Ambrose C Taylor

List of Publications by Year
in descending order

97 papers	6,029 citations	76326 40 h-index	71685 76 g-index
102 all docs	102 docs citations	102 times ranked	4271 citing authors

#	Article	IF	Citations
1	Toughening mechanisms of nanoparticle-modified epoxy polymers. Polymer, 2007, 48, 530-541.	3.8	815
2	The mechanisms and mechanics of the toughening of epoxy polymers modified with silica nanoparticles. Polymer, 2010, 51, 6284-6294.	3.8	386
3	The toughness of epoxy polymers and fibre composites modified with rubber microparticles and silica nanoparticles. Journal of Materials Science, 2010, 45, 1193-1210.	3.7	331
4	The effect of silica nano particles and rubber particles on the toughness of multiphase thermosetting epoxy polymers. Journal of Materials Science, 2005, 40, 5083-5086.	3.7	263
5	The effect of carbon nanotubes on the fracture toughness and fatigue performance of a thermosetting epoxy polymer. Journal of Materials Science, 2011, 46, 7525.	3.7	217
6	Toughening structural adhesives via nano- and micro-phase inclusions. Journal of Adhesion, 2003, 79, 867-873.	3.0	198
7	The mechanical properties and toughening mechanisms of an epoxy polymer modified with polysiloxane-based core-shell particles. Polymer, 2013, 54, 4276-4289.	3.8	186
8	The tensile fatigue behaviour of a silica nanoparticle-modified glass fibre reinforced epoxy composite. Composites Science and Technology, 2010, 70, 193-199.	7.8	181
9	The fracture and fatigue behaviour of nano-modified epoxy polymers. Journal of Materials Science, 2007, 42, 7049-7051.	3.7	156
10	The mechanical properties and fracture behaviour of epoxy-inorganic micro- and nano-composites. Journal of Materials Science, 2006, 41, 3271-3297.	3.7	152
11	Toughening of epoxy using coreâ€“shell particles. Journal of Materials Science, 2011, 46, 327-338.	3.7	145
12	Durability of asphalt mixtures: Effect of aggregate type and adhesion promoters. International Journal of Adhesion and Adhesives, 2014, 54, 100-111.	2.9	144
13	Predicting the service-life of adhesively-bonded joints. International Journal of Fracture, 2000, 103, 41-69.	2.2	115
14	Toughness of syndiotactic polystyrene/epoxy polymer blends: microstructure and toughening mechanisms. Polymer, 2005, 46, 7352-7369.	3.8	114
15	The modelling of the toughening of epoxy polymers via silica nanoparticles: The effects of volume fraction and particle size. Polymer, 2013, 54, 7022-7032.	3.8	106
16	Mechanical and fracture properties of epoxy/inorganic micro- and nano-composites. Journal of Materials Science Letters, 2003, 22, 1439-1441.	0.5	102
17	The fracture of glass-fibre-reinforced epoxy composites using nanoparticle-modified matrices. Journal of Materials Science, 2008, 43, 1151-1154.	3.7	98
18	Title is missing!. Journal of Materials Science, 2002, 37, 433-460.	3.7	94

#	Article	IF	Citations
19	The Morphology and Fracture Properties of Thermoplastic-Toughened Epoxy Polymers. Journal of Adhesion, 2010, 86, 726-741.	3.0	91
20	Toughening of epoxy-based hybrid nanocomposites. Polymer, 2016, 97, 179-190.	3.8	91
21	Toughened carbon fibre-reinforced polymer composites with nanoparticle-modified epoxy matrices. Journal of Materials Science, 2017, 52, 1767-1788.	3.7	86
22	The interlaminar toughness of carbon-fibre reinforced plastic composites using â€˜hybrid-toughenedâ€™ matrices. Journal of Materials Science, 2006, 41, 5043-5046.	3.7	85
23	Graphene nanoplatelet-modified epoxy: effect of aspect ratio and surface functionality on mechanical properties and toughening mechanisms. Journal of Materials Science, 2016, 51, 8764-8790.	3.7	77
24	In situ thermally reduced graphene oxide/epoxy composites: thermal and mechanical properties. Applied Nanoscience (Switzerland), 2016, 6, 1015-1022.	3.1	75
25	The impact wedge-peel performance of structural adhesives. Journal of Materials Science, 2000, 35, 1867-1884.	3.7	71
26	The prediction of crack growth in bonded joints under cyclic-fatigue loading I. Experimental studies. International Journal of Adhesion and Adhesives, 2003, 23, 449-461.	2.9	70
27	A MARTINI Coarse-Grained Model of a Thermoset Polyester Coating. Macromolecules, 2011, 44, 6198-6208.	4.8	66
28	The effect of silica nanoparticles and carbon nanotubes on the toughness of a thermosetting epoxy polymer. Journal of Applied Polymer Science, 2011, 119, 2135-2142.	2.6	65
29	A facile way to produce epoxy nanocomposites having excellent thermal conductivity with low contents of reduced graphene oxide. Journal of Materials Science, 2017, 52, 7323-7344.	3.7	63
30	The Tensile Fatigue Behavior of a Glass-fiber Reinforced Plastic Composite Using a Hybrid-toughened Epoxy Matrix. Journal of Composite Materials, 2010, 44, 2095-2109.	2.4	60
31	Improving the fracture toughness and the cyclic-fatigue resistance of epoxy-polymer blends. Polymer, 2014, 55, 6325-6334.	3.8	57
32	Epoxy modified with triblock copolymers: morphology, mechanical properties and fracture mechanisms. Journal of Materials Science, 2012, 47, 4546-4560.	3.7	56
33	Toughening performance of glass fibre composites with coreâ€“shell rubber and silica nanoparticle modified matrices. Composites Part A: Applied Science and Manufacturing, 2016, 80, 292-303.	7.6	56
34	The effect of rubber micro-particles and silica nano-particles on the tensile fatigue behaviour of a glass-fibre epoxy composite. Journal of Materials Science, 2009, 44, 342-345.	3.7	55
35	Mechanical and dielectric properties of epoxyâ€“clay nanocomposites. Journal of Materials Science, 2014, 49, 1574-1584.	3.7	55
36	The cyclic-fatigue behaviour of an epoxy polymer modified with micron-rubber and nano-silica particles. Journal of Materials Science, 2009, 44, 4487-4490.	3.7	50

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37	Fracture and toughening mechanisms of silica- and coreâ€“shell rubber-toughened epoxy at ambient and low temperature. Journal of Materials Science, 2019, 54, 13938-13958.	3.7	46
38	Particle cavitation in rubber toughened epoxies: the role of particle size. Journal of Materials Science, 2010, 45, 3882-3894.	3.7	44
39	Enhanced fatigue behavior of a glass fiber reinforced hybrid particles modified epoxy nanocomposite under WISPERX spectrum load sequence. International Journal of Fatigue, 2013, 54, 25-31.	5.7	43
40	The microstructure and fracture performance of styreneâ€“butadieneâ€“methylmethacrylate block copolymer-modified epoxy polymers. Journal of Materials Science, 2013, 48, 6762-6777.	3.7	42
41	The prediction of crack growth in bonded joints under cyclic-fatigue loading II. Analytical and finite element studies. International Journal of Adhesion and Adhesives, 2003, 23, 463-471.	2.9	41
42	Core-shell rubber nanoparticle reinforcement and processing of high toughness fast-curing epoxy composites. Composites Science and Technology, 2017, 147, 78-88.	7.8	40
43	Co-continuous polymer systems: A numerical investigation. Computational Materials Science, 2015, 98, 24-33.	3.0	38
44	Toughening epoxy syntactic foams with milled carbon fibres: Mechanical properties and toughening mechanisms. Materials and Design, 2019, 169, 107654.	7.0	38
45	Fast-curing epoxy polymers with silica nanoparticles: properties and rheo-kinetic modelling. Journal of Materials Science, 2016, 51, 236-251.	3.7	36
46	The Tensile Fatigue Behavior of a GFRP Composite with Rubber Particle Modified Epoxy Matrix. Journal of Reinforced Plastics and Composites, 2010, 29, 2170-2183.	3.1	35
47	Fracture and fatigue behaviour of carbon fibre composites with nanoparticle-sized fibres. Composite Structures, 2019, 217, 143-149.	5.8	33
48	The toughening of cyanate-ester polymers: Part II Chemical modification. Journal of Materials Science, 2003, 38, 65-79.	3.7	32
49	The development of a novel test method to assess the durability of asphalt roadâ€“pavement materials. International Journal of Adhesion and Adhesives, 2013, 42, 1-10.	2.9	32
50	The properties and suitability of commercial bioâ€based epoxies for use in fiberâ€reinforced composites. Journal of Applied Polymer Science, 2021, 138, 50417.	2.6	30
51	Quantifying nanoparticle dispersion: application of the Delaunay network for objective analysis of sample micrographs. Journal of Materials Science, 2011, 46, 6437-6452.	3.7	24
52	Tough, natural-fibre composites based upon epoxy matrices. Journal of Materials Science, 2015, 50, 6947-6960.	3.7	24
53	Improved variable-amplitude fatigue behavior of a glass-fiber-reinforced hybrid-toughened epoxy composite. Journal of Reinforced Plastics and Composites, 2011, 30, 1783-1793.	3.1	23
54	Simultaneously tough and conductive rubberâ€“grapheneâ€“epoxy nanocomposites. Journal of Materials Science, 2016, 51, 8631-8644.	3.7	21

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55	Examining the effect of graphene nanoplatelets on the corrosion resistance of epoxy coatings. International Journal of Adhesion and Adhesives, 2021, 104, 102723.	2.9	21
56	THE EFFECT OF MICRON-RUBBER AND NANO-SILICA PARTICLES ON THE FATIGUE CRACK GROWTH BEHAVIOR OF AN EPOXY POLYMER. International Journal of Nanoscience, 2011, 10, 1095-1099.	0.7	19
57	Fracture behaviour of rubber- and silica nanoparticle-toughened glass fibre composites under static and fatigue loading. Composites Part A: Applied Science and Manufacturing, 2018, 109, 239-256.	7.6	18
58	An essential work of fracture study of the toughness of thermoset polyester coatings. Progress in Organic Coatings, 2015, 78, 265-274.	3.9	17
59	Mechanical and fracture performance of carbon fibre reinforced composites with nanoparticle modified matrices. Procedia Structural Integrity, 2016, 2, 96-103.	0.8	17
60	Quantifying Nanoparticle Dispersion by Using The Area Disorder of Delaunay Triangulation. Journal of the Royal Statistical Society Series C: Applied Statistics, 2012, 61, 253-275.	1.0	16
61	Influence of backbone structure, conversion and phenolic co-curing of cyanate esters on side relaxations, fracture toughness, flammability properties and water uptake and toughening with low molecular weight polyethersulphones. Reactive and Functional Polymers, 2018, 129, 2-22.	4.1	16
62	The effects of particle morphology on the analysis of discrete particle dispersion using Delaunay tessellation. Composites Part A: Applied Science and Manufacturing, 2013, 54, 37-45.	7.6	13
63	Advances in nanoparticle reinforcement in structural adhesives. , 2010, , 151-182.		11
64	Quantification of coating surface strains in Erichsen cupping tests. Journal of Materials Science, 2019, 54, 7997-8009.	3.7	11
65	Vibration behaviours of single/multi-debonded curved composite sandwich structures. Composite Structures, 2019, 226, 111291.	5.8	10
66	A modelling study of the visco-elastic behaviour of polyester-based coil coatings. Progress in Organic Coatings, 2013, 76, 1556-1566.	3.9	9
67	Determining the Fracture Energy of Structural Adhesives from Wedge-Peel Tests. Journal of Adhesion, 2011, 87, 482-503.	3.0	8
68	Adhesives with Nanoparticles. , 2011, , 1437-1460.		8
69	Quantifying the dispersion of carbon nanotubes in thermoplastic-toughened epoxy polymers. Journal of Materials Science, 2011, 46, 3108-3118.	3.7	8
70	THE FATIGUE AND FRACTURE BEHAVIOR OF MICRON-RUBBER AND NANO-SILICA PARTICLES MODIFIED EPOXY POLYMER. International Journal of Nanoscience, 2012, 11, 1240002.	0.7	8
71	Quantifying Alumina Nanoparticle Dispersion in Hybrid Carbon Fiber Composites Using Photoluminescent Spectroscopy. Applied Spectroscopy, 2017, 71, 258-266.	2.2	8
72	Silica nano-particle filled polymers: Debonding and microstructure. Composites Science and Technology, 2022, 218, 109202.	7.8	8

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73	Toughness of syndiotactic polystyrene (sPS)/epoxy blends. Journal of Materials Science Letters, 2003, 22, 507-512.	0.5	7
74	Establishing the fracture properties of delaminating multilayered decorative coatings on wood and their changes after consolidation with polymer formulations. Journal of Materials Science, 2015, 50, 2666-2681.	3.7	7
75	A preliminary examination of urushi-based conservation options for the treatment of photodegraded Japanese lacquer using scanning electron microscopy and profilometry. Studies in Conservation, 2016, 61, 131-148.	1.1	7
76	The fracture of thermosetting epoxy polymers containing silica nanoparticles. Strength, Fracture and Complexity, 2018, 11, 137-148.	0.3	7
77	A numerical investigation of interfacial and channelling crack growth rates under low-cycle fatigue in bi-layer materials relevant to cultural heritage. Journal of Cultural Heritage, 2021, 49, 70-78.	3.3	7
78	Cracking in paintings due to relative humidity cycles. Procedia Structural Integrity, 2018, 13, 379-384.	0.8	6
79	The effect of HMMM crosslinker content on the thermal-mechanical properties of polyester coil coatings. Progress in Organic Coatings, 2019, 137, 105338.	3.9	6
80	Vibration behaviours of single/multi-debonded composite sandwich structures with nanoparticle-modified matrices. Composite Structures, 2019, 210, 590-598.	5.8	6
81	Nanoclay-filled epoxy composites for electrical insulation applications. , 2009, , .		5
82	Fatigue Behaviour of a Hybrid Particle Modified Fiberglass/Epoxy Composite under a Helicopter Spectrum Load Sequence. Advanced Composites Letters, 2013, 22, 096369351302200.	1.3	5
83	Silane functionalization effects on dispersion of alumina nanoparticles in hybrid carbon fiber composites. Applied Optics, 2018, 57, 6671.	1.8	5
84	Reconstruction of historical temperature and relative humidity cycles within Knole House, Kent. Journal of Cultural Heritage, 2019, 39, 212-220.	3.3	5
85	Quantification and analysis of coating surface strains in T-bend tests. International Journal of Advanced Manufacturing Technology, 2021, 113, 1125-1142.	3.0	4
86	The effect of substrate material properties on the failure behaviour of coatings in the Erichsen cupping test. Progress in Organic Coatings, 2021, 151, 106087.	3.9	4
87	Nano-and micro-silica modification of epoxy polymers. , 2010, , .		3
88	A Comparison of How Well Two Different Models of Thermoâ€Setting Polymers Predict Their Thermoâ€Mechanical Aspects. Macromolecular Symposia, 2017, 372, 51-68.	0.7	3
89	A microstructure image-based numerical model for predicting the fracture toughness of alumina trihydrate (ATH) ï¬lled poly(methyl methacrylate) (PMMA) composites. Composites Part B: Engineering, 2022, 232, 109632.	12.0	3
90	The effect of varying molecular weight on the performance of HMMM-crosslinked polyester coatings. Progress in Organic Coatings, 2020, 149, 105920.	3.9	2

#	Article	IF	Citations
91	Characterizing Mechanical Properties of Hybrid Alumina Carbon Fiber Composites with Piezospectroscopy. , 2016, , .		1
92	Effect of Functionalization on Mechanical Properties of Hybrid Carbon Fiber Reinforced Polymer (HCFRP) Composites Using Piezopectroscopy. , 2018, , .		1
93	Adhesives with Nanoparticles. , 2018, , 1677-1702.		1
94	The effect of structure-property relationships on the formability of pigmented polyester coatings. Progress in Organic Coatings, 2021, 154, 106198.	3.9	1
95	A methodology for the use of alkyd paint in thermally aged easel painting reconstructions for mechanical testing. Journal of Cultural Heritage, 2022, 55, 237-244.	3.3	1
96	Adhesives with Nanoparticles. , 2017, , 1-27.		0
97	Dispersion of Nanoparticles in Polymers. , 2017, , 279-317.		0