Kumarasamy Sudhakar

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Carbon mitigation potential of the airport-based solar PV plants in the Indian context. International Journal of Ambient Energy, 2022, 43, 1311-1319.	1.4	13
2	Modelling and simulation of dual sourced front-end converter for hybrid electric vehicles. International Journal of Ambient Energy, 2022, 43, 1646-1653.	1.4	10
3	A systematic review of thermal insulation performance of hollow bricks as a function of hollow geometry. International Journal of Ambient Energy, 2022, 43, 4406-4415.	1.4	6
4	Thermal model of a photovoltaic module with heat-protective film. Case Studies in Thermal Engineering, 2022, 30, 101744.	2.8	9
5	Solar Chimney Power Plants: A Review of the Concepts, Designs and Performances. Sustainability, 2022, 14, 1450.	1.6	17
6	Waste plastic oil to fuel: An experimental study in thermal barrier coated CI engine with exhaust gas recirculation. Environmental Quality Management, 2022, 32, 125-131.	1.0	17
7	Molecular simulation of copper based metal-organic framework (Cu-MOF) for hydrogen adsorption. International Journal of Hydrogen Energy, 2022, 47, 15820-15831.	3.8	19
8	Performance assessment of solar chimney power plants with natural thermal energy storage materials on ground: CFD analysis with experimental validation. International Journal of Low-Carbon Technologies, 2022, 17, 752-759.	1.2	4
9	A decade of solar PV deployment in ASEAN: Policy landscape and recommendations. Energy Reports, 2022, 8, 460-469.	2.5	19
10	Grey wolf optimization and differential evolution-based maximum power point tracking controller for photovoltaic systems under partial shading conditions. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 6286-6302.	1.2	6
11	A review of conventional and renewable biodiesel production. Chinese Journal of Chemical Engineering, 2021, 40, 1-17.	1.7	20
12	Recent trends in liquid desiccant materials and cooling systems: Application, performance and regeneration characteristics. Journal of Building Engineering, 2021, 33, 101579.	1.6	18
13	Metal-organic framework-based photocatalysts for carbon dioxide reduction to methanol: A review on progress and application. Journal of CO2 Utilization, 2021, 43, 101374.	3.3	47
14	Simulation and experimental design of adaptive-based maximum power point tracking methods for photovoltaic systems. Computers and Electrical Engineering, 2021, 89, 106910.	3.0	15
15	Thermal performance of Uâ€shaped serpentine microchannel heat sink using various metal oxide nanofluids. Heat Transfer, 2021, 50, 3094-3118.	1.7	6
16	Sustainable green campus in NEPAL: 3E analysis. International Journal of Low-Carbon Technologies, 2021, 16, 531-542.	1.2	3
17	Industrial and Small-Scale Biomass Dryers: An Overview. Energy Engineering: Journal of the Association of Energy Engineers, 2021, 118, 435-446.	0.3	7
18	Biochemical and Thermal Analysis of Spirulina Biomass through FTIR, TGA, CHN. Energy Engineering: Journal of the Association of Energy Engineers, 2021, 118, 1045-1056.	0.3	4

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19	Performance assessment of solar chimney power plants with the impacts of divergent and convergent chimney geometry. International Journal of Low-Carbon Technologies, 2021, 16, 704-714.	1.2	22
20	Biodiesel and green diesel generation: an overview. Oil and Gas Science and Technology, 2021, 76, 6.	1.4	36
21	Performance assessment of conceptual bifacial solar PV system in varying albedo conditions. IOP Conference Series: Materials Science and Engineering, 2021, 1078, 012033.	0.3	5
22	Design and simulation of solar roof-top projects for an energy self-reliant university campus. IOP Conference Series: Materials Science and Engineering, 2021, 1078, 012013.	0.3	2
23	Enhancement of the heat transfer in radiator with louvered fin by using Graphene-based hybrid nanofluids. IOP Conference Series: Materials Science and Engineering, 2021, 1062, 012014.	0.3	6
24	A review on current trends in potential use of metal-organic framework for hydrogen storage. International Journal of Hydrogen Energy, 2021, 46, 11782-11803.	3.8	200
25	7E analysis of a conceptual utility-scale land-based solar photovoltaic power plant. Energy, 2021, 219, 119610.	4.5	34
26	Energy performance and loss analysis of 100 kWp grid-connected rooftop solar photovoltaic system. Building Services Engineering Research and Technology, 2021, 42, 485-500.	0.9	14
27	Glare prediction of solar PV system in airport environment: A scenario analysis of material, tilt and orientation. IOP Conference Series: Materials Science and Engineering, 2021, 1068, 012014.	0.3	1
28	An overview of the spark plug engine profile in a spark ignition engine. IOP Conference Series: Materials Science and Engineering, 2021, 1092, 012030.	0.3	5
29	Solar PV Microgrids Implementation model: A case study of Local Self Governments in the Indian State of Kerala. IOP Conference Series: Materials Science and Engineering, 2021, 1068, 012024.	0.3	1
30	Solar PV in the airport environment: A review of glare assessment approaches & metrics. Solar Energy, 2021, 216, 439-451.	2.9	6
31	Performance evaluation and analysis of grid-tied large scale PV plant in Algeria. Energy for Sustainable Development, 2021, 61, 181-195.	2.0	46
32	A systematic review on graphene-based nanofluids application in renewable energy systems: Preparation, characterization, and thermophysical properties. Sustainable Energy Technologies and Assessments, 2021, 44, 101058.	1.7	19
33	Ultrasonication an intensifying tool for preparation of stable nanofluids and study the time influence on distinct properties of graphene nanofluids – A systematic overview. Ultrasonics Sonochemistry, 2021, 73, 105479.	3.8	69
34	The Comparison of Solar-Powered Hydrogen Closed-Cycle System Capacities for Selected Locations. Energies, 2021, 14, 2722.	1.6	1
35	Impacts of Ground Slope on Main Performance Figures of Solar Chimney Power Plants: A Comprehensive CFD Research with Experimental Validation. International Journal of Photoenergy, 2021, 2021, 1-11.	1.4	14
36	Hybrid Floating Solar Plant Designs: A Review. Energies, 2021, 14, 2751.	1.6	56

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37	A review on recent developments in solar photoreactors for carbon dioxide conversion to fuels. Journal of CO2 Utilization, 2021, 47, 101515.	3.3	42
38	Energy, economic and environmental performance assessment of a grid-tied rooftop system in different cities of India based on 3E analysis. Clean Energy, 2021, 5, 288-301.	1.5	20
39	Performance Modeling of the Weather Impact on a Utility-Scale PV Power Plant in a Tropical Region. International Journal of Photoenergy, 2021, 2021, 1-10.	1.4	23
40	Influence of various operational parameters in enhancing photocatalytic reduction efficiency of carbon dioxide in a photoreactor: A review. Journal of Industrial and Engineering Chemistry, 2021, 99, 19-47.	2.9	31
41	Energy analysis of utility-scale PV plant in the rain-dominated tropical monsoon climates. Case Studies in Thermal Engineering, 2021, 26, 101123.	2.8	26
42	A perspective of COVID 19 impact on global economy, energy and environment. International Journal of Sustainable Engineering, 2021, 14, 1290-1305.	1.9	60
43	Suitability Analysis of Solar Tracking PV System in the Airport Based on Glare Assessment. International Journal of Automotive and Mechanical Engineering, 2021, 18, 9061-9070.	0.5	2
44	Energy-exergy-economic-environmental-energo-exergo-enviroecono (7E) analysis of solar photovoltaic power plant: A case study of 7 airport sites in India. Sustainable Energy Technologies and Assessments, 2021, 47, 101352.	1.7	10
45	Sustainable passive cooling strategy for PV module: A comparative analysis. Case Studies in Thermal Engineering, 2021, 27, 101317.	2.8	16
46	Effect of PV material, texturing, orientation and tracking on glare impact: A simulation study from an Indian airport. Cleaner Engineering and Technology, 2021, 4, 100236.	2.1	4
47	Sustainability at airports: Technologies and best practices from ASEAN countries. Journal of Environmental Management, 2021, 299, 113639.	3.8	28
48	Hybrid nano-coolants in automotive heat transfer – an updated report. Maejo International Journal of Energy and Environmental Communication, 2021, 2, 43-57.	0.5	3
49	Comparison of normal and weather corrected performance ratio of photovoltaic solar plants in hot and cold climates. Energy for Sustainable Development, 2021, 65, 53-62.	2.0	12
50	CO2 to green fuel: Photocatalytic process optimization study. Sustainable Chemistry and Pharmacy, 2021, 24, 100533.	1.6	3
51	Effects of Lean Combustion on Bioethanol-Gasoline Blends using Turbocharged Spark Ignition Engine. International Journal of Automotive and Mechanical Engineering, 2021, 18, .	0.5	1
52	Food Supplements Formulated with Spirulina. , 2021, , 201-226.		7
53	Ultra-Short-term PV Power Forecasting Based on a Support Vector Machine with Improved Dragonfly Algorithm. , 2021, , .		0
54	Role of Biofuels in Energy Transition, Green Economy and Carbon Neutrality. Sustainability, 2021, 13, 12374.	1.6	37

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55	Performance evaluation of CdTe BIPV roof and façades in tropical weather conditions. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, 42, 1057-1071.	1.2	16
56	Solar space power: an overview. International Journal of Ambient Energy, 2020, 41, 600-607.	1.4	8
57	Performance evaluation of building-integrated photovoltaic systems for residential buildings in southern India. Building Services Engineering Research and Technology, 2020, 41, 492-506.	0.9	35
58	Investigation of a binary eutectic mixture of phase change material for building integrated photovoltaic (BIPV) system. Solar Energy Materials and Solar Cells, 2020, 207, 110360.	3.0	121
59	Analysis of solar PV glare in airport environment: Potential solutions. Results in Engineering, 2020, 5, 100079.	2.2	23
60	Simulation and analysis of open raceway pond system at Manit, Bhopal. IOP Conference Series: Materials Science and Engineering, 2020, 788, 012084.	0.3	0
61	Performance evaluation of solar PV module with filters in an outdoor environment. Case Studies in Thermal Engineering, 2020, 21, 100700.	2.8	24
62	U.V light effect on the mechanical behaviour of HDPE/Carbon black composites. IOP Conference Series: Materials Science and Engineering, 2020, 788, 012054.	0.3	7
63	Performance and emission of turbocharger engine using gasoline and ethanol blends. IOP Conference Series: Materials Science and Engineering, 2020, 863, 012034.	0.3	4
64	Investigations on an evacuated tube solar water heater using hybrid-nano based organic phase change material. International Journal of Green Energy, 2020, 17, 872-883.	2.1	91
65	Solar photovoltaics in airport: Risk assessment and mitigation strategies. Environmental Impact Assessment Review, 2020, 84, 106418.	4.4	19
66	Advanced cooling techniques of P.V. modules: A state of art. Case Studies in Thermal Engineering, 2020, 21, 100674.	2.8	165
67	Airportâ€based photovoltaic applications. Progress in Photovoltaics: Research and Applications, 2020, 28, 833-853.	4.4	15
68	Solar PV energy system in Malaysian airport: Glare analysis, general design and performance assessment. Energy Reports, 2020, 6, 698-712.	2.5	47
69	Technical assessment of captive solar power plant: A case study of Senai airport, Malaysia. Renewable Energy, 2020, 152, 849-866.	4.3	20
70	Influence of U.V light on the thermal properties of HDPE/Carbon black composites. Case Studies in Thermal Engineering, 2019, 15, 100534.	2.8	29
71	Net-zero building designs in hot and humid climates: A state-of-art. Case Studies in Thermal Engineering, 2019, 13, 100400.	2.8	58
72	3D printing: Overview of PLA progress. AIP Conference Proceedings, 2019, , .	0.3	34

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73	An overview of Higher alcohol and biodiesel as alternative fuels in engines. Energy Reports, 2019, 5, 467-479.	2.5	149
74	Artificial Leaves: Towards Bio-Inspired Solar Energy Converters. , 2019, , .		3
75	Evaluation of properties on performance and emission to turbocharged SI engine using fusel oil blend with gasoline. IOP Conference Series: Materials Science and Engineering, 2019, 469, 012113.	0.3	3
76	Renewable energy in Southeast Asia: Policies and recommendations. Science of the Total Environment, 2019, 670, 1095-1102.	3.9	155
77	Modelling of a solar desiccant cooling system using a TRNSYS-MATLAB co-simulator: A review. Journal of Building Engineering, 2019, 24, 100749.	1.6	26
78	Comparative study on the growth performance of Spirulina platensis on modifying culture media. Energy Reports, 2019, 5, 327-336.	2.5	72
79	Preliminary investigations of polylactic acid (PLA) properties. AIP Conference Proceedings, 2019, , .	0.3	19
80	Preliminary investigation of acrylonitrile butadiene styrene (ABS) properties. AIP Conference Proceedings, 2019, , .	0.3	6
81	Mechanical property of FDM printed ABS: influence of printing parameters. International Journal of Advanced Manufacturing Technology, 2019, 102, 2779-2796.	1.5	197
82	Magnetic nanowires (Ni) via chemical reduction method. AIP Conference Proceedings, 2019, , .	0.3	0
83	Performance comparison of BAPV and BIPV systems with c-Si, CIS and CdTe photovoltaic technologies under tropical weather conditions. Case Studies in Thermal Engineering, 2019, 13, 100374.	2.8	70
84	Cobalt nanowires: Advancing into future nanomaterial. , 2019, , .		2
85	Effect of UV exposure on bimodal HDPE floats for floating solar application. Journal of Materials Research and Technology, 2019, 8, 147-156.	2.6	29
86	Techno-economic analysis of 1 MWp grid connected solar PV plant in Malaysia. International Journal of Ambient Energy, 2019, 40, 434-443.	1.4	78
87	Speed Regulation Enhancement for SRM Drive in PHEV Applications by using Hybrid Fuzzy Logic controller. International Journal of Recent Technology and Engineering, 2019, 8, 526-533.	0.2	0
88	Performance analysis of solar powered airport based on energy and exergy analysis. Energy, 2018, 149, 1000-1009.	4.5	56
89	An overview of marine macroalgae as bioresource. Renewable and Sustainable Energy Reviews, 2018, 91, 165-179.	8.2	184
90	Smart Dustbins: An Approach for Sustainable Solid Waste Management in Smart Cities. Water Science and Technology Library, 2018, , 483-492.	0.2	0

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91	Performance and land footprint analysis of a solar photovoltaic tree. Journal of Cleaner Production, 2018, 187, 432-448.	4.6	33
92	Solar PV and BIPV system: Barrier, challenges and policy recommendation in India. Renewable and Sustainable Energy Reviews, 2018, 82, 3314-3322.	8.2	111
93	Solar PV tree design: A review. Renewable and Sustainable Energy Reviews, 2018, 82, 1079-1096.	8.2	67
94	Estimation of solar collector area for water heating in buildings of Malaysia. IOP Conference Series: Materials Science and Engineering, 2018, 342, 012039.	0.3	2
95	On the technologies empowering drones for intelligent monitoring of solar photovoltaic power plants. Procedia Computer Science, 2018, 133, 585-593.	1.2	46
96	Dust cleaning robots (DCR) for BIPV and BAPV solar power plants-A conceptual framework and research challenges. Procedia Computer Science, 2018, 133, 746-754.	1.2	23
97	Nanofluid as coolant for grinding process: An overview. IOP Conference Series: Materials Science and Engineering, 2018, 342, 012078.	0.3	13
98	BIPV Power Plants and Policy recommendatons. , 2018, , .		4
99	BIPV Market Growth: SWOT Analysis and Favorable Factors. , 2018, , .		3
100	Performance simulation of grid-connected rooftop solar PV system for small households: A case study of Ujjain, India. Energy Reports, 2018, 4, 546-553.	2.5	127
101	A novel Sun tracking technique through a Solar PV Tree and a smart controller. , 2018, , .		1
102	Performance of Utility Scale PV Plant in Malaysia and India: A Comparative Study. , 2018, , .		2
103	Anaerobic co-digestion of different wastes in a UASB reactor. Waste Management, 2018, 77, 545-554.	3.7	38
104	Performance of thin-film BIPV as double sloped pitched roof in buildings of Malaysia. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 2476-2484.	1.2	20
105	BIPV based sustainable building in South Asian countries. Solar Energy, 2018, 170, 1162-1170.	2.9	63
106	Performance studies on cryogenic treated carbide cutting tool for turning of AISI304 steel. Journal of Mechanical Engineering and Sciences, 2018, 12, 3927-3941.	0.3	4
107	Comparison of BIPV and BIPVT: A review. Resource-efficient Technologies, 2017, 3, 263-271.	0.1	72
108	Renewable energy resources in South Asian countries: Challenges, policy and recommendations. Resource-efficient Technologies, 2017, 3, 342-346.	0.1	86

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109	Thermal modeling, exergy analysis, performance of BIPV and BIPVT: A review. Renewable and Sustainable Energy Reviews, 2017, 73, 1276-1288.	8.2	116
110	Fully solar powered Raja Bhoj International Airport: A feasibility study. Resource-efficient Technologies, 2017, 3, 309-316.	0.1	28
111	Recent advancement in BIPV product technologies: A review. Energy and Buildings, 2017, 140, 188-195.	3.1	298
112	Modeling and performance simulation of 100 MW LFR based solar thermal power plant in Udaipur India. Resource-efficient Technologies, 2017, 3, 365-377.	0.1	28
113	Fully solar powered airport: A case study of Cochin International airport. Journal of Air Transport Management, 2017, 62, 176-188.	2.4	71
114	Carbon Sequestration Through Solar Bioreactors: Industrial Strategies. Green Energy and Technology, 2017, , 143-155.	0.4	5
115	Modeling and performance simulation of 100 MW PTC based solar thermal power plant in Udaipur India. Case Studies in Thermal Engineering, 2017, 10, 216-226.	2.8	72
116	Spirulina – From growth to nutritional product: A review. Trends in Food Science and Technology, 2017, 69, 157-171.	7.8	278
117	BIPV in Southeast Asian countries – opportunities and challenges. Renewable Energy Focus, 2017, 21, 25-32.	2.2	54
118	Solar powered green campus: a simulation study. International Journal of Low-Carbon Technologies, 2017, 12, 400-410.	1.2	36
119	Experimental performance of a direct evaporative cooler in composite climate of India. Energy and Buildings, 2017, 153, 190-200.	3.1	80
120	Electrochemical deposited nickel nanowires: influence of deposition bath temperature on the morphology and physical properties. IOP Conference Series: Materials Science and Engineering, 2017, 257, 012032.	0.3	5
121	Influence of boric acid (H ₃ BO ₃) concentration on the physical properties of electrochemical deposited nickel (Ni) nanowires. IOP Conference Series: Materials Science and Engineering, 2017, 257, 012033.	0.3	1
122	Experimental exergy analysis of water-cooled PV module. International Journal of Exergy, 2017, 23, 197.	0.2	12
123	Biophotovoltaics and Biohydrogen through artificial photosynthesis: an overview. International Journal of Environment and Sustainable Development, 2016, 15, 313.	0.2	13
124	Energy assessment of floating photovoltaic system. , 2016, , .		36
125	Exergetic assessment of BIPV module using parametric and photonic energy methods: A review. Energy and Buildings, 2016, 119, 62-73.	3.1	59
126	Simulation and performance analysis of 110ÂkWp grid-connected photovoltaic system for residential building in India: A comparative analysis of various PV technology. Energy Reports, 2016, 2, 82-88.	2.5	148

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127	Design, simulation and economic analysis of standalone roof top solar PV system in India. Solar Energy, 2016, 136, 437-449.	2.9	160
128	Exergetic analysis of building integrated semitransparent photovoltaic module in clear sky condition at Bhopal India. Case Studies in Thermal Engineering, 2016, 8, 142-151.	2.8	47
129	Floating photovoltaic power plant: A review. Renewable and Sustainable Energy Reviews, 2016, 66, 815-824.	8.2	483
130	Concentrated solar power technology in India: A review. Renewable and Sustainable Energy Reviews, 2016, 63, 593-603.	8.2	73
131	A comprehensive review on design of building integrated photovoltaic system. Energy and Buildings, 2016, 128, 99-110.	3.1	194
132	Mathematical modelling of solar radiation incident on tilted surface for photovoltaic application at Bhopal, M.P., India. International Journal of Ambient Energy, 2016, 37, 579-588.	1.4	28
133	Sustainable biomass production from microalgae for food, feed and biofuels: An integrated approach. Bioscience Biotechnology Research Communications, 2016, 9, 729-736.	0.1	1
134	Life Cycle Cost of Solar Biomass Hybrid Dryer Systems for Cashew Drying of Nuts in India. Environmental and Climate Technologies, 2015, 15, 22-33.	0.5	20
135	A comparative study of exergetic performance of amorphous and polycrystalline solar PV modules. International Journal of Exergy, 2015, 17, 433.	0.2	34
136	Characterization of Micro Algal Biomass Through FTIR/TGA /CHN Analysis: Application to <i>Scenedesmus</i> sp Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2015, 37, 2330-2337.	1.2	68
137	Nanotechnology for solar and wind energy applications recent trends and future development. , 2015, , .		3
138	Performance evaluation of 10ÂMW grid connected solar photovoltaic power plant in India. Energy Reports, 2015, 1, 184-192.	2.5	396
139	Recent improvements in dye sensitized solar cells: A review. Renewable and Sustainable Energy Reviews, 2015, 52, 54-64.	8.2	273
140	A comparative study of ultrasonic and conventional methods of biodiesel production from mahua oil. Biofuels, 2015, 6, 107-113.	1.4	17
141	Comparative study of isotropic and anisotropic sky models to estimate solar radiation incident on tilted surface: A case study for Bhopal, India. Energy Reports, 2015, 1, 96-103.	2.5	120
142	Different domestic designs of solar stills: A review. Renewable and Sustainable Energy Reviews, 2015, 47, 718-731.	8.2	87
143	Ultrasonic Assisted Transesterification of Neem Oil for Biodiesel Production. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2015, 37, 1921-1927.	1.2	10
144	Large-scale open pond algae biomass yield analysis in India: a case study. International Journal of Sustainable Energy, 2014, 33, 304-315.	1.3	35

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145	Energy and exergy analysis of 36ÂW solar photovoltaic module. International Journal of Ambient Energy, 2014, 35, 51-57.	1.4	99
146	Lighting Parameters Assessment and Energy Efficient Illumination Design for a Classroom. Advanced Science Letters, 2014, 20, 1658-1661.	0.2	0
147	An energy efficient microcontroller based digital solar weighing machine. , 2013, , .		0
148	Modelling and estimation of photosynthetically active incident radiation based on global irradiance in Indian latitudes. International Journal of Energy and Environmental Engineering, 2013, 4, 21.	1.3	33
149	Life cycle cost assessment of solar-wind-biomass hybrid energy system for energy centre, MANIT, Bhopal. , 2013, , .		9
150	Effect of color filter on the performance of solar photovoltaic module. , 2013, , .		9
151	Energy audit: A case study of energy centre and Hostel of MANIT, Bhopal. , 2013, , .		7
152	Design, development and testing of a novel triangular prism shaped solar cell. , 2013, , .		1
153	A Novel Design of Multi-Chambered Biomass Battery. International Journal of Renewable Energy Development, 2013, 2, 31-34.	1.2	1
154	A Mathematical Model to Assess the Potential of Algal Bio-fuels in India. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2012, 34, 1114-1120.	1.2	28
155	Carbon mitigation potential of Jatropha Biodiesel in Indian context. Energy Procedia, 2012, 14, 1421-1426.	1.8	14
156	Heat transfer performance of a radiator with and without louvered strip by using Graphene-based nanofluids. Journal of Thermal Engineering, 0, , 1315-1328.	0.8	4
157	Viscosity measurements in semi-solid metal processing: current status and recent developments. International Journal of Advanced Manufacturing Technology, 0, , 1.	1.5	3