Robert Joseph Young

List of Publications by Year
in descending order

255 papers	20,132 citations	13068 68 h-index	12910 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.	16.0	1,682
2	The mechanics of graphene nanocomposites: A review. Composites Science and Technology, 2012, 72, 1459-1476.	3.8	1,076
3	Sensitive electromechanical sensors using viscoelastic graphene-polymer nanocomposites. Science, 2016, 354, 1257-1260.	6.0	676
4	Composites with carbon nanotubes and graphene: An outlook. Science, 2018, 362, 547-553.	6.0	662
5	Graphene Oxide: Structural Analysis and Application as a Highly Transparent Support for Electron Microscopy. ACS Nano, 2009, 3, 2547-2556.	7.3	629
6	The Real Graphene Oxide Revealed: Stripping the Oxidative Debris from the Grapheneâ€like Sheets. Angewandte Chemie - International Edition, 2011, 50, 3173-3177.	7.2	569
7	Interfacial Stress Transfer in a Graphene Monolayer Nanocomposite. Advanced Materials, 2010, 22, 2694-2697.	11.1	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.	3.8	422
10	Collapse of Single-Wall Carbon Nanotubes is Diameter Dependent. Physical Review Letters, 2004, 92, 095501.	2.9	328
11	Introduction to Polymers. , 0, , .		324
12	Graphene/elastomer nanocomposites. Carbon, 2015, 95, 460-484.	5.4	308
13	Electrical percolation in grapheneâ€“polymer composites. 2D Materials, 2018, 5, 032003.	2.0	266
14	Optimizing the Reinforcement of Polymer-Based Nanocomposites by Graphene. ACS Nano, 2012, 6, 2086-2095.	7.3	255
15	Control of the functionality of graphene oxide for its application inÂepoxy nanocomposites. Polymer, 2013, 54, 6437-6446.	1.8	252
16	Mechanisms of mechanical reinforcement by graphene and carbon nanotubes in polymer nanocomposites. Nanoscale, 2020, 12, 2228-2267.	2.8	222
17	The mechanics of reinforcement of polymers by graphene nanoplatelets. Composites Science and Technology, 2018, 154, 110-116.	3.8	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.	6.6	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.	5.4	209
20	Deoxygenation of Graphene Oxide: Reduction or Cleaning?. Chemistry of Materials, 2013, 25, 3580-3588.	3.2	198
21	Copper/graphene composites: a review. Journal of Materials Science, 2019, 54, 12236-12289.	1.7	193
22	Rapidly switchable water-sensitive shape-memory cellulose/elastomer nano-composites. Soft Matter, 2012, 8, 2509.	1.2	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.	5.4	190
24	Effective Youngâ€™s Modulus of Bacterial and Microfibrillated Cellulose Fibrils in Fibrous Networks. Biomacromolecules, 2012, 13, 1340-1349.	2.6	189
25	Supercapacitance from Cellulose and Carbon Nanotube Nanocomposite Fibers. ACS Applied Materials & Interfaces, 2013, 5, 9983-9990.	4.0	183
26	The role of functional groups on graphene oxide in epoxy nanocomposites. Polymer, 2013, 54, 5821-5829.	1.8	163
27	Mechanisms of Liquid-Phase Exfoliation for the Production of Graphene. ACS Nano, 2020, 14, 10976-10985.	7.3	157
28	Analysis of Structure/Property Relationships in Silkworm (Bombyx mori) and Spider Dragline (Nephila) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.6	148
29	Carbon nanofibres produced from electrospun cellulose nanofibres. Carbon, 2013, 58, 66-75.	5.4	147
30	Interfacial Stress Transfer in Graphene Oxide Nanocomposites. ACS Applied Materials & Interfaces, 2013, 5, 456-463.	4.0	144
31	Analysis of spider silk in native and supercontracted states using Raman spectroscopy. Polymer, 1999, 40, 2493-2500.	1.8	143
32	Deformation of Wrinkled Graphene. ACS Nano, 2015, 9, 3917-3925.	7.3	143
33	Strain Mapping in a Graphene Monolayer Nanocomposite. ACS Nano, 2011, 5, 3079-3084.	7.3	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.	3.8	137
35	Relationship between mechanical properties of and crack progogation in epoxy resin adhesives. Polymer, 1978, 19, 574-582.	1.8	134
36	The mechanical properties of epoxy resins. Journal of Materials Science, 1980, 15, 1823-1831.	1.7	134

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37	Effects of plasma oxidation on the surface and interfacial properties of ultra-high modulus carbon fibres. Composites Part A: Applied Science and Manufacturing, 2001, 32, 361-371.	3.8	131
38	Stability of crack propagation in epoxy resins. Polymer, 1977, 18, 1075-1080.	1.8	128
39	Composite micromechanics of hemp fibres and epoxy resin microdroplets. Composites Science and Technology, 2004, 64, 767-772.	3.8	126
40	Wideâ€Area Strain Sensors based upon Grapheneâ€Polymer Composite Coatings Probed by Raman Spectroscopy. Advanced Functional Materials, 2014, 24, 2865-2874.	7.8	122
41	The mechanical properties of epoxy resins. Journal of Materials Science, 1980, 15, 1814-1822.	1.7	113
42	Identifying the fluorescence of graphene oxide. Journal of Materials Chemistry C, 2013, 1, 338-342.	2.7	112
43	Modeling Crystal and Molecular Deformation in Regenerated Cellulose Fibers. Biomacromolecules, 2005, 6, 507-513.	2.6	111
44	Simultaneous SAXS/WAXS and d.s.c. analysis of the melting and recrystallization behaviour of quenched polypropylene. Polymer, 1994, 35, 1352-1358.	1.8	104
45	Molecular deformation processes in aromatic high modulus polymer fibres. Polymer, 1999, 40, 857-870.	1.8	104
46	Single-Walled Carbon Nanotube Networks Decorated with Silver Nanoparticles:â€‰ A Novel Graded SERS Substrate. Journal of Physical Chemistry C, 2007, 111, 16167-16173.	1.5	100
47	Raman spectroscopy of stressed high modulus poly(p-phenylene benzobisthiazole) fibres. Polymer, 1987, 28, 1833-1840.	1.8	99
48	Failure of brittle polymers by slow crack growth. Journal of Materials Science, 1975, 10, 1334-1342.	1.7	97
49	Coefficient of thermal expansion of carbon nanotubes measured by Raman spectroscopy. Applied Physics Letters, 2014, 104, .	1.5	97
50	Deformation mechanisms in polymer fibres and nanocomposites. Polymer, 2007, 48, 2-18.	1.8	95
51	Hybrid multifunctional graphene/glass-fibre polypropylene composites. Composites Science and Technology, 2016, 137, 44-51.	3.8	93
52	The Effective Youngâ€™s Modulus of Carbon Nanotubes in Composites. ACS Applied Materials & Interfaces, 2011, 3, 433-440.	4.0	91
53	The rheological behaviour of concentrated dispersions of graphene oxide. Journal of Materials Science, 2014, 49, 6311-6320.	1.7	91
54	Investigating nanostructures in carbon fibres using Raman spectroscopy. Carbon, 2018, 130, 178-184.	5.4	91

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55	Salt-assisted direct exfoliation of graphite into high-quality, large-size, few-layer graphene sheets. Nanoscale, 2013, 5, 7202.	2.8	88
56	Strain-induced phonon shifts in tungsten disulfide nanoplatelets and nanotubes. 2D Materials, 2017, 4, 015007.	2.0	85
57	Analysis of the fragmentation test for carbon-fibre/epoxy model composites by means of Raman spectroscopy. Composites Science and Technology, 1994, 52, 505-517.	3.8	84
58	Raman spectroscopy study of high-modulus carbon fibres: effect of plasma-treatment on the interfacial properties of single-fibreâ€“epoxy composites. Carbon, 2002, 40, 857-875.	5.4	84
59	The effect of solvents on spider silk studied by mechanical testing and single-fibre Raman spectroscopy. International Journal of Biological Macromolecules, 1999, 24, 295-300.	3.6	82
60	Three techniques of interfacial bond strength estimation from direct observation of crack initiation and propagation in polymerâ€“fibre systems. Composites Part A: Applied Science and Manufacturing, 2001, 32, 435-443.	3.8	81
61	The mechanisms of reinforcement of polypropylene by graphene nanoplatelets. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 216, 2-9.	1.7	81
62	Quantitative determination of the spatial orientation of graphene by polarized Raman spectroscopy. Carbon, 2015, 88, 215-224.	5.4	80
63	Hybrid hollow spheres of carbon@Co_xNi_{1âˆ’x}MoO₄ as advanced electrodes for high-performance asymmetric supercapacitors. Nanoscale, 2019, 11, 3281-3291.	2.8	79
64	Toughening of Epoxy Matrices with Reduced Single-Walled Carbon Nanotubes. ACS Applied Materials & Interfaces, 2011, 3, 2309-2317.	4.0	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. Composites Science and Technology, 1995, 53, 411-421.	3.8	75
66	Self-assembly of a layered two-dimensional molecularly woven fabric. Nature, 2020, 588, 429-435.	13.7	74
67	Strong Dependence of Mechanical Properties on Fiber Diameter for Polymerâˆ’Nanotube Composite Fibers: Differentiating Defect from Orientation Effects. ACS Nano, 2010, 4, 6989-6997.	7.3	73
68	Crack propagation in and fractography of epoxy resins. Journal of Materials Science, 1979, 14, 1609-1618.	1.7	72
69	Crack velocity and the fracture of bone. Journal of Biomechanics, 1978, 11, 473-479.	0.9	71
70	The Effect of Stress Transfer Within Doubleâ€Walled Carbon Nanotubes Upon Their Ability to Reinforce Composites. Advanced Materials, 2009, 21, 3591-3595.	11.1	71
71	Graphene oxide and base-washed graphene oxide as reinforcements in PMMA nanocomposites. Composites Science and Technology, 2013, 88, 158-164.	3.8	71
72	The Effect of Nanotube Content and Orientation on the Mechanical Properties of Polymer-Nanotube Composite Fibers: Separating Intrinsic Reinforcement from Orientational Effects. Advanced Functional Materials, 2011, 21, 364-371.	7.8	70

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73	Simultaneous global and local strain sensing in SWCNTâ€“epoxy composites by Raman and impedance spectroscopy. Composites Science and Technology, 2011, 71, 160-166.	3.8	68
74	Reversible Loss of Bernal Stacking during the Deformation of Few-Layer Graphene in Nanocomposites. ACS Nano, 2013, 7, 7287-7294.	7.3	68
75	Benchmarking of graphene-based materials: real commercial products versus ideal graphene. 2D Materials, 2019, 6, 025006.	2.0	68
76	Factors controlling the strength of carbon fibres in tension. Composites Part A: Applied Science and Manufacturing, 2014, 57, 88-94.	3.8	67
77	A numerical study of ply orientation on ballistic impact resistance of multi-ply fabric panels. Composites Part B: Engineering, 2015, 68, 259-265.	5.9	67
78	Molecular deformation in spider dragline silk subjected to stress. Polymer, 2000, 41, 1223-1227.	1.8	66
79	Deformation micromechanics of natural cellulose fibre networks and composites. Composites Science and Technology, 2003, 63, 1225-1230.	3.8	64
80	A Raman spectroscopic investigation of heating effects and the deformation behaviour of epoxy/SWNT composites. Composites Science and Technology, 2004, 64, 2291-2295.	3.8	64
81	Deformation of isolated single-wall carbon nanotubes in electrospun polymer nanofibres. Nanotechnology, 2007, 18, 235707.	1.3	64
82	Interfacial behaviour in high temperature cured carbon fibre/epoxy resin model composite. Composites, 1995, 26, 541-550.	0.9	63
83	Production of carbon fibres from a pyrolysed and graphitised liquid crystalline cellulose fibre precursor. Journal of Materials Science, 2012, 47, 5402-5410.	1.7	62
84	Characterization and micromechanical testing of the interphase of aramid-reinforced epoxy composites. Composites Part A: Applied Science and Manufacturing, 2001, 32, 331-342.	3.8	60
85	A microstructural study of silicon carbide fibres through the use of Raman microscopy. Journal of Materials Science, 2001, 36, 55-66.	1.7	60
86	Structure of and stress transfer in fibres spun from carbon nanotubes produced by chemical vapour deposition. Carbon, 2011, 49, 4149-4158.	5.4	60
87	Enhanced thermal and fire retardancy properties of polypropylene reinforced with a hybrid graphene/glass-fibre filler. Composites Science and Technology, 2018, 156, 95-102.	3.8	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. Polymer, 1993, 34, 61-69.	1.8	58
89	The effect of flake diameter on the reinforcement of few-layer grapheneâ€“PMMA composites. Composites Science and Technology, 2015, 111, 17-22.	3.8	58
90	The effect of nanostructure upon the deformation micromechanics of carbon fibres. Carbon, 2013, 52, 372-378.	5.4	57

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91	Mechanical Stability of Flexible Graphene-Based Displays. ACS Applied Materials & Interfaces, 2016, 8, 22605-22614.	4.0	56
92	PMMA-grafted graphene nanoplatelets to reinforce the mechanical and thermal properties of PMMA composites. Carbon, 2020, 157, 750-760.	5.4	56
93	Tensile and compressive deformation of polypyridobisimidazole (PIPD)-based `M5' rigid-rod polymer fibres. Polymer, 1999, 40, 3421-3431.	1.8	55
94	Micromechanics of reinforcement of a graphene-based thermoplastic elastomer nanocomposite. Composites Part A: Applied Science and Manufacturing, 2018, 110, 84-92.	3.8	53
95	Electrochemical exfoliation of graphite in quaternary ammonium-based deep eutectic solvents: a route for the mass production of graphane. Nanoscale, 2015, 7, 11386-11392.	2.8	52
96	Negative Gauge Factor Piezoresistive Composites Based on Polymers Filled with MoS₂ Nanosheets. ACS Nano, 2019, 13, 6845-6855.	7.3	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.	3.8	52
98	Fibre deformation and residual thermal stresses in carbon fibre reinforced PEEK. Composites Science and Technology, 1989, 34, 243-258.	3.8	51
99	Thermal residual stresses and their toughening effect in Al2O3 platelet reinforced glass. Acta Materialia, 1999, 47, 3233-3240.	3.8	51
100	Characterisation of the microstructure and deformation of high modulus cellulose fibres. Polymer, 2003, 44, 5901-5908.	1.8	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.	3.8	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.	1.7	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.	1.8	47
104	Effect of the <scp>C/O</scp> ratio in graphene oxide materials on the reinforcement of epoxyâ€based nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 281-291.	2.4	47
105	Crystal lattice deformation in single poly(p-phenylene benzobisoxazole) fibres. Polymer, 2004, 45, 7693-7704.	1.8	46
106	Controlled interfacial adhesion of TwaronÂ® aramid fibres in composites by the finish formulation. Composites Science and Technology, 2007, 67, 2027-2035.	3.8	46
107	Hybrid carbon fibreâ€"carbon nanotube composite interfaces. Composites Science and Technology, 2014, 95, 114-120.	3.8	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	1.8	44

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109	Multifunctional Biocomposites Based on Polyhydroxyalkanoate and Graphene/Carbon Nanofiber Hybrids for Electrical and Thermal Applications. ACS Applied Polymer Materials, 2020, 2, 3525-3534.	2.0	44
110	Evaluation of interface fracture energy for single-fibre composites. Composites Science and Technology, 1998, 58, 1907-1916.	3.8	42
111	Deformation micromechanics in high-modulus fibres and composites. Composites Science and Technology, 1993, 48, 255-261.	3.8	41
112	Nanocomposites of graphene nanoplatelets in natural rubber: microstructure and mechanisms of reinforcement. Journal of Materials Science, 2017, 52, 9558-9572.	1.7	41
113	Crack propagation and arrest in epoxy resins. Journal of Materials Science, 1976, 11, 776-779.	1.7	40
114	Graphene/Polyelectrolyte Layer-by-Layer Coatings for Electromagnetic Interference Shielding. ACS Applied Nano Materials, 2019, 2, 5272-5281.	2.4	40
115	Strain engineering in monolayer WS₂ and WS₂ nanocomposites. 2D Materials, 2020, 7, 045022.	2.0	40
116	Interfacial micromechanics in thermoplastic and thermosetting matrix carbon fibre composites. Composites Part A: Applied Science and Manufacturing, 1996, 27, 973-980.	3.8	39
117	Few layer grapheneâ€“polypropylene nanocomposites: the role of flake diameter. Faraday Discussions, 2014, 173, 379-390.	1.6	39
118	Application of raman microscopy to the analysis of high modulus polymer fibres and composites. British Polymer Journal, 1989, 21, 17-21.	0.7	38
119	Effect of temperature on the graphitization process of a semianthracite. Fuel Processing Technology, 2002, 79, 245-250.	3.7	38
120	Raman spectroscopic study of the effect of strain on the radial breathing modes of carbon nanotubes in epoxy/SWNT composites. Composites Science and Technology, 2004, 64, 2297-2302.	3.8	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. Composites Science and Technology, 1994, 52, 387-396.	3.8	37
122	Model ceramic fibre-reinforced glass composites: residual thermal stresses. Composites, 1994, 25, 488-493.	0.9	37
123	Interfacial failure in poly(p-phenylene benzobisoxazole) (PBO)/epoxy single fibre pull-out specimens. Composites Part A: Applied Science and Manufacturing, 2001, 32, 445-455.	3.8	37
124	Molecular Orientation Distributions in Uniaxially Oriented Poly(l-lactic acid) Films Determined by Polarized Raman Spectroscopy. Macromolecules, 2006, 39, 3312-3321.	2.2	36
125	SWNT composite coatings as a strain sensor on glass fibres in model epoxy composites. Composites Science and Technology, 2009, 69, 1547-1552.	3.8	36
126	Tensile failure phenomena in carbon fibres. Carbon, 2016, 107, 474-481.	5.4	36

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127	Graphene and related materials in hierarchical fiber composites: Production techniques and key industrial benefits. Composites Science and Technology, 2020, 185, 107848.	3.8	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. Composites Part A: Applied Science and Manufacturing, 2000, 31, 165-171.	3.8	34
129	Dynamic microstructural evolution of graphite under displacing irradiation. Carbon, 2014, 68, 273-284.	5.4	33
130	The Effect of Network Formation on the Mechanical Properties of 1D:2D Nano:Nano Composites. Chemistry of Materials, 2018, 30, 5245-5255.	3.2	33
131	Time-dependent failure of poly(methyl methacrylate). Polymer, 1976, 17, 717-722.	1.8	32
132	Interfacial stress transfer in strain engineered wrinkled and folded graphene. 2D Materials, 2019, 6, 045026.	2.0	32
133	Tensile properties of biaxially drawn polyethylene. Polymer, 1990, 31, 231-236.	1.8	31
134	Comparing single-walled carbon nanotubes and samarium oxide as strain sensors for model glass-fibre/epoxy composites. Composites Science and Technology, 2010, 70, 88-93.	3.8	30
135	Surface functionality analysis by Boehm titration of graphene nanoplatelets functionalized<i>via</i>a solvent-free cycloaddition reaction. Nanoscale Advances, 2019, 1, 1432-1441.	2.2	30
136	Fragmentation analysis of glass fibres in model composites through the use of Raman spectroscopy. Composites Part A: Applied Science and Manufacturing, 2001, 32, 253-269.	3.8	29
137	Formation mechanism of peapod-derived double-walled carbon nanotubes. Physical Review B, 2010, 82, .	1.1	29
138	Unique identification of single-walled carbon nanotubes in composites. Composites Science and Technology, 2007, 67, 2135-2149.	3.8	28
139	Interfacial and internal stress transfer in carbon nanotube based nanocomposites. Journal of Materials Science, 2016, 51, 344-352.	1.7	28
140	Chain stretching in a poly(ethylene terephthalate) fibre. Polymer, 1994, 35, 3844-3847.	1.8	27
141	A study of transcrystalline polypropylene/ single-aramid-fibre pull-out behaviour using Raman spectroscopy. Composites Part A: Applied Science and Manufacturing, 1996, 27, 833-838.	3.8	27
142	Influence of Domain Orientation on the Mechanical Properties of Regenerated Cellulose Fibers. Biomacromolecules, 2007, 8, 624-630.	2.6	27
143	Assessment of interface damage during the deformation of carbon nanotube composites. Journal of Materials Science, 2010, 45, 1425-1431.	1.7	27
144	Modelling mechanical percolation in graphene-reinforced elastomer nanocomposites. Composites Part B: Engineering, 2019, 178, 107506.	5.9	27

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145	Determination of residual stresses in SiC monofilament reinforced metal-matrix composites using Raman spectroscopy. Composites Part A: Applied Science and Manufacturing, 2002, 33, 1409-1416.	3.8	26
146	Dependence of fibre strain on orientation angle for off-axis fibres in composites. Journal of Materials Science Letters, 1992, 11, 1344-1346.	0.5	25
147	The effect of nanostructure upon the compressive strength of carbon fibres. Journal of Materials Science, 2013, 48, 2104-2110.	1.7	25
148	Grapheneâ€“Polyurethane Coatings for Deformable Conductors and Electromagnetic Interference Shielding. Advanced Electronic Materials, 2020, 6, 2000429.	2.6	25
149	Direct imaging of molecules in polydiacetylene single crystals. Polymer, 1986, 27, 202-210.	1.8	24
150	Formation and properties of urethane-diacetylene segmented block copolymers. Polymer, 1991, 32, 1713-1725.	1.8	24
151	Measurement of micro stress fields in epoxy matrix around a fibre using phase-stepping automated photoelasticity. Composites Science and Technology, 2003, 63, 1783-1787.	3.8	24
152	Deformation micromechanics of a model cellulose/glass fibre hybrid composite. Composites Science and Technology, 2009, 69, 2218-2224.	3.8	24
153	The microstructure of a graphene-reinforced tennis racquet. Journal of Materials Science, 2016, 51, 3861-3867.	1.7	24
154	Raman Spectra and Mechanical Properties of Graphene/Polypropylene Nanocomposites. International Journal of Chemical Engineering and Applications (IJCEA), 2015, 6, 1-5.	0.3	24
155	Deformation micromechanics of spider silk. Journal of Materials Science, 2008, 43, 3728-3732.	1.7	23
156	The role of interlayer adhesion in graphene oxide upon its reinforcement of nanocomposites. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150283.	1.6	23
157	Deformation mechanisms in biaxially drawn polyethylene. Journal of Polymer Science, Part B: Polymer Physics, 1991, 29, 825-835.	2.4	22
158	Determination of residual strains in ceramic-fibre reinforced composites using fluorescence spectroscopy. Acta Metallurgica Et Materialia, 1995, 43, 2407-2416.	1.9	22
159	Experimental studies on the interfacial shear-transfer mechanism in discontinuous glass-fibre composites. Composites Science and Technology, 2000, 60, 361-365.	3.8	22
160	Deformation of PBO/epoxy plain weave fabric laminae followed using Raman spectroscopy. Composites Part A: Applied Science and Manufacturing, 2001, 32, 499-509.	3.8	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. Journal of Macromolecular Science - Physics, 2002, 41, 61-76.	0.4	22
162	Analysis of Stress Transfer in Two-Phase Polymer Systems Using Synchrotron Microfocus X-ray Diffraction. Macromolecules, 2004, 37, 9503-9509.	2.2	22

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163	Crystallographic texturing in single poly(p-phenylene benzobisoxazole) fibres investigated using synchrotron radiation. Polymer, 2005, 46, 1935-1942.	1.8	22
164	Controlling and mapping interfacial stress transfer in fragmented hybrid carbon fibreâ€“carbon nanotube composites. Composites Science and Technology, 2014, 100, 121-127.	3.8	22
165	Realizing the theoretical stiffness of graphene in composites through confinement between carbon fibers. Composites Part A: Applied Science and Manufacturing, 2018, 113, 311-317.	3.8	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. Electrochimica Acta, 2019, 304, 350-359.	2.6	22
167	Relationship between structure and mechanical properties in high-modulus poly (2,5(6)-benzoxazole) (ABPBO) fibres. Polymer, 1992, 33, 975-982.	1.8	21
168	Deformation studies of single rigid-rod polymer-based fibres. Part 1. Determination of crystal modulus. Polymer, 2002, 43, 5219-5226.	1.8	21
169	Effect of residual stresses upon the Raman radial breathing modes of nanotubes in epoxy composites. Composites Science and Technology, 2007, 67, 840-843.	3.8	21
170	Silverâ€decorated carbon nanotube networks as SERS substrates. Journal of Raman Spectroscopy, 2011, 42, 1255-1262.	1.2	21
171	The relationship between structure and properties in titanium dioxide filled polypropylene. Polymer Bulletin, 1993, 30, 361-368.	1.7	20
172	Deformation micromechanics in aramid/epoxy composites. Composites, 1994, 25, 745-751.	0.9	20
173	Meso-scale strain mapping in UD woven composites. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1838-1845.	3.8	20
174	Investigation of elastic property relationships for flake and spheroidal cast irons using Raman spectroscopy. Acta Materialia, 2002, 50, 4037-4046.	3.8	19
175	Analysis of interfacial micromechanics in microdroplet model composites using synchrotron microfocus X-ray diffraction. Composites Science and Technology, 2006, 66, 2197-2205.	3.8	19
176	Deformation of and Interfacial Stress Transfer in Ti₃C₂ MXeneâ€“Polymer Composites. ACS Applied Materials & Interfaces, 2022, 14, 10681-10690.	4.0	19
177	Deformation micromechanics in high-performance polymer fibres and composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 184, 197-205.	2.6	18
178	Effect of excitation wavelength on the Raman scattering from optical phonons in silicon carbide monofilaments. Journal of Applied Physics, 2007, 102, 023512.	1.1	18
179	Debundling, Isolation, and Identification of Carbon Nanotubes in Electrospun Nanofibers. Small, 2008, 4, 930-933.	5.2	18
180	Molecular and Crystal Deformation in Poly(aryl ether ether ketone) Fibers. Macromolecules, 2008, 41, 7519-7524.	2.2	18

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181	The strength of mechanically-exfoliated monolayer graphene deformed on a rigid polymer substrate. Nanoscale, 2019, 11, 14339-14353.	2.8	18
182	Reinforcement of Polymer-Based Nanocomposites by Thermally Conductive and Electrically Insulating Boron Nitride Nanotubes. ACS Applied Nano Materials, 2020, 3, 364-374.	2.4	18
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