

# Akarsh Verma

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9044215/publications.pdf>

Version: 2024-02-01

33  
papers

2,175  
citations

201385

27  
h-index

395343

33  
g-index

33  
all docs

33  
docs citations

33  
times ranked

573  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical, microstructural, and thermal characterization insights of pyrolyzed carbon black from waste tires reinforced epoxy nanocomposites for coating application. <i>Polymer Composites</i> , 2020, 41, 338-349.	2.3	156
2	Experimental Analysis on Carbon Residuum Transformed Epoxy Resin: Chicken Feather Fiber Hybrid Composite. <i>Polymer Composites</i> , 2019, 40, 2690-2699.	2.3	127
3	A novel palm sheath and sugarcane bagasse fiber based hybrid composites for automotive applications: An experimental approach. <i>Polymer Composites</i> , 2021, 42, 512-521.	2.3	117
4	Processing and characterization analysis of pyrolyzed oil rubber (from waste tires)–epoxy polymer blend composite for lightweight structures and coatings applications. <i>Polymer Engineering and Science</i> , 2019, 59, 2041-2051.	1.5	108
5	Effect of grain boundaries on the interfacial behaviour of graphene-polyethylene nanocomposite. <i>Applied Surface Science</i> , 2019, 470, 1085-1092.	3.1	108
6	Experimental and Computational Studies to Analyze the Effect of h-BN Nanosheets on Mechanical Behavior of h-BN/Polyethylene Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2019, 123, 20059-20070.	1.5	103
7	A novel approach for development of printed circuit board from biofiber based composites. <i>Polymer Composites</i> , 2020, 41, 4550-4558.	2.3	101
8	Atomistic modeling of graphene/hexagonal boron nitride polymer nanocomposites: a review. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2018, 8, e1346.	6.2	99
9	Dynamic Mechanical Analysis and Creep-recovery behaviour of Polyvinyl Alcohol based cross-linked Biocomposite reinforced with Basalt fiber. <i>Materials Research Express</i> , 2019, 6, 105373.	0.8	97
10	Enhanced thermal transport across a bi-crystalline graphene–polymer interface: an atomistic approach. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 6229-6237.	1.3	95
11	The effect of STW defects on the mechanical properties and fracture toughness of pristine and hydrogenated graphene. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 16023-16037.	1.3	89
12	Molecular dynamics based simulations to study failure morphology of hydroxyl and epoxide functionalised graphene. <i>Computational Materials Science</i> , 2018, 143, 15-26.	1.4	84
13	Molecular dynamics based simulations to study the fracture strength of monolayer graphene oxide. <i>Nanotechnology</i> , 2018, 29, 115706.	1.3	82
14	Fabrication and characterization of chitosan-coated sisal fiber – Phytagel modified soy protein-based green composite. <i>Journal of Composite Materials</i> , 2019, 53, 2481-2504.	1.2	75
15	Tailoring the failure morphology of 2D bicrystalline graphene oxide. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	73
16	Mechanical, Microstructural and Thermal Characterization of Epoxy-Based Human Hair–Reinforced Composites. <i>Journal of Testing and Evaluation</i> , 2019, 47, 1193-1215.	0.4	66
17	Structural and chemical insights into thermal transport for strained functionalised graphene: a molecular dynamics study. <i>Materials Research Express</i> , 2018, 5, 115605.	0.8	62
18	Reactive force field based atomistic simulations to study fracture toughness of bicrystalline graphene functionalised with oxide groups. <i>Diamond and Related Materials</i> , 2018, 88, 193-203.	1.8	58

#	ARTICLE	IF	CITATIONS
19	Starch-jute fiber hybrid biocomposite modified with an epoxy resin coating: fabrication and experimental characterization. <i>Journal of the Mechanical Behavior of Materials</i> , 2018, 27, .	0.7	57
20	ReaxFF reactive molecular dynamics simulations to study the interfacial dynamics between defective h-BN nanosheets and water nanodroplets. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 10822-10834.	1.3	55
21	A molecular dynamics based study to estimate the point defects formation energies in graphene containing STW defects. <i>Materials Research Express</i> , 2019, 6, 015606.	0.8	53
22	Effect of functionalized silicon carbide nano-particles as additive in cross-linked PVA based composites for vibration damping application. <i>Journal of Vinyl and Additive Technology</i> , 2021, 27, 920-932.	1.8	50
23	Experimental investigation of chicken feather fiber and crumb rubber reformed epoxy resin hybrid composite: mechanical and microstructural characterization. <i>Journal of the Mechanical Behavior of Materials</i> , 2018, 27, .	0.7	44
24	Mechanical Properties and Microstructure of Starch and Sisal Fiber Biocomposite Modified with Epoxy Resin. <i>Materials Performance and Characterization</i> , 2017, 6, 20170069.	0.2	39
25	Human Hair: A Biodegradable Composite Fiber—A Review. <i>International Journal of Waste Resources</i> , 2016, 6, .	0.2	36
26	Bio-composite film from corn starch based vetiver cellulose. <i>Journal of Natural Fibers</i> , 2022, 19, 14634-14644.	1.7	36
27	Physical and Thermal Characterization of Chicken Feather Fiber and Crumb Rubber Reformed Epoxy Resin Hybrid Composite. <i>Advances in Civil Engineering Materials</i> , 2018, 7, 538-557.	0.2	33
28	Adsorption chemistry of co-doped graphene nanoribbon and its derivatives towards carbon based gases for gas sensing applications: Quantum DFT investigation. <i>Materials Science in Semiconductor Processing</i> , 2022, 146, 106670.	1.9	27
29	Mechanical, thermal, and acoustical studies on natural alternative material for partition walls: A novel experimental investigation. <i>Polymer Composites</i> , 2022, 43, 4711-4720.	2.3	21
30	WEDM machining of heat treated ASSAB <sup>TM</sup> 88 tool steel: A comprehensive experimental analysis. <i>Materials Today: Proceedings</i> , 2022, 50, 946-951.	0.9	17
31	Study of Flame Retardant and Mechanical Properties of Coconut Shell Particles Filled Composite. <i>Research &amp; Reviews Journal of Material Sciences</i> , 2016, 04, .	0.1	4
32	Experimental Investigations on Thermal Properties of Coconut Shell Particles in DAP Solution for Use in Green Composite Applications. <i>Journal of Material Science &amp; Engineering</i> , 2016, 05, .	0.2	2
33	Inspection of Hydrodynamic Lubrication in Infinitely Long Journal Bearing with Oscillating Journal Velocity. <i>Journal of Applied Mechanical Engineering</i> , 2016, 5, .	0.0	1