Akarsh Verma

List of Publications by Year in Descending Order

31 papers	992 citations	23 h-index	31 g-index
33 ext. papers	1,371 ext. citations	2.7 avg, IF	5.66 L-index

#	Paper	IF	Citations
31	Adsorption chemistry of co-doped graphene nanoribbon and its derivatives towards carbon based gases for gas sensing applications: Quantum DFT investigation. *Materials Science in Semiconductor Processing*, **2022**, 146, 106670	4.3	1
30	Effect of functionalized silicon carbide nano-particles as additive in cross-linked PVA based composites for vibration damping application. *Journal of Vinyl and Additive Technology*, **2021**, 27, 920	2	12
29	A novel palm sheath and sugarcane bagasse fiber based hybrid composites for automotive applications: An experimental approach. *Polymer Composites*, **2021**, 42, 512-521	3	37
28	ReaxFF reactive molecular dynamics simulations to study the interfacial dynamics between defective h-BN nanosheets and water nanodroplets. *Physical Chemistry Chemical Physics*, **2021**, 23, 10822-10834	3.6	23
27	WEDM machining of heat treated ASSAB 88 tool steel: A comprehensive experimental analysis. *Materials Today: Proceedings*, **2021**,	1.4	8
26	Mechanical, microstructural, and thermal characterization insights of pyrolyzed carbon black from waste tires reinforced epoxy nanocomposites for coating application. *Polymer Composites*, **2020**, 41, 338-349	3	54
25	A novel approach for development of printed circuit board from biofiber based composites. *Polymer Composites*, **2020**, 41, 4550-4558	3	35
24	Enhanced thermal transport across a bi-crystalline graphene-polymer interface: an atomistic approach. *Physical Chemistry Chemical Physics*, **2019**, 21, 6229-6237	3.6	49
23	Experimental and Computational Studies to Analyze the Effect of h-BN Nanosheets on Mechanical Behavior of h-BN/Polyethylene Nanocomposites. *Journal of Physical Chemistry C*, **2019**, 123, 20059-20070	3.8	51
22	Processing and characterization analysis of pyrolyzed oil rubber (from waste tires)-epoxy polymer blend composite for lightweight structures and coatings applications. *Polymer Engineering and Science*, **2019**, 59, 2041-2051	2.3	48
21	Dynamic Mechanical Analysis and Creep-recovery behaviour of Polyvinyl Alcohol based cross-linked Biocomposite reinforced with Basalt fiber. *Materials Research Express*, **2019**, 6, 105373	1.7	52
20	Mechanical, Microstructural and Thermal Characterization of Epoxy-Based Human Hair Reinforced Composites. *Journal of Testing and Evaluation*, **2019**, 47, 20170063	1	46
19	Fabrication and characterization of chitosan-coated sisal fiber Phytagel modified soy protein-based green composite. *Journal of Composite Materials*, **2019**, 53, 2481-2504	2.7	36
18	Experimental Analysis on Carbon Residuum Transformed Epoxy Resin: Chicken Feather Fiber Hybrid Composite. *Polymer Composites*, **2019**, 40, 2690-2699	3	52
17	Effect of grain boundaries on the interfacial behaviour of graphene-polyethylene nanocomposite. *Applied Surface Science*, **2019**, 470, 1085-1092	6.7	49
16	A molecular dynamics based study to estimate the point defects formation energies in graphene containing STW defects. *Materials Research Express*, **2019**, 6, 015606	1.7	26
15	Molecular dynamics based simulations to study the fracture strength of monolayer graphene oxide. *Nanotechnology*, **2018**, 29, 115706	3.4	44

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14	Reactive force field based atomistic simulations to study fracture toughness of bicrystalline graphene functionalised with oxide groups. *Diamond and Related Materials*, **2018**, 88, 193-203	3.5	23
13	Experimental investigation of chicken feather fiber and crumb rubber reformed epoxy resin hybrid composite: mechanical and microstructural characterization. *Journal of the Mechanical Behavior of Materials*, **2018**, 27,	1.9	30
12	Physical and Thermal Characterization of Chicken Feather Fiber and Crumb Rubber Reformed Epoxy Resin Hybrid Composite. *Advances in Civil Engineering Materials*, **2018**, 7, 20180027	0.7	14
11	Molecular dynamics based simulations to study failure morphology of hydroxyl and epoxide functionalised graphene. *Computational Materials Science*, **2018**, 143, 15-26	3.2	47
10	Atomistic modeling of graphene/hexagonal boron nitride polymer nanocomposites: a review. *Wiley Interdisciplinary Reviews: Computational Molecular Science*, **2018**, 8, e1346	7.9	63
9	Starch-jute fiber hybrid biocomposite modified with an epoxy resin coating: fabrication and experimental characterization. *Journal of the Mechanical Behavior of Materials*, **2018**, 27,	1.9	27
8	Structural and chemical insights into thermal transport for strained functionalised graphene: a molecular dynamics study. *Materials Research Express*, **2018**, 5, 115605	1.7	29
7	Tailoring the failure morphology of 2D bicrystalline graphene oxide. *Journal of Applied Physics*, **2018**, 124, 015102	2.5	39
6	The effect of STW defects on the mechanical properties and fracture toughness of pristine and hydrogenated graphene. *Physical Chemistry Chemical Physics*, **2017**, 19, 16023-16037	3.6	47
5	Mechanical Properties and Microstructure of Starch and Sisal Fiber Biocomposite Modified with Epoxy Resin. *Materials Performance and Characterization*, **2017**, 6, 20170069	0.5	18
4	Study of Flame Retardant and Mechanical Properties of Coconut Shell Particles Filled Composite. *Research & Reviews Journal of Material Sciences*, **2016**, 04,		2
3	Human Hair: A Biodegradable Composite Fiber－A Review. *International Journal of Waste Resources*, **2016**, 6,		23
2	Experimental Investigations on Thermal Properties of Coconut Shell Particles in DAP Solution for Use in Green Composite Applications. *Journal of Material Science & Engineering*, **2016**, 05,	0.7	2
1	Bio-composite film from corn starch based vetiver cellulose. *Journal of Natural Fibers*,1-11	1.8	2