

## **List of Journal Publications:**

<b>2007-2012</b>
<ol style="list-style-type: none"><li>1. Mathematical modeling of the working cycle of oil injected rotary twin screw compressor; Applied thermal engineering; 27; 1; 145-155; 2007; <b>Q1</b></li><li>2. Ghosh, Subrata K; Sahoo, Ranjit K; Sarangi, Sunil K; Experimental performance study of cryogenic turboexpander by using aerodynamic thrust bearing; Applied thermal engineering; 30; 12-Nov; 1304-1311; 2010; <b>Q1</b></li><li>3. Ghosh, Subrata K; Sahoo, RK; Sarangi, Sunil K; Mathematical analysis for off-design performance of cryogenic turboexpander; Journal of fluids engineering; 133; 3; 2011; <b>Q2</b></li><li>4. Ghosh, Subrata; Mukherjee, Parboti; Sarangi, Sunil; Development of bearings for a small high speed cryogenic turboexpander; Industrial Lubrication and Tribology; 64; 3-10; 2012; <b>Q4</b></li></ol>
<b>2013-2015</b>
<ol style="list-style-type: none"><li>1. Rizvi, Imbesat Hassan; Jain, Ayush; Ghosh, Subrata Kr; Mukherjee, PS; Mathematical modelling of thermal conductivity for nanofluid considering interfacial nano-layer; Heat and mass transfer; 49; 4; 595-600; 2013; <b>Q2</b></li><li>2. Jain, Ayush; Rizvi, Imbesat Hassan; Ghosh, Subrata Kumar; Mukherjee, PS; Analysis of nanofluids as a means of thermal conductivity enhancement in heavy machineries; Industrial Lubrication and Tribology; 66/2; 238-243; 2014; <b>Q4</b></li><li>3. Sarkar, Mayukh; Ghosh, Subrata Kumar; Mukherjee, PS; Analysis of wear generation in mine excavator bucket; Industrial Lubrication and Tribology; 67/1; 52-58; 2015; <b>Q4</b></li><li>4. Sarkar, Mayukh; Shaw, Rakesh Kr; Ghosh, Subrata Kr; Numerical analysis of stresses in mine excavator bucket; Journal of Mining Science; 51; 2; 309-313; 2015; <b>Q4</b></li><li>5. Kotia, Ankit; Ghosh, Subrata Kumar; Experimental analysis for rheological properties of aluminium oxide (Al<sub>2</sub>O<sub>3</sub>)/gear oil (SAE EP-90) nanolubricant used in HEMM; Industrial Lubrication and Tribology; 67/6; 600-605; 2015; <b>Q4</b></li><li>6. Kumar, Vikas; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Application of nanofluids in plate heat exchanger: a review; Energy conversion and management; 105; 1017-1036; 2015; <b>Q1</b></li></ol>
<b>2016</b>
<ol style="list-style-type: none"><li>1. Kumar, Vikas; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Effect of chevron angle on heat transfer performance in plate heat exchanger using ZnO/water nanofluid, Energy Conversion and Management; 118; 142-154; 2016; <b>Q1</b></li><li>2. Biswas, Animesh; Ghosh, Subrata Kumar; Experimental and numerical investigation on performance of a double inlet type cryogenic pulse tube refrigerator; Heat and Mass Transfer; 52; 9; 1899-1908; 2016; <b>Q2</b></li><li>3. Sarkar, Mayukh; Mukherjee, PS; Ghosh, Subrata Kumar; 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; 230;12; 1483-1489; 2016; <b>Q3</b></li><li>4. Kumar, Vikas; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Effect of variable spacing on performance of plate heat exchanger using nanofluids; Energy; 114; 1107-1119; 2016; <b>Q1</b></li><li>5. Kumar, Ashwani; Ghosh, Subrata Kumar; Oil condition monitoring for HEMM—a case study; Industrial Lubrication and Tribology; 68/6; 718-722; 2016; <b>Q4</b></li></ol>
<b>2017</b>
<ol style="list-style-type: none"><li>1. Mojumder, Soumyajit; Sikdar, Soumya; Ghosh, Subrata Kumar; Experimental study of wear for implant materials under dry sliding conditions; Industrial Lubrication and Tribology; 69/6; 828-832; 2017; <b>Q4</b></li></ol>

<ol style="list-style-type: none"> <li>2. Kotia, Ankit; Borkakoti, Sheeba; Deval, Piyush; Ghosh, Subrata Kumar; Review of interfacial layer's effect on thermal conductivity in nanofluid; Heat and Mass Transfer; 53; 6; 2199-2209; 2017; <b>Q2</b></li> <li>3. Kotia, Ankit; Ghosh, Subrata Kumar; CFD analysis on natural convective heat transfer of Al<sub>2</sub>O<sub>3</sub>-gear oil nanolubricant used in HEMM; Industrial Lubrication and Tribology; 69/5; 673-677; 2017; <b>Q4</b></li> <li>4. Kotia, Ankit; Halder, Abhisek; Kumar, Ravindra; Deval, Piyush; Ghosh, Subrata Kr; Effect of copper oxide nanoparticles on thermophysical properties of hydraulic oil-based nanolubricants; Journal of the Brazilian Society of Mechanical Sciences and Engineering; 39; 1; 259-266; 2017; <b>Q2</b></li> <li>5. Kumar, Rahul; Azam, Mohammad Sikandar; Ghosh, Subrata Kumar; Khan, Hasim; Effect of surface roughness and deformation on Rayleigh step bearing under thin film lubrication; Industrial Lubrication and Tribology; 69/6; 1016-1032; 2017; <b>Q4</b></li> <li>6. Kotia, Ankit; Ghosh, Subrata Kumar; Heat Transfer Analysis of Nanofluid Considering the Interfacial Nanolayer; Heat Transfer Research; 48; 6; 2017; <b>Q2</b></li> </ol>
<b>2018</b>
<ol style="list-style-type: none"> <li>1. Gupta, Naveen Kumar; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Experimental Investigation of The Thermal Performance of Mesh Wick Heat Pipe; Heat Transfer Research; 49; 18; 2018; <b>Q2</b></li> <li>2. Kumar, Ashwani; Ghosh, Subrata K; 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; 232; 8; 921-926; 2018; <b>Q3</b></li> <li>3. Bhowmik, Subrata; Paul, Abhishek; Panua, Rajsekhar; Ghosh, Subrata Kumar; Debroy, Durbadal; Performance-exhaust emission prediction of diesosenol fueled diesel engine: An ANN coupled MORSM based optimization; Energy; 153; 212-222; 2018; <b>Q1</b></li> <li>4. Kotia, Ankit; Ghosh, Gaurab Kumar; Ghosh, Subrata Kumar; Analytical modelling of interfacial thermal conductivity of nanofluids for advanced energy transfer; Iranian Journal of Science and Technology, Transactions A: Science; 42; 3; 1603-1611; 2018; <b>Q3</b></li> <li>5. Gupta, Naveen Kumar; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Experimental study of thermal performance of nanofluid-filled and nanoparticles-coated mesh wick heat pipes; Journal of Heat Transfer; 140; 10; 2018; <b>Q3</b></li> <li>6. Bhowmik, Subrata; Panua, Rajsekhar; Kumar Ghosh, Subrata; Debroy, Durbadal; Paul, Abhishek; A comparative study of Artificial Intelligence based models to predict performance and emission characteristics of a single cylinder Diesel engine fuelled with Diesosenol; Journal of Thermal Science and Engineering Applications; 10; 4; 2018; <b>Q4</b></li> <li>7. Kotia, Ankit; Kumar, Ravindra; Halder, Abhisek; Deval, Piyush; Ghosh, Subrata Kumar; Characterization of Al<sub>2</sub>O<sub>3</sub>-SAE 15W40 engine oil nanolubricant and performance evaluation in 4-stroke diesel engine; Journal of the Brazilian Society of Mechanical Sciences and Engineering; 40; 1; 38; 2018; <b>Q2</b></li> <li>8. Kotia, Ankit; Borkakoti, Sheeba; Ghosh, Subrata Kumar; Wear and performance analysis of a 4-stroke diesel engine employing nanolubricants; Particuology; 37; 54-63; 2018; <b>Q2</b></li> <li>9. Gupta, Naveen Kumar; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Heat transfer mechanisms in heat pipes using nanofluids—A review; Experimental Thermal and Fluid Science; 90; 84-100; 2018; <b>Q1</b></li> <li>10. Kumar, Vikas; Tiwari, Arun Kumar; Ghosh, Subrata Kumar; Exergy analysis of hybrid nanofluids with optimum concentration in a plate heat exchanger; Materials Research Express; 5; 6; 65022; 2018; <b>Q3</b></li> <li>11. Bhowmik, Subrata; Panua, Rajsekhar; Ghosh, Subrata K; Paul, Abhishek; Debroy, Durbadal; Prediction of performance and exhaust emissions of diesel engine fuelled with adulterated diesel;</li> </ol>

	<p>An artificial neural network assisted fuzzy-based topology optimization; Energy &amp; Environment; 29; 8; 1413-1437; 2018; <b>Q3</b></p> <p>12. Manna, Saurav; Haldar, Subhas C; Ghosh, Subrata K; Effect of an axial hole on natural convection heat transfer from a cylindrical pin fin attached to a horizontal plate; Thermal Science; 22; 6 Part A; 2493-2502; 2018; <b>Q4</b></p> <p>13. Kotia, Ankit; Rajkhowa, Pranami; Rao, Gogineni Satyanarayana; Ghosh, Subrata Kumar; Thermophysical and tribological properties of nanolubricants: A review; Heat and Mass Transfer; 54; 11; 3493-3508; 2018; <b>Q2</b></p> <p>14. Singh, Jyoti Prakash; Nandi, T; Ghosh, SK; Srivastava, J; Tripathi, SK; Prasad, N Eswara; Carbon nanoparticle synthesis, separation, characterization, and tribological property evaluation; Separation Science and Technology; 53; 14; 2314-2326; 2018; <b>Q3</b></p> <p>15. Kumar, Rahul; Azam, Mohammad Sikandar; Ghosh, Subrata Kumar; Yadav, Sanjay; 70 years of Elastohydrodynamic Lubrication (EHL): A Review on Experimental Techniques for Film Thickness and Pressure Measurement; Mapan; 33; 4; 481-491; 2018; <b>Q4</b></p> <p>16. Kumar, Rahul; Ghosh, Subrata Kumar; Azam, Mohammad Sikandar; Khan, Hasim; 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; 22-Jan; 2018; <b>Q2</b></p>
<b>2019</b>	<ol style="list-style-type: none"> <li>1. Kotia, Ankit; Ghosh, Gaurab Kumar; Srivastava, Isha; Deval, Piyush; Ghosh, Subrata Kumar; Mechanism for improvement of friction/wear by using Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub>/Gear oil nanolubricants; Journal of Alloys and Compounds; 782;592-599; 2019; <b>Q1</b></li> <li>2. Kumar, Rahul; Azam, Mohammad Sikandar; Ghosh, Subrata Kumar; Khan, Hasim; Thermo-elastohydrodynamic lubrication simulation of the Rayleigh step bearing using the progressive mesh densification method; SIMULATION; 95; 5; 395-410; 2019; <b>Q4</b></li> <li>3. Kumar, Ashwani; Ghosh, Subrata Kumar; Size distribution analysis of wear debris generated in HEMM engine oil for reliability assessment: A statistical approach; Measurement; 131; 412-418; 2019; <b>Q1</b></li> <li>4. Kumar, Rahul; Azam, Mohammad Sikandar; Ghosh, Subrata Kumar; Influence of stochastic roughness on performance of a Rayleigh step bearing operating under Thermo-elastohydrodynamic lubrication considering shear flow factor; Tribology International; 134; 264-280; 2019; <b>Q1</b></li> <li>5. Manna, S; Ghosh, SK; Haldar, SC; Optimum fin parameters of radial heat sinks subjected to natural convection; Journal of Thermal Science and Engineering Applications; 11; 5; 2019; <b>Q4</b></li> <li>6. Ranjan, Rakesh; Ghosh, Subrata Kumar; Kumar, Manoj; Modelling of wear debris in planetary gear drive; Industrial Lubrication and Tribology; 2019; <b>Q4</b></li> <li>7. Singh, Jyoti Prakash; Nandi, Tandra; Ghosh, Subrata Kumar; Prasad, N Eswara; Preparation and Isolation of Carbon Nanorods and “Carbon Nanoflowers” through Combustion of Candle Wax for Heat Transfer Application; Combustion Science and Technology; 22-Jan; 2019; <b>Q3</b></li> <li>8. Kumar, Rahul; Azam, Mohammad Sikandar; Ghosh, Subrata Kumar; Khan, Hasim; Performance evaluation of rough thrust pad bearing under thermo-elastohydrodynamic lubrication using an improved iterative method; Mechanics &amp; Industry; 20; 1; 110; 2019; <b>Q2</b></li> <li>9. Gupta, Naveen Kumar; Tiwari, Arun Kr; Verma, Sujit Kr; Rathore, Pushpendra Kr Singh; Ghosh, Subrata Kr; 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; 50; 18; 1767-1779; 2019; <b>Q2</b></li> <li>10. S Bhowmik, A Paul, R Panua, S K Ghosh, D Debroy; Artificial intelligence based gene expression programming (GEP) model prediction of Diesel engine performances and exhaust emissions under Diesosenol fuel strategies; Fuel; 235, 317-325; 2019; <b>Q1</b></li> </ol>
<b>2020</b>	

1. Kotia, Ankit; Chowdary, Krishna; Srivastava, Isha; Ghosh, Subrata Kumar; Ali, Mohamed Kamal Ahmed; Carbon nanomaterials as friction modifiers in automotive engines: Recent progress and perspectives; *Journal of Molecular Liquids*; 113200; 2020; **Q1**
2. Kumar, Santosh; Ghosh, Subrata Kumar; Particle emission of organic brake pad material: A review; *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*; 234; 5; 1213-1223; 2020; **Q4**
3. Yadav, Devendra; Dansena, Prabhat; Ghosh, Subrata Kumar; Singh, Pawan Kumar; A unique multilayer perceptron model (ANN) for different oxide/EG nanofluid's viscosity from the experimental study; *Physica A: Statistical Mechanics and its Applications*; 124030; 2020; **Q2**
4. Ranjan, Rakesh; Ghosh, Subrata Kumar; Kumar, Manoj; 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*; 234; 3; 235-242; 2020; **Q3**
5. Haldar, Abhisek; Chatterjee, Sankhadeep; Kotia, Ankit; Kumar, Niranjana; Ghosh, Subrata Kumar; Analysis of rheological properties of MWCNT/SiO<sub>2</sub> hydraulic oil nanolubricants using regression and artificial neural network; *International Communications in Heat and Mass Transfer*; 116; 104723; 2020; **Q1**
6. More, S; Kotiya, A; Kotia, A; Ghosh, SK; Spyrou, LA; Sarris, IE; Rheological Properties of Synovial Fluid due to Viscosupplements: A Review for Osteoarthritis Remedy; *Computer Methods and Programs in Biomedicine*; 105644; 2020; **Q1**
7. Bhowmik, Subrata; Paul, Abhishek; Panua, Rajsekhar; Ghosh, Subrata Kumar; "Performance, combustion and emission characteristics of a diesel engine fueled with diesel-kerosene-ethanol: A multi-objective optimization study"; *Energy*; 2020; Pergamon; **Q1**
8. Srivastava, Isha; Singh, Fateh; Kotia, Ankit; Ghosh, Subrata Kumar; "MWCNT and graphene nanoparticles additives for energy efficiency in engine oil with regression modeling; *Journal of Thermal Analysis and Calorimetry*" 2020; Springer; **Q1**
9. Kumar, Santosh; Ghosh, Subrata Kumar; "Porosity and tribological performance analysis on new developed metal matrix composite for brake pad materials"; *Journal of Manufacturing Processes*; 59186-204; 2020; Elsevier; **Q2**
10. Sharma, Gaurav, Ankit Kotia, Subrata Kumar Ghosh, Prashant Singh Rana, Seema Bawa, and Mohamed Kamal Ahmed Ali. "Kinematic Viscosity Prediction of Nanolubricants Employed in Heavy Earth Moving Machinery Using Machine Learning Techniques." *International Journal of Precision Engineering and Manufacturing* 21, no. 10 (2020): 1921-1932; **Q3**

## 2021

1. Pare, Ashutosh, and Subrata Kumar Ghosh. "A unique thermal conductivity model (ANN) for nanofluid based on experimental study." *Powder Technology* 377 (2021): 429-438.; **Q1**
2. Singh, Jyoti Prakash, Tandra Nandi, and Subrata Kumar Ghosh. "Structure-property relationship of silver decorated functionalized reduced graphene oxide based nanofluids: Optical and thermophysical aspects and applications." *Applied Surface Science* 542 (2021): 148410; **Q1**
3. Singh, Shiva, Sumit Kumar, and Subrata Kumar Ghosh. "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): 127184; **Q2**
4. Pare, Ashutosh, and Subrata Kumar Ghosh. "Surface qualitative analysis and ANN modelling for pool boiling heat transfer using Al<sub>2</sub>O<sub>3</sub>-water based nanofluids." *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 610 (2021): 125926; **Q2**
5. Kumar, Vikas, Ashutosh Pare, Arun Kumar Tiwari, and Subrata Kumar Ghosh. "Efficacy evaluation of oxide-MWCNT water hybrid nanofluids: An experimental and artificial neural network approach." *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 620 (2021): 126562; **Q2**

6. Singh, Jyoti Prakash, Shiva Singh, Tandra Nandi, and Subrata Kumar Ghosh. "Development of graphitic lubricant nanoparticles based nanolubricant for automotive applications: Thermophysical and tribological properties followed by IC engine performance." *Powder Technology* 387 (2021): 31-47; **Q1**
7. Kumar, Santosh, and Subrata Kumar Ghosh. "Statistical and computational analysis of an environment-friendly MWCNT/NiSO<sub>4</sub> composite materials." *Journal of Manufacturing Processes* 66 (2021): 11-26; **Q2**
8. Singh, S., Verma, P. and Ghosh, S.K., 2021. Numerical and experimental analysis of performance in a compact plate heat exchanger using graphene oxide/water nanofluid. *International Journal of Numerical Methods for Heat & Fluid Flow*; **Q1**
9. Kumar, Ashwani, Piyush Deval, Ekta Singh Shrinet, and Subrata Kumar Ghosh. "Investigation on tribological properties of used engine oil with graphene." *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology* (2021): 1350650120960996. **Q3**
10. Kumar, Ashwani, T. V. K. Gupta, Rajib Kumar Jha, and Subrata Kumar Ghosh. "Wear analysis of abrasive waterjet nozzle using suprathreshold stochastic resonance technique." *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering* 235, no. 2 (2021): 499-504; **Q3**
11. Srivastava, Isha, Ankit Kotia, Subrata Kumar Ghosh, and Mohamed Kamal Ahmed Ali. "Recent Advances of Molecular Dynamics Simulations in Nanotribology." *Journal of Molecular Liquids* (2021): 116154; **Q1**
12. Kumar, Santosh, and Subrata Kumar Ghosh. "Statistical and artificial neural network technique for prediction of performance in AlSi10Mg-MWCNT based composite materials." *Materials Chemistry and Physics* 273 (2021): 125136. **Q2**
13. Kumar, Santosh, Rohith Goli, and Subrata Kumar Ghosh. "Performance analysis of SiC-Ni-P nanocomposite electroless coated brake pad." *Materials and Manufacturing Processes* (2021): 1-18. **Q2**
14. Pare, Ashutosh, and Subrata Kumar Ghosh. "The empirical characteristics on transient nature of Al<sub>2</sub>O<sub>3</sub>-water nanofluid pool boiling." *Applied Thermal Engineering* (2021): 117617.; **Q1**
15. Ghosh, Gaurab Kumar, Ankit Kotia, Niranjana Kumar, and Subrata Kumar Ghosh. "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): 127605. **Q2**
16. Shiva Singh and Subrata Kumar Ghosh; Pressure drop and heat transfer characteristics in 60° Chevron plate heat exchanger using Al<sub>2</sub>O<sub>3</sub>, GNP and MWCNT nanofluids; *International Journal of Numerical Methods for Heat & Fluid Flow*; DOI 10.1108/HFF-08-2021-0580; **Q1**

## 2022

1. Singh, Shiva, and Subrata Kumar Ghosh. "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* 640 (2022): 128389.; **Q2**
2. Singh, Shiva, and Subrata Kumar Ghosh. "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): 117515.; **Q1**
3. Kumar, Santosh, Rohith Goli, and Subrata Kumar Ghosh. "Performance analysis of SiC-Ni-P nanocomposite electroless coated brake pad." *Materials and Manufacturing Processes* 37.7 (2022): 764-781.; **Q2**
4. Halder, Abhisek, et al. "Enhancing the tribological properties of hydraulic oil-based nanolubricants using MWCNT-SiO<sub>2</sub> hybrid nanoparticles." *Journal of the Brazilian Society of Mechanical Sciences and Engineering* 44.6 (2022): 1-13.; **Q2**

<ol style="list-style-type: none"> <li>5. Kumar, Santosh, and Subrata Kumar Ghosh. "Comparative study of airborne particles on new developed metal matrix composite and commercial brake pad materials with ANN and finite element analysis." <i>Computational Particle Mechanics</i> (2022): 1-15., <b>Q2</b></li> <li>6. Pare, Ashutosh, and Subrata Kumar Ghosh. "The chronological study on parametric evolution of pool boiling with nanofluids: An experimental review." <i>Thermal Science and Engineering Progress</i> (2022): 101420. <b>Q1</b></li> </ol>
<b>2023</b>
<ol style="list-style-type: none"> <li>1. Santosh Kumar, Subrata Kumar Ghosh. "Comparative study of airborne particles on new developed metal matrix composite and commercial brake pad materials with ANN and finite element analysis". <i>Computational Particle Mechanics</i>, 10, 273–287 (2023). <b>Q1</b></li> <li>2. Kuwar Mausam, Ashutosh Pare, Subrata Kumar Ghosh, AK Tiwari. "Thermal performance analysis of hybrid-nanofluid based flat plate collector using Grey relational analysis (GRA): An approach for sustainable energy harvesting". <i>Thermal Science and Engineering Progress</i> (2023), 37 <b>Q1</b></li> <li>3. Shiva Singh, Kuwar Mausam, Subrata Kumar Ghosh, AK Tiwari. "An experimental and numerical approach for thermal performance investigation of solar flat plate collector". <i>Environmental Science and Pollution Research</i> 30 (40), 92859-92879 <b>Q1</b></li> <li>4. S Singh, SK Ghosh, "Multiphase numerical simulation in mini-channel heat exchangers using hybrid nanofluid", <i>Journal of Thermal Analysis and Calorimetry</i> 148 (20), 11255-11267 <b>Q1</b></li> <li>5. R Ranjan, S Kumar, SK Ghosh, M Kumar, "Experimental and statistical analysis of wear on gear material", <i>Lubrication Science</i> 35 (6), 438-448 <b>Q3</b></li> <li>6. SK Sabar, SK Ghosh, "Nanolubrication and tribological behaviour of the rolling process—a review", <i>Surface Engineering</i> 39 (1), 6-24 <b>Q3</b></li> </ol>
<b>2024</b>
<ol style="list-style-type: none"> <li>1. Nikunj Upadhyay, Randip Kumar Das, Subrata Kumar Ghosh, "Investigating the impact of n-heptane (C7H16) and nanoparticles (TiO2) on diesel–microalgae biodiesel blend in CI diesel engines", <i>Environmental Science and Pollution Research</i> <b>Q2</b></li> <li>2. K Mausam, S Singh, SK Ghosh, RP Singh, AK Tiwari, "Experimental analysis of the thermal performance of traditional parallel tube collector (PTC) and cutting-edge spiral tube collector (STC): A comparative study for sustainable solar energy harvesting", <i>Thermal Science and Engineering Progress</i> 47, 102295 <b>Q1</b></li> <li>3. I Srivastava, A Kotia, SK Ghosh, "Molecular dynamics simulation on engine oil nanolubricant boundary lubrication conditions", <i>Heat Transfer</i> 53 (1), 199-224 <b>Q2</b></li> <li>4. Ritesh Kumar Patel, Sidhant Kumar Sabar, Subrata Kumar Ghosh, "The heating effect on tribological behaviour in the hot rolling process using TiO2 oil-in-water emulsion-A comparative study", <i>Powder Technology</i>, 432, 119112 <b>Q1</b></li> <li>5. S Bhowmik, R Panua, SK Ghosh, "Investigation of performance, combustion and exhaust emission characteristics of a compression ignition engine fuelled with diesel-kerosene-ethanol-hydrogen strategies", <i>International Journal of Hydrogen Energy</i> 49, 697-712 <b>Q1</b></li> <li>6. GK Ghosh, S Panda, RK Patel, A Kotia, N Kumar, SK Ghosh, "Evaluation of tribological efficacy and EP lubricity properties of gear oil (EP90) energized with molybdenum disulfide (MoS2) nano-additives", <i>Journal of Dispersion Science and Technology</i> <b>Q4</b></li> <li>7. Nikunj Upadhyay, Randip Kumar Das, Subrata Kumar Ghosh, "Size impact of cerium oxide nanoparticles (CeO2) on ternary fuel blend using third-generation biodiesel in VCR diesel engine", <i>Journal of Thermal Analysis and Calorimetry</i>, 149 (9), 3851-3876, <b>Q1</b></li> <li>8. Kuwar Mausam, Shiva Singh, Subrata Kumar Ghosh, Ravindra P Singh, "Thermal performance modelling of solar flat plate parallel tube collector using ANN", <i>Energy</i>, 131940, <b>Q1</b></li> <li>9. Gaurab Kumar Ghosh, Sikta Panda, Ankit Kotia, Niranjana Kumar, Subrata Kumar Ghosh, "The conjoint effect of lab-grown nano-graphene dispersant and omega-9 fatty acid surfactant on performance of CI engine", <i>Journal of Dispersion Science and Technology</i>, 1-14, <b>Q4</b></li> </ol>

10. Sidhant Kumar Sabar, Ritesh Kumar Patel, Subrata Kumar Ghosh, "Roll force prediction by combined FEM and ANN in the hot rolling process under nano-lubrication condition", 134, 7, 3893-3904, **Q2**
11. Ghosh, G. K., Kotia, A., Kumar, N., & Ghosh, S. K. (2024). Multi-response Optimization of Tribological Characteristics for Graphene-Gear Oil Nanolubricants Using Grey-Taguchi Methodology Followed by Scrutinization of Lubrication Mechanisms. *Journal of Materials Engineering and Performance*, 1-19, **Q2**
12. Ghosh, Gaurab Kumar, Sikta Panda, Niranjana Kumar, Subrata Kumar Ghosh, Ankit Kotia, Jayant Giri, Mohammad Kanan, and T. Sathish. "A multi-faceted review on industrial grade nanolubricants: Applications and rheological insights with global market forecast." *Results in Engineering* (2024): 103628, **Q1**
13. Upadhyay, N., Kumar, K., Das, R. K., & Ghosh, S. K. (2024). A thermodynamic approach to energy, exergy, exergoeconomic, enviroeconomic, and sustainability assessments involving an VCR diesel engine employing third-generation biodiesel with TiO<sub>2</sub> NPs and n-heptane. *Energy Conversion and Management*, 321, 119064, **Q1**