

Alagar Karthick

List of Publications by Year in descending order

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Version: 2024-02-01

104
papers

3,119
citations

126907

33
h-index

197818

49
g-index

106
all docs

106
docs citations

106
times ranked

1185
citing authors

#	ARTICLE	IF	CITATIONS
1	State of Charge Estimation of Lithium-Ion Battery for Electric Vehicles Using Machine Learning Algorithms. <i>World Electric Vehicle Journal</i> , 2021, 12, 38.	3.0	140
2	Characterization of Hybrid-nano/Paraffin Organic Phase Change Material for Thermal Energy Storage Applications in Solar Thermal Systems. <i>Energies</i> , 2020, 13, 5079.	3.1	126
3	Investigation of a binary eutectic mixture of phase change material for building integrated photovoltaic (BIPV) system. <i>Solar Energy Materials and Solar Cells</i> , 2020, 207, 110360.	6.2	121
4	Investigation of Inorganic Phase Change Material for a Semi-Transparent Photovoltaic (STPV) Module. <i>Energies</i> , 2020, 13, 3582.	3.1	100
5	Performance enhancement of a building-integrated photovoltaic module using phase change material. <i>Energy</i> , 2018, 142, 803-812.	8.8	97
6	Investigations on an evacuated tube solar water heater using hybrid-nano based organic phase change material. <i>International Journal of Green Energy</i> , 2020, 17, 872-883.	3.8	91
7	COVID-19 Detection Based on Lung Ct Scan Using Deep Learning Techniques. <i>Computational and Mathematical Methods in Medicine</i> , 2022, 2022, 1-13.	1.3	86
8	Diagnosis of Cervical Cancer based on Ensemble Deep Learning Network using Colposcopy Images. <i>BioMed Research International</i> , 2021, 2021, 1-15.	1.9	81
9	Status of BIPV and BAPV System for Less Energy-Hungry Building in India—A Review. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2337.	2.5	78
10	Effect of ZrB ₂ on microstructural, mechanical and corrosion behaviour of aluminium (AA7178) alloy matrix composite prepared by the stir casting route. <i>Ceramics International</i> , 2021, 47, 12951-12962.	4.8	78
11	Optimization of transformer oil blended with natural ester oils using Taguchi-based grey relational analysis. <i>Fuel</i> , 2021, 288, 119629.	6.4	69
12	Performance analysis and energy metrics of grid-connected photovoltaic systems. <i>Energy for Sustainable Development</i> , 2019, 52, 104-115.	4.5	68
13	Performance analysis of semitransparent photovoltaic module for skylights. <i>Energy</i> , 2018, 162, 798-812.	8.8	66
14	Experimental investigation on cooling the photovoltaic panel using hybrid nanofluids. <i>Applied Nanoscience (Switzerland)</i> , 2021, 11, 363-374.	3.1	62
15	Performance and emission characteristics of diesel engine fueled with ternary blends of linseed and rubber seed oil biodiesel. <i>Fuel</i> , 2021, 285, 119255.	6.4	54
16	Performance enhancement of copper indium diselenide photovoltaic module using inorganic phase change material. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2020, 15, e2480.	1.5	53
17	Short-Term Power Prediction of Building Integrated Photovoltaic (BIPV) System Based on Machine Learning Algorithms. <i>International Journal of Photoenergy</i> , 2021, 2021, 1-11.	2.5	53
18	Review on phase change materials for solar energy storage applications. <i>Environmental Science and Pollution Research</i> , 2022, 29, 9491-9532.	5.3	52

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19	Enhancing the fresh water produced from inclined cover stepped absorber solar still using wick and energy storage materials. <i>Environmental Science and Pollution Research</i> , 2021, 28, 18146-18162.	5.3	50
20	Study on an ETC solar water heater using flat and wavy diffuse reflectors. <i>Materials Today: Proceedings</i> , 2021, 47, 5228-5232.	1.8	49
21	Review on the progress of building-applied/integrated photovoltaic system. <i>Environmental Science and Pollution Research</i> , 2021, 28, 47689-47724.	5.3	49
22	Performance enhancement of photovoltaic module by integrating eutectic inorganic phase change material. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 0, , 1-18.	2.3	47
23	Performance study of building integrated photovoltaic modules. <i>Advances in Building Energy Research</i> , 2018, 12, 178-194.	2.3	46
24	Artificial neural network-based output power prediction of grid-connected semitransparent photovoltaic system. <i>Environmental Science and Pollution Research</i> , 2022, 29, 10173-10182.	5.3	46
25	Synthesis and Characterization of Mechanical Properties and Wire Cut EDM Process Parameters Analysis in AZ61 Magnesium Alloy + B4C + SiC. <i>Materials</i> , 2021, 14, 3689.	2.9	45
26	Experimental analysis of concrete absorber solar water heating systems. <i>Energy and Buildings</i> , 2014, 84, 501-505.	6.7	43
27	A comprehensive MCDM-based approach using TOPSIS and EDAS as an auxiliary tool for pyrolysis material selection and its application. <i>Biomass Conversion and Biorefinery</i> , 2022, 12, 5845-5860.	4.6	43
28	Experimental analysis of solar concrete collector for residential buildings. <i>International Journal of Green Energy</i> , 2021, 18, 615-623.	3.8	42
29	Effect of titanium diboride ceramic particles on mechanical and wear behaviour of Cu-10 wt% W alloy composites processed by P/M route. <i>Vacuum</i> , 2021, 184, 109895.	3.5	39
30	Comprehensive review on various parameters that influence the performance of parabolic trough collector. <i>Environmental Science and Pollution Research</i> , 2021, 28, 22310-22333.	5.3	38
31	Sustainable potable water production from conventional solar still during the winter season at Algerian dry areas: energy and exergy analysis. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 145, 1215-1225.	3.6	37
32	Phosphate bags as energy storage materials for enhancement of solar still performance. <i>Environmental Science and Pollution Research</i> , 2021, 28, 21540-21552.	5.3	37
33	Performance evaluation of building-integrated photovoltaic systems for residential buildings in southern India. <i>Building Services Engineering Research and Technology</i> , 2020, 41, 492-506.	1.8	35
34	Building integrated photovoltaic modules and the integration of phase change materials for equatorial applications. <i>Building Services Engineering Research and Technology</i> , 2020, 41, 634-652.	1.8	33
35	Investigating performance of solar photovoltaic using a nano phase change material. <i>Materials Today: Proceedings</i> , 2021, 47, 5029-5033.	1.8	33
36	Agro Waste Sugarcane Bagasse as a Cementitious Material for Reactive Powder Concrete. <i>Clean Technologies</i> , 2020, 2, 476-491.	4.2	32

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37	Novel Multi-Time Scale Deep Learning Algorithm for Solar Irradiance Forecasting. <i>Energies</i> , 2021, 14, 2404.	3.1	32
38	Energy and Economic Analysis of Curved, Straight, and Spiral Flow Flat-Plate Solar Water Collector. <i>International Journal of Photoenergy</i> , 2021, 2021, 1-11.	2.5	32
39	Microstructural and Mechanical Behaviors of Friction Stir Welded Dissimilar AA6082-AA7075 Joints. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-13.	1.8	30
40	Weldability Investigation and Optimization of Process Variables for TIG-Welded Aluminium Alloy (AA) Tj ETQq0 0 0 rrgBT /Overlock 10 Tf	1.8	26
41	Comparative Analysis of Drilling Behaviour of Synthetic and Natural Fiber-Based Composites. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-13.	1.8	25
42	Comprehensive review on recycling of spent lithium-ion batteries. <i>Materials Today: Proceedings</i> , 2021, 47, 167-180.	1.8	24
43	Diagnosis of Retinal Diseases Based on Bayesian Optimization Deep Learning Network Using Optical Coherence Tomography Images. <i>Computational Intelligence and Neuroscience</i> , 2022, 2022, 1-15.	1.7	23
44	Bioactive Potential of Brown Algae. <i>Adsorption Science and Technology</i> , 2022, 2022, .	3.2	23
45	3D Printing Manufacturing Techniques, Materials, and Applications: An Overview. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-10.	1.8	22
46	Integrated modeling and feasibility analysis of a rooftop photovoltaic systems for an academic building in Bangladesh. <i>International Journal of Low-Carbon Technologies</i> , 2021, 16, 1317-1327.	2.6	21
47	A Review on the Effect of Various Chemical Treatments on the Mechanical Properties of Renewable Fiber-Reinforced Composites. <i>Advances in Materials Science and Engineering</i> , 2022, 2022, 1-24.	1.8	21
48	Investigating the Role of Image Fusion in Brain Tumor Classification Models Based on Machine Learning Algorithm for Personalized Medicine. <i>Computational and Mathematical Methods in Medicine</i> , 2022, 2022, 1-13.	1.3	21
49	A Practical Approach for Predicting Power in a Small-Scale Off-Grid Photovoltaic System using Machine Learning Algorithms. <i>International Journal of Photoenergy</i> , 2022, 2022, 1-21.	2.5	20
50	Performance assessment of free standing and building integrated grid connected photovoltaic system for southern part of India. <i>Building Services Engineering Research and Technology</i> , 2021, 42, 237-248.	1.8	19
51	An Expert System for COVID-19 Infection Tracking in Lungs Using Image Processing and Deep Learning Techniques. <i>BioMed Research International</i> , 2021, 2021, 1-17.	1.9	19
52	Wind power forecasting based on time series model using deep machine learning algorithms. <i>Materials Today: Proceedings</i> , 2021, 47, 115-126.	1.8	18
53	Performance enhancement of solar photovoltaic system for roof top garden. <i>Environmental Science and Pollution Research</i> , 2021, 28, 50017-50027.	5.3	18
54	Investigation on electric erosion behavior of nickel-based super alloy (Waspaloy: Ni, Cr, Co, Mo, Ti, Al) using response surface methodology. <i>Surface Topography: Metrology and Properties</i> , 2021, 9, 035006.	1.6	18

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55	Design of Efficient Off-Grid Solar Photovoltaic Water Pumping System Based on Improved Fractional Open Circuit Voltage MPPT Technique. <i>International Journal of Photoenergy</i> , 2021, 2021, 1-18.	2.5	18
56	Investigation of Drilling Process Parameters of Palmyra Based Composite. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-9.	1.8	18
57	Removing microplastics from wastewater using leading-edge treatment technologies: a solution to microplastic pollution—a review. <i>Bioprocess and Biosystems Engineering</i> , 2023, 46, 309-321.	3.4	18
58	Application of r-GO-MMT Hybrid Nanofillers for Improving Strength and Flame Retardancy of Epoxy/Glass Fibre Composites. <i>Advances in Polymer Technology</i> , 2021, 2021, 1-9.	1.7	17
59	Taguchi approach and decision tree algorithm for prediction of wear rate in zinc oxide-filled AA7075 matrix composites. <i>Surface Topography: Metrology and Properties</i> , 2021, 9, 035005.	1.6	17
60	Effects of the Interfacial Bonding Behavior on the Mechanical Properties of E-Glass Fiber/Nanographite Reinforced Hybrid Composites. <i>Advances in Polymer Technology</i> , 2021, 2021, 1-9.	1.7	17
61	Investigation of Weight Fraction and Alkaline Treatment on Catechu Linnaeus/Hibiscus cannabinus/Sansevieria Ehrenbergii Plant Fibers-Reinforced Epoxy Hybrid Composites. <i>Advances in Materials Science and Engineering</i> , 2022, 2022, 1-9.	1.8	17
62	Integrating Nanomaterial and High-Performance Fuzzy-Based Machine Learning Approach for Green Energy Conversion. <i>Journal of Nanomaterials</i> , 2022, 2022, 1-11.	2.7	16
63	Review on progress in concrete solar water collectors. <i>Environmental Science and Pollution Research</i> , 2021, 28, 22296-22309.	5.3	15
64	Energy loss analysis of a large scale BIPV system for university buildings in tropical weather conditions: A partial and cumulative performance ratio approach. <i>Case Studies in Thermal Engineering</i> , 2021, 25, 100916.	5.7	15
65	Role of Nanoparticles in Biodegradation and Their Importance in Environmental and Biomedical Applications. <i>Journal of Nanomaterials</i> , 2022, 2022, 1-15.	2.7	15
66	Performance analysis of domestic solar air heating system using V-shaped baffles – An experimental study. <i>Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering</i> , 2021, 235, 1705-1717.	2.5	14
67	Investigation of Dynamic, Mechanical, and Thermal Properties of Calotropis procera Particle-Reinforced PLA Biocomposites. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-7.	1.8	14
68	Thermal and Flame Retardant Behavior of Neem and Banyan Fibers When Reinforced with a Bran Particulate Epoxy Hybrid Composite. <i>Polymers</i> , 2021, 13, 3859.	4.5	14
69	Energy analysis of building integrated photovoltaic modules. , 2017, , .		13
70	Microstructure and Mechanical Properties of Friction Stir Welded SiC/TiB ₂ Reinforced Aluminum Hybrid Composites. <i>Silicon</i> , 2022, 14, 3571-3581.	3.3	13
71	Standalone PV-Wind-DC-Battery Hybrid Energy System for Zero Energy Buildings in Smart City Coimbatore, India. <i>EAI/Springer Innovations in Communication and Computing</i> , 2021, , 55-63.	1.1	13
72	A Novel Context Aware Joint Segmentation and Classification Framework for Glaucoma Detection. <i>Computational and Mathematical Methods in Medicine</i> , 2021, 2021, 1-19.	1.3	13

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73	Hourly and Day Ahead Power Prediction of Building Integrated Semitransparent Photovoltaic System. International Journal of Photoenergy, 2021, 2021, 1-8.	2.5	12
74	Mechanical Properties of Titanium Diboride Particles Reinforced Aluminum Alloy Matrix Composites: A Comprehensive Review. Advances in Materials Science and Engineering, 2021, 2021, 1-18.	1.8	10
75	Comparative Study of Mechanical Properties and Thermal Stability on Banyan/Ramie Fiber-Reinforced Hybrid Polymer Composite. Advances in Materials Science and Engineering, 2021, 2021, 1-11.	1.8	9
76	Diagnosing Breast Cancer Based on the Adaptive Neuro-Fuzzy Inference System. Computational and Mathematical Methods in Medicine, 2022, 2022, 1-11.	1.3	9
77	Study on Compaction and Machinability of Silicon Nitride (Si ₃ N ₄) Reinforced Copper Alloy Composite through P/M Route. International Journal of Polymer Science, 2021, 2021, 1-10.	2.7	8
78	Investigations on Microstructure, Mechanical, Thermal, and Tribological Behavior of Cu-MWCNT Composites Processed by Powder Metallurgy. Journal of Nanomaterials, 2021, 2021, 1-15.	2.7	8
79	Investigation on Heat Transfer Enhancement in Microchannel Using Al ₂ O ₃ /Water Nanofluids. International Journal of Photoenergy, 2021, 2021, 1-9.	2.5	8
80	Mechanical Properties and Electrical Resistivity of the Friction Stir Spot-Welded Dissimilar Al-Cu Joints. International Journal of Polymer Science, 2022, 2022, 1-7.	2.7	8
81	Effect of Various Factors on Plant Fibre-Reinforced Composites with Nanofillers and Its Industrial Applications: A Critical Review. Journal of Nanomaterials, 2022, 2022, 1-23.	2.7	8
82	An improved control algorithm for Series Hybrid Active Power Filter based on SOGI-PLL under dynamic load conditions. Solid State Communications, 2021, 333, 114357.	1.9	7
83	Finite Element Analysis of Temperature Distribution and Stress Behavior of Squeeze Pressure Composites. Advances in Materials Science and Engineering, 2021, 2021, 1-9.	1.8	7
84	Design of Boosted Multilevel DC-DC Converter for Solar Photovoltaic System. International Journal of Photoenergy, 2022, 2022, 1-23.	2.5	7
85	Performance analysis of mixed vegetable oil as an alternative for transformer insulation oil. Biomass Conversion and Biorefinery, 0, , 1.	4.6	7
86	Performance Evaluation of Cyclic Stability and Capacitance of Manganese Oxide Modified Graphene Oxide Nanocomposite for Potential Supercapacitor Applications. Journal of Nanomaterials, 2022, 2022, 1-8.	2.7	7
87	Investigation on Inorganic Salts K ₂ TiF ₆ and KBF ₄ to Develop Nanoparticles Based TiB ₂ Reinforcement Aluminium Composites. Bioinorganic Chemistry and Applications, 2022, 2022, 1-13.	4.1	7
88	Utilisation possibilities of waste medium-density fiberboard: A material recycling process. Materials Today: Proceedings, 2022, 59, 1362-1366.	1.8	7
89	Performance and Emission Analysis of Watermelon Seed Oil Methyl Ester and n-Butanol Blends Fueled Diesel Engine. Mathematical Problems in Engineering, 2022, 2022, 1-12.	1.1	7
90	Effect of Graphene Oxide-Boron Nitride-Based Dual Fillers on Mechanical Behavior of Epoxy/Glass Fiber Composites. Journal of Nanomaterials, 2021, 2021, 1-10.	2.7	6

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91	Investigation of Mechanical and Durability Properties of Concrete Mixed with Water Exposed to a Magnetic Field. <i>Advances in Civil Engineering</i> , 2021, 2021, 1-14.	0.7	6
92	Fabrication of MnO ₂ Nanocomposite on GO Functionalized with Advanced Electrode Material for Supercapacitors. <i>Journal of Nanomaterials</i> , 2022, 2022, 1-7.	2.7	6
93	Experimental Study on the Sound Absorption Properties of Finger Millet Straw, Darbha, and Ripe Bulrush Fibers. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-12.	1.8	6
94	Dynamic Analysis and Fabrication of Single Screw Conveyor Machine. <i>Advances in Materials Science and Engineering</i> , 2022, 2022, 1-10.	1.8	6
95	Biofabrication of Silver Nanoparticles and Current Research of Its Environmental Applications. <i>Journal of Nanomaterials</i> , 2022, 2022, 1-11.	2.7	6
96	Novel Approach to Handling Microfiber-Rich Dye Effluent for Sustainable Water Conservation. <i>Advances in Civil Engineering</i> , 2021, 2021, 1-10.	0.7	5
97	Thermal and Mechanical Properties of Vinyl Ester Hybrid Composites with Carbon Black and Glass Reinforcement. <i>Advances in Materials Science and Engineering</i> , 2021, 2021, 1-7.	1.8	4
98	IoT-Based Intelligent System for Internal Crack Detection in Building Blocks. <i>Journal of Nanomaterials</i> , 2022, 2022, 1-8.	2.7	4
99	Review on application of phase change material for BIPV system. <i>Materials Today: Proceedings</i> , 2022, 59, 1243-1248.	1.8	3
100	Human Centered Decision-Making for COVID-19 Testing Center Location Selection: Tamil Naduâ€™A Case Study. <i>Computational and Mathematical Methods in Medicine</i> , 2022, 2022, 1-13.	1.3	3
101	Synthesis and Workability Behavior of Cu-X wt.% TiC (x=0, 4, 8, and 12) Powder Metallurgy Composites. <i>Bioinorganic Chemistry and Applications</i> , 2022, 2022, 1-10.	4.1	3
102	Investigation of Reinforced Concrete Column Containing Metakaolin and Fly Ash Cementitious Materials. <i>Advances in Civil Engineering</i> , 2022, 2022, 1-13.	0.7	2
103	Investigation on Mechanical and Durability Performance of Reinforced Concrete Containing Red Soil as Alternate for M-Sand. <i>Journal of Nanomaterials</i> , 2022, 2022, 1-15.	2.7	2
104	Mechanical and Durability Studies on Ficus exasperata Leaf Ash Concrete. <i>Advances in Civil Engineering</i> , 2022, 2022, 1-10.	0.7	0