

Mrinal C Saha

List of Publications by Year in descending order

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papers

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times ranked

1113
citing authors

#	ARTICLE	IF	CITATIONS
1	3D Printing of Highly Stretchable Strain Sensors Based on Carbon Nanotube Nanocomposites. <i>Advanced Engineering Materials</i> , 2018, 20, 1800425.	3.5	96
2	Response of sandwich composites with nanophased cores under flexural loading. <i>Composites Part B: Engineering</i> , 2004, 35, 543-550.	12.0	78
3	Highly Conductive Polydimethylsiloxane/Carbon Nanofiber Composites for Flexible Sensor Applications. <i>Advanced Materials Technologies</i> , 2019, 4, 1800398.	5.8	72
4	Functional nanocomposites for 3D printing of stretchable and wearable sensors. <i>Applied Nanoscience (Switzerland)</i> , 2019, 9, 2071-2083.	3.1	51
5	Effect of Carbon Nanofibers on Thermal Conductivity of Carbon Fiber Reinforced Composites. <i>Procedia Engineering</i> , 2013, 56, 814-820.	1.2	47
6	Investigation of Lightweight and Flexible Carbon Nanofiber/Poly Dimethylsiloxane Nanocomposite Sponge for Piezoresistive Sensor Application. <i>Advanced Engineering Materials</i> , 2019, 21, 1801068.	3.5	47
7	Development of ultrastretchable and skin attachable nanocomposites for human motion monitoring via embedded 3D printing. <i>Composites Part B: Engineering</i> , 2020, 200, 108224.	12.0	34
8	Multi-walled carbon nanotubes coated by multi-layer silica for improving thermal conductivity of polymer composites. <i>Journal of Thermal Analysis and Calorimetry</i> , 2013, 113, 467-474.	3.6	33
9	Investigation on jet stability, fiber diameter, and tensile properties of electrospun polyacrylonitrile nanofibrous yarns. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	2.6	33
10	Evaluation of Moisture Susceptibility of Nanoclay-Modified Asphalt Binders through the Surface Science Approach. <i>Journal of Materials in Civil Engineering</i> , 2015, 27, .	2.9	31
11	Effect of nanoparticles on mode II fracture toughness of polyurethane foams. <i>Polymer Composites</i> , 2009, 30, 1058-1064.	4.6	30
12	Influence of humidity, temperature, and annealing on microstructure and tensile properties of electrospun polyacrylonitrile nanofibers. <i>Polymer Engineering and Science</i> , 2018, 58, 998-1009.	3.1	29
13	Highly sensitive compression sensors using three-dimensional printed polydimethylsiloxane/carbon nanotube nanocomposites. <i>Journal of Intelligent Material Systems and Structures</i> , 2019, 30, 1216-1224.	2.5	25
14	Poly dimethylsiloxane/carbon nanofiber nanocomposites: fabrication and characterization of electrical and thermal properties. <i>International Journal of Smart and Nano Materials</i> , 2016, 7, 236-247.	4.2	24
15	PDMS Sponges with Embedded Carbon Nanotubes as Piezoresistive Sensors for Human Motion Detection. <i>Nanomaterials</i> , 2021, 11, 1740.	4.1	23
16	Evaluation of Viscosity and Rutting Properties of Nanoclay-Modified Asphalt Binders. , 2014, , .		22
17	Fabrication and characterization of porous CNF/PDMS nanocomposites for sensing applications. <i>Applied Nanoscience (Switzerland)</i> , 2019, 9, 1309-1317.	3.1	22
18	Processing and performance evaluation of hollow microspheres filled epoxy composites. <i>Polymer Composites</i> , 2008, 29, 293-301.	4.6	21

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19	Nanoclay reinforced syntactic foams: Flexure and thermal behavior. <i>Polymer Composites</i> , 2010, 31, 1332-1342.	4.6	21
20	Studies of reaction mechanisms during stabilization of electrospun polyacrylonitrile carbon nanofibers. <i>Polymer Engineering and Science</i> , 2018, 58, 1315-1321.	3.1	19
21	Rapid Microwave Polymerization of Porous Nanocomposites with Piezoresistive Sensing Function. <i>Nanomaterials</i> , 2020, 10, 233.	4.1	17
22	Carbon Nanotube Based Piezoresistive Sensors Fabricated by Microwave Irradiation. <i>Advanced Engineering Materials</i> , 2020, 22, 1901068.	3.5	16
23	Synthesis and characterization of hierarchical porous structure of polydimethylsiloxane (PDMS) sheets via two-step phase separation method. <i>Materials and Design</i> , 2021, 212, 110194.	7.0	15
24	Interfacial Properties of ZnO Nanowire-Enhanced Carbon Fiber Composites: A Molecular Dynamics Simulation Study. <i>Langmuir</i> , 2021, 37, 7138-7146.	3.5	14
25	3D Printed Flexible Microscaled Porous Conductive Polymer Nanocomposites for Piezoresistive Sensing Applications. <i>Advanced Materials Technologies</i> , 2022, 7, .	5.8	12
26	Multiscale Modeling of Fiber Fragmentation Process in Aligned ZnO Nanowires Enhanced Single Fiber Composites. <i>Scientific Reports</i> , 2019, 9, 19964.	3.3	11
27	Study on the Cure Kinetic Behavior of Thermosetting Polyurethane Solids and Foams: Effect of Temperature, Density, and Carbon Nanofiber. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2011, 133, .	1.4	10
28	Effect of carbon nanotube persistence length on heat transfer in nanocomposites: A simulation approach. <i>Applied Physics Letters</i> , 2013, 102, 203116.	3.3	10
29	Investigation of porous polydimethylsiloxane structures with tunable properties induced by the phase separation technique. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50688.	2.6	10
30	Ultrasound Assisted Hybrid Carbon Epoxy Composites Containing Carbon Nanotubes. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2013, 135, .	1.4	7
31	Synthesis and characterization of porous polydimethylsiloxane structures with adjustable porosity and pore morphology using emulsion templating technique. <i>Polymer Engineering and Science</i> , 2021, 61, 1943-1955.	3.1	7
32	Tensile Stress Relaxation Behavior of Thermosetting Polyurethane Solid and Foams: Experiment and Model Prediction. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2011, 133, .	1.4	6
33	Multi-scale analysis of aligned ZnO nanowires reinforced hybrid composites under three-point bending. <i>Composite Interfaces</i> , 2021, 28, 961-978.	2.3	6
34	Effect of Distribution Media Length and Multiwalled Carbon Nanotubes on the Formation of Voids in VARTM Composites. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2011, 133, .	1.4	5
35	Incorporating Density and Temperature in the Stretched Exponential Model for Predicting Stress Relaxation Behavior of Polymer Foams. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2016, 138, .	1.4	5
36	Funnel-Shaped Floating Vessel Oil Skimmer with Joule Heating Sorption Functionality. <i>Polymers</i> , 2022, 14, 2269.	4.5	5

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37	Atomistic Simulations on Structural Characteristics of ZnO Nanowire-Enhanced Graphene/Epoxy Polymer Composites: Implications for Lightweight Structures. ACS Applied Nano Materials, 0, , .	5.0	4
38	Evaluation of Moisture Susceptibility and Healing Properties of Nanoclay-Modified Asphalt Binders. , 2015, , .		3
39	Functionalization Enhancement on Interfacial Properties Between Graphene and ZnO NW/Epoxy: A Molecular Dynamics Simulation Study. Advanced Theory and Simulations, 0, , 2200010.	2.8	3
40	CNT Bucky Paper Enhanced Sandwich Composites for In-Situ Load Sensing. , 2017, , .		2
41	Processing and Characterization of Thermoplastic Polyurethane Nanocomposite Thin Films. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	1
42	Recent Advances in Micro, Nano, and Cellular Composite Materials. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	0
43	Effects of Ultrasound and Strain Rate on Tensile Mechanical Behavior of Thermoplastic Poly Urethane Thin Films. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	0
44	Investigation of Mechanical Properties of Nanoclay Incorporated Room Temperature Vulcanized (RTV) Silicone Foams. , 2013, , .		0