Costas Galiotis

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1475436/publications.pdf

Version: 2024-02-01

249 papers	18,630 citations	34105 52 h-index	12946 131 g-index
255 all docs	255 docs citations	255 times ranked	22674 citing authors

#	Article	IF	Citations
1	Carbon nanotubeâ€“polymer composites: Chemistry, processing, mechanical and electrical properties. Progress in Polymer Science, 2010, 35, 357-401.	24.7	2,738
2	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	5.6	2,452
3	Chemical oxidation of multiwalled carbon nanotubes. Carbon, 2008, 46, 833-840.	10.3	2,376
4	Uniaxial strain in graphene by Raman spectroscopy:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>G</mml:mi></mml:math>peak splitting, GrÃ¼neisen parameters, and sample orientation. Physical Review B, 2009, 79, .	3.2	1,662
5	Subjecting a Graphene Monolayer to Tension and Compression. Small, 2009, 5, 2397-2402.	10.0	400
6	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	4.4	333
7	Compression Behavior of Single-Layer Graphenes. ACS Nano, 2010, 4, 3131-3138.	14.6	282
8	Raman 2D-Band Splitting in Graphene: Theory and Experiment. ACS Nano, 2011, 5, 2231-2239.	14.6	271
9	Graphene aerogels: a review. 2D Materials, 2017, 4, 032001.	4.4	195
10	Surface refinement and electronic properties of graphene layers grown on copper substrate: An XPS, UPS and EELS study. Applied Surface Science, 2011, 257, 9785-9790.	6.1	185
11	Development of a universal stress sensor for graphene and carbon fibres. Nature Communications, 2011, 2, .	12.8	172
12	The study of model polydiacetylene/epoxy composites. Journal of Materials Science, 1984, 19, 3640-3648.	3.7	168
13	2020 Roadmap on Carbon Materials for Energy Storage and Conversion. Chemistry - an Asian Journal, 2020, 15, 995-1013.	3.3	154
14	Deformation of Wrinkled Graphene. ACS Nano, 2015, 9, 3917-3925.	14.6	143
15	Work Function Tuning of Reduced Graphene Oxide Thin Films. Journal of Physical Chemistry C, 2016, 120, 281-290.	3.1	143
16	Strain dependence of the Raman frequencies for different types of carbon fibres. Journal of Materials Science Letters, 1987, 6, 1212-1214.	0.5	137
17	Accelerated environmental ageing study of polyester/glass fiber reinforced composites (GFRPCs). Composites Part B: Engineering, 2008, 39, 467-475.	12.0	130
18	Graphene: A new activator of sodium persulfate for the advanced oxidation of parabens in water. Water Research, 2017, 126, 111-121.	11.3	123

#	Article	IF	Citations
19	Interfacial studies on model composites by laser Raman spectroscopy. Composites Science and Technology, 1991, 42, 125-150.	7.8	120
20	Optical detection of strain and doping inhomogeneities in single layer MoS2. Applied Physics Letters, 2016, 108, .	3.3	119
21	Strain dependences of the first- and second-order Raman spectra of carbon fibres. Journal of Materials Science Letters, 1988, 7, 545-547.	0.5	118
22	Phonon properties of graphene derived from molecular dynamics simulations. Scientific Reports, 2015, 5, 12923.	3.3	113
23	Characterization of PAN-based carbon fibres with laser Raman spectroscopy. Journal of Materials Science, 1996, 31, 851-860.	3.7	112
24	Stress Transfer Mechanisms at the Submicron Level for Graphene/Polymer Systems. ACS Applied Materials & Interfaces, 2015, 7, 4216-4223.	8.0	105
25	Effect of oxidation treatment of multiwalled carbon nanotubes on the mechanical and electrical properties of their epoxy composites. Composites Part A: Applied Science and Manufacturing, 2009, 40, 778-783.	7.6	104
26	In-plane force fields and elastic properties of graphene. Journal of Applied Physics, 2013, 113, .	2.5	98
27	Evaluating arbitrary strain configurations and doping in graphene with Raman spectroscopy. 2D Materials, 2018, 5, 015016.	4.4	95
28	Raman Vibrational Studies of Syndiotactic Polystyrene. 1. Assignments in a Conformational/Crystallinity Sensitive Spectral Region. Macromolecules, 1996, 29, 3515-3520.	4.8	94
29	Tunable macroscale structural superlubricity in two-layer graphene via strain engineering. Nature Communications, 2020, 11, 1595.	12.8	88
30	Graphene flakes under controlled biaxial deformation. Scientific Reports, 2016, 5, 18219.	3.3	84
31	Effective EMI shielding behaviour of thin graphene/PMMA nanolaminates in the THz range. Nature Communications, 2021, 12, 4655.	12.8	84
32	Effect of fibre sizing on the stress transfer efficiency in carbon/epoxy model composites. Composites Part A: Applied Science and Manufacturing, 1996, 27, 755-767.	7.6	81
33	Interfacial Shear Stress Distribution in Model Composites Part 2: Fragmentation Studies on Carbon Fibre/Epoxy Systems. Journal of Composite Materials, 1992, 26, 574-610.	2.4	80
34	Fundamentals and applications of micro Raman spectroscopy to strain measurements in fibre reinforced composites. International Materials Reviews, 1995, 40, 116-134.	19.3	78
35	Graphene Mechanics: Current Status and Perspectives. Annual Review of Chemical and Biomolecular Engineering, 2015, 6, 121-140.	6.8	76
36	Study of model polydiacetylene/epoxy composites. Journal of Materials Science, 1987, 22, 3642-3646.	3.7	73

#	Article	IF	Citations
37	Benchmarking of graphene-based materials: real commercial products versus ideal graphene. 2D Materials, 2019, 6, 025006.	4.4	68
38	A study of mechanisms of stress transfer in continuous- and discontinuous-fibre model composites by laser Raman spectroscopy. Composites Science and Technology, 1993, 48, 15-28.	7.8	67
39	Compressional behaviour of carbon fibres. Journal of Materials Science, 1990, 25, 5081-5090.	3.7	66
40	Phonon and Structural Changes in Deformed Bernal Stacked Bilayer Graphene. Nano Letters, 2012, 12, 687-693.	9.1	65
41	Failure Processes in Embedded Monolayer Graphene under Axial Compression. Scientific Reports, 2014, 4, 5271.	3.3	65
42	Compressional behaviour of carbon fibres. Journal of Materials Science, 1994, 29, 786-799.	3.7	63
43	The effect of oxidation treatment on the properties of multi-walled carbon nanotube thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 135-138.	3.5	62
44	The solid-state polymerization and physical properties of bis(ethyl urethane) of 2,4-hexadiyne-1,6-diol. II. Resonance Raman spectroscopy. Journal of Polymer Science, Polymer Physics Edition, 1983, 21, 2483-2494.	1.0	61
45	Monitoring the micromechanics of reinforcement in carbon fibre/epoxy resin systems. Journal of Materials Science, 1993, 28, 1648-1654.	3.7	61
46	Residual stress distribution in carbon fibre/thermoplastic matrix pre-impregnated composite tapes. Composites, 1992, 23, 28-38.	0.7	58
47	Deformation behaviour of liquid crystal polymer fibres: 1. Converting spectroscopic data into mechanical stress-strain curves in tension and compression. Polymer, 1994, 35, 2335-2347.	3.8	58
48	High volume fraction carbon nanotubeâ€“epoxy composites. Nanotechnology, 2009, 20, 405702.	2.6	58
49	Determination of molecular changes in soft tissues under strain using laser Raman microscopy. Journal of Biomechanics, 2000, 33, 483-486.	2.1	57
50	Raman spectroscopy of graphene at high pressure: Effects of the substrate and the pressure transmitting media. Physical Review B, 2013, 88, .	3.2	56
51	Mechanical Stability of Flexible Graphene-Based Displays. ACS Applied Materials & Interfaces, 2016, 8, 22605-22614.	8.0	56
52	Interfacial Shear Stress Distribution in Model Composites, Part 1: A Kevlar 49Â® Fibre in an Epoxy Matrix. Journal of Composite Materials, 1991, 25, 609-631.	2.4	55
53	Suspended monolayer graphene under true uniaxial deformation. Nanoscale, 2015, 7, 13033-13042.	5.6	52
54	Thermal properties enhancement of epoxy resins by incorporating polybenzimidazole nanofibers filled with graphene and carbon nanotubes as reinforcing material. Polymer Testing, 2020, 82, 106317.	4.8	52

#	Article	IF	Citations
55	Strained hexagonal boron nitride: Phonon shift and GrÃ¼neisen parameter. Physical Review B, 2018, 97, .	3.2	51
56	Electrochemical oxidation of multi-wall carbon nanotubes. Carbon, 2011, 49, 2702-2708.	10.3	50
57	Raman Vibrational Studies of Syndiotactic Polystyrene. 2. Use of the Fundamental Î½1Vibrational Mode as a Quantitative Measure of Crystallinity within Isotropic Material. Macromolecules, 1997, 30, 2400-2407.	4.8	49
58	Study of the thermal reduction of graphene oxide and of its application as electrocatalyst in quasi-solid state dye-sensitized solar cells in combination with PEDOT. Electrochimica Acta, 2013, 111, 698-706.	5.2	49
59	Matrix cracking in polymeric composites laminates: Modelling and experiments. Composites Science and Technology, 2008, 68, 2310-2317.	7.8	48
60	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
61	Effects of interface, volume fraction and geometry on stress redistribution in polymer composites under tension. Composites Science and Technology, 1997, 57, 1089-1101.	7.8	47
62	Modelling of stress transfer in fibre composites. Composites Science and Technology, 1994, 50, 319-332.	7.8	46
63	Remote Laser Raman Microscopy (ReRaM). 1-Design and Testing of a Confocal Microprobe. Journal of Raman Spectroscopy, 1996, 27, 519-526.	2.5	46
64	Polymerâ€“nanotube interaction in MWCNT/poly(vinyl alcohol) composite mats. Carbon, 2012, 50, 4291-4294.	10.3	46
65	Wrinkled Few-Layer Graphene as Highly Efficient Load Bearer. ACS Applied Materials & Interfaces, 2017, 9, 26593-26601.	8.0	46
66	Title is missing!. Journal of Materials Science, 2001, 36, 535-546.	3.7	45
67	High-modulus polydiacetylene single-crystal fibers. Journal of Polymer Science, Polymer Physics Edition, 1984, 22, 1589-1606.	1.0	44
68	Tailoring viscoelastic response, self-heating and deicing properties of carbon-fiber reinforced epoxy composites by graphene modification. Composites Part A: Applied Science and Manufacturing, 2018, 106, 1-10.	7.6	44
69	Real-Time Micro-Raman Measurements on Stressed Polyethylene Fibers. 1. Strain Rate Effects and Molecular Stress Redistribution. Macromolecules, 1998, 31, 6964-6976.	4.8	43
70	Stress Transfer from the Matrix to the Fibre in a Fragmentation Test: Raman Experiments and Analytical Modeling. Journal of Composite Materials, 1999, 33, 377-399.	2.4	43
71	Progress on Composites with Embedded Shape Memory Alloy Wires. Materials Transactions, 2002, 43, 961-973.	1.2	43
72	Aramid fibers; a multifunctional sensor for monitoring stress/strain fields and damage development in composite materials. Engineering Fracture Mechanics, 2002, 69, 1067-1087.	4.3	43

#	Article	IF	Citations
73	Experimentally derived axial stressâ€“strain relations for two-dimensional materials such as monolayer graphene. Carbon, 2015, 81, 322-328.	10.3	43
74	Stress generation by shape memory alloy wires embedded in polymer composites. Acta Materialia, 2007, 55, 5489-5499.	7.9	42
75	Electrochemically exfoliated graphene/PEDOT composite films as efficient Pt-free counter electrode for dye-sensitized solar cells. Electrochimica Acta, 2016, 194, 110-115.	5.2	41
76	Whey protein films reinforced with bacterial cellulose nanowhiskers: Improving edible film properties via a circular economy approach. Food Chemistry, 2022, 385, 132604.	8.2	41
77	Monitoring the behaviour of polymer fibres under axial compression. Polymer, 1991, 32, 1788-1793.	3.8	40
78	Compressive behavior of MWCNT/epoxy composite mats. Composites Science and Technology, 2012, 72, 1027-1033.	7.8	40
79	Interfacial micromechanics in model composites using laser Raman spectroscopy. Proceedings of the Royal Society A, 1993, 440, 379-398.	0.9	39
80	Unification of fibre/matrix interfacial measurements with Raman microscopy. Journal of Raman Spectroscopy, 1999, 30, 899-912.	2.5	39
81	Adaptive composites incorporating shape memory alloy wires. Part 2: development of internal recovery stresses as a function of activation temperature. Composites Part A: Applied Science and Manufacturing, 2001, 32, 1735-1747.	7.6	39
82	Graphene production by dissociation of camphor molecules on nickel substrate. Thin Solid Films, 2013, 527, 31-37.	1.8	37
83	Graphene and related materials in hierarchical fiber composites: Production techniques and key industrial benefits. Composites Science and Technology, 2020, 185, 107848.	7.8	36
84	Estimation of Crystallinity in Isotropic Isotactic Polypropylene with Raman Spectroscopy. Applied Spectroscopy, 2005, 59, 1141-1147.	2.2	35
85	Waterâ€Soluble Carbon Nanotubes by Redox Radical Polymerization. Macromolecular Rapid Communications, 2007, 28, 1553-1558.	3.9	35
86	Curvature dependent surface energy for a free standing monolayer graphene: Some closed form solutions of the non-linear theory. International Journal of Non-Linear Mechanics, 2014, 67, 186-197.	2.6	35
87	Mosaic pattern formation in exfoliated graphene by mechanical deformation. Nature Communications, 2019, 10, 1572.	12.8	35
88	Fabrication and Electrochemical Properties of Three-Dimensional (3D) Porous Graphitic and Graphenelike Electrodes Obtained by Low-Cost Direct Laser Writing Methods. ACS Omega, 2020, 5, 1540-1548.	3.5	35
89	Stress induced twinning of polydiacetylene single crystal fibres in composites. Journal of Materials Science, 1986, 21, 3440-3444.	3.7	34
90	Interfacial studies on carbon/thermoplastic model composites using laser Raman spectroscopy. Journal of Materials Science, 1992, 27, 1663-1671.	3.7	34

#	Article	IF	Citations
91	Phase transformation around indentations in zirconia. Journal of Materials Science Letters, 1992, 11, 575-577.	0.5	33
92	Residual strain mapping in carbon fibre/PEEK composites. Composites, 1988, 19, 321-324.	0.7	32
93	Matrix crack propagation criteria for model short-carbon fibre/epoxy composites. Composites Science and Technology, 2000, 60, 2835-2847.	7.8	32
94	The study of model polydiacetylene/epoxy composites. Journal of Materials Science, 1984, 19, 3640-3648.	3.7	32
95	A resonance Raman spectroscopic study of the strength of the bonding between an epoxy resin and a polydiacetylene fibre. Journal of Materials Science Letters, 1983, 2, 263-266.	0.5	31
96	In situ monitoring of the fibre strain distribution in carbon-fibre thermoplastic composites1. Application of a tensile stress field. Composites Science and Technology, 1999, 59, 2149-2161.	7.8	31
97	Wrinkling formation in simply-supported graphenes under tension and compression loadings. Nanoscale, 2017, 9, 18180-18188.	5.6	31
98	Growth andin situcharacterization of 2D materials by chemical vapour deposition on liquid metal catalysts: a review. Nanoscale, 2021, 13, 3346-3373.	5.6	30
99	Buckypaper as Pt-free cathode electrode in photoactivated fuel cells. Electrochimica Acta, 2012, 80, 399-404.	5.2	29
100	Laser Raman Spectroscopy; A New Stress/Strain Measurement Technique for the Remote and On-Line Nondestructive Inspection of Fiber Reinforced Polymer Composites. Materials Technology, 1993, 8, 203-209.	3.0	28
101	Local strain re-distribution and stiffness degradation in cross-ply polymer composites under tension. Acta Materialia, 2005, 53, 3335-3343.	7.9	28
102	Covalently functionalized carbon nanotubes as macroinitiators for radical polymerization. Physica Status Solidi (B): Basic Research, 2007, 244, 4046-4050.	1.5	28
103	Energy criterion for modelling damage evolution in cross-ply composite laminates. Composites Science and Technology, 2008, 68, 2318-2324.	7.8	28
104	Open structured in comparison with dense multi-walled carbon nanotube buckypapers and their composites. Composites Science and Technology, 2013, 77, 52-59.	7.8	28
105	A novel mild method for surface treatment of carbon fibres in epoxy-matrix composites. Composites Science and Technology, 2018, 157, 178-184.	7.8	28
106	Real-Time Multiscale Monitoring and Tailoring of Graphene Growth on Liquid Copper. ACS Nano, 2021, 15, 9638-9648.	14.6	28
107	The structure and morphology of syndiotactic polystyrene injection molded coupons. Polymer Engineering and Science, 1997, 37, 153-165.	3.1	27
108	Detailed atomistic molecular-dynamics simulation of the orthorhombic phase of crystalline polyethylene and alkane crystals. Journal of Chemical Physics, 2001, 115, 3937-3950.	3.0	27

#	Article	IF	Citations
109	Mechanically and thermally induced chain conformational transformations between helical form I and trans-planar form III in syndiotactic polypropylene using FT-IR and Raman spectroscopic techniques. Polymer, 2004, 45, 4453-4464.	3.8	27
110	Design and construction of a vehicular bridge made of glass/polyester pultruded box beams. Plastics, Rubber and Composites, 2005, 34, 201-207.	2.0	26
111	Quantifying Crystalline Fraction within Polymer Spherulites. Macromolecules, 2007, 40, 786-789.	4.8	26
112	Bioink with cartilage-derived extracellular matrix microfibers enables spatial control of vascular capillary formation in bioprinted constructs. Biofabrication, 2022, 14, 034104.	7.1	26
113	A study of the stress-transfer characteristics in model composites as a function of material processing, fibre sizing and temperature of the environment. Composites Science and Technology, 1997, 57, 827-838.	7.8	25
114	Direct in situ measurements of bridging stresses in CFCCs. Acta Materialia, 2003, 51, 5359-5373.	7.9	25
115	Transformation fatigue and stress relaxation of shape memory alloy wires. Smart Materials and Structures, 2007, 16, 2560-2570.	3.5	25
116	Curvature dependent surface energy for free standing monolayer graphene: Geometrical and material linearization with closed form solutions. International Journal of Engineering Science, 2014, 85, 224-233.	5.0	25
117	Compressive response and buckling of graphene nanoribbons. Scientific Reports, 2018, 8, 9593.	3.3	25
118	Interfacial shear stress distribution in model composites: the effect of fibre modulus. Composites, 1993, 24, 459-466.	0.7	24
119	Interfacial measurements and fracture characteristics of 2D microcomposites using remote laser Raman microscopy. Composites Part A: Applied Science and Manufacturing, 1996, 27, 881-888.	7.6	24
120	Definition and measurement of the shear-lag parameter, Î², as an index of the stress transfer efficiency in polymer composites. Journal of Materials Science, 1998, 33, 1137-1143.	3.7	24
121	Embedded trilayer graphene flakes under tensile and compressive loading. 2D Materials, 2015, 2, 024009.	4.4	24
122	Effect of Off â€“ Axis Matrix Cracking on Stiffness of Symmetric Angle-Ply Composite Laminates. International Journal of Fracture, 2006, 139, 529-536.	2.2	23
123	Epoxidized multi-walled carbon nanotube buckypapers: A scaffold for polymer nanocomposites with enhanced mechanical properties. Chemical Engineering Journal, 2015, 281, 793-803.	12.7	23
124	Controllable, eco-friendly, synthesis of highly crystalline 2D-MoS ₂ and clarification of the role of growth-induced strain. 2D Materials, 2018, 5, 035035.	4.4	23
125	Multifunctional Cement Mortars Enhanced with Graphene Nanoplatelets and Carbon Nanotubes. Sensors, 2021, 21, 933.	3.8	23
126	The progressional approach to interfacial failure in carbon reinforced composites: elasto-plastic finite element modelling of interface cracks. Composites Part A: Applied Science and Manufacturing, 2000, 31, 929-943.	7.6	22

#	Article	IF	Citations
127	Efficient exfoliation of graphene sheets in binary solvents. Materials Letters, 2013, 94, 47-50.	2.6	22
128	Structural Properties of Chemically Functionalized Carbon Nanotube Thin Films. Materials, 2013, 6, 2360-2371.	2.9	22
129	Visible Laser Scribing Fabrication of Porous Graphitic Carbon Electrodes: Morphologies, Electrochemical Properties, and Applications as Disposable Sensor Platforms. ACS Applied Electronic Materials, 2020, 2, 3279-3288.	4.3	22
130	Preventing colour fading in artworks with graphene veils. Nature Nanotechnology, 2021, 16, 1004-1010.	31.5	22
131	Measurement and modeling of stress concentration around a circular notch. Experimental Mechanics, 2000, 40, 248-255.	2.0	21
132	Direct measurement of fiber bridging in notched glass-ceramic-matrix composites. Journal of Materials Research, 2006, 21, 1150-1160.	2.6	21
133	Oxidized Multi-Walled Carbon Nanotube Film Fabrication and Characterization. Advanced Composites Letters, 2007, 16, 096369350701600.	1.3	21
134	Improved power conversion efficiency by insertion of RGOâ€“TiO2 composite layer as optical spacer in polymer bulk heterojunction solar cells. Organic Electronics, 2014, 15, 348-355.	2.6	21
135	Uniaxial compression of suspended single and multilayer graphenes. 2D Materials, 2016, 3, 025033.	4.4	21
136	Molecular Modeling Combined with Advanced Chemistry for the Rational Design of Efficient Graphene Dispersing Agents. ACS Macro Letters, 2016, 5, 24-29.	4.8	21
137	Single-walled carbon nanotubes decorated with a pyreneâ€“fluorenevinylene conjugate. Nanotechnology, 2009, 20, 135606.	2.6	20
138	Stress transfer at the nanoscale on graphene ribbons of regular geometry. Nanoscale, 2019, 11, 14354-14361.	5.6	20
139	Growth of calcium carbonate on non-covalently modified carbon nanotubes. Materials Letters, 2007, 61, 5044-5046.	2.6	19
140	3-Arm star pyrene-functional PMMAs for efficient exfoliation of graphite in chloroform: fabrication of graphene-reinforced fibrous veils. Nanoscale, 2019, 11, 915-931.	5.6	19
141	Development of a reactor for the in situ monitoring of 2D materials growth on liquid metal catalysts, using synchrotron x-ray scattering, Raman spectroscopy, and optical microscopy. Review of Scientific Instruments, 2020, 91, 013907.	1.3	19
142	The study of model polydiacetylene/epoxy composites. Journal of Materials Science, 1991, 26, 2293-2299.	3.7	18
143	Fibre strain mapping in aramid/epoxy microcomposites. Composites, 1993, 24, 635-642.	0.7	18
144	Measurement of stress concentration around fibre breaks in carbon-fibre/epoxy-resin composite tows. Composites Science and Technology, 1997, 57, 913-923.	7.8	18

#	Article	IF	Citations
145	Axial strain redistribution resulting from off-axis ply cracking in polymer composites. Applied Physics Letters, 2004, 85, 3752-3754.	3.3	18
146	An experimental and theoretical study of the stress transfer problem in fibrous composites. Acta Materialia, 2005, 53, 4173-4183.	7.9	18
147	Thermal stress development in fibrous composites. Materials Letters, 2008, 62, 341-345.	2.6	18
148	Nonlinear softening and hardening nonlocal bending stiffness of an initially curved monolayer graphene. International Journal of Non-Linear Mechanics, 2013, 56, 123-131.	2.6	18
149	Constitutive modeling of some 2D crystals: Graphene, hexagonal BN, MoS 2 , WSe 2 and NbSe 2. International Journal of Solids and Structures, 2015, 66, 98-110.	2.7	18
150	Sculpturing graphene wrinkle patterns into compliant substrates. Carbon, 2019, 146, 772-778.	10.3	18
151	Nacre-like GNP/Epoxy composites: Reinforcement efficiency vis-Ã-vis graphene content. Composites Science and Technology, 2021, 211, 108873.	7.8	18
152	Enhancement of damping response in polymers and composites by the addition of graphene nanoplatelets. Composites Science and Technology, 2022, 227, 109562.	7.8	18
153	Enhancing the damping of wind turbine rotor blades, the DAMPBLADE project. Wind Energy, 2006, 9, 163-177.	4.2	17
154	Compression behavior of simply-supported and fully embedded monolayer graphene: Theory and experiment. Extreme Mechanics Letters, 2016, 8, 191-200.	4.1	17
155	Effect of Carbon Support on the Electrocatalytic Properties of Ptâ^'Ru Catalysts. ChemElectroChem, 2019, 6, 4970-4979.	3.4	17
156	Mechanical, Electrical, and Thermal Properties of Carbon Nanotube Buckypapers/Epoxy Nanocomposites Produced by Oxidized and Epoxidized Nanotubes. Materials, 2020, 13, 4308.	2.9	17
157	Failure characteristics in carbon/epoxy composite tows. Composites Part A: Applied Science and Manufacturing, 1996, 27, 1183-1194.	7.6	16
158	Micromechanics of reinforcement and damage initiation in carbon fibre/epoxy composites under fatigue loading. Composites Part A: Applied Science and Manufacturing, 2001, 32, 457-471.	7.6	16
159	Growth of calcium phosphate mineral on carbon nanotube buckypapers. Physica Status Solidi (B): Basic Research, 2006, 243, 3230-3233.	1.5	16
160	Improving the damping behavior of fiber-reinforced polymer composites with embedded superelastic shape memory alloys (SMA). Smart Materials and Structures, 2020, 29, 025006.	3.5	16
161	Fundamentals and applications of micro Raman spectroscopy to strain measurements in fibre reinforced composites. International Materials Reviews, 1995, 40, 116-134.	19.3	16
162	Hazard assessment of abraded thermoplastic composites reinforced with reduced graphene oxide. Journal of Hazardous Materials, 2022, 435, 129053.	12.4	16

#	Article	IF	Citations
163	Mechanisms of stress transfer and interface integrity in carbon/epoxy composites under compression loading. International Journal of Solids and Structures, 2002, 39, 3217-3231.	2.7	15
164	Oxidation resistance of aligned carbon nanotubeâ€“reinforced silicon carbide composites. Ceramics International, 2015, 41, 12495-12498.	4.8	15
165	Strain Engineering in Highly Wrinkled CVD Graphene/Epoxy Systems. ACS Applied Materials & Interfaces, 2018, 10, 43192-43202.	8.0	14
166	Wettability of graphene by molten polymers. Polymer, 2019, 180, 121708.	3.8	14
167	Stress-transfer from polymer substrates to monolayer and few-layer graphenes. Nanoscale Advances, 2019, 1, 4972-4980.	4.6	14
168	Residual strain and Young's modulus determination in cross-ply composites using an embedded aramid fibre strain sensor. Composites Part A: Applied Science and Manufacturing, 1998, 29, 1363-1369.	7.6	13
169	Comparative assessment of stress transfer efficiency in tension and compression. Composites Part A: Applied Science and Manufacturing, 2002, 33, 1303-1309.	7.6	13
170	Determination of interface integrity in high volume fraction polymer composites at all strain levels. Acta Materialia, 2005, 53, 647-657.	7.9	13
171	Effects of inter-fibre spacing and matrix cracks on stress amplification factors in carbon-fibre/epoxy matrix composites, Part II: Hexagonal array of fibres. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1936-1943.	7.6	13
172	Analysis of matrix cracking in GFRP laminates using Raman spectroscopy. Composites Science and Technology, 2007, 67, 1946-1954.	7.8	13
173	Curvature-dependent surface energy for free-standing monolayer graphene. Mathematics and Mechanics of Solids, 2016, 21, 812-825.	2.4	13
174	Atomistic potential for graphene and other sp²carbon systems. Physical Chemistry Chemical Physics, 2017, 19, 30925-30932.	2.8	13
175	Non-Eulerian behavior of graphitic materials under compression. Carbon, 2018, 138, 227-233.	10.3	13
176	Elasto-plastic finite element modelling of interfacial failure in model Kevlar 49 fibreâ€”epoxy composites. Composites Part A: Applied Science and Manufacturing, 1996, 27, 821-832.	7.6	12
177	Title is missing!. Journal of Materials Science, 1998, 33, 2745-2750.	3.7	12
178	Effects of inter-fibre spacing and matrix cracks on stress amplification factors in carbon-fibre/epoxy matrix composites. Part I: planar array of fibres. Composites Part A: Applied Science and Manufacturing, 2003, 34, 1227-1234.	7.6	12
179	Graphene resting on substrate: Closed form solutions for the perfect bonding and the delamination case. International Journal of Solids and Structures, 2015, 71, 219-232.	2.7	12
180	Stress and charge transfer in uniaxially strained CVD graphene. Physica Status Solidi (B): Basic Research, 2016, 253, 2355-2361.	1.5	12

#	Article	IF	Citations
181	A mechanical system for tensile testing of supported films at the nanoscale. Nanotechnology, 2018, 29, 395707.	2.6	12
182	Enhancing the adhesion of graphene to polymer substrates by controlled defect formation. Nanotechnology, 2019, 30, 015704.	2.6	12
183	Determination of the elastic moduli of CVD graphene by probing graphene/polymer Bragg stacks. 2D Materials, 2021, 8, 035040.	4.4	12
184	Fiber/Matrix mechanical interaction in carbon fiber/bismaleimide model composites. Polymer Composites, 1996, 17, 937-947.	4.6	11
185	Fluorescence studies of polycrystalline Al2O3 composite constituents: piezo-spectroscopic calibration and applications. Applied Physics A: Materials Science and Processing, 2004, 79, 647-659.	2.3	11
186	Effect of the reduction process on the field emission performance of reduced graphene oxide cathodes. RSC Advances, 2015, 5, 53604-53610.	3.6	11
187	Nonlinear subharmonic oscillation of orthotropic graphene-matrix composite. Computational Materials Science, 2015, 99, 164-172.	3.0	11
188	Colloidal stabilization of graphene sheets by ionizable amphiphilic block copolymers in various media. RSC Advances, 2015, 5, 89447-89460.	3.6	11
189	Graphene as a hexagonal 2-lattice: Evaluation of the in-plane material constants for the linear theory. A multiscale approach. Journal of Applied Physics, 2015, 118, .	2.5	11
190	Investigation of charges-driven interactions between graphene and different SiO2 surfaces. Carbon, 2019, 148, 336-343.	10.3	11
191	Multi-functional 2D hybrid aerogels for gas absorption applications. Scientific Reports, 2021, 11, 13548.	3.3	11
192	Finite element modelling of interfacial failure in model carbon fibre-epoxy composites. Journal of Materials Science, 1996, 31, 2879-2883.	3.7	10
193	Title is missing!. Journal of Materials Science, 1998, 33, 5311-5325.	3.7	10
194	Modelling the stressâ€“transfer efficiency of carbonâ€“epoxy interfaces. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2001, 457, 1555-1577.	2.1	10
195	Compressive failure mechanisms in multi-fibre microcomposites. Composites Part A: Applied Science and Manufacturing, 2004, 35, 461-475.	7.6	10
196	Shape Memory Composite Sandwich Structures with Self-Healing Properties. Polymers, 2021, 13, 3056.	4.5	10
197	In situ kinetic studies of CVD graphene growth by reflection spectroscopy. Chemical Engineering Journal, 2021, 421, 129434.	12.7	10
198	Stress and temperature self-sensing fibres. Chemical Physics Letters, 2003, 367, 270-277.	2.6	9

#	Article	IF	Citations
199	Nanostructured Heteroarm Star Block Terpolymers via an Extension of the â€œInâ€“Outâ€•Polymerization Route. Macromolecular Rapid Communications, 2011, 32, 371-377.	3.9	9
200	Efficient Mechanical Stress Transfer in Multilayer Graphene with a Ladder-like Architecture. ACS Applied Materials & Interfaces, 2021, 13, 4473-4484.	8.0	9
201	Measurement of strain distribution in fibre reinforced ceramic matrix composites. Composites Part A: Applied Science and Manufacturing, 1996, 27, 729-735.	7.6	8
202	Surface and bulk stress/strain measurements in composite laminates with a fibre-optic Raman probe. Composites Part A: Applied Science and Manufacturing, 1999, 30, 1187-1195.	7.6	8
203	High pressure Raman study of the secondâ€order vibrational modes of singleâ€•and doubleâ€walled carbon nanotubes. Physica Status Solidi (B): Basic Research, 2007, 244, 4069-4073.	1.5	8
204	Effect of fatigue on the interface integrity of unidirectional Cf-reinforced epoxy resin composites. Acta Materialia, 2009, 57, 2800-2811.	7.9	8
205	Analysis of Stress Transfer from the Matrix to the Fiber through an Imperfect Interface: Application to Raman Data and the Single-Fiber Fragmentation Test. , 1996, , 47-66.		8
206	Effect of stress and temperature on the optical phonons of aramid fibers. Physical Review B, 2006, 73, .	3.2	7
207	Thermomechanical Response of Supported Hexagonal Boron Nitride Sheets of Various Thicknesses. Journal of Physical Chemistry C, 2020, 124, 12134-12143.	3.1	7
208	Thermomechanical behaviour of hexagonal boron nitride at elevated temperatures. 2D Materials, 2020, 7, 045011.	4.4	7
209	Highly Deformable, Ultrathin Large-Area Poly(methyl methacrylate) Films. ACS Omega, 2021, 6, 8308-8312.	3.5	7
210	Environmental Degradation Studies of the Interface in Single-Filament Graphite / Epoxy Composites using Laser Raman Spectroscopy. Advanced Composites Letters, 1994, 3, 096369359400300.	1.3	6
211	STRESS/STRAIN MEASUREMENTS IN ADVANCED COMPOSITES USING REMOTE LASER RAMAN MICROSCOPY. Nondestructive Testing and Evaluation, 1996, 12, 355-366.	2.1	6
212	Mechanisms of stress transfer and interface integrity in carbon/epoxy composites under compression loading. Part II: Numerical approach. International Journal of Solids and Structures, 2003, 40, 5521-5538.	2.7	6
213	Assessing micromechanical behaviour of PET cords in rubber matrix composites by laser Raman microscopy. Composites Science and Technology, 2013, 85, 104-110.	7.8	6
214	Stress-transfer characteristics in model composites. Composite Interfaces, 1993, 1, 321-336.	2.3	5
215	Localised Stress Measurements in Composite Laminates Using a Raman Stress Sensor. Advanced Composites Letters, 1995, 4, 096369359500400.	1.3	5
216	Micromechanics of reinforcement using laser Raman spectroscopy. , 1998, , 224-255.		5

#	Article	IF	Citations
217	Stress transfer efficiency in model composites under dynamic loading. Applied Physics A: Materials Science and Processing, 2003, 76, 231-239.	2.3	5
218	Development and testing of a self-deformed composite material. Composite Structures, 2010, 92, 306-311.	5.8	5
219	Interfacial damage modelling of composites. , 2005, , 33-64.		4
220	Dielectric Spectroscopy and Tunability of Multi-Walled Carbon Nanotube / Epoxy Resin Composites. Advanced Composites Letters, 2010, 19, 096369351001900.	1.3	4
221	An Evaluation of Graphene as a Multi-Functional Heating Element for Biomedical Applications. Journal of Biomedical Nanotechnology, 2018, 14, 86-97.	1.1	4
222	Viscoplastic finite element analysis of matrix crack propagation in model continuous-carbon fibre/epoxy composites. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1922-1935.	7.6	3
223	Chemical Vapour Deposition Grapheneâ€“PMMA Nanolaminates for Flexible Gas Barrier. Membranes, 2022, 12, 611.	3.0	3
224	Phonon stress sensitivity for interface characterization of fibrous composites at various temperatures. Acta Materialia, 2007, 55, 3783-3793.	7.9	2
225	Effect of Processing and Loading Conditions upon the Fatigue Behaviour of a C_f/Epoxy Laminate. Advanced Composites Letters, 2009, 18, 096369350901800.	1.3	2
226	High-pressure Raman study of stacked-cup carbon nanofibers. High Pressure Research, 2011, 31, 131-135.	1.2	2
227	Phenomenological multiscale finite element for single layer graphene. Computational Materials Science, 2016, 115, 125-136.	3.0	2
228	Effect of Carbon Support on the Electrocatalytic Properties of Ptâ^'Ru Catalysts. ChemElectroChem, 2019, 6, 4921-4921.	3.4	2
229	Production and Mechanical Characterization of Graphene Micro-Ribbons. Journal of Composites Science, 2019, 3, 42.	3.0	2
230	Load transfer in high content graphite nanoplateles composites. AIP Conference Proceedings, 2019, , .	0.4	2
231	Hierarchy of nanoscale graphene wrinkles on compliant substrate: Theory and experiment. Extreme Mechanics Letters, 2020, 40, 100948.	4.1	2
232	Impact of prolonged environmental exposure on stress transfer efficiency in poly(pâ€phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1	4.6	2
233	Axial Deformation of Monolayer Graphene under Tension and Compression. Carbon Nanostructures, 2012, , 87-97.	0.1	2
234	Strain Redistribution in Composite Laminates Resulting from Off-Axis Ply Cracking. , 2003, , 139-150.		2

#	Article	IF	Citations
235	Global method for measuring stress in polymer fibers at elevated temperatures. Applied Physics Letters, 2005, 87, 131910.	3.3	1
236	Raman spectroscopy investigation of stiffness change and residual strains due to matrix cracking. Mechanics of Composite Materials, 2006, 42, 535-546.	1.4	1
237	Morphological and Microstructural Property Comparison of Bulk and Aligned Cvd-Grown Carbon Nanotubes. Advanced Composites Letters, 2014, 23, 096369351402300.	1.3	1
238	A Study of Carbon Fibres under Axial Compression. , 1990, , 525-530.		1
239	Stress induced twinning of polydiacetylene single crystal fibres in composites. Journal of Materials Science, 1986, 21, 3440-3444.	3.7	1
240	The Raman Optomechanical Strain Gauge. , 1989, , .		0
241	Determination of Stress Distribution in Fibre Bridged Cracks in Ceramic Matrix Composites. Advanced Composites Letters, 1994, 3, 096369359400300.	1.3	0
242	The effect of the interface on the fatigue performance of fibre composites. , 2003, , 147-172.		0
243	Experimental Determination of Stress Concentrations in Composite Laminates and their Effects on Damage Evolution. Applied Mechanics and Materials, 2006, 5-6, 383-390.	0.2	0
244	Thermal Characterization of Porous Silicon Micro-Hotplates using IR Thermography. , 2007, , .		0
245	In Situ Assessment of the Micromechanics of Large Scale Bridging in Ceramic Composites. , 2003, , 71-79.		0
246	Stress/Strain Measurements in Fibers and Composites Using Raman Spectroscopy. , 2005, , 35-98.		0
247	Raman Optomechanical Studies on Fibres and Composites. , 1989, , 765-770.		0
248	Monitoring Interfacial Phenomena in Single Fibre Model Composites. , 1990, , 679-684.		0
249	FRAGMENTATION STUDIES ON CARBON FIBRE / EPOXY SYSTEMS, USING LASER RAMAN SPECTROSCOPY.. , 1991, , 288-289.		0