Arun Kumar Tiwari

List of Publications by Year in Descending Order

74 papers	3,121 citations	28 h-index	55 g-index
77 ext. papers	3,988 ext. citations	4.5 avg, IF	6.36 L-index

#	Paper	IF	Citations
74	Theoretical analysis and correlations for predicting properties of hybrid nanofluids **2022**, 149-170		1
73	Radiative transport of hybrid nanofluid **2022**, 131-147		
72	Solar organic Rankine cycle and its poly-generation applications A review. *Sustainable Energy Technologies and Assessments*, **2022**, 49, 101732	4.7	3
71	4E (energy, exergy, economic and environmental) investigation of LFR using MXene based silicone oil nanofluids. *Sustainable Energy Technologies and Assessments*, **2022**, 49, 101715	4.7	1
70	Analysis of Mechanical and Sliding Wear Performance of Hybrid AA7075-SiC/Gr/Cu Alloy Composites Fabricated by High Vacuum Stir Casting Process. *Journal of Bio- and Tribo-Corrosion*, **2022**, 8, 1	2.9	0
69	Energy, exergy, economic and environmental (4E) analysis of a parabolic trough solar collector using MXene based silicone oil nanofluids. *Solar Energy Materials and Solar Cells*, **2022**, 239, 111633	6.4	11
68	Nanofluids as coolants **2022**, 713-735		
67	Application of novel framework based on ensemble boosted regression trees and Gaussian process regression in modelling thermal performance of small-scale organic rankine cycle using hybrid nanofluid. *Journal of Cleaner Production*, **2022**, 132194	10.3	4
66	Synthesis, characterization, and measurement techniques for the thermophysical properties of nanofluids **2022**, 59-93		0
65	Recent advances in machine learning research for nanofluid heat transfer in renewable energy **2022**, 203-228		0
64	A review on the application of hybrid nanofluids for parabolic trough collector: Recent progress and outlook. *Journal of Cleaner Production*, **2021**, 292, 126031	10.3	47
63	3S (Sonication, surfactant, stability) impact on the viscosity of hybrid nanofluid with different base fluids: An experimental study. *Journal of Molecular Liquids*, **2021**, 329, 115455	6	25
62	Experimental and numerical investigation on the thermal performance of triple tube heat exchanger equipped with different inserts with WO3/water nanofluid under turbulent condition. *International Journal of Thermal Sciences*, **2021**, 164, 106861	4.1	25
61	Recent advances on the fundamental physical phenomena behind stability, dynamic motion, thermophysical properties, heat transport, applications, and challenges of nanofluids. *Physics Reports*, **2021**, 946, 1-1	27.7	75
60	4S consideration (synthesis, sonication, surfactant, stability) for the thermal conductivity of CeO2 with MWCNT and water based hybrid nanofluid: An experimental assessment. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 610, 125918	5.1	37
59	Heat transfer, entropy generation, economic and environmental analyses of linear fresnel reflector using novel rGO-Co3O4 hybrid nanofluids. *Renewable Energy*, **2021**, 165, 420-437	8.1	67
58	Influence of the geometrical parameters and particle concentration levels of hybrid nanofluid on the thermal performance of axial grooved heat pipe. *Thermal Science and Engineering Progress*, **2021**, 21, 100762	3.6	13

57	Synthesis and Characterization of Nanocomposites for the Application in Hybrid Solar Cell. *Advances in Computational Intelligence and Robotics Book Series*, **2021**, 250-266	0.4	
56	Efficacy evaluation of oxide-MWCNT water hybrid nanofluids: An experimental and artificial neural network approach. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 620, 126562	5.1	16
55	A comprehensive review analysis on advances of evacuated tube solar collector using nanofluids and PCM. *Sustainable Energy Technologies and Assessments*, **2021**, 47, 101417	4.7	15
54	4E (Energy, Exergy, Economic, and Environment) examination of a small LFR solar water heater: An experimental and numerical study. *Case Studies in Thermal Engineering*, **2021**, 27, 101277	5.6	23
53	Preparation, characterization, stability, and thermal conductivity of rGO-Fe3O4-TiO2 hybrid nanofluid: An experimental study. *Powder Technology*, **2020**, 372, 235-245	5.2	56
52	Solicitation of nanoparticles/fluids in solar thermal energy harvesting: A review. *Materials Today: Proceedings*, **2020**, 26, 2289-2295	1.4	6
51	Discharging of PCM for ventilation system incorporating nanoparticles. *Journal of Molecular Liquids*, **2020**, 315, 113696	6	7
50	Heat transfer enhancement with nanofluids in plate heat exchangers: A comprehensive review. *European Journal of Mechanics, B/Fluids*, **2020**, 81, 173-190	2.4	54
49	Study of a Water-Based Hybrid Solar Photovoltaic Thermal Collector. *Smart Innovation, Systems and Technologies*, **2020**, 519-527	0.5	
48	Thermal Performance Enhancement of Flat-Plate Solar Collector Using CeO2–Water Nanofluid. *Springer Proceedings in Energy*, **2020**, 109-118	0.2	0
47	Rheological Behaviour of Hybrid Nanofluids: A Review. *Materials Forming, Machining and Tribology*, **2020**, 77-94	0.5	2
46	Experimental comparison of specific heat capacity of three different metal oxides with MWCNT/water-based hybrid nanofluids: proposing a new correlation. *Applied Nanoscience (Switzerland)*, **2020**, 1	3.3	15
45	Influence of nanoparticles and porous plates on discharging of ventilation unit. *Powder Technology*, **2020**, 375, 513-520	5.2	1
44	Machining performance enhancement of powder mixed electric discharge machining using Green dielectric fluid. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2020**, 42, 1	2	5
43	Measurement of machining forces and surface roughness in turning of AISI 304 steel using alumina-MWCNT hybrid nanoparticles enriched cutting fluid. *Measurement: Journal of the International Measurement Confederation*, **2020**, 150, 107078	4.6	33
42	A review of thermo physical properties of nanofluids. *Materials Today: Proceedings*, **2019**, 18, 968-978	1.4	10
41	Numerical study of CeO2/H2O nanofluid application on thermal performance of heat pipe. *Materials Today: Proceedings*, **2019**, 18, 1006-1016	1.4	10
40	A COMPARATIVE STUDY OF THERMAL PERFORMANCE OF A HEAT PIPE USING WATER AND NANOFLUID, AND A NANOPARTICLE-COATED WICK HEAT PIPE USING WATER. *Heat Transfer Research*, **2019**, 50, 1767-1779	3.9	7

39	Solar Power Development: A Root for Sustainable Development of India. *IOP Conference Series: Materials Science and Engineering*, **2019**, 691, 012084	0.4	3
38	An Investigation on Tool Flank Wear Using Alumina/MoS2 Hybrid Nanofluid in Turning Operation. *Lecture Notes in Mechanical Engineering*, **2019**, 213-219	0.4	8
37	Performance analysis of hybrid nanofluids in flat plate solar collector as an advanced working fluid. *Solar Energy*, **2018**, 167, 231-241	6.8	90
36	Prediction of temperature distribution over cutting tool with alumina-MWCNT hybrid nanofluid using computational fluid dynamics (CFD) analysis. *International Journal of Advanced Manufacturing Technology*, **2018**, 97, 427-439	3.2	23
35	Experimental Study of Thermal Performance of Nanofluid-Filled and Nanoparticles-Coated Mesh Wick Heat Pipes. *Journal of Heat Transfer*, **2018**, 140,	1.8	28
34	Viscosity of hybrid nanofluids: Measurement and comparison. *Journal of Mechanical Engineering and Sciences*, **2018**, 12, 3614-3623	2	17
33	Novel uses of alumina/graphene hybrid nanoparticle additives for improved tribological properties of lubricant in turning operation. *Tribology International*, **2018**, 119, 99-111	4.9	104
32	Heat transfer mechanisms in heat pipes using nanofluids □A review. *Experimental Thermal and Fluid Science*, **2018**, 90, 84-100	3	87
31	EXPERIMENTAL INVESTIGATION OF THE THERMAL PERFORMANCE OF MESH WICK HEAT PIPE. *Heat Transfer Research*, **2018**, 49, 1793-1811	3.9	8
30	An evaluative observation on impact of optical properties of nanofluids in performance of photo-thermal concentrating systems. *Solar Energy*, **2018**, 176, 709-724	6.8	21
29	Influence of graphene and multi-walled carbon nanotube additives on tribological behaviour of lubricants. *International Journal of Surface Science and Engineering*, **2018**, 12, 207	1	20
28	Exergy analysis of hybrid nanofluids with optimum concentration in a plate heat exchanger. *Materials Research Express*, **2018**, 5, 065022	1.7	13
27	Characterization of Nanofluids as an advanced heat transporting medium for Energy Systems. *Materials Today: Proceedings*, **2017**, 4, 4095-4103	1.4	7
26	Characterization and performance of nanofluids in plate heat exchanger. *Materials Today: Proceedings*, **2017**, 4, 4070-4078	1.4	19
25	Investigation into Performance of SiO2 Nanoparticle Based Cutting Fluid in Machining Process. *Materials Today: Proceedings*, **2017**, 4, 133-141	1.4	22
24	Performance evaluation of alumina-graphene hybrid nano-cutting fluid in hard turning. *Journal of Cleaner Production*, **2017**, 162, 830-845	10.3	128
23	Experimental evaluation of flat plate solar collector using nanofluids. *Energy Conversion and Management*, **2017**, 134, 103-115	10.6	143
22	Novel uses of alumina-MoS2 hybrid nanoparticle enriched cutting fluid in hard turning of AISI 304 steel. *Journal of Manufacturing Processes*, **2017**, 30, 467-482	5	77

21	Experimental investigation of thermal conductivity and specific heat of nanoparticles mixed cutting fluids. *Materials Today: Proceedings*, **2017**, 4, 8587-8596	1.4	27
20	Rheological behaviour of nanofluids: A review. *Renewable and Sustainable Energy Reviews*, **2016**, 53, 779-791	10.1	197
19	Characterization of TiO2, Al2O3 and SiO2 Nanoparticle based Cutting Fluids. *Materials Today: Proceedings*, **2016**, 3, 1890-1898	1.4	16
18	Characterization and experimental investigation of Al2O3 nanoparticle based cutting fluid in turning of AISI 1040 steel under minimum quantity lubrication (MQL). *Materials Today: Proceedings*, **2016**, 3, 1899-1906	1.4	64
17	Tribological Investigation of TiO2 Nanoparticle based Cutting Fluid in Machining under Minimum Quantity Lubrication (MQL). *Materials Today: Proceedings*, **2016**, 3, 2155-2162	1.4	48
16	Effect of chevron angle on heat transfer performance in plate heat exchanger using ZnO/water nanofluid. *Energy Conversion and Management*, **2016**, 118, 142-154	10.6	57
15	Effects of Minimum Quantity Lubrication (MQL) in machining processes using conventional and nanofluid based cutting fluids: A comprehensive review. *Journal of Cleaner Production*, **2016**, 127, 1-18	10.3	267
14	Effect of variable spacing on performance of plate heat exchanger using nanofluids. *Energy*, **2016**, 114, 1107-1119	7.9	53
13	Performance augmentation in flat plate solar collector using MgO/water nanofluid. *Energy Conversion and Management*, **2016**, 124, 607-617	10.6	82
12	Particle concentration levels of various nanofluids in plate heat exchanger for best performance. *International Journal of Heat and Mass Transfer*, **2015**, 89, 1110-1118	4.9	77
11	Mechanism of Nanoparticles Functioning and Effects in Machining Processes: A Review. *Materials Today: Proceedings*, **2015**, 2, 3539-3544	1.4	27
10	Application of nanofluids in plate heat exchanger: A review. *Energy Conversion and Management*, **2015**, 105, 1017-1036	10.6	115
9	Improved Machining Performance with Nanoparticle Enriched Cutting Fluids under Minimum Quantity Lubrication (MQL) Technique: A Review. *Materials Today: Proceedings*, **2015**, 2, 3545-3551	1.4	29
8	Application of Nanoparticles in Solar collectors: A Review. *Materials Today: Proceedings*, **2015**, 2, 3638-3647	1.4	14
7	Current Trends in Electric Discharge Machining Using Micro and Nano Powder Materials- A Review. *Materials Today: Proceedings*, **2015**, 2, 3302-3307	1.4	20
6	Progress of nanofluid application in solar collectors: A review. *Energy Conversion and Management*, **2015**, 100, 324-346	10.6	218
5	Progress of Nanofluid Application in Machining: A Review. *Materials and Manufacturing Processes*, **2015**, 30, 813-828	4.1	110
4	Numerical investigation of heat transfer and fluid flow in plate heat exchanger using nanofluids. *International Journal of Thermal Sciences*, **2014**, 85, 93-103	4.1	79

3	Combined energy and exergy analysis of a corrugated plate heat exchanger and experimental investigation. *International Journal of Exergy*, **2014**, 15, 395	1.2	9
2	Performance comparison of the plate heat exchanger using different nanofluids. *Experimental Thermal and Fluid Science*, **2013**, 49, 141-151	3	114
1	Heat transfer and pressure drop characteristics of CeO2/water nanofluid in plate heat exchanger. *Applied Thermal Engineering*, **2013**, 57, 24-32	5.8	104