Christos Tzivanidis

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Thermal enhancement of solar parabolic trough collectors by using nanofluids and converging-diverging absorber tube. Renewable Energy, 2016, 94, 213-222.	4.3	340
2	Alternative designs of parabolic trough solar collectors. Progress in Energy and Combustion Science, 2019, 71, 81-117.	15.8	246
3	A detailed working fluid investigation for solar parabolic trough collectors. Applied Thermal Engineering, 2017, 114, 374-386.	3.0	228
4	Enhancing the performance of parabolic trough collectors using nanofluids and turbulators. Renewable and Sustainable Energy Reviews, 2018, 91, 358-375.	8.2	217
5	Energetic and financial investigation of a stand-alone solar-thermal Organic Rankine Cycle power plant. Energy Conversion and Management, 2016, 126, 421-433.	4.4	195
6	The use of nanofluids in solar concentrating technologies: A comprehensive review. Journal of Cleaner Production, 2018, 196, 84-99.	4.6	167
7	Thermal and optical efficiency investigation of a parabolic trough collector. Case Studies in Thermal Engineering, 2015, 6, 226-237.	2.8	166
8	Energetic and financial evaluation of solar assisted heat pump space heating systems. Energy Conversion and Management, 2016, 120, 306-319.	4.4	154
9	Exergetic, energetic and financial evaluation of a solar driven absorption cooling system with various collector types. Applied Thermal Engineering, 2016, 102, 749-759.	3.0	150
10	Thermal enhancement of parabolic trough collector with internally finned absorbers. Solar Energy, 2017, 157, 514-531.	2.9	131
11	Parametric investigation of nanofluids utilization in parabolic trough collectors. Thermal Science and Engineering Progress, 2017, 2, 71-79.	1.3	130
12	Thermal analysis of parabolic trough collector operating with mono and hybrid nanofluids. Sustainable Energy Technologies and Assessments, 2018, 26, 105-115.	1.7	130
13	Parametric analysis and optimization of a solar driven trigeneration system based on ORC and absorption heat pump. Journal of Cleaner Production, 2017, 161, 493-509.	4.6	126
14	A detailed exergetic analysis of parabolic trough collectors. Energy Conversion and Management, 2017, 149, 275-292.	4.4	126
15	Multi-criteria evaluation of parabolic trough collector with internally finned absorbers. Applied Energy, 2017, 205, 540-561.	5.1	121
16	Solar-driven polygeneration systems: Recent progress and outlook. Applied Energy, 2020, 264, 114764.	5.1	118
17	Thermal, hydraulic and exergetic evaluation of a parabolic trough collector operating with thermal oil and molten salt based nanofluids. Energy Conversion and Management, 2018, 156, 388-402.	4.4	113
18	The impact of internal longitudinal fins in parabolic trough collectors operating with gases. Energy Conversion and Management, 2017, 135, 35-54.	4.4	108

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19	The use of gas working fluids in parabolic trough collectors – An energetic and exergetic analysis. Applied Thermal Engineering, 2016, 109, 1-14.	3.0	104
20	Investigation of a star flow insert in a parabolic trough solar collector. Applied Energy, 2018, 224, 86-102.	5.1	103
21	A review of concentrating solar thermal collectors with and without nanofluids. Journal of Thermal Analysis and Calorimetry, 2019, 135, 763-786.	2.0	103
22	Design, simulation and optimization of a compound parabolic collector. Sustainable Energy Technologies and Assessments, 2016, 16, 53-63.	1.7	98
23	Energetic, exergetic and financial evaluation of a solar driven absorption chiller – A dynamic approach. Energy Conversion and Management, 2017, 137, 34-48.	4.4	98
24	Investigation of a hybrid ORC driven by waste heat and solar energy. Energy Conversion and Management, 2018, 156, 427-439.	4.4	96
25	Parametric analysis and optimization of an Organic Rankine Cycle with nanofluid based solar parabolic trough collectors. Renewable Energy, 2017, 114, 1376-1393.	4.3	91
26	Multi-objective optimization of a solar driven trigeneration system. Energy, 2018, 149, 47-62.	4.5	91
27	Exergetic and energetic comparison of LiCl-H 2 O and LiBr-H 2 O working pairs in a solar absorption cooling system. Energy Conversion and Management, 2016, 123, 453-461.	4.4	90
28	Experimental and numerical investigation of a linear Fresnel solar collector with flat plate receiver. Energy Conversion and Management, 2016, 130, 44-59.	4.4	90
29	Optimum number of internal fins in parabolic trough collectors. Applied Thermal Engineering, 2018, 137, 669-677.	3.0	90
30	Daily performance of parabolic trough solar collectors. Solar Energy, 2017, 158, 663-678.	2.9	83
31	An innovative Trombe wall as a passive heating system for a building in Athens—A comparison with the conventional Trombe wall and the insulated wall. Energy and Buildings, 2016, 133, 754-769.	3.1	77
32	Performance analysis and optimization of an absorption chiller driven by nanofluid based solar flat plate collector. Journal of Cleaner Production, 2018, 174, 256-272.	4.6	74
33	Energetic and financial evaluation of a solar assisted heat pump heating system with other usual heating systems in Athens. Applied Thermal Engineering, 2016, 106, 87-97.	3.0	71
34	Multiple cylindrical inserts for parabolic trough solar collector. Applied Thermal Engineering, 2018, 143, 80-89.	3.0	70
35	Energetic, Exergetic, Economic and Environmental (4E) analysis of a solar assisted refrigeration system for various operating scenarios. Energy Conversion and Management, 2017, 148, 1055-1069.	4.4	68
36	Experimental investigation and parametric analysis of a solar thermal dish collector with spiral absorber. Applied Thermal Engineering, 2017, 121, 126-135.	3.0	67

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37	Energetic investigation of solar assisted heat pump underfloor heating systems with and without phase change materials. Energy Conversion and Management, 2018, 173, 626-639.	4.4	65
38	Investigation of a nanofluid-based compound parabolic trough solar collector under laminar flow conditions. Applied Thermal Engineering, 2019, 149, 366-376.	3.0	64
39	Thermal efficiency enhancement of nanofluid-based parabolic trough collectors. Journal of Thermal Analysis and Calorimetry, 2019, 135, 597-608.	2.0	64
40	Investigation of a solar-biomass polygeneration system. Energy Conversion and Management, 2018, 173, 283-295.	4.4	63
41	The use of parabolic trough collectors for solar cooling – A case study for Athens climate. Case Studies in Thermal Engineering, 2016, 8, 403-413.	2.8	61
42	Parametric analysis and optimization of a cooling system with ejector-absorption chiller powered by solar parabolic trough collectors. Energy Conversion and Management, 2018, 168, 329-342.	4.4	59
43	Optimization of a Solar-Driven Trigeneration System with Nanofluid-Based Parabolic Trough Collectors. Energies, 2017, 10, 848.	1.6	57
44	Numerical simulation of a solar cooling system with and without phase change materials in radiant walls of a building. Energy Conversion and Management, 2019, 188, 40-53.	4.4	57
45	Energetic and financial sustainability of solar assisted heat pump heating systems in Europe. Sustainable Cities and Society, 2017, 33, 70-84.	5.1	57
46	Energetic and financial analysis of solar cooling systems with single effect absorption chiller in various climates. Applied Thermal Engineering, 2017, 126, 809-821.	3.0	56
47	Multi-criteria evaluation of a nanofluid-based linear Fresnel solar collector. Solar Energy, 2018, 163, 200-214.	2.9	56
48	Multi-objective optimization of a solar assisted heat pump-driven by hybrid PV. Applied Thermal Engineering, 2019, 149, 528-535.	3.0	56
49	Parametric analysis and optimization of a solar assisted gas turbine. Energy Conversion and Management, 2017, 139, 151-165.	4.4	55
50	Numerical simulation of cooling energy consumption in connection with thermostat operation mode and comfort requirements for the Athens buildings. Applied Energy, 2011, 88, 2871-2884.	5.1	53
51	A detailed parametric analysis of a solar dish collector. Sustainable Energy Technologies and Assessments, 2018, 25, 99-110.	1.7	51
52	Investigation of a nanofluid-based concentrating thermal photovoltaic with a parabolic reflector. Energy Conversion and Management, 2019, 180, 171-182.	4.4	50
53	Optimum design of a solar ejector refrigeration system for various operating scenarios. Energy Conversion and Management, 2017, 154, 11-24.	4.4	48
54	Thermodynamic investigation of LiCl-H2O working pair in a double effect absorption chiller driven by parabolic trough collectors. Thermal Science and Engineering Progress, 2017, 3, 75-87.	1.3	48

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55	Optical and thermal analysis of a linear Fresnel reflector operating with thermal oil, molten salt and liquid sodium. Applied Thermal Engineering, 2018, 133, 70-80.	3.0	48
56	Enhancing the Performance of Evacuated and Non-Evacuated Parabolic Trough Collectors Using Twisted Tape Inserts, Perforated Plate Inserts and Internally Finned Absorber. Energies, 2018, 11, 1129.	1.6	48
57	Enhancing the performance of a parabolic trough collector with combined thermal and optical techniques. Applied Thermal Engineering, 2020, 164, 114496.	3.0	47
58	Parametric analysis and yearly performance of a trigeneration system driven by solarâ€dish collectors. International Journal of Energy Research, 2019, 43, 1534-1546.	2.2	46
59	Analytical Expression of Parabolic Trough Solar Collector Performance. Designs, 2018, 2, 9.	1.3	45
60	Energetic, exergetic and financial evaluation of a solar driven trigeneration system. Thermal Science and Engineering Progress, 2018, 7, 99-106.	1.3	45
61	Experimental and theoretical studies of space cooling using ceiling-embedded piping. Applied Thermal Engineering, 1997, 17, 351-367.	3.0	44
62	Thermal and exergy performance of a nanofluid-based solar dish collector with spiral cavity receiver. Applied Thermal Engineering, 2018, 135, 206-217.	3.0	44
63	Design, simulation and optimization of a solar dish collector with spiral-coil thermal absorber. Thermal Science, 2016, 20, 1387-1397.	0.5	42
64	A new mini-CPC with a U-type evacuated tube under thermal and optical investigation. Renewable Energy, 2018, 128, 529-540.	4.3	42
65	Assessment of linear solar concentrating technologies for Greek climate. Energy Conversion and Management, 2018, 171, 1502-1513.	4.4	42
66	Financial and energetic evaluation of solar-assisted heat pump underfloor heating systems with phase change materials. Applied Thermal Engineering, 2019, 149, 548-564.	3.0	41
67	Parametric analysis and optimization of an underfloor solar assisted heating system with phase change materials. Thermal Science and Engineering Progress, 2019, 10, 59-72.	1.3	41
68	Parametric investigation of supercritical carbon dioxide utilization in parabolic trough collectors. Applied Thermal Engineering, 2017, 127, 736-747.	3.0	38
69	A systematic parametric thermal analysis of nanofluid-based parabolic trough solar collectors. Sustainable Energy Technologies and Assessments, 2020, 39, 100714.	1.7	38
70	Secondary concentrator optimization of a linear Fresnel reflector using Bezier polynomial parametrization. Solar Energy, 2018, 171, 716-727.	2.9	36
71	Investigation and optimization of a solar-assisted pumped thermal energy storage system with flat plate collectors. Energy Conversion and Management, 2021, 237, 114137.	4.4	36
72	Enhancing the performance of a linear Fresnel reflector using nanofluids and internal finned absorber. Journal of Thermal Analysis and Calorimetry, 2019, 135, 237-255.	2.0	34

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73	Experimental determination of the effective thermal capacity function and other thermal properties for various phase change materials using the thermal delay method. Applied Energy, 2011, 88, 4459-4469.	5.1	33
74	Optical and thermal investigation of a linear Fresnel collector with trapezoidal cavity receiver. Applied Thermal Engineering, 2018, 135, 379-388.	3.0	33
75	Assessment of the thermal enhancement methods in parabolic trough collectors. International Journal of Energy and Environmental Engineering, 2018, 9, 59-70.	1.3	31
76	Investigation of a booster secondary reflector for a parabolic trough solar collector. Solar Energy, 2019, 179, 174-185.	2.9	31
77	Numerical solution of unsteady three-dimensional heat transfer during space cooling using ceiling-embedded piping. Energy, 1997, 22, 59-67.	4.5	30
78	Development of analytical expressions for the incident angle modifiers of a linear Fresnel reflector. Solar Energy, 2018, 173, 769-779.	2.9	30
79	Optical and thermal analysis of different cavity receiver designs for solar dish concentrators. Energy Conversion and Management: X, 2019, 2, 100013.	0.9	30
80	Experimental, numerical and analytical investigation of a U-type evacuated tube collectors' array. Renewable Energy, 2019, 135, 218-231.	4.3	30
81	Parametric analysis of space cooling systems based on night ceiling cooling with PCM-embedded piping. International Journal of Energy Research, 2012, 36, 18-35.	2.2	29
82	Energetic and exergetic evaluation of a novel trigeneration system driven by parabolic trough solar collectors. Thermal Science and Engineering Progress, 2018, 6, 41-47.	1.3	29
83	A Theoretical Comparative Study of CO2 Cascade Refrigeration Systems. Applied Sciences (Switzerland), 2019, 9, 790.	1.3	29
84	Investigation and optimization of a solar assisted heat pump driven by nanofluid-based hybrid PV. Energy Conversion and Management, 2019, 198, 111831.	4.4	27
85	Numerical investigation and optimization of an experimentally analyzed solar CPC. Energy, 2019, 172, 57-67.	4.5	27
86	Yearly investigation of a solar-driven absorption refrigeration system with ammonia-water absorption pair. Thermal Science and Engineering Progress, 2021, 23, 100885.	1.3	27
87	Reducing the optical end losses of a linear Fresnel reflector using novel techniques. Solar Energy, 2019, 186, 247-256.	2.9	26
88	Energetic and exergetic investigation of a parabolic trough collector with internal fins operating with carbon dioxide. International Journal of Energy and Environmental Engineering, 2017, 8, 109-122.	1.3	25
89	Energy and financial analysis of a solar driven thermoelectric generator. Journal of Cleaner Production, 2020, 264, 121534.	4.6	25
90	Energy and environmental investigation of R744 all-in-one configurations for refrigeration and heating/air conditioning needs of a supermarket. Journal of Cleaner Production, 2021, 279, 123234.	4.6	25

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91	Daily, monthly and yearly performance of a linear Fresnel reflector. Solar Energy, 2018, 173, 517-529.	2.9	24
92	Enhancing the performance of a CO2 refrigeration system with the use of an absorption chiller. International Journal of Refrigeration, 2019, 108, 37-52.	1.8	24
93	A Comparative Study of Solar-Driven Trigeneration Systems for the Building Sector. Energies, 2020, 13, 2074.	1.6	24
94	Investigation of energy and financial performance of a novel CO2 supercritical solar-biomass trigeneration system for operation in the climate of Athens. Energy Conversion and Management, 2021, 245, 114583.	4.4	24
95	A comparative study of CO2 refrigeration systems. Energy Conversion and Management: X, 2019, 1, 100002.	0.9	22
96	Experimental evaluation of energy savings in air-conditioning using metal ceiling panels. Applied Thermal Engineering, 1998, 18, 1129-1138.	3.0	21
97	Parametric investigation and optimization of an innovative trigeneration system. Energy Conversion and Management, 2016, 127, 515-525.	4.4	20
98	Energy and financial investigation of a cogeneration system based on linear Fresnel reflectors. Energy Conversion and Management, 2019, 198, 111821.	4.4	20
99	Investigation of the Environmentally-Friendly Refrigerant R152a for Air Conditioning Purposes. Applied Sciences (Switzerland), 2019, 9, 119.	1.3	20
100	Parametric analysis of a solar-driven trigeneration system with an organic Rankine cycle and a vapor compression cycle. Energy and Built Environment, 2021, 2, 278-289.	2.9	20
101	Dynamic investigation and optimization of a solar-fed trigeneration system. Applied Thermal Engineering, 2021, 191, 116869.	3.0	20
102	Multi-objective optimization of a solar-driven polygeneration system based on CO2 working fluid. Energy Conversion and Management, 2022, 252, 115136.	4.4	20
103	Investigation and optimization of a CO2-based polygeneration unit for supermarkets. Applied Energy, 2022, 311, 118717.	5.1	18
104	Finite-difference prediction of transient indoor temperature and related correlation based on the building time constant. International Journal of Energy Research, 1996, 20, 507-520.	2.2	16
105	CO2 Transcritical Refrigeration Cycle with Dedicated Subcooling: Mechanical Compression vs. Absorption Chiller. Applied Sciences (Switzerland), 2019, 9, 1605.	1.3	16
106	Annual performance of a supermarket refrigeration system using different configurations with CO2 refrigerant. Energy Conversion and Management: X, 2019, 1, 100006.	0.9	16
107	Parametric Investigation of a Trigeneration System with an Organic Rankine Cycle and Absorption Heat Pump Driven by Parabolic Trough Collectors for the Building Sector. Energies, 2020, 13, 1800.	1.6	16
108	Development of an analytical model for the daily performance of solar thermal systems with experimental validation. Sustainable Energy Technologies and Assessments, 2018, 28, 22-29.	1.7	15

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109	A cylindrical insert for parabolic trough solar collector. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 1846-1876.	1.6	15
110	Investigation of a novel solar-driven refrigeration system with ejector. Thermal Science and Engineering Progress, 2018, 8, 284-295.	1.3	14
111	Development of two new semi-empirical formulas for estimation of solar absorptance in circular cavity receivers. Thermal Science and Engineering Progress, 2019, 10, 147-153.	1.3	14
112	Solar concentrating systems and applications in Greece – A critical review. Journal of Cleaner Production, 2020, 272, 122855.	4.6	14
113	Thermal Behavior of a Building with Incorporated Phase Change Materials in the South and the North Wall. Computation, 2019, 7, 2.	1.0	13
114	Analytical solution of boundary value problems of heat conduction in composite regions with arbitrary convection boundary conditions. Acta Mechanica, 1996, 118, 65-78.	1.1	12
115	Energetic and exergetic investigation of a novel solar assisted mechanical compression refrigeration system. Energy Conversion and Management, 2017, 147, 1-18.	4.4	12
116	Parametric analysis and multi-objective optimization of a solar heating system for various building envelopes. Thermal Science and Engineering Progress, 2018, 8, 307-317.	1.3	12
117	Financial Optimization of a Solar-Driven Organic Rankine Cycle. Applied System Innovation, 2020, 3, 23.	2.7	12
118	A correlation for the thermal delay of buildings. Renewable Energy, 1995, 6, 687-699.	4.3	11
119	Investigation of a novel small-sized bifacial cavity PTC and comparison with conventional configurations. Thermal Science and Engineering Progress, 2020, 17, 100355.	1.3	11
120	Concentrating Solar Collectors for a Trigeneration System—A Comparative Study. Applied Sciences (Switzerland), 2020, 10, 4492.	1.3	11
121	Optimum geometry of parabolic trough collectors with optical and thermal criteria. International Review of Applied Sciences and Engineering, 2017, 8, 45-50.	0.3	10
122	Thermal and exergetic evaluation of parabolic trough collectors with finned absorbers operating with air. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2017, 231, 631-644.	0.8	10
123	Time constant of greek buildings. Energy, 1995, 20, 785-802.	4.5	9
124	Energetic, Exergetic, and Financial Investigation of Biomass-Driven Trigeneration System. Journal of Energy Engineering - ASCE, 2019, 145, .	1.0	9
125	Investigation of Different Storage Systems for Solar-Driven Organic Rankine Cycle. Applied System Innovation, 2020, 3, 52.	2.7	9
126	Parametric Analysis of a Polygeneration System with CO2 Working Fluid. Applied Sciences (Switzerland), 2021, 11, 3215.	1.3	8

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127	Design of a solarâ€driven cogeneration system using flat plate collectors and evacuated tube collectors. International Journal of Energy Research, 2019, 43, 5841-5851.	2.2	7
128	Thermal analysis of a serpentine flat plate collector and investigation of the flow and convection regime. Thermal Science, 2019, 23, 47-59.	0.5	7
129	Thermo-optical modelling of the linear Fresnel collector at the Cyprus institute. AIP Conference Proceedings, 2019, , .	0.3	6
130	Incorporation of an organic Rankine cycle in a transcritical booster CO ₂ refrigeration system. International Journal of Energy Research, 2020, 44, 7974-7988.	2.2	6
131	Pumped Thermal Energy Storage System for Trigeneration: The Concept of Power to XYZ. Applied Sciences (Switzerland), 2022, 12, 970.	1.3	6
132	Using orthogonal expansion of functions over multilayer walls for calculating the layer thermal properties. Applied Thermal Engineering, 1997, 17, 193-201.	3.0	5
133	Energetic and Financial Optimization of Solar Heat Industry Process with Parabolic Trough Collectors. Designs, 2018, 2, 24.	1.3	5
134	A Realistic Approach of the Maximum Work Extraction from Solar Thermal Collectors. Applied System Innovation, 2018, 1, 6.	2.7	5
135	Evaluation of a solar driven trigeneration system with conventional and new criteria. International Journal of Sustainable Energy, 2019, 38, 238-252.	1.3	5
136	Parametric Investigation of a Ground Source CO2 Heat Pump for Space Heating. Energies, 2021, 14, 3563.	1.6	5
137	Investigation of a Novel CO2 Transcritical Organic Rankine Cycle Driven by Parabolic Trough Solar Collectors. Applied System Innovation, 2021, 4, 53.	2.7	5
138	Investigation of a Solar-Driven Organic Rankine Cycle with Reheating. Applied Sciences (Switzerland), 2022, 12, 2322.	1.3	5
139	Transient Three-Dimensional Numerical Solution of Night Ceiling Cooling Using PCM-Embedded Piping. Journal of Energy Engineering - ASCE, 2011, 137, 177-186.	1.0	4
140	Financial and Energetic Optimization of Greek Buildings Insulation. Designs, 2018, 2, 34.	1.3	4
141	Optical Performance and Optimization of Two Stationary Compound Parabolic Collectors (CPC). , 0, , .		4
142	A Symmetric and an Asymmetric mini Compound Parabolic Collector Under Optical Investigation. Green Energy and Technology, 2018, , 649-661.	0.4	3
143	Theoretical investigation of a novel hybrid refrigeration cycle based on the partial thermal isochoric compression. Thermal Science and Engineering Progress, 2019, 11, 239-248.	1.3	3
144	The Impact of Insulation Layer in Various Solar Heating Systems: An Energetic and Financial Evaluation. International Journal of Mechanical Systems Engineering, 2015, 1, .	0.2	3

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145	Comparison of two solar-assisted underfloor heating systems with Phase Change Materials. International Journal of Thermodynamics, 2019, 22, 138-147.	0.4	3
146	Heat and Flow Study of the Internally Finned Tubes with Different Fin Geometries. Applied System Innovation, 2022, 5, 50.	2.7	3
147	A transient model for the energy analysis of indoor spaces. Applied Energy, 2010, 87, 3084-3091.	5.1	2
148	Polynomial Expressions for the Thermal Efficiency of the Parabolic Trough Solar Collector. Applied Sciences (Switzerland), 2020, 10, 6901.	1.3	2
149	Energetic and Financial Comparison between a 1-Stage Absorption Chiller Driven by FPC and a 2-Stage Absorption Chiller Driven by PTC. , 0, , .		2
150	Experimental results of a solar absorption cooling plant in Greece. International Journal of Sustainable Energy, 2016, 35, 309-322.	1.3	1
151	Experimental and numerical investigation of a triple-dish solar concentrator: a thermal and exergy study. International Journal of Exergy, 2018, 26, 481.	0.2	1
152	Experimental and numerical investigation of a triple-dish solar concentrator: a thermal and exergy study. International Journal of Exergy, 2018, 26, 481.	0.2	0
153	Enhancing The Performance Of Parabolic Trough Collectors Using Nanofluids And Turbulators. , 2018, , .		0
154	An innovative small-sized double cavity PTC under investigation and comparison with a conventional PTC. Sustainable Energy Technologies and Assessments, 2022, 53, 102462.	1.7	0