

Robert Joseph Young

List of Publications by Year in descending order

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255
papers

20,132
citations

13099

68
h-index

12946

131
g-index

261
all docs

261
docs citations

261
times ranked

20359
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical properties of graphene and graphene-based nanocomposites. Progress in Materials Science, 2017, 90, 75-127.	32.8	1,682
2	The mechanics of graphene nanocomposites: A review. Composites Science and Technology, 2012, 72, 1459-1476.	7.8	1,076
3	Sensitive electromechanical sensors using viscoelastic graphene-polymer nanocomposites. Science, 2016, 354, 1257-1260.	12.6	676
4	Composites with carbon nanotubes and graphene: An outlook. Science, 2018, 362, 547-553.	12.6	662
5	Graphene Oxide: Structural Analysis and Application as a Highly Transparent Support for Electron Microscopy. ACS Nano, 2009, 3, 2547-2556.	14.6	629
6	The Real Graphene Oxide Revealed: Stripping the Oxidative Debris from the Graphene-like Sheets. Angewandte Chemie - International Edition, 2011, 50, 3173-3177.	13.8	569
7	Interfacial Stress Transfer in a Graphene Monolayer Nanocomposite. Advanced Materials, 2010, 22, 2694-2697.	21.0	551
8	Introduction to Polymers. , 1991, , .		470
9	Investigation into the deformation of carbon nanotubes and their composites through the use of Raman spectroscopy. Composites Part A: Applied Science and Manufacturing, 2001, 32, 401-411.	7.6	422
10	Collapse of Single-Wall Carbon Nanotubes is Diameter Dependent. Physical Review Letters, 2004, 92, 095501.	7.8	328
11	Introduction to Polymers. , 0, , .		324
12	Graphene/elastomer nanocomposites. Carbon, 2015, 95, 460-484.	10.3	308
13	Electrical percolation in graphene-polymer composites. 2D Materials, 2018, 5, 032003.	4.4	266
14	Optimizing the Reinforcement of Polymer-Based Nanocomposites by Graphene. ACS Nano, 2012, 6, 2086-2095.	14.6	255
15	Control of the functionality of graphene oxide for its application in epoxy nanocomposites. Polymer, 2013, 54, 6437-6446.	3.8	252
16	Mechanisms of mechanical reinforcement by graphene and carbon nanotubes in polymer nanocomposites. Nanoscale, 2020, 12, 2228-2267.	5.6	222
17	The mechanics of reinforcement of polymers by graphene nanoplatelets. Composites Science and Technology, 2018, 154, 110-116.	7.8	221
18	Two-Step Electrochemical Intercalation and Oxidation of Graphite for the Mass Production of Graphene Oxide. Journal of the American Chemical Society, 2017, 139, 17446-17456.	13.7	211

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19	Effect of fibre microstructure upon the modulus of PAN- and pitch-based carbon fibres. Carbon, 1995, 33, 97-107.	10.3	209
20	Deoxygenation of Graphene Oxide: Reduction or Cleaning?. Chemistry of Materials, 2013, 25, 3580-3588.	6.7	198
21	Copper/graphene composites: a review. Journal of Materials Science, 2019, 54, 12236-12289.	3.7	193
22	Rapidly switchable water-sensitive shape-memory cellulose/elastomer nano-composites. Soft Matter, 2012, 8, 2509.	2.7	192
23	Raman spectroscopy study of HM carbon fibres: effect of plasma treatment on the interfacial properties of single fibre/epoxy composites. Carbon, 2002, 40, 845-855.	10.3	190
24	Effective Young's Modulus of Bacterial and Microfibrillated Cellulose Fibrils in Fibrous Networks. Biomacromolecules, 2012, 13, 1340-1349.	5.4	189
25	Supercapacitance from Cellulose and Carbon Nanotube Nanocomposite Fibers. ACS Applied Materials & Interfaces, 2013, 5, 9983-9990.	8.0	183
26	The role of functional groups on graphene oxide in epoxy nanocomposites. Polymer, 2013, 54, 5821-5829.	3.8	163
27	Mechanisms of Liquid-Phase Exfoliation for the Production of Graphene. ACS Nano, 2020, 14, 10976-10985.	14.6	157
28	Analysis of Structure/Property Relationships in Silkworm (Bombyx mori) and Spider Dragline (Nephila) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	5.4	148
29	Carbon nanofibres produced from electrospun cellulose nanofibres. Carbon, 2013, 58, 66-75.	10.3	147
30	Interfacial Stress Transfer in Graphene Oxide Nanocomposites. ACS Applied Materials & Interfaces, 2013, 5, 456-463.	8.0	144
31	Analysis of spider silk in native and supercontracted states using Raman spectroscopy. Polymer, 1999, 40, 2493-2500.	3.8	143
32	Deformation of Wrinkled Graphene. ACS Nano, 2015, 9, 3917-3925.	14.6	143
33	Strain Mapping in a Graphene Monolayer Nanocomposite. ACS Nano, 2011, 5, 3079-3084.	14.6	142
34	Effect of the orientation of graphene-based nanoplatelets upon the Young's modulus of nanocomposites. Composites Science and Technology, 2016, 123, 125-133.	7.8	137
35	Relationship between mechanical properties of and crack progogation in epoxy resin adhesives. Polymer, 1978, 19, 574-582.	3.8	134
36	The mechanical properties of epoxy resins. Journal of Materials Science, 1980, 15, 1823-1831.	3.7	134

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37	Effects of plasma oxidation on the surface and interfacial properties of ultra-high modulus carbon fibres. <i>Composites Part A: Applied Science and Manufacturing</i> , 2001, 32, 361-371.	7.6	131
38	Stability of crack propagation in epoxy resins. <i>Polymer</i> , 1977, 18, 1075-1080.	3.8	128
39	Composite micromechanics of hemp fibres and epoxy resin microdroplets. <i>Composites Science and Technology</i> , 2004, 64, 767-772.	7.8	126
40	Wide-Area Strain Sensors based upon Graphene-Polymer Composite Coatings Probed by Raman Spectroscopy. <i>Advanced Functional Materials</i> , 2014, 24, 2865-2874.	14.9	122
41	The mechanical properties of epoxy resins. <i>Journal of Materials Science</i> , 1980, 15, 1814-1822.	3.7	113
42	Identifying the fluorescence of graphene oxide. <i>Journal of Materials Chemistry C</i> , 2013, 1, 338-342.	5.5	112
43	Modeling Crystal and Molecular Deformation in Regenerated Cellulose Fibers. <i>Biomacromolecules</i> , 2005, 6, 507-513.	5.4	111
44	Simultaneous SAXS/WAXS and d.s.c. analysis of the melting and recrystallization behaviour of quenched polypropylene. <i>Polymer</i> , 1994, 35, 1352-1358.	3.8	104
45	Molecular deformation processes in aromatic high modulus polymer fibres. <i>Polymer</i> , 1999, 40, 857-870.	3.8	104
46	Single-Walled Carbon Nanotube Networks Decorated with Silver Nanoparticles: A Novel Graded SERS Substrate. <i>Journal of Physical Chemistry C</i> , 2007, 111, 16167-16173.	3.1	100
47	Raman spectroscopy of stressed high modulus poly(p-phenylene benzobisthiazole) fibres. <i>Polymer</i> , 1987, 28, 1833-1840.	3.8	99
48	Failure of brittle polymers by slow crack growth. <i>Journal of Materials Science</i> , 1975, 10, 1334-1342.	3.7	97
49	Coefficient of thermal expansion of carbon nanotubes measured by Raman spectroscopy. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	97
50	Deformation mechanisms in polymer fibres and nanocomposites. <i>Polymer</i> , 2007, 48, 2-18.	3.8	95
51	Hybrid multifunctional graphene/glass-fibre polypropylene composites. <i>Composites Science and Technology</i> , 2016, 137, 44-51.	7.8	93
52	The Effective Young's Modulus of Carbon Nanotubes in Composites. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 433-440.	8.0	91
53	The rheological behaviour of concentrated dispersions of graphene oxide. <i>Journal of Materials Science</i> , 2014, 49, 6311-6320.	3.7	91
54	Investigating nanostructures in carbon fibres using Raman spectroscopy. <i>Carbon</i> , 2018, 130, 178-184.	10.3	91

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55	Salt-assisted direct exfoliation of graphite into high-quality, large-size, few-layer graphene sheets. <i>Nanoscale</i> , 2013, 5, 7202.	5.6	88
56	Strain-induced phonon shifts in tungsten disulfide nanoplatelets and nanotubes. <i>2D Materials</i> , 2017, 4, 015007.	4.4	85
57	Analysis of the fragmentation test for carbon-fibre/epoxy model composites by means of Raman spectroscopy. <i>Composites Science and Technology</i> , 1994, 52, 505-517.	7.8	84
58	Raman spectroscopy study of high-modulus carbon fibres: effect of plasma-treatment on the interfacial properties of single-fibre-epoxy composites. <i>Carbon</i> , 2002, 40, 857-875.	10.3	84
59	The effect of solvents on spider silk studied by mechanical testing and single-fibre Raman spectroscopy. <i>International Journal of Biological Macromolecules</i> , 1999, 24, 295-300.	7.5	82
60	Three techniques of interfacial bond strength estimation from direct observation of crack initiation and propagation in polymer-fibre systems. <i>Composites Part A: Applied Science and Manufacturing</i> , 2001, 32, 435-443.	7.6	81
61	The mechanisms of reinforcement of polypropylene by graphene nanoplatelets. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2017, 216, 2-9.	3.5	81
62	Quantitative determination of the spatial orientation of graphene by polarized Raman spectroscopy. <i>Carbon</i> , 2015, 88, 215-224.	10.3	80
63	Hybrid hollow spheres of carbon@Co _x Ni _{1-x} MoO ₄ as advanced electrodes for high-performance asymmetric supercapacitors. <i>Nanoscale</i> , 2019, 11, 3281-3291.	5.6	79
64	Toughening of Epoxy Matrices with Reduced Single-Walled Carbon Nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 2309-2317.	8.0	77
65	Analysis of the single-fibre pull-out test by means of Raman spectroscopy: Part II. Micromechanics of deformation for an aramid/epoxy system. <i>Composites Science and Technology</i> , 1995, 53, 411-421.	7.8	75
66	Self-assembly of a layered two-dimensional molecularly woven fabric. <i>Nature</i> , 2020, 588, 429-435.	27.8	74
67	Strong Dependence of Mechanical Properties on Fiber Diameter for Polymer-Nanotube Composite Fibers: Differentiating Defect from Orientation Effects. <i>ACS Nano</i> , 2010, 4, 6989-6997.	14.6	73
68	Crack propagation in and fractography of epoxy resins. <i>Journal of Materials Science</i> , 1979, 14, 1609-1618.	3.7	72
69	Crack velocity and the fracture of bone. <i>Journal of Biomechanics</i> , 1978, 11, 473-479.	2.1	71
70	The Effect of Stress Transfer Within Double-Walled Carbon Nanotubes Upon Their Ability to Reinforce Composites. <i>Advanced Materials</i> , 2009, 21, 3591-3595.	21.0	71
71	Graphene oxide and base-washed graphene oxide as reinforcements in PMMA nanocomposites. <i>Composites Science and Technology</i> , 2013, 88, 158-164.	7.8	71
72	The Effect of Nanotube Content and Orientation on the Mechanical Properties of Polymer-Nanotube Composite Fibers: Separating Intrinsic Reinforcement from Orientational Effects. <i>Advanced Functional Materials</i> , 2011, 21, 364-371.	14.9	70

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73	Simultaneous global and local strain sensing in SWCNT-epoxy composites by Raman and impedance spectroscopy. <i>Composites Science and Technology</i> , 2011, 71, 160-166.	7.8	68
74	Reversible Loss of Bernal Stacking during the Deformation of Few-Layer Graphene in Nanocomposites. <i>ACS Nano</i> , 2013, 7, 7287-7294.	14.6	68
75	Benchmarking of graphene-based materials: real commercial products versus ideal graphene. <i>2D Materials</i> , 2019, 6, 025006.	4.4	68
76	Factors controlling the strength of carbon fibres in tension. <i>Composites Part A: Applied Science and Manufacturing</i> , 2014, 57, 88-94.	7.6	67
77	A numerical study of ply orientation on ballistic impact resistance of multi-ply fabric panels. <i>Composites Part B: Engineering</i> , 2015, 68, 259-265.	12.0	67
78	Molecular deformation in spider dragline silk subjected to stress. <i>Polymer</i> , 2000, 41, 1223-1227.	3.8	66
79	Deformation micromechanics of natural cellulose fibre networks and composites. <i>Composites Science and Technology</i> , 2003, 63, 1225-1230.	7.8	64
80	A Raman spectroscopic investigation of heating effects and the deformation behaviour of epoxy/SWNT composites. <i>Composites Science and Technology</i> , 2004, 64, 2291-2295.	7.8	64
81	Deformation of isolated single-wall carbon nanotubes in electrospun polymer nanofibres. <i>Nanotechnology</i> , 2007, 18, 235707.	2.6	64
82	Interfacial behaviour in high temperature cured carbon fibre/epoxy resin model composite. <i>Composites</i> , 1995, 26, 541-550.	0.7	63
83	Production of carbon fibres from a pyrolysed and graphitised liquid crystalline cellulose fibre precursor. <i>Journal of Materials Science</i> , 2012, 47, 5402-5410.	3.7	62
84	Characterization and micromechanical testing of the interphase of aramid-reinforced epoxy composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2001, 32, 331-342.	7.6	60
85	A microstructural study of silicon carbide fibres through the use of Raman microscopy. <i>Journal of Materials Science</i> , 2001, 36, 55-66.	3.7	60
86	Structure of and stress transfer in fibres spun from carbon nanotubes produced by chemical vapour deposition. <i>Carbon</i> , 2011, 49, 4149-4158.	10.3	60
87	Enhanced thermal and fire retardancy properties of polypropylene reinforced with a hybrid graphene/glass-fibre filler. <i>Composites Science and Technology</i> , 2018, 156, 95-102.	7.8	59
88	Studies of rubber-toughened poly(methyl methacrylate): 1. Preparation and thermal properties of blends of poly(methyl methacrylate) with multiple-layer toughening particles. <i>Polymer</i> , 1993, 34, 61-69.	3.8	58
89	The effect of flake diameter on the reinforcement of few-layer graphene-PMMA composites. <i>Composites Science and Technology</i> , 2015, 111, 17-22.	7.8	58
90	The effect of nanostructure upon the deformation micromechanics of carbon fibres. <i>Carbon</i> , 2013, 52, 372-378.	10.3	57

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91	Mechanical Stability of Flexible Graphene-Based Displays. ACS Applied Materials & Interfaces, 2016, 8, 22605-22614.	8.0	56
92	PMMA-grafted graphene nanoplatelets to reinforce the mechanical and thermal properties of PMMA composites. Carbon, 2020, 157, 750-760.	10.3	56
93	Tensile and compressive deformation of polypyridobisimidazole (PIPD)-based 'M5' rigid-rod polymer fibres. Polymer, 1999, 40, 3421-3431.	3.8	55
94	Micromechanics of reinforcement of a graphene-based thermoplastic elastomer nanocomposite. Composites Part A: Applied Science and Manufacturing, 2018, 110, 84-92.	7.6	53
95	Electrochemical exfoliation of graphite in quaternary ammonium-based deep eutectic solvents: a route for the mass production of graphene. Nanoscale, 2015, 7, 11386-11392.	5.6	52
96	Negative Gauge Factor Piezoresistive Composites Based on Polymers Filled with MoS ₂ Nanosheets. ACS Nano, 2019, 13, 6845-6855.	14.6	52
97	Hybrid poly(ether ether ketone) composites reinforced with a combination of carbon fibres and graphene nanoplatelets. Composites Science and Technology, 2019, 175, 60-68.	7.8	52
98	Fibre deformation and residual thermal stresses in carbon fibre reinforced PEEK. Composites Science and Technology, 1989, 34, 243-258.	7.8	51
99	Thermal residual stresses and their toughening effect in Al ₂ O ₃ platelet reinforced glass. Acta Materialia, 1999, 47, 3233-3240.	7.9	51
100	Characterisation of the microstructure and deformation of high modulus cellulose fibres. Polymer, 2003, 44, 5901-5908.	3.8	50
101	Failure phenomena in fibre-reinforced composites. Part 6: a finite element study of stress concentrations in unidirectional carbon fibre-reinforced epoxy composites. Composites Science and Technology, 2004, 64, 645-656.	7.8	50
102	Microstructure and mechanical behaviour of aluminium matrix composites reinforced with graphene oxide and carbon nanotubes. Journal of Materials Science, 2017, 52, 13466-13477.	3.7	48
103	The solid-state polymerization and physical properties of bis(ethyl urethane) of 2,4-hexadiyne-1,6-diol: 3. Mechanical properties. Polymer, 1983, 24, 1023-1030.	3.8	47
104	Effect of the C/O ratio in graphene oxide materials on the reinforcement of epoxy-based nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 281-291.	2.1	47
105	Crystal lattice deformation in single poly(p-phenylene benzobisoxazole) fibres. Polymer, 2004, 45, 7693-7704.	3.8	46
106	Controlled interfacial adhesion of Twaron® aramid fibres in composites by the finish formulation. Composites Science and Technology, 2007, 67, 2027-2035.	7.8	46
107	Hybrid carbon fibre-carbon nanotube composite interfaces. Composites Science and Technology, 2014, 95, 114-120.	7.8	46
108	Characterization of the adhesion of single-walled carbon nanotubes in poly(p-phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50,62 Td (te	3.8	44

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109	Multifunctional Biocomposites Based on Polyhydroxyalkanoate and Graphene/Carbon Nanofiber Hybrids for Electrical and Thermal Applications. <i>ACS Applied Polymer Materials</i> , 2020, 2, 3525-3534.	4.4	44
110	Evaluation of interface fracture energy for single-fibre composites. <i>Composites Science and Technology</i> , 1998, 58, 1907-1916.	7.8	42
111	Deformation micromechanics in high-modulus fibres and composites. <i>Composites Science and Technology</i> , 1993, 48, 255-261.	7.8	41
112	Nanocomposites of graphene nanoplatelets in natural rubber: microstructure and mechanisms of reinforcement. <i>Journal of Materials Science</i> , 2017, 52, 9558-9572.	3.7	41
113	Crack propagation and arrest in epoxy resins. <i>Journal of Materials Science</i> , 1976, 11, 776-779.	3.7	40
114	Graphene/Polyelectrolyte Layer-by-Layer Coatings for Electromagnetic Interference Shielding. <i>ACS Applied Nano Materials</i> , 2019, 2, 5272-5281.	5.0	40
115	Strain engineering in monolayer WS ₂ and WS ₂ nanocomposites. <i>2D Materials</i> , 2020, 7, 045022.	4.4	40
116	Interfacial micromechanics in thermoplastic and thermosetting matrix carbon fibre composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 1996, 27, 973-980.	7.6	39
117	Few layer graphene-polypropylene nanocomposites: the role of flake diameter. <i>Faraday Discussions</i> , 2014, 173, 379-390.	3.2	39
118	Application of raman microscopy to the analysis of high modulus polymer fibres and composites. <i>British Polymer Journal</i> , 1989, 21, 17-21.	0.7	38
119	Effect of temperature on the graphitization process of a semianthracite. <i>Fuel Processing Technology</i> , 2002, 79, 245-250.	7.2	38
120	Raman spectroscopic study of the effect of strain on the radial breathing modes of carbon nanotubes in epoxy/SWNT composites. <i>Composites Science and Technology</i> , 2004, 64, 2297-2302.	7.8	38
121	Analysis of the single-fibre pull-out test by the use of Raman spectroscopy. Part I: pull-out of aramid fibres from an epoxy resin. <i>Composites Science and Technology</i> , 1994, 52, 387-396.	7.8	37
122	Model ceramic fibre-reinforced glass composites: residual thermal stresses. <i>Composites</i> , 1994, 25, 488-493.	0.7	37
123	Interfacial failure in poly(p-phenylene benzobisoxazole) (PBO)/epoxy single fibre pull-out specimens. <i>Composites Part A: Applied Science and Manufacturing</i> , 2001, 32, 445-455.	7.6	37
124	Molecular Orientation Distributions in Uniaxially Oriented Poly(L-lactic acid) Films Determined by Polarized Raman Spectroscopy. <i>Macromolecules</i> , 2006, 39, 3312-3321.	4.8	36
125	SWNT composite coatings as a strain sensor on glass fibres in model epoxy composites. <i>Composites Science and Technology</i> , 2009, 69, 1547-1552.	7.8	36
126	Tensile failure phenomena in carbon fibres. <i>Carbon</i> , 2016, 107, 474-481.	10.3	36

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127	Graphene and related materials in hierarchical fiber composites: Production techniques and key industrial benefits. <i>Composites Science and Technology</i> , 2020, 185, 107848.	7.8	36
128	Failure phenomena in two-dimensional multi-fibre microcomposites. Part 4: a Raman spectroscopic study on the influence of the matrix yield stress on stress concentrations. <i>Composites Part A: Applied Science and Manufacturing</i> , 2000, 31, 165-171.	7.6	34
129	Dynamic microstructural evolution of graphite under displacing irradiation. <i>Carbon</i> , 2014, 68, 273-284.	10.3	33
130	The Effect of Network Formation on the Mechanical Properties of 1D:2D Nano:Nano Composites. <i>Chemistry of Materials</i> , 2018, 30, 5245-5255.	6.7	33
131	Time-dependent failure of poly(methyl methacrylate). <i>Polymer</i> , 1976, 17, 717-722.	3.8	32
132	Interfacial stress transfer in strain engineered wrinkled and folded graphene. <i>2D Materials</i> , 2019, 6, 045026.	4.4	32
133	Tensile properties of biaxially drawn polyethylene. <i>Polymer</i> , 1990, 31, 231-236.	3.8	31
134	Comparing single-walled carbon nanotubes and samarium oxide as strain sensors for model glass-fibre/epoxy composites. <i>Composites Science and Technology</i> , 2010, 70, 88-93.	7.8	30
135	Surface functionality analysis by Boehm titration of graphene nanoplatelets functionalized via a solvent-free cycloaddition reaction. <i>Nanoscale Advances</i> , 2019, 1, 1432-1441.	4.6	30
136	Fragmentation analysis of glass fibres in model composites through the use of Raman spectroscopy. <i>Composites Part A: Applied Science and Manufacturing</i> , 2001, 32, 253-269.	7.6	29
137	Formation mechanism of peapod-derived double-walled carbon nanotubes. <i>Physical Review B</i> , 2010, 82, .	3.2	29
138	Unique identification of single-walled carbon nanotubes in composites. <i>Composites Science and Technology</i> , 2007, 67, 2135-2149.	7.8	28
139	Interfacial and internal stress transfer in carbon nanotube based nanocomposites. <i>Journal of Materials Science</i> , 2016, 51, 344-352.	3.7	28
140	Chain stretching in a poly(ethylene terephthalate) fibre. <i>Polymer</i> , 1994, 35, 3844-3847.	3.8	27
141	A study of transcrystalline polypropylene/ single-aramid-fibre pull-out behaviour using Raman spectroscopy. <i>Composites Part A: Applied Science and Manufacturing</i> , 1996, 27, 833-838.	7.6	27
142	Influence of Domain Orientation on the Mechanical Properties of Regenerated Cellulose Fibers. <i>Biomacromolecules</i> , 2007, 8, 624-630.	5.4	27
143	Assessment of interface damage during the deformation of carbon nanotube composites. <i>Journal of Materials Science</i> , 2010, 45, 1425-1431.	3.7	27
144	Modelling mechanical percolation in graphene-reinforced elastomer nanocomposites. <i>Composites Part B: Engineering</i> , 2019, 178, 107506.	12.0	27

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145	Determination of residual stresses in SiC monofilament reinforced metal-matrix composites using Raman spectroscopy. <i>Composites Part A: Applied Science and Manufacturing</i> , 2002, 33, 1409-1416.	7.6	26
146	Dependence of fibre strain on orientation angle for off-axis fibres in composites. <i>Journal of Materials Science Letters</i> , 1992, 11, 1344-1346.	0.5	25
147	The effect of nanostructure upon the compressive strength of carbon fibres. <i>Journal of Materials Science</i> , 2013, 48, 2104-2110.	3.7	25
148	Graphene-Polyurethane Coatings for Deformable Conductors and Electromagnetic Interference Shielding. <i>Advanced Electronic Materials</i> , 2020, 6, 2000429.	5.1	25
149	Direct imaging of molecules in polydiacetylene single crystals. <i>Polymer</i> , 1986, 27, 202-210.	3.8	24
150	Formation and properties of urethane-diacetylene segmented block copolymers. <i>Polymer</i> , 1991, 32, 1713-1725.	3.8	24
151	Measurement of micro stress fields in epoxy matrix around a fibre using phase-stepping automated photoelasticity. <i>Composites Science and Technology</i> , 2003, 63, 1783-1787.	7.8	24
152	Deformation micromechanics of a model cellulose/glass fibre hybrid composite. <i>Composites Science and Technology</i> , 2009, 69, 2218-2224.	7.8	24
153	The microstructure of a graphene-reinforced tennis racquet. <i>Journal of Materials Science</i> , 2016, 51, 3861-3867.	3.7	24
154	Raman Spectra and Mechanical Properties of Graphene/Polypropylene Nanocomposites. <i>International Journal of Chemical Engineering and Applications (IJCEA)</i> , 2015, 6, 1-5.	0.3	24
155	Deformation micromechanics of spider silk. <i>Journal of Materials Science</i> , 2008, 43, 3728-3732.	3.7	23
156	The role of interlayer adhesion in graphene oxide upon its reinforcement of nanocomposites. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20150283.	3.4	23
157	Deformation mechanisms in biaxially drawn polyethylene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1991, 29, 825-835.	2.1	22
158	Determination of residual strains in ceramic-fibre reinforced composites using fluorescence spectroscopy. <i>Acta Metallurgica Et Materialia</i> , 1995, 43, 2407-2416.	1.8	22
159	Experimental studies on the interfacial shear-transfer mechanism in discontinuous glass-fibre composites. <i>Composites Science and Technology</i> , 2000, 60, 361-365.	7.8	22
160	Deformation of PBO/epoxy plain weave fabric laminae followed using Raman spectroscopy. <i>Composites Part A: Applied Science and Manufacturing</i> , 2001, 32, 499-509.	7.6	22
161	An investigation into the relationship between processing, structure, and properties for high-modulus PBO fibers. II. Hysteresis of stress-induced Raman band shifts and peak broadening, and skin-core structure. <i>Journal of Macromolecular Science - Physics</i> , 2002, 41, 61-76.	1.0	22
162	Analysis of Stress Transfer in Two-Phase Polymer Systems Using Synchrotron Microfocus X-ray Diffraction. <i>Macromolecules</i> , 2004, 37, 9503-9509.	4.8	22

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163	Crystallographic texturing in single poly(p-phenylene benzobisoxazole) fibres investigated using synchrotron radiation. <i>Polymer</i> , 2005, 46, 1935-1942.	3.8	22
164	Controlling and mapping interfacial stress transfer in fragmented hybrid carbon fibre-carbon nanotube composites. <i>Composites Science and Technology</i> , 2014, 100, 121-127.	7.8	22
165	Realizing the theoretical stiffness of graphene in composites through confinement between carbon fibers. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 113, 311-317.	7.6	22
166	Chitin-derived porous carbon loaded with Co, N and S with enhanced performance towards electrocatalytic oxygen reduction, oxygen evolution, and hydrogen evolution reactions. <i>Electrochimica Acta</i> , 2019, 304, 350-359.	5.2	22
167	Relationship between structure and mechanical properties in high-modulus poly (2,5(6)-benzoxazole) (ABPBO) fibres. <i>Polymer</i> , 1992, 33, 975-982.	3.8	21
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