nano PCM photovoltaic thermal systems performance. Renewable Energy, 2020, 145, 963-980.	8.9	101
17	Advanced photovoltaic thermal collectors. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2020, 234, 206-213.	2.5	10
18	Cooling of PV Panels for Performance Enhancement of Grid-Connected Systems. Innovative Renewable Energy, 2020, , 139-147.	0.4	0

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19	The Impact of Dust's Physical Properties on Photovoltaic Modules Outcomes. Innovative Renewable Energy, 2020, , 495-506.	0.4	4
20	Advances in Nano-Materials Used in Photovoltaic/Thermal Systems. Advances in Material Research and Technology, 2020, , 105-133.	0.6	0
21	Evaluation and comparison of different flow configurations PVT systems in Oman: A numerical and experimental investigation. Solar Energy, 2020, 208, 58-88.	6.1	59
22	A review of dust accumulation and cleaning methods for solar photovoltaic systems. Journal of Cleaner Production, 2020, 276, 123187.	9.3	152
23	Evaluation of aging and performance of grid-connected photovoltaic system northern Oman: Seven years' experimental study. Solar Energy, 2020, 207, 1247-1258.	6.1	32
24	Evaluation of the electrical performance of a photovoltaic thermal system using nano-enhanced paraffin and nanofluids. Case Studies in Thermal Engineering, 2020, 21, 100678.	5.7	56
25	A novel model and experimental validation of dust impact on grid-connected photovoltaic system performance in Northern Oman. Solar Energy, 2020, 206, 564-578.	6.1	43
26	Machine learning predictive models for optimal design of building's integrated photovoltaic thermal collectors. International Journal of Energy Research, 2020, 44, 5675-5695.	4.5	24
27	Energy, exergy and efficiency of four photovoltaic thermal collectors with different energy storage material. Journal of Energy Storage, 2020, 29, 101245.	8.1	61
28	The effect of dust components and contaminants on the performance of photovoltaic for the four regions in Iraq: a practical study. Renewable Energy and Environmental Sustainability, 2020, 5, 3.	1.4	26
29	Impact of preheating environment on microstructural and optoelectronic properties of Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZTS) thin films deposited by spin-coating. Superlattices and Microstructures, 2020, 140, 106452.	3.1	41
30	Recent Advances in Solar Thermal Assisted Air Conditioning Systems. , 2020, , .		0
31	Experimental and deep learning artificial neural network approach for evaluating grid-connected photovoltaic systems. International Journal of Energy Research, 2019, 43, 8572-8591.	4.5	43
32	Novel criteria for assessing PV/T solar energy production. Case Studies in Thermal Engineering, 2019, 16, 100547.	5.7	20
33	Turbulent convective heat transfer of silica oxide nanofluid through corrugated channels: An experimental and numerical study. International Journal of Heat and Mass Transfer, 2019, 145, 118806.	4.8	86
34	Mathematical and neural network models for predicting the electrical performance of a PV/T system. International Journal of Energy Research, 2019, 43, 8100.	4.5	10
35	Artificial neural network modeling and analysis of photovoltaic/thermal system based on the experimental study. Energy Conversion and Management, 2019, 186, 368-379.	9.2	108
36	Experimental investigation of using nano-PCM/nanofluid on a photovoltaic thermal system (PVT): Technical and economic study. Thermal Science and Engineering Progress, 2019, 11, 213-230.	2.7	150

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37	Evaluation and Design Criteria of Photovoltaic Thermal (PV/T). Materials Today: Proceedings, 2019, 19, 1111-1118.	1.8	2
38	Thermodynamic analysis of new concepts for enhancing cooling of PV panels for grid-connected PV systems. Journal of Thermal Analysis and Calorimetry, 2019, 136, 147-157.	3.6	19
39	Influence of the base fluid on the thermo-physical properties of PV/T nanofluids with surfactant. Case Studies in Thermal Engineering, 2019, 13, 100340.	5.7	61
40	Modeling and experimental validation of a PVT system using nanofluid coolant and nano-PCM. Solar Energy, 2019, 177, 178-191.	6.1	210
41	Evaluation and analysis of nanofluid and surfactant impact on photovoltaic-thermal systems. Case Studies in Thermal Engineering, 2019, 13, 100392.	5.7	81
42	Photovoltaic/Thermal (PV/T) Systems. , 2019, , .		35
43	PV/T Feasibility and Cost Assessment. , 2019, , 153-171.		0
44	The Impact of Climatic Conditions on PV/PVT Outcomes. , 2019, , 173-222.		0
45	PV/T Principles and Design. , 2019, , 65-123.		2
46	Advanced PV/T Systems. , 2019, , 125-151.		0
47	Applications and PV/T Systems. , 2019, , 223-263.		0
48	Comparison of prediction methods of PV/T nanofluid and nano-PCM system using a measured dataset and artificial neural network. Solar Energy, 2018, 162, 378-396.	6.1	150
49	Comparison study of indoor/outdoor experiments of a photovoltaic thermal PV/T system containing SiC nanofluid as a coolant. Energy, 2018, 151, 33-44.	8.8	101
50	Techno-economical assessment of grid connected PV/T using nanoparticles and water as base-fluid systems in Malaysia. International Journal of Sustainable Energy, 2018, 37, 558-575.	2.4	63
51	Nanofluid based grid connected PV/T systems in Malaysia: A techno-economical assessment. Sustainable Energy Technologies and Assessments, 2018, 28, 81-95.	2.7	59
52	Simultaneous enhancement in light absorption and charge transportation of bismuth vanadate (BiVO <sub>4</sub> ) photoanode via microwave annealing. Materials Letters, 2018, 233, 67-70.	2.6	31
53	Numerical investigation of V-groove air-collector performance with changing cover in Bangi, Malaysia. Case Studies in Thermal Engineering, 2018, 12, 587-599.	5.7	27
54	Numerical study on the effect of operating nanofluids of photovoltaic thermal system (PV/T) on the convective heat transfer. Case Studies in Thermal Engineering, 2018, 12, 405-413.	5.7	61

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55	Concepts and Challenges of Nanofluids and Phase Change Material (PCM) in Photovoltaic Thermal (PV/T) Collectors: A Review. Jurnal Kejuruteraan, 2018, S11, 31-36.	0.3	3
56	Design, measurement and evaluation of photovoltaic pumping system for rural areas in Oman. Environment, Development and Sustainability, 2017, 19, 1041-1053.	5.0	34
57	Photovoltaic/Thermal (PV/T) systems: Status and future prospects. Renewable and Sustainable Energy Reviews, 2017, 77, 109-130.	16.4	323
58	Techno-economic feasibility analysis of 1 MW photovoltaic grid connected system in Oman. Case Studies in Thermal Engineering, 2017, 10, 131-141.	5.7	92
59	An experimental investigation of SiC nanofluid as a base-fluid for a photovoltaic thermal PV/T system. Energy Conversion and Management, 2017, 142, 547-558.	9.2	240
60	Evaluation of the nanofluid and nano-PCM based photovoltaic thermal (PVT) system: An experimental study. Energy Conversion and Management, 2017, 151, 693-708.	9.2	311
61	Comparative study to use nano-(Al <sub>2</sub> O <sub>3</sub> , CuO, and SiC) with water to enhance photovoltaic thermal PV/T collectors. Energy Conversion and Management, 2017, 148, 963-973.	9.2	149
62	Evaluation of the Economic and Environmental Aspects of Using Photovoltaic Water Pumping System. Lecture Notes in Electrical Engineering, 2017, , 715-723.	0.4	12
63	Effect of Shadows on the Performance of Solar Photovoltaic. , 2017, , 379-385.		26
64	Review and design of a standalone PV system performance. International Journal of Computation and Applied Sciences, 2016, 1, 1-6.	0.3	6
65	Technoeconomical Assessment of Optimum Design for Photovoltaic Water Pumping System for Rural Area in Oman. International Journal of Photoenergy, 2015, 2015, 1-8.	2.5	9
66	Levelized electricity cost for photovoltaic system in Sohar-Oman. , 2013, , .		7
67	Dust Effect on the Performance of Photovoltaic. Advanced Materials Research, 0, 875-877, 1908-1911.	0.3	6
68	Modeling and experimental validation of dust impact on solar cell performance. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-17.	2.3	9