

# Abhijit Date

## List of Publications by Year in descending order

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126  
papers

2,604  
citations

201658

27  
h-index

243610

44  
g-index

126  
all docs

126  
docs citations

126  
times ranked

2412  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biofuel from Algae- Is It a Viable Alternative?. <i>Procedia Engineering</i> , 2012, 49, 221-227.	1.2	137
2	Simultaneous power generation and heat recovery using a heat pipe assisted thermoelectric generator system. <i>Energy Conversion and Management</i> , 2015, 91, 110-119.	9.2	123
3	Experimental investigation of combined heat recovery and power generation using a heat pipe assisted thermoelectric generator system. <i>Energy Conversion and Management</i> , 2016, 111, 147-157.	9.2	113
4	Progress of thermoelectric power generation systems: Prospect for small to medium scale power generation. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 33, 371-381.	16.4	90
5	Theoretical and experimental study on heat pipe cooled thermoelectric generators with water heating using concentrated solar thermal energy. <i>Solar Energy</i> , 2014, 105, 656-668.	6.1	87
6	Heat extraction from Non-Convective and Lower Convective Zones of the solar pond: A transient study. <i>Solar Energy</i> , 2013, 97, 517-528.	6.1	82
7	Performance analysis of a heat pump driven humidification-dehumidification desalination system. <i>Desalination</i> , 2018, 445, 95-104.	8.2	72
8	A numerical and experimental study of solidification around axially finned heat pipes for high temperature latent heat thermal energy storage units. <i>Applied Thermal Engineering</i> , 2014, 70, 609-619.	6.0	67
9	An experimental review on coupling of solar pond with membrane distillation. <i>Solar Energy</i> , 2015, 119, 319-331.	6.1	65
10	Design and cost analysis of low head simple reaction hydro turbine for remote area power supply. <i>Renewable Energy</i> , 2009, 34, 409-415.	8.9	62
11	Efficiency Gains of Photovoltaic System Using Latent Heat Thermal Energy Storage. <i>Energy Procedia</i> , 2017, 110, 83-88.	1.8	62
12	A Review on Micro Hydropower in Indonesia. <i>Energy Procedia</i> , 2017, 110, 316-321.	1.8	55
13	Sustainable zero liquid discharge desalination (SZLDD). <i>Solar Energy</i> , 2016, 135, 337-347.	6.1	47
14	Synthesis and Characterization of Chemical Spray Pyrolysed CZTS Thin Films for Solar Cell Applications. <i>Energy Procedia</i> , 2017, 110, 180-187.	1.8	46
15	Theoretical and experimental estimation of limiting input heat flux for thermoelectric power generators with passive cooling. <i>Solar Energy</i> , 2015, 111, 201-217.	6.1	44
16	Transient model to predict the performance of thermoelectric generators coupled with solar pond. <i>Energy</i> , 2016, 103, 271-289.	8.8	44
17	Synthesis of orthorhombic-molybdenum trioxide ( $\beta$ -MoO <sub>3</sub> ) thin films by hot wire-CVD and investigations of its humidity sensing properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 15790-15796.	2.2	44
18	Structural and Optical Properties of CdTe Thin Films Deposited Using RF Magnetron Sputtering. <i>Energy Procedia</i> , 2017, 110, 188-195.	1.8	43

#	ARTICLE	IF	CITATIONS
19	Performance of suspended finned heat pipes in high-temperature latent heat thermal energy storage. Applied Thermal Engineering, 2015, 81, 242-252.	6.0	42
20	Power Generation from Waste Heat Using Heat Pipe and Thermoelectric Generator. Energy Procedia, 2015, 75, 645-650.	1.8	36
21	Temperature Dependent Raman Spectroscopy and Sensing Behavior of Few Layer SnSe <sub>2</sub> Nanosheets. ChemistrySelect, 2016, 1, 5380-5387.	1.5	35
22	Theoretical study of a new thermodynamic power cycle for thermal water pumping application and its prospects when coupled to a solar pond. Applied Thermal Engineering, 2013, 58, 511-521.	6.0	34
23	Experimental investigation of a vapour chamber heat spreader with hybrid wick structure. International Journal of Thermal Sciences, 2019, 140, 28-35.	4.9	31
24	Numerical investigation of temperature distribution and thermal performance while charging-discharging thermal energy in aquifer. Applied Thermal Engineering, 2017, 115, 756-773.	6.0	30
25	Effect of Bath Temperature on Optical and Morphology Properties of CdS Thin Films Grown by Chemical Bath Deposition. Energy Procedia, 2017, 110, 202-209.	1.8	30
26	An experimental study of brine recirculation in humidification-dehumidification desalination of seawater. Case Studies in Thermal Engineering, 2019, 14, 100463.	5.7	30
27	Investigating the potential for using a simple water reaction turbine for power production from low head hydro resources. Energy Conversion and Management, 2013, 66, 257-270.	9.2	29
28	Performance Evaluation of Solid Desiccant Wheel Regenerated by Waste Heat or Renewable Energy. Energy Procedia, 2017, 110, 434-439.	1.8	28
29	A new house wall system for residential buildings. Energy and Buildings, 2013, 67, 403-418.	6.7	27
30	Electric power generation via plate type power generation unit from solar pond using thermoelectric cells. Applied Energy, 2016, 183, 61-76.	10.1	27
31	Small Scale Power Generation using Low Grade Heat from Solar Pond. Procedia Engineering, 2012, 49, 50-56.	1.2	26
32	Performance and reliability of commercially available thermoelectric cells for power generation. Applied Thermal Engineering, 2016, 102, 548-556.	6.0	26
33	Investigation of Direct Contact Membrane Distillation coupling with a Concentrated Photovoltaic solar system. Energy Procedia, 2019, 160, 246-252.	1.8	26
34	Performance of a rotating two-phase turbine for combined power generation and desalination. Applied Thermal Engineering, 2015, 76, 9-17.	6.0	24
35	Wide band gap and conducting tungsten carbide (WC) thin films prepared by hot wire chemical vapor deposition (HW-CVD) method. Materials Letters, 2016, 183, 315-317.	2.6	24
36	On the addition of heat to solar pond from external sources. Solar Energy, 2017, 144, 111-116.	6.1	24

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37	Investigate the Potential of Using Trilateral Flash Cycle for Combined Desalination and Power Generation Integrated with Salinity Gradient Solar Ponds. <i>Procedia Engineering</i> , 2012, 49, 42-49.	1.2	23
38	Heat recovery from ground below the solar pond. <i>Solar Energy</i> , 2017, 155, 1254-1260.	6.1	23
39	Monitoring and maintaining the water clarity of salinity gradient solar ponds. <i>Solar Energy</i> , 2011, 85, 2987-2996.	6.1	22
40	Energy efficient residential house wall system. <i>Applied Thermal Engineering</i> , 2013, 58, 400-410.	6.0	22
41	Experimental Study of Screw Turbine Performance based on Different Angle of Inclination. <i>Energy Procedia</i> , 2017, 110, 8-13.	1.8	22
42	Base-load Thermoelectric Power Generation Using Evacuated Tube Solar Collector and Water Storage Tank. <i>Energy Procedia</i> , 2014, 57, 2112-2120.	1.8	20
43	Modelling and Optimization of Low-temperature Waste Heat Thermoelectric Generator System. <i>Energy Procedia</i> , 2017, 110, 196-201.	1.8	20
44	Performance review of a novel combined thermoelectric power generation and water desalination system. <i>Renewable Energy</i> , 2015, 83, 256-269.	8.9	19
45	A research on water desalination using membrane distillation. <i>Desalination and Water Treatment</i> , 2015, 56, 2618-2630.	1.0	19
46	Trilateral Flash Cycle (TFC): a promising thermodynamic cycle for low grade heat to power generation. <i>Energy Procedia</i> , 2019, 160, 208-214.	1.8	19
47	Experimental study on the prospect of low-temperature heat to power generation using Trilateral Flash Cycle (TFC). <i>Applied Thermal Engineering</i> , 2020, 172, 115139.	6.0	19
48	Experimental investigation of the effect of the spacer and operating conditions on mass transfer in direct contact membrane distillation. <i>Desalination</i> , 2021, 500, 114839.	8.2	19
49	On the effective thermal conductivity of the vapour region in vapour chamber heat spreaders. <i>International Journal of Heat and Mass Transfer</i> , 2019, 145, 118797.	4.8	18
50	Passive small scale electric power generation using thermoelectric cells in solar pond. <i>Energy</i> , 2016, 117, 149-165.	8.8	17
51	Energy Saving Opportunities in air Drying Process in High-pressure Compressors. <i>Energy Procedia</i> , 2017, 110, 428-433.	1.8	17
52	Further investigation of simultaneous fresh water production and power generation concept by permeate gap membrane distillation system. <i>Journal of Membrane Science</i> , 2019, 572, 230-245.	8.2	17
53	On increasing the thermal mass of a salinity gradient solar pond with external heat addition: A transient study. <i>Energy</i> , 2019, 168, 43-56.	8.8	17
54	Design and analysis of a split reaction water turbine. <i>Renewable Energy</i> , 2010, 35, 1947-1955.	8.9	16

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55	Experimental performance of a rotating two-phase reaction turbine. Applied Thermal Engineering, 2015, 76, 475-483.	6.0	16
56	An Investigation into the Effective Thermal Conductivity of Vapour Chamber Heat Spreaders. Energy Procedia, 2017, 110, 256-261.	1.8	16
57	Numerical analysis of latent heat thermal energy storage using miniature heat pipes: A potential thermal enhancement for CSP plant development. Applied Thermal Engineering, 2016, 108, 93-103.	6.0	14
58	DCMD modelling and experimental study using PTFE membrane. Desalination and Water Treatment, 2016, 57, 3835-3845.	1.0	14
59	Power Generation from Low Grade Heat Using Trilateral Flash Cycle. Energy Procedia, 2017, 110, 492-497.	1.8	14
60	Investigation of Thermal Performance of a Solar Pond With External Heat Addition. Journal of Solar Energy Engineering, Transactions of the ASME, 2018, 140, .	1.8	14
61	Growth of Hydrogenated Nano-crystalline Silicon (nc-Si:H) Films by Plasma Enhanced Chemical Vapor Deposition (PE-CVD). Energy Procedia, 2017, 110, 45-52.	1.8	13
62	Effectiveness of Bottom Insulation of a Salinity Gradient Solar Pond. Journal of Solar Energy Engineering, Transactions of the ASME, 2018, 140, .	1.8	13
63	Performance Investigation of a Simple Reaction Water Turbine for Power Generation from Low Head Micro Hydro Resources. Smart Grid and Renewable Energy, 2012, 03, 239-245.	1.1	13
64	Electrochemical Synthesis of Core-shell ZnO/CdS Nanostructure for Photocatalytic Water Splitting Application. Energy Procedia, 2017, 110, 121-127.	1.8	12
65	Investigating the prospects of water desalination using a thermal water pump coupled with reverse osmosis membrane. Desalination, 2018, 445, 256-265.	8.2	12
66	Synthesis of $\text{WO}_3$ thin films by hot wire CVD and investigation of its humidity sensing properties. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600717.	1.8	11
67	Examining the Potential of Split Reaction Water Turbine for Ultra-Low Head Hydro Resources. Procedia Engineering, 2012, 49, 197-204.	1.2	10
68	Development of Flexible Thermoelectric Cells and Performance Investigation of Thermoelectric Materials for Power Generation. Energy Procedia, 2017, 110, 281-285.	1.8	10
69	Experimental Analysis of Thermoelectric Heat Exchanger for Power Generation from Salinity Gradient Solar Pond Using Low-Grade Heat. Journal of Electronic Materials, 2017, 46, 2854-2859.	2.2	10
70	Industrial Heating application of a Salinity gradient solar pond for salt production. Energy Procedia, 2019, 160, 231-238.	1.8	10
71	Experimental study of converging-diverging nozzle to generate power by Trilateral Flash Cycle (TFC). Applied Thermal Engineering, 2019, 147, 675-683.	6.0	10
72	Comparison between Rankine Cycle and Trilateral Cycle in Binary System for Power Generation. Applied Mechanics and Materials, 0, 464, 151-155.	0.2	9

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73	Experimental investigation of the thermal power pump cycle – Proof of concept. Applied Thermal Engineering, 2018, 134, 182-193.	6.0	9
74	An experimental study to establish a salt gradient solar pond (SGSP). Energy Procedia, 2019, 160, 239-245.	1.8	9
75	Experimental Performance Evaluation of Humidification–Dehumidification System With Direct-Contact Dehumidifier. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	2.3	9
76	Power generation from salinity gradient solar pond using thermoelectric generators for renewable energy application. , 2012, , .		8
77	Efficiency of a two-phase nozzle for geothermal power generation. Applied Thermal Engineering, 2014, 73, 229-237.	6.0	8
78	Passive Heat Recovery System Using Combination of Heat Pipe and Thermoelectric Generator. Energy Procedia, 2015, 75, 608-614.	1.8	8
79	Combined Thermoelectric Power Generation and Passive Vacuum Desalination. Energy Procedia, 2017, 110, 262-267.	1.8	8
80	Sustainable Seawater Desalination by Permeate Gap Membrane Distillation Technology. Energy Procedia, 2017, 110, 346-351.	1.8	8
81	Neuro-Fuzzy System for Energy Management of Conventional Autonomous Vehicles. Energies, 2020, 13, 1745.	3.1	8
82	Thermal Performance Modelling of Residential House Wall Systems. Procedia Engineering, 2012, 49, 161-168.	1.2	7
83	Examining the commercially available hydrophobic membranes in combined desalination and power generation through permeate gap membrane distillation. Desalination, 2020, 474, 114149.	8.2	7
84	Heat extraction from gradient layer using external heat exchangers to enhance the overall efficiency of solar ponds. , 2011, , .		6
85	Sustainable thermoelectric power system using concentrated solar energy and latent heat storage. , 2012, , .		6
86	DESIGN AND CONSTRUCTION OF A SIMPLE THERMOELECTRIC GENERATOR HEAT EXCHANGER FOR POWER GENERATION FROM SALINITY GRADIENT SOLAR POND. Jurnal Teknologi (Sciences and Engineering), 2015, 76, .	0.4	6
87	Prospects of Power Generation from Low Grade Heat Resources through Trilateral Flash Cycle (TFC) Using Impulse Turbine. Energy Procedia, 2017, 110, 352-358.	1.8	6
88	Setting up salinity gradient in an experimental solar pond (SGSP). Energy Procedia, 2019, 156, 115-121.	1.8	6
89	Optimization model for power generation using thermoelectric generator. Energy Procedia, 2019, 160, 723-730.	1.8	6
90	Numerical study of flow and direct contact condensation of entrained vapor in water jet eductor. Experimental and Computational Multiphase Flow, 2022, 4, 291-303.	3.9	6

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91	Sustainable removal of non-condensable gases from geothermal waters. Renewable and Sustainable Energy Reviews, 2013, 21, 204-214.	16.4	5
92	Experimental Investigation of Power Generation from Salinity Gradient Solar Pond Using Thermoelectric Generators for Renewable Energy Application. Applied Mechanics and Materials, 2013, 393, 809-814.	0.2	5
93	Investigation of Counter-Flow in a Heat Pipe Thermoelectric Generator (HPTEG). Journal of Electronic Materials, 2017, 46, 3115-3123.	2.2	5
94	Synthesis, characterization, and photovoltaic properties of TiO <sub>2</sub> /CdTe core-shell heterostructure for semiconductor-sensitized solar cells (SSSCs). Journal of Solid State Electrochemistry, 2017, 21, 2665-2676.	2.5	5
95	A unique permeate gap membrane distillation system for combined fresh water and power production. Energy Procedia, 2019, 160, 170-177.	1.8	5
96	Experimental Investigation of Heat Transfer Correlation for Direct Contact Membrane Distillation. Journal of Heat Transfer, 2020, 142, .	2.1	5
97	Hot wire chemical vapor deposited multiphase silicon carbide (SiC) thin films at various filament temperatures. Journal of Materials Science: Materials in Electronics, 2016, 27, 12340-12350.	2.2	4
98	Investigate the Feasibility of High Aspect Ratio Vertical Axis Wind Turbine. Energy Procedia, 2017, 110, 304-309.	1.8	4
99	Development of Low Temperature Heat Engine for Water Pumping Application. Energy Procedia, 2017, 110, 292-297.	1.8	4
100	Experimental Investigation on Effect of Adhesives on Thermoelectric Generator Performance. Journal of Electronic Materials, 2015, 44, 1864-1869.	2.2	3
101	A Novel Approach to Low Temperature Thermal Reverse Osmosis Desalination. Procedia Technology, 2015, 20, 144-148.	1.1	3
102	Theoretical and Experimental Study to Determine the Solar Concentration Limit with Passive Cooling of Solar Cells. Energy Procedia, 2017, 110, 286-291.	1.8	3
103	Effect of Heat Loss in a Geothermal Reservoir. Energy Procedia, 2017, 110, 77-82.	1.8	3
104	Islanded microgrid energy system parameter estimation using stochastic methods. Solar Energy, 2017, 147, 300-313.	6.1	3
105	A Comparative Case Study of Remote Area Power Supply Systems Using Photovoltaic-battery vs Thermoelectric-battery Configuration. Energy Procedia, 2017, 110, 89-94.	1.8	3
106	Humidification-dehumidification desalination cycle. , 2018, , 227-254.		3
107	An experimental heat transfer investigation of using spacer in direct contact membrane distillation. Energy Procedia, 2019, 160, 223-230.	1.8	3
108	Experimental investigation of nozzle geometry effect on two-phase nozzle performance through trilateral flash cycle. Thermal Science and Engineering Progress, 2020, 20, 100676.	2.7	3

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109	The efficiency of a two-phase nozzle as a motion force for power generation from low-temperature resources. WIT Transactions on Engineering Sciences, 2014, , .	0.0	3
110	A Review on Process and Practices in Operation and Design Modification of Ejectors. Fluids, 2021, 6, 409.	1.7	3
111	Experimental Analysis of Two-phase Flow nozzle for Desalination and Power Generation System. Procedia Engineering, 2012, 49, 324-329.	1.2	2
112	Two stage stochastic optimisation of highly distributed PV/Battery microgrids with grid connection. , 2015, , .		2
113	Numerical Investigation of Temperature Distribution in a Confined Heterogeneous Geothermal Reservoir Due to Injection-production. Energy Procedia, 2017, 110, 143-148.	1.8	2
114	Influence of inlet pressure and geometric variations on the applicability of Eductor in low temperature thermal desalinations. Journal of King Saud University, Engineering Sciences, 2023, 35, 137-147.	2.0	2
115	Theoretical Analysis to Determine the Solar Concentration Limit with Passive Cooling of Solar Cells. , 2011, , .		2
116	Solar ponds. , 2022, , 537-558.		2
117	Expander Modelling in Binary Cycle Utilizing Geothermal Resources for Generating Green Energy in Victoria, Australia. Procedia Engineering, 2012, 49, 316-323.	1.2	1
118	Passive Power Generation and Heat Recovery from Waste Heat. Advanced Materials Research, 0, 1113, 789-794.	0.3	1
119	Sustainable Removal of Non-Condensable Gases from Geothermal Waters. , 2011, , .		1
120	Renewable Thermal Energy Driven Desalination Process for a Sustainable Management of Reverse Osmosis Reject Water. Sustainability, 2021, 13, 10860.	3.2	1
121	Design of a High Sensitivity Fluid Energy Harvester. Energy Procedia, 2017, 110, 298-303.	1.8	0
122	Experimental study of a sustainable hybrid system for thermoelectric generation and freshwater production. AIP Conference Proceedings, 2017, , .	0.4	0
123	Importance of Making Student Aware of Interconnections and Relevance of Topics. , 2018, , .		0
124	Final year research project course for engineering: course coordinators reflection. , 2018, , .		0
125	Investigation of Optimal Design of Direct Contact Humidification-Dehumidification Desalination Cycle. , 2017, , .		0
126	Sustainable Desalination by Permeate Gap Membrane Distillation Technology. , 2017, , .		0