

Rashmi Walvekar

List of Publications by Year in descending order

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106
papers

4,791
citations

87888

38
h-index

106344

65
g-index

108
all docs

108
docs citations

108
times ranked

5105
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of magnetic basic palm kernel shell catalyst for biodiesel production and characterisation and optimisation by Taguchi method. Applied Nanoscience (Switzerland), 2022, 12, 3721-3733.	3.1	4
2	Comprehensive review on carbon nanotubes embedded in different metal and polymer matrix: fabrications and applications. Critical Reviews in Solid State and Materials Sciences, 2022, 47, 837-864.	12.3	31
3	Fabrication of binary metal phosphate-based binder-free electrode for new generation energy storage device. Surface and Coatings Technology, 2022, 429, 127924.	4.8	13
4	Proton Conductivity Enhancement at High Temperature on Polybenzimidazole Membrane Electrolyte with Acid-Functionalized Graphene Oxide Fillers. Membranes, 2022, 12, 344.	3.0	16
5	Thermophysical properties of novel ammonium-based eutectic solvents with ethane-1,2-diol and $ZnCl_2$. Journal of Chemical Technology and Biotechnology, 2022, 97, 2728-2738.	3.2	2
6	Current progress in waste tire rubber devulcanization. Chemosphere, 2021, 265, 129033.	8.2	63
7	Algae utilization and its role in the development of green cities. Chemosphere, 2021, 268, 129322.	8.2	53
8	Functionalized multi-walled carbon nanotubes and hydroxyapatite nanorods reinforced with polypropylene for biomedical application. Scientific Reports, 2021, 11, 843.	3.3	33
9	Magnetic nanocomposites for sustainable water purification—a comprehensive review. Environmental Science and Pollution Research, 2021, 28, 19563-19588.	5.3	38
10	Deep eutectic solvents-based CNT nanofluid – A potential alternative to conventional heat transfer fluids. Journal of the Taiwan Institute of Chemical Engineers, 2021, 128, 314-326.	5.3	21
11	Stability, thermo-physical and electrical properties of naphthenic/POME blended transformer oil nanofluids. Thermal Science and Engineering Progress, 2021, 23, 100878.	2.7	8
12	A comprehensive review on magnetic carbon nanotubes and carbon nanotube-based buckypaper for removal of heavy metals and dyes. Journal of Hazardous Materials, 2021, 413, 125375.	12.4	223
13	Corrosion, rheology, and thermal ageing behaviour of the eutectic salt-based graphene hybrid nanofluid for high-temperature TES applications. Journal of Molecular Liquids, 2021, 334, 116156.	4.9	3
14	Enhancement in hydrolytic stability and proton conductivity of optimised chitosan/sulfonated poly(vinyl alcohol) composite membrane with inorganic fillers. International Journal of Energy Research, 2021, 45, 21307-21323.	4.5	2
15	Carbon and polymer-based magnetic nanocomposites for oil-spill remediation—a comprehensive review. Environmental Science and Pollution Research, 2021, 28, 54477-54496.	5.3	24
16	Viscoelastic Properties and Thermal Stability of Nanohydroxyapatite Reinforced Poly-Lactic Acid for Load Bearing Applications. Molecules, 2021, 26, 5852.	3.8	2
17	Recent progress in solar water heaters and solar collectors: A comprehensive review. Thermal Science and Engineering Progress, 2021, 25, 100981.	2.7	42
18	Biodiesel synthesis using natural solid catalyst derived from biomass waste – A review. Journal of Industrial and Engineering Chemistry, 2020, 81, 41-60.	5.8	101

#	ARTICLE	IF	CITATIONS
19	Development of Poly(Vinyl Alcohol)-Based Polymers as Proton Exchange Membranes and Challenges in Fuel Cell Application: A Review. <i>Polymer Reviews</i> , 2020, 60, 171-202.	10.9	94
20	A Review: Emphasizing the Nanofluids Use in PV/T Systems. <i>IEEE Access</i> , 2020, 8, 58227-58249.	4.2	26
21	A review on Malaysia's solar energy pathway towards carbon-neutral Malaysia beyond Covid-19 pandemic. <i>Journal of Cleaner Production</i> , 2020, 273, 122834.	9.3	149
22	Graphene/PVA buckypaper for strain sensing application. <i>Scientific Reports</i> , 2020, 10, 20106.	3.3	20
23	Influences of crosslinked carboxylic acid monomers on the proton conduction characteristics of chitosan/SPVA composite membranes. <i>Polymer</i> , 2020, 203, 122782.	3.8	11
24	Graphene based nanomaterials for strain sensor application—a review. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103743.	6.7	136
25	High-temperature molten salts optimisation using mixture design for energy storage application. <i>Journal of Energy Storage</i> , 2020, 32, 101981.	8.1	16
26	Rheological behaviour of eutectic nanofluids containing a low fraction of GO/TiO ₂ hybrid nanoparticles. <i>Thermal Science and Engineering Progress</i> , 2020, 20, 100753.	2.7	4
27	Magnetic nanoparticles incorporation into different substrates for dyes and heavy metals removal—A Review. <i>Environmental Science and Pollution Research</i> , 2020, 27, 43526-43541.	5.3	82
28	Recent Progress in the Development of Aromatic Polymer-Based Proton Exchange Membranes for Fuel Cell Applications. <i>Polymers</i> , 2020, 12, 1061.	4.5	53
29	Adsorption of Cu(II) and Ni(II) ions from wastewater onto bentonite and bentonite/GO composite. <i>Environmental Science and Pollution Research</i> , 2020, 27, 33270-33296.	5.3	62
30	Synthesis of Hybrid Graphene/TiO ₂ Nanoparticles Based High-Temperature Quinary Salt Mixture for Energy Storage Application. <i>Journal of Energy Storage</i> , 2020, 31, 101540.	8.1	29
31	Adsorption of heavy metal from industrial wastewater onto low-cost Malaysian kaolin clay-based adsorbent. <i>Environmental Science and Pollution Research</i> , 2020, 27, 13949-13962.	5.3	50
32	Surface force arising from Adsorbed graphene oxide in kaolinite suspensions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2020, 592, 124592.	4.7	12
33	Low-melting-temperature binary molten nitrate salt mixtures for solar energy storage. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020, 141, 2657-2664.	3.6	13
34	Devulcanisation of ground rubber tyre by novel ternary deep eutectic solvents. <i>Journal of Molecular Liquids</i> , 2020, 306, 112913.	4.9	16
35	Synthesis and thermophysical properties of ethylammonium chloride-glycerol-ZnCl ₂ ternary deep eutectic solvent. <i>Journal of Molecular Liquids</i> , 2020, 310, 113232.	4.9	29
36	Magnetic nanoadsorbents' potential route for heavy metals removal—a review. <i>Environmental Science and Pollution Research</i> , 2020, 27, 24342-24356.	5.3	127

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37	Feasibility study of phosphonium ionic liquids as efficient solvent for sulfur extraction from liquid fuels. AIP Conference Proceedings, 2019, , .	0.4	5
38	Dilution and ZnCl ₂ impact on eutectic solvents as devulcanizing reagent in de-linking phenomena of waste ground rubber tire. AIP Conference Proceedings, 2019, , .	0.4	1
39	Effect of graphene doping on the charge carrier and thermoelectric properties of RCF-Bi ₂ S ₃ composites. AIP Conference Proceedings, 2019, , .	0.4	7
40	Experimental studies on the biodiesel production parameters optimization of sunflower and soybean oil mixture and DI engine combustion, performance, and emission analysis fueled with diesel/biodiesel blends. Fuel, 2019, 255, 115791.	6.4	169
41	Synthesis of organic phase change materials by using carbon nanotubes as filler material. Nano Structures Nano Objects, 2019, 19, 100361.	3.5	22
42	Investigating the effect of graphene on eutectic salt properties for thermal energy storage. Materials Research Bulletin, 2019, 119, 110568.	5.2	13
43	Recycled carbon fibre/Bi ₂ Te ₃ and Bi ₂ S ₃ hybrid composite doped with MWCNTs for thermoelectric applications. Composites Part B: Engineering, 2019, 175, 107085.	12.0	21
44	Synthesis of organic phase change materials (PCM) for energy storage applications: A review. Nano Structures Nano Objects, 2019, 20, 100399.	3.5	137
45	Magnetic palm kernel biochar potential route for phenol removal from wastewater. Environmental Science and Pollution Research, 2019, 26, 35183-35197.	5.3	70
46	Experimental investigations on spray flames and emissions analysis of diesel and diesel/biodiesel blends for combustion in oxy-fuel burner. Asia-Pacific Journal of Chemical Engineering, 2019, 14, e2375.	1.5	6
47	Recent Progress and Challenges in Transformer Oil Nanofluid Development: A Review on Thermal and Electrical Properties. IEEE Access, 2019, 7, 151422-151438.	4.2	42
48	Investigating the effects of processing parameters on poly(lactic acid) properties – a central composite design approach. Plastics, Rubber and Composites, 2019, 48, 95-102.	2.0	3
49	An Overview of Magnetic Material: Preparation and Adsorption Removal of Heavy Metals from Wastewater. Nanotechnology in the Life Sciences, 2019, , 131-159.	0.6	25
50	Tribological performance of nanographite-based metalworking fluid and parametric investigation using artificial neural network. International Journal of Advanced Manufacturing Technology, 2019, 104, 359-374.	3.0	16
51	Effective devulcanization of ground tire rubber using choline chloride-based deep eutectic solvents. Journal of Environmental Chemical Engineering, 2019, 7, 103151.	6.7	22
52	Carbon nanomaterials based films for strain sensing application – A review. Nano Structures Nano Objects, 2019, 18, 100312.	3.5	59
53	Additives in proton exchange membranes for low- and high-temperature fuel cell applications: A review. International Journal of Hydrogen Energy, 2019, 44, 6116-6135.	7.1	207
54	Stability enhancement of MWCNT/water nanofluids using PVA surfactant. International Journal of Nanotechnology, 2019, 16, 631.	0.2	1

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55	Parametric optimization of pulsed laser ablation on stainless steel for improving corrosion resistance by Taguchi method. <i>Materials Research Express</i> , 2019, 6, 026533.	1.6	2
56	Deep eutectic solvents for extraction-desulphurization: A review. <i>Journal of Molecular Liquids</i> , 2019, 275, 312-322.	4.9	126
57	Parametric Study for Devulcanization of Waste Tire Rubber Utilizing Deep Eutectic Solvent (DES). <i>MATEC Web of Conferences</i> , 2018, 152, 01005.	0.2	8
58	Corrosion Inhibition of Cold-rolled Low Carbon Steel with Pulse Fiber Laser Ablation in Water. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 2805-2814.	2.5	2
59	E-beam sterilizable thermoplastics elastomers for healthcare devices: Mechanical, morphology, and in vivo studies. <i>Journal of Biomaterials Applications</i> , 2018, 32, 1049-1062.	2.4	2
60	Natural and synthetic biocompatible and biodegradable polymers. , 2018, , 3-32.		58
61	Mechanical and physical performance of cowdung-based polypropylene biocomposites. <i>Polymer Composites</i> , 2018, 39, 288-296.	4.6	16
62	Surface modification of nanohydroxyapatite and its loading effect on polylactic acid properties for load bearing implants. <i>Polymer Composites</i> , 2018, 39, 2880-2888.	4.6	7
63	Performance of Cow Dung Reinforced Biodegradable Poly(Lactic Acid) Biocomposites for Structural Applications. <i>Journal of Polymers and the Environment</i> , 2018, 26, 474-486.	5.0	22
64	Mechanical properties of polylactic acid/synthetic rubber blend reinforced with cellulose nanoparticles isolated from kenaf fibres. <i>Polymer Bulletin</i> , 2018, 75, 809-827.	3.3	9
65	Investigation of rheological and corrosion properties of graphene-based eutectic salt. <i>Journal of Materials Science</i> , 2018, 53, 692-707.	3.7	8
66	Thermophysical properties of glycerol and polyethylene glycol (PEG 600) based DES. <i>Journal of Molecular Liquids</i> , 2018, 252, 439-444.	4.9	59
67	Cost effective thermoelectric composites from recycled carbon fibre: From waste to energy. <i>Journal of Cleaner Production</i> , 2018, 195, 1015-1025.	9.3	34
68	Surface modification techniques of biodegradable and biocompatible polymers. , 2018, , 33-54.		11
69	Physical properties optimization of POME-groundnut-naphthenic based graphene nanolubricant using response surface methodology. <i>Journal of Cleaner Production</i> , 2018, 193, 277-289.	9.3	9
70	Optimisation of extractive desulfurization using Choline Chloride-based deep eutectic solvents. <i>Fuel</i> , 2018, 234, 1388-1400.	6.4	80
71	Effect of deep eutectic solvent in proton conduction and thermal behaviour of chitosan-based membrane. <i>Journal of Molecular Liquids</i> , 2018, 269, 675-683.	4.9	27
72	Effect of electron beam irradiation on (waste tire dust)-filled ethylene vinyl acetate in the presence of bisphenol a diglycidyl ether. <i>Journal of Vinyl and Additive Technology</i> , 2017, 23, 172-180.	3.4	0

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73	Thermal conductivity and electrical properties of hybrid SiO ₂ -graphene naphthenic mineral oil nanofluid as potential transformer oil. <i>Materials Research Express</i> , 2017, 4, 015504.	1.6	61
74	Recent developments and performance review of metal working fluids. <i>Tribology International</i> , 2017, 114, 389-401.	5.9	63
75	Stability and thermophysical studies on deep eutectic solvent based carbon nanotube nanofluid. <i>Materials Research Express</i> , 2017, 4, 075028.	1.6	28
76	Sonosynthesis of Microcellulose from Kenaf Fiber: Optimization of Process Parameters. <i>Journal of Natural Fibers</i> , 2017, 14, 437-449.	3.1	9
77	Effect of electron beam irradiation on thermal and crystallization behavior of PP/EPDM blend. <i>Radiation Physics and Chemistry</i> , 2017, 141, 179-189.	2.8	25
78	Co-PP/EPDM Blend Optimization Using D-Optimal Design for Medical Applications. <i>Polymer-Plastics Technology and Engineering</i> , 2017, 56, 216-226.	1.9	3
79	Recent progress in solar thermal energy storage using nanomaterials. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 67, 450-460.	16.4	115
80	Optimization of bio-mineral lubricants. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	1
81	Thermal Stability and Conductivity of Carbon Nanotube Nanofluid using Xanthan Gum as Surfactant. <i>Sains Malaysiana</i> , 2017, 46, 1017-1024.	0.5	7
82	Mechanical and thermal properties of polylactic acid composites reinforced with cellulose nanoparticles extracted from kenaf fibre. <i>Materials Research Express</i> , 2016, 3, 125301.	1.6	24
83	Study of graphene nanolubricant using thermogravimetric analysis. <i>Journal of Materials Research</i> , 2016, 31, 1939-1946.	2.6	17
84	Effect of nanofillers on the physico-mechanical properties of load bearing bone implants. <i>Materials Science and Engineering C</i> , 2016, 67, 792-806.	7.3	80
85	Sonosynthesis of cellulose nanoparticles (CNP) from kenaf fiber: Effects of processing parameters. <i>Fibers and Polymers</i> , 2016, 17, 1352-1358.	2.1	24
86	Heat transfer and tribological performance of graphene nanolubricant in an internal combustion engine. <i>Tribology International</i> , 2016, 103, 504-515.	5.9	97
87	Rubber/Nanoclay Composites: Towards Advanced Functional Materials. <i>Engineering Materials</i> , 2016, , 209-224.	0.6	8
88	Nanohydroxyapatite synthesis using optimized process parameters for load-bearing implant. <i>Bulletin of Materials Science</i> , 2016, 39, 133-145.	1.7	12
89	Graphene based nanofluids and nanolubricants – Review of recent developments. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 63, 346-362.	16.4	222
90	Application of CNT nanofluids in a turbulent flow heat exchanger. <i>Journal of Experimental Nanoscience</i> , 2016, 11, 1-17.	2.4	45

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91	Sono-synthesis of nanohydroxyapatite: Effects of process parameters. <i>Ceramics International</i> , 2016, 42, 6263-6272.	4.8	13
92	Synthesis and thermo-physical properties of deep eutectic solvent-based graphene nanofluids. <i>Nanotechnology</i> , 2016, 27, 075702.	2.6	39
93	Waste tire rubber in polymer blends: A review on the evolution, properties and future. <i>Progress in Materials Science</i> , 2015, 72, 100-140.	32.8	368
94	Experimental and numerical investigation of heat transfer in CNT nanofluids. <i>Journal of Experimental Nanoscience</i> , 2015, 10, 545-563.	2.4	36
95	Preparation, thermo-physical properties and heat transfer enhancement of nanofluids. <i>Materials Research Express</i> , 2014, 1, 032001.	1.6	53
96	Investigating corrosion effects and heat transfer enhancement in smaller size radiators using CNT-nanofluids. <i>Journal of Materials Science</i> , 2014, 49, 4544-4551.	3.7	30
97	Solar energy harvesting with the application of nanotechnology. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 26, 837-852.	16.4	185
98	Thermal conductivity of carbon nanotube nanofluid—Experimental and theoretical study. <i>Heat Transfer - Asian Research</i> , 2012, 41, 145-163.	2.8	54
99	Stability and thermal conductivity enhancement of carbon nanotube nanofluid using gum arabic. <i>Journal of Experimental Nanoscience</i> , 2011, 6, 567-579.	2.4	114
100	CFD studies on natural convection heat transfer of Al ₂ O ₃ -water nanofluids. <i>Heat and Mass Transfer</i> , 2011, 47, 1301-1310.	2.1	50
101	Effect of radiation dose on the properties of natural rubber nanocomposite. <i>Radiation Physics and Chemistry</i> , 2010, 79, 1279-1285.	2.8	37
102	OPTIMIZATION OF CNTs PRODUCTION USING FULL FACTORIAL DESIGN AND ITS ADVANCED APPLICATION IN PROTEIN PURIFICATION. <i>International Journal of Nanoscience</i> , 2010, 09, 181-192.	0.7	3
103	Numerical study of dispersed oil—water turbulent flow in horizontal tube. <i>Journal of Petroleum Science and Engineering</i> , 2009, 65, 123-128.	4.2	44
104	Comparative Study On Water Uptake And Ionic Transport Properties Of Pre- And Post Sulfonated Chitosan/PVA polymer Exchange Membrane. <i>IOP Conference Series: Materials Science and Engineering</i> , 0, 458, 012017.	0.6	5
105	Thermo-physical properties of naphthenic-palm oil methyl ester (POME) blended transformer oil. <i>Journal of Thermal Analysis and Calorimetry</i> , 0, , 1.	3.6	2
106	THERMOPHYSICAL PROPERTIES OF DEEP EUTECTIC SOLVENT-CARBON NANOTUBES (DES-CNT) BASED NANOLUBRICANT. <i>Journal of Thermal Engineering</i> , 0, , 15-26.	1.6	3