Jonathan N Coleman

List of Publications by Year
in descending order

375 papers	86,638 citations	1099 112 h-index	313 290 g-index
384 all docs	384 docs citations	384 times ranked	62682 citing authors

#	Article	IF	Citations
1	Electronics and optoelectronics of two-dimensional transition metal dichalcogenides. Nature Nanotechnology, 2012, 7, 699-712.	31.5	13,346
2	Two-Dimensional Nanosheets Produced by Liquid Exfoliation of Layered Materials. Science, 2011, 331, 568-571.	12.6	6,190
3	High-yield production of graphene by liquid-phase exfoliation of graphite. Nature Nanotechnology, 2008, 3, 563-568.	31.5	5,431
4	Small but strong: A review of the mechanical properties of carbon nanotubeâ€“polymer composites. Carbon, 2006, 44, 1624-1652.	10.3	3,611
5	Liquid Exfoliation of Layered Materials. Science, 2013, 340, .	12.6	3,109
6	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	5.6	2,452
7	Liquid Phase Production of Graphene by Exfoliation of Graphite in Surfactant/Water Solutions. Journal of the American Chemical Society, 2009, 131, 3611-3620.	13.7	2,038
8	Scalable production of large quantities of defect-free few-layer graphene by shear exfoliation in liquids. Nature Materials, 2014, 13, 624-630.	27.5	1,958
9	Mechanical Reinforcement of Polymers Using Carbon Nanotubes. Advanced Materials, 2006, 18, 689-706.	21.0	1,504
10	Silver Nanowire Networks as Flexible, Transparent, Conducting Films: Extremely High DC to Optical Conductivity Ratios. ACS Nano, 2009, 3, 1767-1774.	14.6	1,472
11	Super-tough carbon-nanotube fibres. Nature, 2003, 423, 703-703.	27.8	1,394
12	Largeâ€Scale Exfoliation of Inorganic Layered Compounds in Aqueous Surfactant Solutions. Advanced Materials, 2011, 23, 3944-3948.	21.0	1,012
13	Liquid exfoliation of solvent-stabilized few-layer black phosphorus for applications beyond electronics. Nature Communications, 2015, 6, 8563.	12.8	921
14	High-Concentration, Surfactant-Stabilized Graphene Dispersions. ACS Nano, 2010, 4, 3155-3162.	14.6	911
15	Highâ€Concentration Solvent Exfoliation of Graphene. Small, 2010, 6, 864-871.	10.0	908
16	Ultrafast Saturable Absorption of Two-Dimensional MoS₂ Nanosheets. ACS Nano, 2013, 7, 9260-9267.	14.6	905
17	Liquid Exfoliation of Defect-Free Graphene. Accounts of Chemical Research, 2013, 46, 14-22.	15.6	846
18	Transparent, Flexible, and Conductive 2D Titanium Carbide (MXene) Films with High Volumetric Capacitance. Advanced Materials, 2017, 29, 1702678.	21.0	756

#	ARTICLE	IF	CITATIONS
19	Experimental observation of scaling laws for alternating current and direct current conductivity in polymer-carbon nanotube composite thin films. Journal of Applied Physics, 2002, 92, 4024-4030.	2.5	713
20	Sensitive, High-Strain, High-Rate Bodily Motion Sensors Based on Grapheneâ€“Rubber Composites. ACS Nano, 2014, 8, 8819-8830.	14.6	708
21	Sensitive electromechanical sensors using viscoelastic graphene-polymer nanocomposites. Science, 2016, 354, 1257-1260.	12.6	676
22	Additive-free MXene inks and direct printing of micro-supercapacitors. Nature Communications, 2019, 10, 1795.	12.8	649
23	Solvent Exfoliation of Transition Metal Dichalcogenides: Dispersibility of Exfoliated Nanosheets Varies Only Weakly between Compounds. ACS Nano, 2012, 6, 3468-3480.	14.6	625
24	A Composite from Poly(m-phenylenevinylene-co-2,5-dioctoxy-p-phenylenevinylene) and Carbon Nanotubes: A Novel Material for Molecular Optoelectronics. Advanced Materials, 1998, 10, 1091-1093.	21.0	601
25	Morphological and mechanical properties of carbon-nanotube-reinforced semicrystalline and amorphous polymer composites. Applied Physics Letters, 2002, 81, 5123-5125.	3.3	599
26	Liquidâ€Phase Exfoliation of Nanotubes and Graphene. Advanced Functional Materials, 2009, 19, 3680-3695.	14.9	588
27	High Performance Nanotube-Reinforced Plastics: Understanding the Mechanism of Strength Increase. Advanced Functional Materials, 2004, 14, 791-798.	14.9	575
28	Measurement of Multicomponent Solubility Parameters for Graphene Facilitates Solvent Discovery. Langmuir, 2010, 26, 3208-3213.	3.5	566
29	Are There Fundamental Limitations on the Sheet Resistance and Transmittance of Thin Graphene Films?. ACS Nano, 2010, 4, 2713-2720.	14.6	511
30	Preparation of High Concentration Dispersions of Exfoliated MoS₂ with Increased Flake Size. Chemistry of Materials, 2012, 24, 2414-2421.	6.7	504
31	Broadband Nonlinear Optical Response of Graphene Dispersions. Advanced Materials, 2009, 21, 2430-2435.	21.0	486
32	Oxygen Radical Functionalization of Boron Nitride Nanosheets. Journal of the American Chemical Society, 2012, 134, 18758-18771.	13.7	464
33	Reinforcement of Polymers with Carbon Nanotubes:Â The Role of Nanotube Surface Area. Nano Letters, 2004, 4, 353-356.	9.1	456
34	Graphene Dispersion and Exfoliation in Low Boiling Point Solvents. Journal of Physical Chemistry C, 2011, 115, 5422-5428.	3.1	440
35	Edge and confinement effects allow in situ measurement of size and thickness of liquid-exfoliated nanosheets. Nature Communications, 2014, 5, 4576.	12.8	432
36	Electrical Connectivity in Single-Walled Carbon Nanotube Networks. Nano Letters, 2009, 9, 3890-3895.	9.1	425

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37	Production of Twoâ€Dimensional Nanomaterials via Liquidâ€Based Direct Exfoliation. Small, 2016, 12, 272-293.	10.0	407
38	Percolation-dominated conductivity in a conjugated-polymer-carbon-nanotube composite. Physical Review B, 1998, 58, R7492-R7495.	3.2	406
39	Guidelines for Exfoliation, Characterization and Processing of Layered Materials Produced by Liquid Exfoliation. Chemistry of Materials, 2017, 29, 243-255.	6.7	401
40	A Commercial Conducting Polymer as Both Binder and Conductive Additive for Silicon Nanoparticle-Based Lithium-Ion Battery Negative Electrodes. ACS Nano, 2016, 10, 3702-3713.	14.6	394
41	All-printed thin-film transistors from networks of liquid-exfoliated nanosheets. Science, 2017, 356, 69-73.	12.6	391
42	Large-Scale Production of Size-Controlled MoS₂ Nanosheets by Shear Exfoliation. Chemistry of Materials, 2015, 27, 1129-1139.	6.7	389
43	Flexible, Transparent, Conducting Films of Randomly Stacked Graphene from Surfactantâ€Stabilized, Oxideâ€Free Graphene Dispersions. Small, 2010, 6, 458-464.	10.0	371
44	2Dâ€Crystalâ€Based Functional Inks. Advanced Materials, 2016, 28, 6136-6166.	21.0	371
45	Production of Highly Monolayer Enriched Dispersions of Liquid-Exfoliated Nanosheets by Liquid Cascade Centrifugation. ACS Nano, 2016, 10, 1589-1601.	14.6	365
46	Multicomponent Solubility Parameters for Single-Walled Carbon Nanotubeâˆ’Solvent Mixtures. ACS Nano, 2009, 3, 2340-2350.	14.6	347
47	Quantitative Evaluation of Surfactant-stabilized Single-walled Carbon Nanotubes: Dispersion Quality and Its Correlation with Zeta Potential. Journal of Physical Chemistry C, 2008, 112, 10692-10699.	3.1	343
48	Towards Solutions of Singleâ€Walled Carbon Nanotubes in Common Solvents. Advanced Materials, 2008, 20, 1876-1881.	21.0	333
49	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	4.4	333
50	Debundling of Single-Walled Nanotubes by Dilution:Â Observation of Large Populations of Individual Nanotubes in Amide Solvent Dispersions. Journal of Physical Chemistry B, 2006, 110, 15708-15718.	2.6	330
51	Broadband ultrafast nonlinear absorption and nonlinear refraction of layered molybdenum dichalcogenide semiconductors. Nanoscale, 2014, 6, 10530-10535.	5.6	328
52	Solvent-Exfoliated Graphene at Extremely High Concentration. Langmuir, 2011, 27, 9077-9082.	3.5	308
53	Basal-Plane Functionalization of Chemically Exfoliated Molybdenum Disulfide by Diazonium Salts. ACS Nano, 2015, 9, 6018-6030.	14.6	293
54	Size Effects and the Problem with Percolation in Nanostructured Transparent Conductors. ACS Nano, 2010, 4, 7064-7072.	14.6	290

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55	Spray Deposition of Highly Transparent, Lowâ€Resistance Networks of Silver Nanowires over Large Areas. Small, 2011, 7, 2621-2628.	10.0	282
56	Development of MoS₂â€"CNT Composite Thin Film from Layered MoS₂ for Lithium Batteries. Advanced Energy Materials, 2013, 3, 798-805.	19.5	282
57	High areal capacity battery electrodes enabled by segregated nanotube networks. Nature Energy, 2019, 4, 560-567.	39.5	281
58	Size selection of dispersed, exfoliated graphene flakes by controlled centrifugation. Carbon, 2012, 50, 470-475.	10.3	272
59	Transparent, Flexible, and Highly Conductive Thin Films Based on Polymerâˆ'Nanotube Composites. ACS Nano, 2009, 3, 714-720.	14.6	271
60	Development of stiff, strong, yet tough composites by the addition of solvent exfoliated graphene to polyurethane. Carbon, 2010, 48, 4035-4041.	10.3	270
61	Production of Molybdenum Trioxide Nanosheets by Liquid Exfoliation and Their Application in High-Performance Supercapacitors. Chemistry of Materials, 2014, 26, 1751-1763.	6.7	266
62	Liquid Phase Exfoliated MoS₂ Nanosheets Percolated with Carbon Nanotubes for High Volumetric/Areal Capacity Sodium-Ion Batteries. ACS Nano, 2016, 10, 8821-8828.	14.6	258
63	Inkjet deposition of liquid-exfoliated graphene and MoS₂nanosheets for printed device applications. Journal of Materials Chemistry C, 2014, 2, 925-932.	5.5	256
64	Selective Interaction of a Semiconjugated Organic Polymer with Single-Wall Nanotubes. Journal of Physical Chemistry B, 2000, 104, 10012-10016.	2.6	254
65	The importance of repulsive potential barriers for the dispersion of graphene using surfactants. New Journal of Physics, 2010, 12, 125008.	2.9	254
66	Improving the mechanical properties of single-walled carbon nanotube sheets by intercalation of polymeric adhesives. Applied Physics Letters, 2003, 82, 1682-1684.	3.3	253
67	High capacity silicon anodes enabled by MXene viscous aqueous ink. Nature Communications, 2019, 10, 849.	12.8	253
68	Continuous carbon nanotube composite fibers: properties, potential applications, and problemsElectronic supplementary information (ESI) available: frontispiece figure. See http://www.rsc.org/suppdata/jm/b3/b312092a/. Journal of Materials Chemistry, 2004, 14, 1.	6.7	247
69	Highly flexible and transparent solid-state supercapacitors based on RuO2/PEDOT:PSS conductive ultrathin films. Nano Energy, 2016, 28, 495-505.	16.0	247
70	Turbulence-assisted shear exfoliation of graphene using household detergent and a kitchen blender. Nanoscale, 2014, 6, 11810-11819.	5.6	241
71	Inkjet Printing of Silver Nanowire Networks. ACS Applied Materials & Interfaces, 2015, 7, 9254-9261.	8.0	235
72	Improving the mechanical properties of graphene oxide based materials by covalent attachment of polymer chains. Carbon, 2013, 52, 363-371.	10.3	232

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73	Ultrafast Nonlinear Excitation Dynamics of Black Phosphorus Nanosheets from Visible to Mid-Infrared. ACS Nano, 2016, 10, 6923-6932.	14.6	231
74	A Generic Organometallic Approach toward Ultra-Strong Carbon Nanotube Polymer Composites. Journal of the American Chemical Society, 2004, 126, 10226-10227.	13.7	227
75	Reinforcement of polymers with carbon nanotubes. The role of an orderedÂpolymer interfacial region. Experiment and modeling. Polymer, 2006, 47, 8556-8561.	3.8	224
76	Electrochemical ascorbic acid sensor based on DMF-exfoliated graphene. Journal of Materials Chemistry, 2010, 20, 7864.	6.7	224
77	Electrical Characteristics of Molybdenum Disulfide Flakes Produced by Liquid Exfoliation. Advanced Materials, 2011, 23, 4178-4182.	21.0	224
78	A Microscopic and Spectroscopic Study of Interactions between Carbon Nanotubes and a Conjugated Polymer. Journal of Physical Chemistry B, 2002, 106, 2210-2216.	2.6	221
79	Enhancement of Modulus, Strength, and Toughness in Poly(methyl methacrylate)-Based Composites by the Incorporation of Poly(methyl methacrylate)-Functionalized Nanotubes. Advanced Functional Materials, 2006, 16, 1608-1614.	14.9	219
80	Functionalization of Liquidâ€Exfoliated Twoâ€Dimensional 2Hâ€MoS₂. Angewandte Chemie - International Edition, 2015, 54, 2638-2642.	13.8	219
81	The effects of percolation in nanostructured transparent conductors. MRS Bulletin, 2011, 36, 774-781.	3.5	215
82	Measuring the lateral size of liquid-exfoliated nanosheets with dynamic light scattering. Nanotechnology, 2013, 24, 265703.	2.6	214
83	Preparation of Gallium Sulfide Nanosheets by Liquid Exfoliation and Their Application As Hydrogen Evolution Catalysts. Chemistry of Materials, 2015, 27, 3483-3493.	6.7	195
84	Spectroscopic metrics allow in situ measurement of mean size and thickness of liquid-exfoliated few-layer graphene nanosheets. Nanoscale, 2016, 8, 4311-4323.	5.6	194
85	Role of Solubility Parameters in Understanding the Steric Stabilization of Exfoliated Two-Dimensional Nanosheets by Adsorbed Polymers. Journal of Physical Chemistry C, 2012, 116, 11393-11400.	3.1	191
86	High-pressure Raman spectroscopy of graphene. Physical Review B, 2009, 80, .	3.2	188
87	Phase Separation of Carbon Nanotubes and Turbostratic Graphite Using a Functional Organic Polymer. Advanced Materials, 2000, 12, 213-216.	21.0	185
88	Quantifying the factors limiting rateÂperformance in battery electrodes. Nature Communications, 2019, 10, 1933.	12.8	185
89	Polymer reinforcement using liquid-exfoliated boron nitride nanosheets. Nanoscale, 2013, 5, 581-587.	5.6	181
90	Graphene oxide and graphene nanosheet reinforced aluminium matrix composites: Powder synthesis and prepared composite characteristics. Materials and Design, 2016, 94, 87-94.	7.0	176

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91	Nanopatterning and Electrical Tuning of MoS₂ Layers with a Subnanometer Helium Ion Beam. Nano Letters, 2015, 15, 5307-5313.	9.1	171
92	The spatial uniformity and electromechanical stability of transparent, conductive films of single walled nanotubes. Carbon, 2009, 47, 2466-2473.	10.3	165
93	Approaching the theoretical limit for reinforcing polymers with graphene. Journal of Materials Chemistry, 2012, 22, 1278-1282.	6.7	161
94	Electrical, Mechanical, and Capacity Percolation Leads to High-Performance MoS₂/Nanotube Composite Lithium Ion Battery Electrodes. ACS Nano, 2016, 10, 5980-5990.	14.6	159
95	Mechanisms of Liquid-Phase Exfoliation for the Production of Graphene. ACS Nano, 2020, 14, 10976-10985.	14.6	157
96	Ag-nanowire films coated with ZnO nanoparticles as a transparent electrode for solar cells. Applied Physics Letters, 2011, 99, .	3.3	149
97	Tunable nonlinear refractive index of two-dimensional MoS_2, WS_2, and MoSe_2 nanosheet dispersions [Invited]. Photonics Research, 2015, 3, A51.	7.0	146
98	Reinforcement in melt-processed polymerâ€“graphene composites at extremely low graphene loading level. Carbon, 2014, 78, 243-249.	10.3	136
99	Avoiding Resistance Limitations in High-Performance Transparent Supercapacitor Electrodes Based on Large-Area, High-Conductivity PEDOT:PSS Films. ACS Applied Materials & Interfaces, 2015, 7, 16495-16506.	8.0	136
100	Nanotube Surfactant Design: The Versatility of Waterâ€Soluble Perylene Bisimides. Advanced Materials, 2010, 22, 788-802.	21.0	134
101	Relationship between Material Properties and Transparent Heater Performance for Both Bulk-like and Percolative Nanostructured Networks. ACS Nano, 2014, 8, 4805-4814.	14.6	132
102	Selective Interaction in a Polymerâ˘'Single-Wall Carbon Nanotube Composite. Journal of Physical Chemistry B, 2003, 107, 478-482.	2.6	128
103	Comparison of liquid exfoliated transition metal dichalcogenides reveals MoSe₂to be the most effective hydrogen evolution catalyst. Nanoscale, 2016, 8, 5737-5749.	5.6	127
104	The dependence of the optoelectrical properties of silver nanowire networks on nanowire length and diameter. Nanotechnology, 2012, 23, 185201.	2.6	125
105	Liquid exfoliation of interlayer spacing-tunable 2D vanadium oxide nanosheets: High capacity and rate handling Li-ion battery cathodes. Nano Energy, 2017, 39, 151-161.	16.0	123
106	Equipartition of Energy Defines the Sizeâ€“Thickness Relationship in Liquid-Exfoliated Nanosheets. ACS Nano, 2019, 13, 7050-7061.	14.6	123
107	Very thin transparent, conductive carbon nanotube films on flexible substrates. Applied Physics Letters, 2010, 97, .	3.3	120
108	Ordered DNA Wrapping Switches on Luminescence in Single-Walled Nanotube Dispersions. Journal of the American Chemical Society, 2008, 130, 12734-12744.	13.7	119

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109	The relationship between network morphology and conductivity in nanotube films. Journal of Applied Physics, 2008, 104, .	2.5	119
110	Electrifying inks with 2D materials. Nature Nanotechnology, 2014, 9, 738-739.	31.5	116
111	Thickness Dependence and Percolation Scaling of Hydrogen Production Rate in MoS₂ Nanosheet and Nanosheetâ€“Carbon Nanotube Composite Catalytic Electrodes. ACS Nano, 2016, 10, 672-683.	14.6	116
112	Additive Manufacturing of Ti₃C₂â€MXeneâ€Functionalized Conductive Polymer Hydrogels for Electromagneticâ€Interference Shielding. Advanced Materials, 2022, 34, e2106253.	21.0	115
113	Hydrogen evolution across nano-Schottky junctions at carbon supported MoS2 catalysts in biphasic liquid systems. Chemical Communications, 2012, 48, 6484.	4.1	113
114	Enhanced brightness in organic light-emitting diodes using a carbon nanotube composite as an electron-transport layer. Journal of Applied Physics, 2001, 90, 969-975.	2.5	112
115	Air-stable monodispersed Mo6S3I6nanowires. Nanotechnology, 2004, 15, 635-638.	2.6	112
116	Improved Adhesive Strength and Toughness of Polyvinyl Acetate Glue on Addition of Small Quantities of Graphene. ACS Applied Materials & Interfaces, 2013, 5, 1423-1428.	8.0	112
117	Improvement of Transparent Conducting Nanotube Films by Addition of Small Quantities of Graphene. ACS Nano, 2010, 4, 4238-4246.	14.6	111
118	Thermoelectric behavior of organic thin film nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 119-123.	2.1	111
119	Mapping of Low-Frequency Raman Modes in CVD-Grown Transition Metal Dichalcogenides: Layer Number, Stacking Orientation and Resonant Effects. Scientific Reports, 2016, 6, 19476.	3.3	111
120	Carbon nanotubes for reinforcement of plastics? A case study with poly(vinyl alcohol). Composites Science and Technology, 2007, 67, 1640-1649.	7.8	110
121	New Solvents for Nanotubes: Approaching the Dispersibility of Surfactants. Journal of Physical Chemistry C, 2010, 114, 231-237.	3.1	108
122	Solubility of Mo6S4.5I4.5Nanowires in Common Solvents:Â A Sedimentation Study. Journal of Physical Chemistry B, 2005, 109, 7124-7133.	2.6	105
123	High-Yield, Nondestructive Purification and Quantification Method for Multiwalled Carbon Nanotubes. Journal of Physical Chemistry B, 2002, 106, 3087-3091.	2.6	104
124	The preparation of hybrid films of carbon nanotubes and nano-graphite/graphene with excellent mechanical and electrical properties. Carbon, 2010, 48, 2825-2830.	10.3	103
125	Photoconductivity of solution-processed MoS2 films. Journal of Materials Chemistry C, 2013, 1, 6899.	5.5	99
126	Material Investigation and Optical Limiting Properties of Carbon Nanotube and Nanoparticle Dispersions. Journal of Physical Chemistry B, 2003, 107, 958-964.	2.6	97

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127	Electrochemical Applications of Two-Dimensional Nanosheets: The Effect of Nanosheet Length and Thickness. Chemistry of Materials, 2016, 28, 2641-2651.	6.7	95
128	Physical Doping of a Conjugated Polymer with Carbon Nanotubes. Synthetic Metals, 1999, 102, 1174-1175.	3.9	93
129	Spontaneous Debundling of Single-Walled Carbon Nanotubes in DNA-Based Dispersions. Journal of Physical Chemistry C, 2007, 111, 66-74.	3.1	93
130	Evolution and evaluation of the polymer/nanotube composite. Synthetic Metals, 1999, 103, 2559-2562.	3.9	92
131	Optimisation of the arc-discharge production of multi-walled carbon nanotubes. Carbon, 2002, 40, 923-928.	10.3	92
132	Percolation Effects in Supercapacitors with Thin, Transparent Carbon Nanotube Electrodes. ACS Nano, 2012, 6, 1732-1741.	14.6	92
133	Liquid Exfoliated Co(OH)₂ Nanosheets as Lowâ€Cost, Yet Highâ€Performance, Catalysts for the Oxygen Evolution Reaction. Advanced Energy Materials, 2018, 8, 1702965.	19.5	92
134	Reinforcement of poly(vinyl chloride) and polystyrene using chlorinated polypropylene grafted carbon nanotubes. Journal of Materials Chemistry, 2006, 16, 4206.	6.7	90
135	Observation of Percolationâ€like Scaling â€“ Far from the Percolation Threshold â€“ in High Volume Fraction, High Conductivity Polymerâ€Nanotube Composite Films. Advanced Materials, 2007, 19, 4443-4447.	21.0	89
136	Effect of Percolation on the Capacitance of Supercapacitor Electrodes Prepared from Composites of Manganese Dioxide Nanoplatelets and Carbon Nanotubes. ACS Nano, 2014, 8, 9567-9579.	14.6	89
137	Carbon-nanotube nucleated crystallinity in a conjugated polymer based composite. Chemical Physics Letters, 2004, 391, 329-333.	2.6	86
138	Highâ€Strength, Highâ€Toughness Composite Fibers by Swelling Kevlar in Nanotube Suspensions. Small, 2009, 5, 466-469.	10.0	85
139	Enhancing the mechanical properties of BN nanosheetâ€“polymer composites by uniaxial drawing. Nanoscale, 2014, 6, 4889.	5.6	85
140	High-Performance Transparent Conductors from Networks of Gold Nanowires. Journal of Physical Chemistry Letters, 2011, 2, 3058-3062.	4.6	84
141	Dibromocarbene Functionalization of Boron Nitride Nanosheets: Toward Band Gap Manipulation and Nanocomposite Applications. Chemistry of Materials, 2014, 26, 7039-7050.	6.7	82
142	DMF-exfoliated graphene for electrochemical NADH detection. Physical Chemistry Chemical Physics, 2011, 13, 7747.	2.8	81
143	Electroconductive Biohybrid Collagen/Pristine Graphene Composite Biomaterials with Enhanced Biological Activity. Advanced Materials, 2018, 30, e1706442.	21.0	81
144	Influence of hard segment content and nature on polyurethane/multiwalled carbon nanotube composites. Composites Science and Technology, 2011, 71, 1030-1038.	7.8	80

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145	Nonlinear optical response of multiwalled carbon-nanotube dispersions. Journal of the Optical Society of America B: Optical Physics, 2003, 20, 49.	2.1	78
146	Charge transport effects in field emission from carbon nanotube-polymer composites. Applied Physics Letters, 2005, 87, 263105.	3.3	78
147	Manipulating Connectivity and Electrical Conductivity in Metallic Nanowire Networks. Nano Letters, 2012, 12, 5966-5971.	9.1	76
148	Large variations in both dark- and photoconductivity in nanosheet networks as nanomaterial is varied from MoS₂to WTe₂. Nanoscale, 2015, 7, 198-208.	5.6	76
149	Reinforcement of macroscopic carbon nanotube structures by polymer intercalation: The role of polymer molecular weight and chain conformation. Physical Review B, 2005, 72, .	3.2	75
150	Large Populations of Individual Nanotubes in Surfactant-Based Dispersions without the Need for Ultracentrifugation. Journal of Physical Chemistry C, 2008, 112, 972-977.	3.1	75
151	Percolation scaling in composites of exfoliated MoS2 filled with nanotubes and graphene. Nanoscale, 2012, 4, 6260.	5.6	75
152	Covalently Functionalized Hexagonal Boron Nitride Nanosheets by Nitrene Addition. Chemistry - A European Journal, 2012, 18, 10808-10812.	3.3	75
153	Biological recognition of graphene nanoflakes. Nature Communications, 2018, 9, 1577.	12.8	75
154	Quantifying the Effect of Electronic Conductivity on the Rate Performance of Nanocomposite Battery Electrodes. ACS Applied Energy Materials, 2020, 3, 2966-2974.	5.1	75
155	The electrical conductivity of solution-processed nanosheet networks. Nature Reviews Materials, 2022, 7, 217-234.	48.7	75
156	Generalizing solubility parameter theory to apply to oneâ€•and twoâ€dimensional solutes and to incorporate dipolar interactions. Journal of Applied Polymer Science, 2013, 127, 4483-4491.	2.6	74
157	Covalently interconnected transition metal dichalcogenide networks via defect engineering for high-performance electronic devices. Nature Nanotechnology, 2021, 16, 592-598.	31.5	74
158	Strong Dependence of Mechanical Properties on Fiber Diameter for Polymerâˆ’Nanotube Composite Fibers: Differentiating Defect from Orientation Effects. ACS Nano, 2010, 4, 6989-6997.	14.6	73
159	Photoluminescence from Liquidâ€Exfoliated WS₂ Monomers in Poly(Vinyl Alcohol) Polymer Composites. Advanced Functional Materials, 2016, 26, 1028-1039.	14.9	73
160	Transition Metal Dichalcogenide Growth via Close Proximity Precursor Supply. Scientific Reports, 2014, 4, 7374.	3.3	72
161	Biomolecules as selective dispersants for carbon nanotubes. Carbon, 2005, 43, 1879-1884.	10.3	71
162	Production of Ni(OH)₂nanosheets by liquid phase exfoliation: from optical properties to electrochemical applications. Journal of Materials Chemistry A, 2016, 4, 11046-11059.	10.3	71

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163	Enabling Flexible Heterostructures for Liâ€Ion Battery Anodes Based on Nanotube and Liquidâ€Phase Exfoliated 2D Gallium Chalcogenide Nanosheet Colloidal Solutions. Small, 2017, 13, 1701677.	10.0	71
164	Carbonâ€Nanotubeâ€"Polymer Nanocomposites for Fieldâ€Emission Cathodes. Small, 2009, 5, 826-831.	10.0	70
165	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.	14.9	70
166	Electronic Polarizability as the Fundamental Variable in the Dielectric Properties of Two-Dimensional Materials. Nano Letters, 2020, 20, 841-851.	9.1	70
167	Chemical functionalisation of titania nanotubes and their utilisation for the fabrication of reinforced polystyrene composites. Journal of Materials Chemistry, 2007, 17, 2351.	6.7	69
168	Observation of mechanical percolation in functionalized graphene oxide/elastomer composites. Carbon, 2012, 50, 4489-4494.	10.3	68
169	Helium ion microscopy of graphene: beam damage, image quality and edge contrast. Nanotechnology, 2013, 24, 335702.	2.6	68
170	All-printed capacitors from graphene-BN-graphene nanosheet heterostructures. Applied Physics Letters, 2016, 109, .	3.3	68
171	White Graphene undergoes Peroxidase Degradation. Angewandte Chemie - International Edition, 2016, 55, 5506-5511.	13.8	67
172	Exfoliation of 2D materials by high shear mixing. 2D Materials, 2019, 6, 015008.	4.4	67
173	Microscopy studies of nanotube-conjugated polymer interactions. Synthetic Metals, 2001, 121, 1225-1226.	3.9	66
174	Binding Kinetics and SWNT Bundle Dissociation in Low Concentration Polymerâˆ'Nanotube Dispersions. Journal of Physical Chemistry B, 2004, 108, 3446-3450.	2.6	65
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