

Bernd Wetzel

List of Publications by Year in descending order

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34
papers

3,046
citations

430874

18
h-index

477307

29
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34
all docs

34
docs citations

34
times ranked

2540
citing authors

#	ARTICLE	IF	CITATIONS
1	Epoxy nanocomposites " fracture and toughening mechanisms. <i>Engineering Fracture Mechanics</i> , 2006, 73, 2375-2398.	4.3	711
2	Epoxy nanocomposites with high mechanical and tribological performance. <i>Composites Science and Technology</i> , 2003, 63, 2055-2067.	7.8	690
3	Impact and wear resistance of polymer nanocomposites at low filler content. <i>Polymer Engineering and Science</i> , 2002, 42, 1919-1927.	3.1	226
4	Effect of particle surface treatment on the tribological performance of epoxy based nanocomposites. <i>Wear</i> , 2002, 253, 1086-1093.	3.1	226
5	Friction and wear of low nanometer Si ₃ N ₄ filled epoxy composites. <i>Wear</i> , 2003, 254, 784-796.	3.1	202
6	Sliding wear behavior of epoxy containing nano-Al ₂ O ₃ particles with different pretreatments. <i>Wear</i> , 2004, 256, 1072-1081.	3.1	162
7	Microstructure and tribological behavior of polymeric nanocomposites. <i>Industrial Lubrication and Tribology</i> , 2001, 53, 72-77.	1.3	139
8	Improvement of Tribological Performance of Epoxy by the Addition of Irradiation Grafted Nano-Inorganic Particles. <i>Macromolecular Materials and Engineering</i> , 2002, 287, 111-115.	3.6	120
9	Graft polymerization onto inorganic nanoparticles and its effect on tribological performance improvement of polymer composites. <i>Tribology International</i> , 2003, 36, 697-707.	5.9	85
10	Atomic force microscopy study on structure and properties of irradiation grafted silica particles in polypropylene-based nanocomposites. <i>Journal of Applied Polymer Science</i> , 2001, 80, 2218-2227.	2.6	69
11	Distinct tribological mechanisms of silica nanoparticles in epoxy composites reinforced with carbon nanotubes, carbon fibers and glass fibers. <i>Tribology International</i> , 2016, 104, 225-236.	5.9	56
12	The effect of block copolymer and core-shell rubber hybrid toughening on morphology and fracture of epoxy-based fibre reinforced composites. <i>Engineering Fracture Mechanics</i> , 2018, 203, 81-101.	4.3	54
13	Thermo-molded self-healing thermoplastics containing multilayer microreactors. <i>Journal of Materials Chemistry A</i> , 2013, 1, 7191.	10.3	51
14	Tensile Properties, Fracture Mechanics Properties and Toughening Mechanisms of Epoxy Systems Modified with Soft Block Copolymers, Rigid TiO ₂ Nanoparticles and Their Hybrids. <i>Journal of Composites Science</i> , 2018, 2, 72.	3.0	28
15	Mechanical properties and fracture behavior of high-performance epoxy nanocomposites modified with block polymer and core-shell rubber particles. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48471.	2.6	27
16	Toughening and Mechanical Properties of Epoxy Modified with Block Co-polymers and MWCNTs. <i>Procedia Structural Integrity</i> , 2016, 2, 104-111.	0.8	23
17	Fatigue crack propagation in triblock copolymer toughened epoxy nanocomposites. <i>Polymer Engineering and Science</i> , 2017, 57, 579-587.	3.1	23
18	Effect of Different Types of Block Copolymers on Morphology, Mechanical Properties, and Fracture Mechanisms of Bisphenol-F Based Epoxy System. <i>Journal of Composites Science</i> , 2019, 3, 68.	3.0	22

#	ARTICLE	IF	CITATIONS
19	Mesoscale modeling of the mechanical and tribological behavior of a polymer matrix composite based on epoxy and 6vol.% silica nanoparticles. Computational Materials Science, 2015, 110, 204-214.	3.0	19
20	Reinforcement of Thermosetting Polymers by the Incorporation of Micro- and Nanoparticles. , 2005, , 45-62.		18
21	Tribological Behaviors of Carbon Fiber Reinforced Epoxy Composites Under PAO Lubrication Conditions. Tribology Letters, 2016, 62, 1.	2.6	18
22	Finite Element Simulation of the Fiberâ€“Matrix Debonding in Polymer Composites Produced by a Sliding Indentor: Part I â€“ Normally Oriented Fibers. Journal of Composite Materials, 2004, 38, 1583-1606.	2.4	14
23	Modeling of the stressâ€“strain behavior of an epoxy-based nanocomposite filled with silica nanoparticles. Materials and Design, 2016, 89, 950-956.	7.0	14
24	The role of surface topography in the evolving microstructure and functionality of tribofilms of an epoxy-based nanocomposite. Wear, 2016, 364-365, 48-56.	3.1	13
25	Finite Element Simulation of the Fiberâ€“ Matrix Debonding in Polymer Composites Produced by a Sliding Indentor: Part II â€“ Parallel and Anti-Parallel Fiber Orientation. Journal of Composite Materials, 2004, 38, 1607-1618.	2.4	8
26	Flexural and fracture mechanical properties of in situ particulate reinforced organomineral hybrid resins modified by organofunctional silanes. Composites Science and Technology, 2019, 174, 169-175.	7.8	8
27	Low velocity impact resistance of thin and toughened carbon fibre reinforced epoxy. Composites Science and Technology, 2022, 230, 109362.	7.8	5
28	Toughening of Glass Fiber Reinforced Unsaturated Polyester Composites by Core-Shell Particles. Key Engineering Materials, 0, 742, 74-81.	0.4	4
29	Fiber/Matrix Adhesion in Glass Fiber Reinforced Inorganic-Organic Polyurea/Polysilicate Resins. Key Engineering Materials, 0, 742, 9-16.	0.4	4
30	Temperature-rate induced polymerization and phase separation of block copolymer toughened polymer composites. Composites Science and Technology, 2022, 230, 109329.	7.8	4
31	Impact of Aggressive Media on the Interlaminar Shear Strength of Innovative Glass Fiber Reinforced Polyurea/Polysilicate Hybrid Resins. Procedia Structural Integrity, 2018, 13, 143-148.	0.8	2
32	<i>In situ</i>functionalisation of organomineral hybrid resins for tough basalt fibre reinforced plastics. Plastics, Rubber and Composites, 2021, 50, 105-115.	2.0	1
33	Fatigue crack propagation in self-assembling nanocomposites. AIP Conference Proceedings, 2016, , .	0.4	0
34	Surface Grafting of Nano-SiC with Glycidyl Methacrylate in Emulsion and Its Effect on the Tribological Performance of Epoxy Composites. , 2004, , 571-576.		0