Subrata Kumar Ghosh

List of Publications by Year in Descending Order

78 papers	**1,095** citations
19 h-index	**30** g-index
82 ext. papers	**1,442** ext. citations
3.3 avg, IF	**5.57** L-index

#	Paper	IF	Citations
78	A unique artificial intelligence approach and mathematical model to accurately evaluate viscosity and density of several nanofluids from experimental data. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2022**, 640, 128389	5.1	5
77	Enhancing the tribological properties of hydraulic oil-based nanolubricants using MWCNT-SiO2 hybrid nanoparticles. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2022**, 44, 1	2	0
76	Influence of chevron angle and MWCNT/distilled water nanofluid on the thermo-hydraulic performance of compact plate heat exchanger: An experimental and numerical study. *Powder Technology*, **2022**, 405, 117515	5.2	0
75	Pressure drop and heat transfer characteristics in 60⬜Chevron plate heat exchanger using Al2O3, GNP and MWCNT nanofluids. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2021**, ahead-of-print,	4.5	4
74	Two dimensional unsteady flow past a square cylinder: Influence of proximal plane wall and power-law index. *Ocean Engineering*, **2021**, 240, 109896	3.9	1
73	Statistical and computational analysis of an environment-friendly MWCNT/NiSO4 composite materials. *Journal of Manufacturing Processes*, **2021**, 66, 11-26	5	4
72	Performance Evaluation of Graphene-Gear Oil Nanolubricants in Rayleigh Step Bearing. *Lecture Notes in Mechanical Engineering*, **2021**, 109-118	0.4	1
71	A unique thermal conductivity model (ANN) for nanofluid based on experimental study. *Powder Technology*, **2021**, 377, 429-438	5.2	24
70	Investigation on tribological properties of used engine oil with graphene. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, **2021**, 235, 1420-1429	1.4	1
69	Surface qualitative analysis and ANN modelling for pool boiling heat transfer using Al2O3-water based nanofluids. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 610, 125926	5.1	9
68	Structure-property relationship of silver decorated functionalized reduced graphene oxide based nanofluids: Optical and thermophysical aspects and applications. *Applied Surface Science*, **2021**, 542, 148470	6.7	8
67	Development of graphitic lubricant nanoparticles based nanolubricant for automotive applications: Thermophysical and tribological properties followed by IC engine performance. *Powder Technology*, **2021**, 387, 31-47	5.2	7
66	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
65	Recent advances of molecular dynamics simulations in nanotribology. *Journal of Molecular Liquids*, **2021**, 335, 116154	6	12
64	Development of a unique multi-layer perceptron neural architecture and mathematical model for predicting thermal conductivity of distilled water based nanofluids using experimental data. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 627, 127184	5.1	7
63	Statistical and artificial neural network technique for prediction of performance in AlSi10Mg-MWCNT based composite materials. *Materials Chemistry and Physics*, **2021**, 273, 125136	4.4	3
62	The empirical characteristics on transient nature of Al2O3-water nanofluid pool boiling. *Applied Thermal Engineering*, **2021**, 199, 117617	5.8	1

61	Optimization and modeling of rheological characteristics for graphene-gear oil based nanolubricant using response surface methodology. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 630, 127605	5.1	1
60	Numerical and experimental analysis of performance in a compact plate heat exchanger using graphene oxide/water nanofluid. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2021**, ahead-of-print,	4.5	9
59	Fault diagnosis of journal bearing in a hydropower plant using wear debris, vibration and temperature analysis: A case study. *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, **2020**, 234, 235-242	1.5	10
58	Analysis of rheological properties of MWCNT/SiO2 hydraulic oil nanolubricants using regression and artificial neural network. *International Communications in Heat and Mass Transfer*, **2020**, 116, 104723	5.8	9
57	Carbon nanomaterials as friction modifiers in automotive engines: Recent progress and perspectives. *Journal of Molecular Liquids*, **2020**, 310, 113200	6	19
56	An Analytic Hierarchy Process (AHP)-Based Multi-criteria Evaluation and Priority Analysis for Best FWH Substitution of Solar Aided Thermal Power Plant. *Smart Innovation, Systems and Technologies*, **2020**, 707-717	0.5	1
55	A unique multilayer perceptron model (ANN) for different oxide/EG nanofluids viscosity from the experimental study. *Physica A: Statistical Mechanics and Its Applications*, **2020**, 549, 124030	3.3	10
54	Performance, combustion and emission characteristics of a diesel engine fueled with diesel-kerosene-ethanol: A multi-objective optimization study. *Energy*, **2020**, 211, 118305	7.9	10
53	MWCNT and graphene nanoparticles additives for energy efficiency in engine oil with regression modeling. *Journal of Thermal Analysis and Calorimetry*, **2020**, 1	4.1	2
52	Kinematic Viscosity Prediction of Nanolubricants Employed in Heavy Earth Moving Machinery Using Machine Learning Techniques. *International Journal of Precision Engineering and Manufacturing*, **2020**, 21, 1921-1932	1.7	2
51	Porosity and tribological performance analysis on new developed metal matrix composite for brake pad materials. *Journal of Manufacturing Processes*, **2020**, 59, 186-204	5	6
50	Numerical Simulation of Rough Thrust Pad Bearing Under Thin-Film Lubrication Using Variable Mesh Density. *Iranian Journal of Science and Technology - Transactions of Mechanical Engineering*, **2020**, 44, 443-464	1.2	1
49	Particle emission of organic brake pad material: A review. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2020**, 234, 1213-1223	1.4	2
48	Preparation and Isolation of Carbon Nanorods and Carbon Nanoflowers through Combustion of Candle Wax for Heat Transfer Application. *Combustion Science and Technology*, **2020**, 192, 1066-1087	1.5	1
47	Influence of stochastic roughness on performance of a Rayleigh step bearing operating under Thermo-elastohydrodynamic lubrication considering shear flow factor. *Tribology International*, **2019**, 134, 264-280	4.9	16
46	Performance evaluation of rough thrust pad bearing under thermo-elastohydrodynamic lubrication using an improved iterative method. *Mechanics and Industry*, **2019**, 20, 110	0.8	1
45	Modelling of wear debris in planetary gear drive. *Industrial Lubrication and Tribology*, **2019**, 71, 199-204	1.3	1
44	Artificial intelligence based gene expression programming (GEP) model prediction of Diesel engine performances and exhaust emissions under Diesosenol fuel strategies. *Fuel*, **2019**, 235, 317-325	7.1	32

43	Thermo-elastohydrodynamic lubrication simulation of the Rayleigh step bearing using the progressive mesh densification method. *Simulation*, **2019**, 95, 395-410	1.2	5
42	Size distribution analysis of wear debris generated in HEMM engine oil for reliability assessment: A statistical approach. *Measurement: Journal of the International Measurement Confederation*, **2019**, 131, 412-418	4.6	21
41	Mechanism for improvement of friction/wear by using Al2O3 and SiO2/Gear oil nanolubricants. *Journal of Alloys and Compounds*, **2019**, 782, 592-599	5.7	30
40	Modelling of Surface Roughness and Tool Consumption of WEDM and Optimization of Process Parameters Based on Fuzzy-PSO. *Materials Today: Proceedings*, **2018**, 5, 7505-7514	1.4	13
39	Performance-exhaust emission prediction of diesosenol fueled diesel engine: An ANN coupled MORSM based optimization. *Energy*, **2018**, 153, 212-222	7.9	52
38	Characterization of Al2O3-SAE 15W40 engine oil nanolubricant and performance evaluation in 4-stroke diesel engine. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2018**, 40, 1	2	7
37	Analytical Modelling of Interfacial Thermal Conductivity of Nanofluids for Advanced Energy Transfer **2018**, 42, 1603-1611		5
36	Wear and performance analysis of a 4-stroke diesel engine employing nanolubricants. *Particuology*, **2018**, 37, 54-63	2.8	29
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	70 years of Elastohydrodynamic Lubrication (EHL): A Review on Experimental Techniques for Film Thickness and Pressure Measurement. *Mapan - Journal of Metrology Society of India*, **2018**, 33, 481-491	1	6
33	Prediction of performance and exhaust emissions of diesel engine fuelled with adulterated diesel: An artificial neural network assisted fuzzy-based topology optimization. *Energy and Environment*, **2018**, 29, 1413-1437	2.4	17
32	Carbon nanoparticle synthesis, separation, characterization, and tribological property evaluation. *Separation Science and Technology*, **2018**, 53, 2314-2326	2.5	4
31	Effect of an axial hole on natural convection heat transfer from a cylindrical pin fin attached to a horizontal plate. *Thermal Science*, **2018**, 22, 2493-2502	1.2	
30	A Comparative Study of Artificial Intelligence Based Models to Predict Performance and Emission Characteristics of a Single Cylinder Diesel Engine Fueled With Diesosenol. *Journal of Thermal Science and Engineering Applications*, **2018**, 10,	1.9	19
29	Size distribution analysis of wear particles in the transmission system of mining equipment. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, **2018**, 232, 921-926	1.4	5
28	Heat transfer mechanisms in heat pipes using nanofluids A review. *Experimental Thermal and Fluid Science*, **2018**, 90, 84-100	3	87
27	EXPERIMENTAL INVESTIGATION OF THE THERMAL PERFORMANCE OF MESH WICK HEAT PIPE. *Heat Transfer Research*, **2018**, 49, 1793-1811	3.9	8
26	Exergy analysis of hybrid nanofluids with optimum concentration in a plate heat exchanger. *Materials Research Express*, **2018**, 5, 065022	1.7	13

#	Reference	IF	Cites
25	Thermophysical and tribological properties of nanolubricants: A review. *Heat and Mass Transfer*, **2018**, 54, 3493-3508	2.2	31
24	Review of interfacial layer's effect on thermal conductivity in nanofluid. *Heat and Mass Transfer*, **2017**, 53, 2199-2209	2.2	23
23	Characterization and performance of nanofluids in plate heat exchanger. *Materials Today: Proceedings*, **2017**, 4, 4070-4078	1.4	19
22	Experimental study of wear for implant materials under dry sliding conditions. *Industrial Lubrication and Tribology*, **2017**, 69, 828-832	1.3	6
21	CFD analysis on natural convective heat transfer of Al2O3-gear oil nanolubricant used in HEMM. *Industrial Lubrication and Tribology*, **2017**, 69, 673-677	1.3	
20	Effect of surface roughness and deformation on Rayleigh step bearing under thin film lubrication. *Industrial Lubrication and Tribology*, **2017**, 69, 1016-1032	1.3	10
19	Effect of copper oxide nanoparticles on thermophysical properties of hydraulic oil-based nanolubricants. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2017**, 39, 259-266	2	19
18	Effect of temperature on rough EHL in slider bearing **2017**,		1
17	HEAT TRANSFER ANALYSIS OF NANOFLUID CONSIDERING THE INTERFACIAL NANOLAYER. *Heat Transfer Research*, **2017**, 48, 549-556	3.9	3
16	Oil condition monitoring for HEMM a case study. *Industrial Lubrication and Tribology*, **2016**, 68, 718-722	1.3	4
15	Experimental and numerical investigation on performance of a double inlet type cryogenic pulse tube refrigerator. *Heat and Mass Transfer*, **2016**, 52, 1899-1908	2.2	5
14	Experimental and mathematical analysis of wear generation at bottom plate of mine excavator bucket. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, **2016**, 230, 1483-1489	1.4	1
13	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
12	Effect of variable spacing on performance of plate heat exchanger using nanofluids. *Energy*, **2016**, 114, 1107-1119	7.9	53
11	Application of nanofluids in plate heat exchanger: A review. *Energy Conversion and Management*, **2015**, 105, 1017-1036	10.6	115
10	Analysis of wear generation in mine excavator bucket. *Industrial Lubrication and Tribology*, **2015**, 67, 52-58	1.3	3
9	Numerical analysis of stresses in mine excavator bucket. *Journal of Mining Science*, **2015**, 51, 309-313	0.8	5
8	Experimental analysis for rheological properties of aluminium oxide (Al2O3)/gear oil (SAE EP-90) nanolubricant used in HEMM. *Industrial Lubrication and Tribology*, **2015**, 67, 600-605	1.3	30

7	Analysis of nanofluids as a means of thermal conductivity enhancement in heavy machineries. *Industrial Lubrication and Tribology*, **2014**, 66, 238-243	1.3	3
6	Mathematical modelling of thermal conductivity for nanofluid considering interfacial nano-layer. *Heat and Mass Transfer*, **2013**, 49, 595-600	2.2	36
5	Development of bearings for a small high speed cryogenic turboexpander. *Industrial Lubrication and Tribology*, **2012**, 64, 3-10	1.3	8
4	Mathematical Analysis for Off-Design Performance of Cryogenic Turboexpander. *Journal of Fluids Engineering, Transactions of the ASME*, **2011**, 133,	2.1	33
3	Experimental performance study of cryogenic turboexpander by using aerodynamic thrust bearing. *Applied Thermal Engineering*, **2010**, 30, 1304-1311	5.8	11
2	Mathematical modeling of the working cycle of oil injected rotary twin screw compressor. *Applied Thermal Engineering*, **2007**, 27, 145-155	5.8	33
1	Performance analysis of SiC-Ni-P nanocomposite electroless coated brake pad. *Materials and Manufacturing Processes*,1-18	4.1	0