

# Dipen Kumar Rajak

## List of Publications by Year in descending order

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Version: 2024-02-01

54  
papers

2,310  
citations

448610

19  
h-index

263392

45  
g-index

60  
all docs

60  
docs citations

60  
times ranked

1802  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamic instability of nanocomposite piezoelectric-leptadenia pyrotechnica rheological elastomer-porous functionally graded materials micro viscoelastic beams at various strain gradient higher-order theories. <i>Polymer Composites</i> , 2022, 43, 282-298.	2.3	27
2	Experimental Analysis and Mechanical Characterization of AISI P20 Tool Steel Through Heat-Treatment Process. <i>Journal of Bio- and Tribo-Corrosion</i> , 2022, 8, 1.	1.2	5
3	Performance Analysis of Three Side Roughened Solar Air Heater: A Preliminary Investigation. <i>Materials</i> , 2022, 15, 2541.	1.3	3
4	Role of Composite Materials in Automotive Sector: Potential Applications. <i>Energy, Environment, and Sustainability</i> , 2022, , 193-217.	0.6	5
5	Adhesion strength investigation of plasma sprayed NiTi coating. <i>Engineering Failure Analysis</i> , 2022, 140, 106368.	1.8	8
6	Combination of FEM-DQM for nonlinear mechanics of porous GPL-reinforced sandwich nanoplates based on various theories. <i>Thin-Walled Structures</i> , 2022, 178, 109495.	2.7	36
7	A Review on Synthetic Fibers for Polymer Matrix Composites: Performance, Failure Modes and Applications. <i>Materials</i> , 2022, 15, 4790.	1.3	40
8	Influence of LPRE on the size-dependent phase velocity of sandwich beam including FG porous and smart nanocomposite layers. <i>Polymer Composites</i> , 2022, 43, 7390-7402.	2.3	4
9	The economic viability of a thermal power plant: a case study. <i>Journal of Thermal Analysis and Calorimetry</i> , 2021, 145, 2625-2631.	2.0	6
10	Internally stiffened foam-filled carbon fiber reinforced composite tubes under impact loading for energy absorption applications. <i>Composite Structures</i> , 2021, 255, 112910.	3.1	48
11	Towards better performances for a novel rooftop solar PV system. <i>Solar Energy</i> , 2021, 216, 518-529.	2.9	48
12	Performance of heat transfer mechanism in nucleate pool boiling -a relative approach of contribution to various heat transfer components. <i>Case Studies in Thermal Engineering</i> , 2021, 24, 100827.	2.8	9
13	3D Printing Technology for Biomedical Practice: A Review. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 5342-5355.	1.2	26
14	Diamond-Like Carbon (DLC) Coatings: Classification, Properties, and Applications. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4445.	1.3	71
15	Influences of fiber reinforced polymer layer on the dynamic deflection of concrete pipes containing nanoparticle subjected to earthquake load. <i>Polymer Composites</i> , 2021, 42, 4073-4081.	2.3	34
16	Atmospheric Plasma Spray Coating of NiTi on Mild Steel Substrate: An Microstructural Investigation. <i>Journal of Bio- and Tribo-Corrosion</i> , 2021, 7, 1.	1.2	10
17	Water-Based Lubricants: Development, Properties, and Performances. <i>Lubricants</i> , 2021, 9, 73.	1.2	58
18	Crushing response of Composite Metallic Foams: Density and High Strain Rate effects. <i>Journal of Alloys and Compounds</i> , 2021, 871, 159614.	2.8	8

#	ARTICLE	IF	CITATIONS
19	Crashworthiness performance of lightweight Composite Metallic Foams at high temperatures. Composites Part A: Applied Science and Manufacturing, 2021, 149, 106516.	3.8	18
20	Evaluation of tensile strength and elastic modulus of 7075-T6 aluminum alloy by adding SiC reinforcing particles using vortex casting method. Journal of Alloys and Compounds, 2021, 886, 161261.	2.8	31
21	Manufacturing Technologies of Carbon/Glass Fiber-Reinforced Polymer Composites and Their Properties: A Review. Polymers, 2021, 13, 3721.	2.0	92
22	Critical Overview of Coatings Technology for Metal Matrix Composites. Journal of Bio- and Tribo-Corrosion, 2020, 6, 1.	1.2	18
23	Manufacturing and Mechanical Characterization of Fly-Ash-Reinforced Materials for Furnace Lining Applications. Journal of Materials Engineering and Performance, 2020, 29, 6307-6321.	1.2	3
24	An Insight Into Metal Based Foams. Advanced Structured Materials, 2020, , .	0.3	13
25	Current global scenario of Sputter deposited NiTi smart systems. Journal of Materials Research and Technology, 2020, 9, 14582-14598.	2.6	21
26	Analysis of Crack Behaviour in Pipeline System Using FAD Diagram Based on Numerical Simulation under XFEM. Applied Sciences (Switzerland), 2020, 10, 6129.	1.3	13
27	Friction-based welding processes: friction welding and friction stir welding. Journal of Adhesion Science and Technology, 2020, 34, 2613-2637.	1.4	78
28	Fabrication and Experimental Investigation on Deformation Behaviour of AlSi10Mg Foam-Filled Mild Steel Tubes. Transactions of the Indian Institute of Metals, 2020, 73, 587-594.	0.7	8
29	Influence of Firing Temperature on the Physical, Thermal and Microstructural Properties of Kankara Kaolin Clay: A Preliminary Investigation. Materials, 2020, 13, 1872.	1.3	15
30	Energy Absorption Behavior of Al-SiC-Graphene Composite Foam under a High Strain Rate. Materials, 2020, 13, 783.	1.3	11
31	Yielding, Fatigue, and Creep Response of Metal Foams. Advanced Structured Materials, 2020, , 81-98.	0.3	0
32	Traditional and Non-Traditional Optimization Techniques to Enhance Reliability in Process Industries. Advances in Computational Intelligence and Robotics Book Series, 2020, , 67-80.	0.4	2
33	Materials Selection and Design Considerations. Advanced Structured Materials, 2020, , 53-80.	0.3	0
34	Recent progress of reinforcement materials: a comprehensive overview of composite materials. Journal of Materials Research and Technology, 2019, 8, 6354-6374.	2.6	449
35	Fiber-Reinforced Polymer Composites: Manufacturing, Properties, and Applications. Polymers, 2019, 11, 1667.	2.0	776
36	Experimental investigation on chromium-diamond like carbon (Cr-DLC) coating through plasma enhanced chemical vapour deposition (PECVD) on the nozzle needle surface. Diamond and Related Materials, 2019, 100, 107588.	1.8	21

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37	Crashworthiness performance and microstructural characteristics of foam-filled thin-walled tubes under diverse strain rate. Journal of Alloys and Compounds, 2019, 775, 675-689.	2.8	59
38	Fabrication and investigation of influence of CaCO <sub>3</sub> as foaming agent on Al-SiCp foam. Materials and Manufacturing Processes, 2019, 34, 379-384.	2.7	22
39	Investigation of Mild Steel Thin-Wall Tubes in Unfilled and Foam-Filled Triangle, Square, and Hexagonal Cross Sections Under Compression Load. Journal of Materials Engineering and Performance, 2018, 27, 1936-1944.	1.2	6
40	Experimental fabrication and compression analysis characterization of LM30 Al alloy foam with 5wt% SiCp at room temperature. Materials Research Express, 2018, 5, 066526.	0.8	7
41	Evaluation of mild steel hollow and foam filled circular tubes under axial loading. Advanced Materials Letters, 2018, 9, 660-664.	0.3	2
42	On the influence of porosity and pore size on AlSi17 alloy foam using artificial neural network. Ciência & Tecnologia Dos Materiais, 2017, 29, 14-21.	0.5	5
43	Experimental studies on the quasi-static movements of tube sections filled with pumice stone. Materials Today: Proceedings, 2017, 4, 10560-10564.	0.9	0
44	An Investigation on Axial Deformation Behavior of Thin-Wall Unfilled and Filled Tube with Aluminum Alloy (Al-Si7Mg) Foam Reinforced with SiC Particles. Journal of Materials Engineering and Performance, 2016, 25, 3430-3438.	1.2	22
45	Experimental analysis to improve energy absorption properties of rectangular metal section subjected to axial loading. Materials Today: Proceedings, 2016, 3, 2207-2212.	0.9	2
46	Investigation and characterisation of aluminium alloy foams with TiH <sub>2</sub> as a foaming agent. Materials Science and Technology, 2016, 32, 1338-1345.	0.8	24
47	Characterization and analysis of compression load behaviour of aluminium alloy foam under the diverse strain rate. Journal of Alloys and Compounds, 2016, 656, 218-225.	2.8	47
48	An improved estimation of shear rate for yield stress fluids using rotating concentric cylinder Fann viscometer. Journal of Petroleum Science and Engineering, 2015, 125, 247-255.	2.1	14
49	Energy Absorption Capabilities Of Aluminium Foam-filled Square. Advanced Materials Letters, 2015, 6, 80-85.	0.3	12
50	Energy Absorption Capacity Of Empty And Foam Filled Mild Steel Tube Under Low Strain Rate At Room Temperature. Advanced Materials Letters, 2015, 6, 548-553.	0.3	10
51	An Energy Absorption Behaviour of Foam Filled Structures. , 2014, 5, 164-172.		30
52	An improved estimation of shear rate using rotating coaxial-cylinder Fann viscometer: A rheological study of bentonite and fly ash suspensions. International Journal of Mineral Processing, 2014, 126, 18-29.	2.6	14
53	Mechanical Behaviour and Energy Absorption Foam Filled Structures of Square Section under Compression Loading. Applied Mechanics and Materials, 0, 592-594, 1109-1113.	0.2	10
54	A study on CO <sub>2</sub> absorption using hybrid solvents in packed columns. International Journal of Low-Carbon Technologies, 0, , .	1.2	4