

Graphene-based artificial nacre nanocomposites

Chemical Society Reviews

45, 2378-2395

DOI: [10.1039/c5cs00258c](https://doi.org/10.1039/c5cs00258c)

Citation Report

#	ARTICLE	IF	CITATIONS
2	Integrated ternary artificial nacre via synergistic toughening of reduced graphene oxide/double-walled carbon nanotubes/poly(vinyl alcohol). <i>Materials Research Express</i> , 2016, 3, 075002.	0.8	23
3	Space-Confined Growth of Defect-Rich Molybdenum Disulfide Nanosheets Within Graphene: Application in The Removal of Smoke Particles and Toxic Volatiles. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 34735-34743.	4.0	45
4	The era of water-enabled electricity generation from graphene. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9730-9738.	5.2	53
5	Microwave heating time dependent synthesis of various dimensional graphene oxide supported hierarchical ZnO nanostructures and its photoluminescence studies. <i>Materials and Design</i> , 2016, 111, 291-300.	3.3	52
6	Mechanical enhancement of a nanoconfined-electrodeposited nacre-like Cu ₂ O layered crystal/graphene oxide nanosheet composite thin film. <i>RSC Advances</i> , 2016, 6, 94845-94850.	1.7	6
7	Supramolecular Double-Helix Formation by Diastereoisomeric Conformations of Configurationally Enantiomeric Macrocycles. <i>Journal of the American Chemical Society</i> , 2016, 138, 14469-14480.	6.6	42
8	Robust bioinspired graphene-based nanocomposites via synergistic toughening of zinc ions and covalent bonding. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17073-17079.	5.2	44
9	Reinforcement of organo-modified molybdenum disulfide nanosheets on the mechanical and thermal properties of polyurethane acrylate films. <i>Composites Science and Technology</i> , 2016, 137, 188-195.	3.8	11
10	Tough and strong bioinspired nanocomposites with interfacial cross-links. <i>Nanoscale</i> , 2016, 8, 18531-18540.	2.8	13
11	Biomimetic Nanofibrillation in Two-Component Biopolymer Blends with Structural Analogs to Spider Silk. <i>Scientific Reports</i> , 2016, 6, 34572.	1.6	24
12	Functional Graphene Nanomaterials Based Architectures: Biointeractions, Fabrications, and Emerging Biological Applications. <i>Chemical Reviews</i> , 2017, 117, 1826-1914.	23.0	425
13	Cyclic microbridge testing of graphene oxide membrane. <i>Carbon</i> , 2017, 116, 479-489.	5.4	4
14	Biomineralization: From Material Tactics to Biological Strategy. <i>Advanced Materials</i> , 2017, 29, 1605903.	11.1	239
15	Graphene Oxide-Polymer Composite Langmuir Films Constructed by Interfacial Thiol-Ene Photopolymerization. <i>Nanoscale Research Letters</i> , 2017, 12, 99.	3.1	83
16	Application of bio-inspired nanocomposites for enhancing impact resistance of cementitious materials. <i>International Journal of Impact Engineering</i> , 2017, 110, 171-180.	2.4	3
17	Nacre-inspired polyglutamic acid/layered double hydroxide bionanocomposite film with high mechanical, translucence and UV-blocking properties. <i>Chinese Journal of Polymer Science (English)</i> Tj ETQq1 1 0.784614 rgB7 /Overlock	8.4	14
18	Lubricant-Infused Anisotropic Porous Surface Design of Reduced Graphene Oxide Toward Electrically Driven Smart Control of Conductive Droplets' Motion. <i>Advanced Functional Materials</i> , 2017, 27, 1606199.	7.8	71
19	Three-dimensional hierarchical porous graphene aerogel for efficient adsorption and preconcentration of chemical warfare agents. <i>Carbon</i> , 2017, 122, 556-563.	5.4	67

#	ARTICLE	IF	CITATIONS
20	Nacre-inspired design of graphene oxide/polydopamine nanocomposites for enhanced mechanical properties and multi-functionalities. <i>Nano Futures</i> , 2017, 1, 011003.	1.0	41
21	Programmable molecular composites of tandem proteins with graphene oxide for efficient bimorph actuators. <i>Carbon</i> , 2017, 118, 404-412.	5.4	27
22	Superstretchable Nacre-Mimetic Graphene/Poly(vinyl alcohol) Composite Film Based on Interfacial Architectural Engineering. <i>ACS Nano</i> , 2017, 11, 4777-4784.	7.3	163
23	Fracture mechanisms in multilayer phosphorene assemblies: from brittle to ductile. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 13083-13092.	1.3	10
24	Learning from nature: constructing high performance graphene-based nanocomposites. <i>Materials Today</i> , 2017, 20, 210-219.	8.3	104
25	Fatigue Resistant Bioinspired Composite from Synergistic Two-Dimensional Nanocomponents. <i>ACS Nano</i> , 2017, 11, 7074-7083.	7.3	49
26	Bioinspired Interface Engineering for Moisture Resistance in Nacre-Mimetic Cellulose Nanofibrils/Clay Nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 20169-20178.	4.0	93
27	Synergistically toughening nacre-like graphene nanocomposites via gel-film transformation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16386-16392.	5.2	43
28	Mechanical, Structural and Thermal Properties of Transparent Bi ₂ O ₃ -Al ₂ O ₃ -ZnO-TeO ₂ Glass System. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2017, 27, 788-794.	1.9	6
29	Nacre-mimetic bulk lamellar composites reinforced with high aspect ratio glass flakes. <i>Bioinspiration and Biomimetics</i> , 2017, 12, 016002.	1.5	1
30	Graphene as initiator/catalyst in polymerization chemistry. <i>Progress in Polymer Science</i> , 2017, 67, 48-76.	11.8	39
31	Nacre-mimic Reinforced Ag@reduced Graphene Oxide-Sodium Alginate Composite Film for Wound Healing. <i>Scientific Reports</i> , 2017, 7, 13851.	1.6	29
32	Fatigue-Resistant Bioinspired Graphene-Based Nanocomposites. <i>Advanced Functional Materials</i> , 2017, 27, 1703459.	7.8	37
33	High-Performance Nanocomposites Inspired by Nature. <i>Advanced Materials</i> , 2017, 29, 1702959.	11.1	138
34	Variable self-assembly and in situ host-guest reaction of beta-cyclodextrin-modified graphene oxide composite Langmuir films with azobenzene compounds. <i>RSC Advances</i> , 2017, 7, 41043-41051.	1.7	18
35	Topological Design of Ultrastrong and Highly Conductive Graphene Films. <i>Advanced Materials</i> , 2017, 29, 1702831.	11.1	108
36	Effect of flake size on the mechanical properties of graphene aerogels prepared by freeze casting. <i>RSC Advances</i> , 2017, 7, 33600-33605.	1.7	53
37	Learning from nacre: Constructing polymer nanocomposites. <i>Composites Science and Technology</i> , 2017, 150, 141-166.	3.8	72

#	ARTICLE	IF	CITATIONS
38	Sheet Collapsing Approach for Rubber-like Graphene Papers. ACS Nano, 2017, 11, 8092-8102.	7.3	50
39	Thermochromic Artificial Nacre Based on Montmorillonite. ACS Applied Materials & Interfaces, 2017, 9, 24993-24998.	4.0	34
40	Robust Bioinspired Graphene Film via " Cross-linking. ACS Applied Materials & Interfaces, 2017, 9, 24987-24992.	4.0	53
41	Preparation of graphene oxide-polymer composite hydrogels via thiol-ene photopolymerization as efficient dye adsorbents for wastewater treatment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 529, 668-676.	2.3	42
42	Precisely controlled growth of poly(ethyl acrylate) chains on graphene oxide and the formation of layered structure with improved mechanical properties. Composites Part A: Applied Science and Manufacturing, 2017, 93, 100-106.	3.8	19
43	Properties of Soy Protein Isolate Biopolymer Film Modified by Graphene. Polymers, 2017, 9, 312.	2.0	26
44	Improvement in Functional Properties of Soy Protein Isolate-Based Film by Cellulose Nanocrystal-Graphene Artificial Nacre Nanocomposite. Polymers, 2017, 9, 321.	2.0	30
45	Naturally-derived biopolymer nanocomposites: Interfacial design, properties and emerging applications. Materials Science and Engineering Reports, 2018, 125, 1-41.	14.8	182
46	Porous nanocomposite membranes based on functional GO with selective function for lithium adsorption. New Journal of Chemistry, 2018, 42, 4432-4442.	1.4	16
47	Adjustable and pseudocapacitance-prompted Li storage via the controlled preparation of nanocomposites with OD-2D carbon networks. Electrochimica Acta, 2018, 268, 323-331.	2.6	9
48	Advanced Materials through Assembly of Nanocelluloses. Advanced Materials, 2018, 30, e1703779.	11.1	493
49	Scalable Water-Based Production of Highly Conductive 2D Nanosheets with Ultrahigh Volumetric Capacitance and Rate Capability. Advanced Energy Materials, 2018, 8, 1800227.	10.2	26
50	Smart Nacre-Inspired Nanocomposites. ChemPhysChem, 2018, 19, 1980-1986.	1.0	8
51	Nacre-inspired composites with different macroscopic dimensions: strategies for improved mechanical performance and applications. NPG Asia Materials, 2018, 10, 1-22.	3.8	147
52	Bio-inspired layered nanolignocellulose/graphene-oxide composite with high mechanical strength due to borate cross-linking. Industrial Crops and Products, 2018, 118, 65-72.	2.5	22
53	Glycerol-Inspired Synergistic Interfacial Interactions for Constructing Ultrastrong Graphene-Based Nanocomposites. Advanced Functional Materials, 2018, 28, 1800924.	7.8	35
54	Anti-fouling and thermosensitive ion-imprinted nanocomposite membranes based on graphene oxide and silicon dioxide for selectively separating europium ions. Journal of Hazardous Materials, 2018, 353, 244-253.	6.5	97
55	Chemical Approach to Ultrastiff, Strong, and Environmentally Stable Graphene Films. ACS Applied Materials & Interfaces, 2018, 10, 5812-5818.	4.0	20

#	ARTICLE	IF	CITATIONS
56	Underwater Mechanically Robust Oil-Repellent Materials: Combining Conflicting Properties Using a Heterostructure. <i>Advanced Materials</i> , 2018, 30, 1706634.	11.1	58
57	The selectivity of nanoparticles for polydispersed ligand chains during the grafting-to process: a computer simulation study. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 2066-2074.	1.3	8
58	Bioinspired graphene-based nanocomposites via ionic interfacial interactions. <i>Composites Communications</i> , 2018, 7, 16-22.	3.3	25
59	Integration of Stiff Graphene and Tough Silk for the Design and Fabrication of Versatile Electronic Materials. <i>Advanced Functional Materials</i> , 2018, 28, 1705291.	7.8	148
60	Bioinspired Reduced Graphene Oxide/Polyacrylonitrile-Based Carbon Fibers/CoFe ₂ O ₄ Nanocomposite for Flexible Supercapacitors with High Strength and Capacitance. <i>ChemElectroChem</i> , 2018, 5, 1297-1305.	1.7	26
61	Role of Interface Interactions in the Construction of GO-Based Artificial Nacres. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800107.	1.9	25
62	Highly Tough Bioinspired Ternary Hydrogels Synergistically Reinforced by Graphene/Xonotlite Network. <i>Small</i> , 2018, 14, e1800673.	5.2	13
63	A review of recent research on materials used in polymer-matrix composites for body armor application. <i>Journal of Composite Materials</i> , 2018, 52, 3241-3263.	1.2	157
64	Bio-inspired graphene-derived membranes with strain-controlled interlayer spacing. <i>Nanoscale</i> , 2018, 10, 8585-8590.	2.8	7
65	A new strategy for air-stable black phosphorus reinforced PVA nanocomposites. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7142-7147.	5.2	47
66	Analysis of optimal crosslink density and platelet size insensitivity in graphene-based artificial nacres. <i>Nanoscale</i> , 2018, 10, 556-565.	2.8	13
67	Engineering the interface in mechanically responsive graphene-based films. <i>RSC Advances</i> , 2018, 8, 36257-36263.	1.7	13
68	Design, Fabrication, and Function of Silk-Based Nanomaterials. <i>Advanced Functional Materials</i> , 2018, 28, 1805305.	7.8	120
69	Programmable wettability on photocontrolled graphene film. <i>Science Advances</i> , 2018, 4, eaat7392.	4.7	245
70	Combining In Silico Design and Biomimetic Assembly: A New Approach for Developing High-Performance Dynamic Responsive Bio-Nanomaterials. <i>Advanced Materials</i> , 2018, 30, e1802306.	11.1	34
71	Pop-Up Conducting Large-Area Biographene Kirigami. <i>ACS Nano</i> , 2018, 12, 9714-9720.	7.3	27
72	Emerging trends in 2D nanotechnology that are redefining our understanding of "Nanocomposites". <i>Nano Today</i> , 2018, 21, 18-40.	6.2	59
73	Assembly Preparation of Multilayered Biomaterials with High Mechanical Strength and Bone-Forming Bioactivity. <i>Chemistry of Materials</i> , 2018, 30, 4646-4657.	3.2	32

#	ARTICLE	IF	CITATIONS
74	Integrated strength and toughness in graphene/calcium alginate films for highly efficient electromagnetic interference shielding. <i>Journal of Materials Chemistry C</i> , 2018, 6, 9166-9174.	2.7	54
75	Biomimicking of Hierarchical Molluscan Shell Structure Via Layer by Layer 3D Printing. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 10832-10840.	1.8	42
76	Effect of Reaction Temperature on Structure, Appearance and Bonding Type of Functionalized Graphene Oxide Modified P-Phenylene Diamine. <i>Materials</i> , 2018, 11, 647.	1.3	5
77	Nature-Inspired Green Procedure for Improving Performance of Protein-Based Nanocomposites via Introduction of Nanofibrillated Cellulose-Stabilized Graphene/Carbon Nanotubes Hybrid. <i>Polymers</i> , 2018, 10, 270.	2.0	26
78	Nacre-like laminate nitrogen-doped porous carbon/carbon nanotubes/graphene composite for excellent comprehensive performance supercapacitors. <i>Nanoscale</i> , 2018, 10, 15229-15237.	2.8	19
79	Self-healing and superstretchable conductors from hierarchical nanowire assemblies. <i>Nature Communications</i> , 2018, 9, 2786.	5.8	195
80	Strong, Conductive, Foldable Graphene Sheets by Sequential Ionic and π - π Bridging. <i>Advanced Materials</i> , 2018, 30, e1802733.	11.1	73
81	Bioinspired Supertough Graphene Fiber through Sequential Interfacial Interactions. <i>ACS Nano</i> , 2018, 12, 8901-8908.	7.3	67
82	Graphene oxide modified cobalt metallated porphyrin photocatalyst for conversion of formic acid from carbon dioxide. <i>Journal of CO2 Utilization</i> , 2018, 27, 107-114.	3.3	37
83	A review on the very high nanofiller-content nanocomposites: Their preparation methods and properties with high aspect ratio fillers. <i>Progress in Polymer Science</i> , 2018, 86, 1-39.	11.8	95
84	Sequentially bridged graphene sheets with high strength, toughness, and electrical conductivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5359-5364.	3.3	114
85	Fabrication the hybridization of ZnO nanorods and Graphene nanoslices and their electrochemical properties to Levodopa in the presence of uric acid. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 16894-16902.	1.1	8
86	Highly Conductive Nanocomposite Enabled by an Accordion-like Graphene Network for Flexible Heating Films and Supercapacitors. <i>ACS Applied Nano Materials</i> , 2018, 1, 4781-4787.	2.4	13
87	Artificial Nacre from Supramolecular Assembly of Graphene Oxide. <i>ACS Nano</i> , 2018, 12, 6228-6235.	7.3	85
88	Mechanical Properties of Nanolaminates Based on Graphene Nanoplatelets. , 2018, , 233-251.		0
89	In Situ Polymerization Approach to Graphene-Oxide-Reinforced Silicone Composites for Superior Anticorrosive Coating. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1800252.	2.0	9
90	Moist-electric generation. <i>Nanoscale</i> , 2019, 11, 23083-23091.	2.8	82
91	Multivariate nanocomposites for electrochemical sensing in the application of food. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 118, 759-769.	5.8	10

#	ARTICLE	IF	CITATIONS
92	Cationic Polyelectrolyte Bridged Boron Nitride Microplatelet Based Poly(vinyl alcohol) Composite: A Novel Method toward High Thermal Conductivity. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900787.	1.9	24
93	Synergistic Strengthening and Toughening the Interphase of Composites by Constructing Alternating "Rigid" and "Soft" Structure on Carbon Fiber Surface. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900970.	1.9	33
94	Bioinspired multifunctional biomaterials with hierarchical microstructure for wound dressing. <i>Acta Biomaterialia</i> , 2019, 100, 270-279.	4.1	57
95	Highly Multifunctional Dopamine-Functionalized Reduced Graphene Oxide Supercapacitors. <i>Matter</i> , 2019, 1, 1532-1546.	5.0	66
96	Two-Dimensional Materials in Biosensing and Healthcare: From <i>In Vitro</i> Diagnostics to Optogenetics and Beyond. <i>ACS Nano</i> , 2019, 13, 9781-9810.	7.3	259
97	Optimization design on simultaneously strengthening and toughening graphene-based nacre-like materials through noncovalent interaction. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 133, 103706.	2.3	36
98	Strong and Highly Conductive Graphene Composite Film Based on the Nanocellulose-Assisted Dispersion of Expanded Graphite and Incorporation of Poly(ethylene oxide). <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5045-5056.	3.2	43
99	Hybrid nanocomposites modified on sensors and biosensors for the analysis of food functionality and safety. <i>Trends in Food Science and Technology</i> , 2019, 90, 100-110.	7.8	19
100	Hierarchical Uniform Supramolecular Conjugated Spherulites with Suppression of Defect Emission. <i>IScience</i> , 2019, 16, 399-409.	1.9	30
101	Nacre-like composite films with high thermal conductivity, flexibility, and solvent stability for thermal management applications. <i>Journal of Materials Chemistry C</i> , 2019, 7, 9018-9024.	2.7	79
102	Synergistic effect of graphene oxide/montmorillonite-sodium carboxymethylcellulose ternary mimic-nacre nanocomposites prepared via a facile evaporation and hot-pressing technique. <i>Carbohydrate Polymers</i> , 2019, 222, 115026.	5.1	19
103	Transparent, Highly Stretchable, Rehealable, Sensing, and Fully Recyclable Ionic Conductors Fabricated by One-Step Polymerization Based on a Small Biological Molecule. <i>Advanced Functional Materials</i> , 2019, 29, 1902467.	7.8	154
104	Nacre-Mimetic Graphene Oxide/Cross-Linking Agent Composite Films with Superior Mechanical Properties. <i>ACS Nano</i> , 2019, 13, 4522-4529.	7.3	43
105	Improvement in antibacterial and functional properties of mussel-inspired cellulose nanofibrils/gelatin nanocomposites incorporated with graphene oxide for active packaging. <i>Industrial Crops and Products</i> , 2019, 132, 197-212.	2.5	65
106	Self-Assembly of Ultralarge Graphene Oxide Nanosheets and Alginate into Layered Nanocomposites for Robust Packaging Materials. <i>ACS Applied Nano Materials</i> , 2019, 2, 1431-1444.	2.4	17
107	Polymer nanocomposites having a high filler content: synthesis, structures, properties, and applications. <i>Nanoscale</i> , 2019, 11, 4653-4682.	2.8	161
108	Effect of Matrix Content on Mechanical and Thermal Properties of High Graphene Content Composites. <i>MATEC Web of Conferences</i> , 2019, 303, 01002.	0.1	5
109	Biological Material Interfaces as Inspiration for Mechanical and Optical Material Designs. <i>Chemical Reviews</i> , 2019, 119, 12279-12336.	23.0	121

#	ARTICLE	IF	CITATIONS
110	Moisture-enabled electricity generation from gradient polyoxometalates-modified sponge-like graphene oxide monolith. <i>Journal of Materials Science</i> , 2019, 54, 4831-4841.	1.7	19
111	Enhanced carbon dioxide flux by catechol-Zn ²⁺ synergistic manipulation of graphene oxide membranes. <i>Chemical Engineering Science</i> , 2019, 195, 230-238.	1.9	26
112	Highly mineralized chitosan-based material with large size, gradient mineral distribution and hierarchical structure. <i>Carbohydrate Polymers</i> , 2019, 208, 336-344.	5.1	9
113	Borate Inorganic Cross-Linked Durable Graphene Oxide Membrane Preparation and Membrane Fouling Control. <i>Environmental Science & Technology</i> , 2019, 53, 1501-1508.	4.6	37
114	Effect of Mussel-Inspired Poly(Dopamine)-Functionalized Carbon Nanotubes/Graphene Nanohybrids on Interfacial Adhesion of Soy Protein-Based Nanocomposites. <i>Polymer Composites</i> , 2019, 40, E1649-E1661.	2.3	4
115	Biomimetic Graphite Foils with High Foldability and Conductivity. <i>Small Methods</i> , 2019, 3, 1800282.	4.6	1
116	In silicon testing of the mechanical properties of graphene oxide-silk nanocomposites. <i>Acta Mechanica</i> , 2019, 230, 1413-1425.	1.1	16
117	Revealing the interrelation between hydrogen bonds and interfaces in graphene/PVA composites towards highly electrical conductivity. <i>Chemical Engineering Journal</i> , 2020, 383, 123126.	6.6	33
118	Probing the room-temperature oxidative desulfurization activity of three-dimensional alkaline graphene aerogel. <i>Applied Catalysis B: Environmental</i> , 2020, 262, 118266.	10.8	59
119	Versatile poly(vinyl alcohol)/clay physical hydrogels with tailorable structure as potential candidates for wound healing applications. <i>Materials Science and Engineering C</i> , 2020, 109, 110395.	3.8	35
120	Coordination-Driven Hierarchical Assembly of Hybrid Nanostructures Based on 2D Materials. <i>Small</i> , 2020, 16, 1902779.	5.2	11
121	Genetically engineered protein based nacre-like nanocomposites with superior mechanical and electrochemical performance. <i>Journal of Materials Chemistry A</i> , 2020, 8, 656-669.	5.2	10
122	Bioinspired Mineral-Organic Bone Adhesives for Stable Fracture Fixation and Accelerated Bone Regeneration. <i>Advanced Functional Materials</i> , 2020, 30, 1908381.	7.8	130
123	Bio-inspired stem-like composites based on highly aligned SiC nanowires. <i>Chemical Engineering Journal</i> , 2020, 389, 123466.	6.6	16
124	Glass Transition Temperature Regulates Mechanical Performance in Nacre-Mimetic Nanocomposites. <i>Macromolecular Rapid Communications</i> , 2020, 41, e2000380.	2.0	11
125	Self-Assembled Bioinspired Nanocomposites. <i>Accounts of Chemical Research</i> , 2020, 53, 2622-2635.	7.6	41
126	Novel bio-inspired three-dimensional nanocomposites based on montmorillonite and chitosan. <i>International Journal of Biological Macromolecules</i> , 2020, 165, 2702-2710.	3.6	10
127	Bioinspired Design of Graphene-Based Materials. <i>Advanced Functional Materials</i> , 2020, 30, 2007458.	7.8	15

#	ARTICLE	IF	CITATIONS
128	Nacre-Inspired Black Phosphorus/Nanofibrillar Cellulose Composite Film with Enhanced Mechanical Properties and Superior Fire Resistance. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 36639-36651.	4.0	46
129	Comparative study on effects of covalent-covalent, covalent-ionic and ionic-ionic bonding of carbon fibers with polyether amine/GO on the interfacial adhesion of epoxy composites. <i>Applied Surface Science</i> , 2020, 532, 147359.	3.1	30
130	Ice templated nanocomposites containing rod-like hematite particles: Interplay between particle anisotropy and particle-matrix interactions. <i>Journal of Applied Physics</i> , 2020, 128, 034702.	1.1	4
131	Amyloid-Mediated Fabrication of Organic-Inorganic Hybrid Materials and Their Biomedical Applications. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001060.	1.9	26
132	Metal-Level Robust, Folding Endurance, and Highly Temperature-Stable MXene-Based Film with Engineered Aramid Nanofiber for Extreme-Condition Electromagnetic Interference Shielding Applications. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 26485-26495.	4.0	113
133	Potential Natural Fiber Polymeric Nanobiocomposites: A Review. <i>Polymers</i> , 2020, 12, 1072.	2.0	154
134	Balancing oxygen-containing groups and structural defects for optimizing macroscopic tribological properties of graphene oxide coating. <i>Applied Surface Science</i> , 2020, 516, 146122.	3.1	15
135	Assembly of graphene oxide into the hyperbranched frameworks for the fabrication of flexible protein-based films with enhanced conductivities. <i>Composites Part B: Engineering</i> , 2020, 196, 108110.	5.9	29
136	In Vivo Disintegration and Bioresorption of a Nacre-Inspired Graphene-Silk Film Caused by the Foreign-Body Reaction. <i>IScience</i> , 2020, 23, 101155.	1.9	8
137	Self-assembly of block copolymers towards mesoporous materials for energy storage and conversion systems. <i>Chemical Society Reviews</i> , 2020, 49, 4681-4736.	18.7	311
138	Multilevel mineral-coated imprinted nanocomposite membranes for template-dependent recognition and separation: A well-designed strategy with PDA/CaCO ₃ -based loading structure. <i>Journal of Colloid and Interface Science</i> , 2020, 575, 356-366.	5.0	19
139	Hierarchically structured diamond composite with exceptional toughness. <i>Nature</i> , 2020, 582, 370-374.	13.7	141
140	Bioinspired Lamellar Barriers for Significantly Improving the Flame-Retardant Properties of Nanocellulose Composites. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4331-4336.	3.2	32
141	Micromechanics of engineered interphases in nacre-like composite structures. <i>Mechanics of Advanced Materials and Structures</i> , 2021, 28, 2327-2342.	1.5	14
142	Review-Nanocomposite-Based Sensors for Voltammetric Detection of Hazardous Phenolic Pollutants in Water. <i>Journal of the Electrochemical Society</i> , 2020, 167, 037568.	1.3	39
143	A novel method for fabricating bioinspired layered nanocomposites using aligned graphene oxide/PVDF and their micromechanical modeling. <i>Materials Today Communications</i> , 2020, 24, 101050.	0.9	9
144	Stable lubrication in air and vacuum of GO-Al ³⁺ coating via strong chemical bonding and reactive sites passivation by aluminum ions. <i>Carbon</i> , 2020, 160, 247-254.	5.4	11
145	Recent researches of the bio-inspired nano-carbon reinforced metal matrix composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 131, 105816.	3.8	45

#	ARTICLE	IF	CITATIONS
146	Super-tough MXene-functionalized graphene sheets. Nature Communications, 2020, 11, 2077.	5.8	289
147	Ultratough grapheneâ€“black phosphorus films. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8727-8735.	3.3	74
148	Fire retardant cellulose aerogel with improved strength and hydrophobic surface by oneâ€“pot method. Journal of Applied Polymer Science, 2021, 138, 50224.	1.3	8
149	Environmental impact of using nanomaterials in textiles. , 2021, , 321-342.		4
150	Mechanical, tribological and thermal properties of injection molded short carbon fiber/expanded graphite/polyetherimide composites. Composites Science and Technology, 2021, 201, 108498.	3.8	38
151	Highly thermally conductive yet mechanically robust composites with nacre-mimetic structure prepared by evaporation-induced self-assembly approach. Chemical Engineering Journal, 2021, 405, 126865.	6.6	34
152	Bioinspired layered proton-exchange membranes with high strength and proton conductivity. International Journal of Hydrogen Energy, 2021, 46, 4087-4099.	3.8	17
153	A facile cathodic electrophoretic deposition (EPD) of GO nanosheet with an orderly layered nanostructure for development of long-term durability anticorrosive coating. Progress in Organic Coatings, 2021, 151, 106034.	1.9	5
154	Interface mechanics in carbon nanomaterials-based nanocomposites. Composites Part A: Applied Science and Manufacturing, 2021, 141, 106212.	3.8	43
155	Fabrication of an orderly layered nanostructure coating via cathodic EPD of silanized GO nanosheet for anti-corrosion protection. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125754.	2.3	5
156	Fabrication and properties for novel graphene oxide powder with extra large interlayer spacing and high reactivity. Journal of Macromolecular Science - Pure and Applied Chemistry, 2021, 58, 156-164.	1.2	3
157	Metal coordination assists fabrication of multifunctional aerogel. Journal of Materials Science and Technology, 2021, 71, 67-74.	5.6	4
158	Coordination-driven interfacial cross-linked graphene oxide-alginate nacre mesh with underwater superoleophobicity for oil-water separation. Carbohydrate Polymers, 2021, 251, 117097.	5.1	51
159	Strengthening of Black Phosphorus/Nanofibrillar Cellulose Composite Film with Nacre-Inspired Structure and Superior Fire Resistance. Springer Theses, 2021, , 85-110.	0.0	0
160	An overview of biopolymer-based nanocomposites for optics and electronics. Journal of Materials Chemistry C, 2021, 9, 5578-5593.	2.7	30
161	Transparent polymer nanocomposites based on two-dimensional materials and their multiple applications. , 2021, , 1-30.		0
162	Ultratough and ultrastrong graphene oxide hybrid films<i>via</i>a polycationitrile approach. Nanoscale Horizons, 2021, 6, 341-347.	4.1	6
163	Nature-inspired hierarchical materials for sensing and energy storage applications. Chemical Society Reviews, 2021, 50, 4856-4871.	18.7	49

#	ARTICLE	IF	CITATIONS
164	Advanced Electrical Conductors: An Overview and Prospects of Metal Nanocomposite and Nanocarbon Based Conductors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000704.	0.8	20
165	Reduced Graphene Oxide-Poly (Ionic Liquid) Composite Films of High Mechanical Performance. <i>Frontiers in Materials</i> , 2021, 8, .	1.2	2
166	Biomass-Derived Carbon Materials: Controllable Preparation and Versatile Applications. <i>Small</i> , 2021, 17, e2008079.	5.2	105
167	Biomimetic strategies for 4.0V all-solid-state flexible supercapacitor: Moving toward eco-friendly, safe, aesthetic, and high-performance devices. <i>Chemical Engineering Journal</i> , 2021, 414, 128842.	6.6	10
168	Radiation synthesis of graphene oxide/composite hydrogels and their ability for potential dye adsorption from wastewater. <i>Journal of Applied Polymer Science</i> , 2021, 138, 51220.	1.3	14
169	Nacre-like GNP/Epoxy composites: Reinforcement efficiency vis-à-vis graphene content. <i>Composites Science and Technology</i> , 2021, 211, 108873.	3.8	18
170	Dragonfly wing-inspired architecture makes a stiff yet tough healable material. <i>Matter</i> , 2021, 4, 2474-2489.	5.0	63
171	Bioinspired multiscale Al ₂ O ₃ -rGO/Al laminated composites with superior mechanical properties. <i>Composites Part B: Engineering</i> , 2021, 217, 108916.	5.9	37
172	Bio-inspired graphene-based nano-systems for biomedical applications. <i>Nanotechnology</i> , 2021, 32, 502001.	1.3	38
173	Graphene-Based Films: Fabrication, Interfacial Modification, and Applications. <i>Nanomaterials</i> , 2021, 11, 2539.	1.9	11
174	Novel titin-inspired high-performance polyurethanes with self-healing and recyclable capacities based on dual dynamic network. <i>Polymer</i> , 2021, 230, 124096.	1.8	22
175	Interface Design of Iron Nanoparticles for Environmental Remediation. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2021, 36, 561.	0.6	1
176	Aramid Polycarbonate Resin Film Engineered Composite for Ballistic Protection: Engineered Layered Materials. <i>Materials Horizons</i> , 2021, , 49-66.	0.3	3
177	Strong and tough graphene papers constructed with pyrene-containing small molecules via π - π /H-bonding synergistic interactions. <i>Science China Materials</i> , 2021, 64, 1206-1218.	3.5	5
178	Biomimetic elastomeric, conductive and biodegradable polycitrate-based nanocomposites for guiding myogenic differentiation and skeletal muscle regeneration. <i>Biomaterials</i> , 2018, 157, 40-50.	5.7	107
179	Functional Hybrid Micro/Nanoentities Promote Agro-Food Safety Inspection. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 12402-12417.	2.4	18
180	A flexible and strong reduced graphene oxide film for high-performance electromagnetic shielding. <i>Composites Communications</i> , 2021, 28, 100954.	3.3	14
181	Ultrastretchable and Self-Healing Conductors with Double Dynamic Network for Omni-Healable Capacitive Strain Sensors. <i>Nano Letters</i> , 2022, 22, 1433-1442.	4.5	24

#	ARTICLE	IF	CITATIONS
182	Extended deformable tension-shear model for graphene layered materials with non-uniform staggering. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 159, 104728.	2.3	7
183	Flexible and High Thermal Conductivity Composites Based on Graphite Nanoplates Paper Impregnated with Polydimethylsiloxane. <i>Journal of Composites Science</i> , 2021, 5, 309.	1.4	2
184	Polycaprolactone Adsorption and Nucleation onto Graphite Nanoplates for Highly Flexible, Thermally Conductive, and Thermomechanically Stiff Nanopapers. <i>ACS Applied Materials & Interfaces</i> , 2021, , .	4.0	5
185	Robust aramid nanopaper based on the uniform wrap of sodium alginate on the surface of nanofibers. <i>Journal of Materials Science</i> , 2022, 57, 1111-1122.	1.7	7
186	Interphase in Polymer Nanocomposites. <i>Jacs Au</i> , 2022, 2, 280-291.	3.6	49
187	Bioinspired strategies for making superior graphene composite coatings. <i>Chemical Engineering Journal</i> , 2022, 435, 134808.	6.6	17
188	Interfacial Assembly of Functional Mesoporous Carbon-Based Materials into Films for Batteries and Electrocatalysis. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	13
189	<sc>Two-dimensional MXenes</sc>: New frontier of wearable and flexible electronics. <i>Informa-Materials</i> , 2022, 4, .	8.5	102
190	Biomimic Heterostructured Graphene Oxide Membranes via Supramolecular-Mediated Intercalation Assembly for Efficient Water Transport. <i>Small</i> , 2022, 18, e2200461.	5.2	7
191	A Bioinspired Ultratough Composite Produced by Integration of Inorganic Ionic Oligomers within Polymer Networks. <i>ACS Nano</i> , 2022, 16, 7926-7936.	7.3	29
192	Multifunctional Rgo-Based Films with "Brick-Slurry" Structure: High-Efficiency Electromagnetic Shielding Performance, High Strength and Excellent Environmental Adaptability. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
193	Synthesis of graphene polymer composites having high filler content. , 2022, , 49-60.		0
194	A Review of Preconcentrator Materials, Flow Regimes and Detection Technologies for Gas Adsorption and Sensing. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	3
195	Graphene oxide-modified layered double hydroxide/chitosan nacre-mimetic scaffolds treat breast cancer metastasis-induced bone defects. <i>Carbon</i> , 2022, 200, 63-74.	5.4	6
196	Multifunctional RGO-based films with "brick-slurry" structure: High-efficiency electromagnetic shielding performance, high strength and excellent environmental adaptability. <i>Carbon</i> , 2022, 200, 156-165.	5.4	14
197	Interfacial Mechanics of Polymer Nanocomposites. , 2022, , .		1
198	Calcium carbonate: controlled synthesis, surface functionalization, and nanostructured materials. <i>Chemical Society Reviews</i> , 2022, 51, 7883-7943.	18.7	70
199	Nanolayered Graphene/Black Phosphorus Films for Fire-Retardant Coatings. <i>ACS Applied Nano Materials</i> , 2022, 5, 14841-14849.	2.4	5

#	ARTICLE	IF	CITATIONS
200	Preparation of Nitrogen-Doped Graphene Films for Temperature Sensing by Crosslinking with Two-Dimensional Small Molecule. <i>Materials Science Forum</i> , 0, 1070, 157-164.	0.3	0
201	Hydrogen Plasma on Graphene Oxide to Produce Gradients of Oxygen-Containing Functional Groups for Self-Powered Devices. <i>ACS Applied Nano Materials</i> , 2022, 5, 16664-16673.	2.4	1
202	Orb-Web-Inspired Polymer-Carbon Nanocomposite Mesh Film for Acoustic Sensing. <i>ACS Applied Nano Materials</i> , 2022, 5, 14654-14662.	2.4	2
203	Three-Dimensionally Conducting Network in Graphene-Based Composite Fibers toward Enhanced Electrochemical and Toughness Performance in Fibrous Supercapacitors. <i>ACS Applied Energy Materials</i> , 2022, 5, 13212-13221.	2.5	5
204	Layer-by-layer covalent bond coupling way making graphdiyne cages. <i>Nano Energy</i> , 2022, 104, 107904.	8.2	3
205	Iron ions induced self-assembly of graphene oxide lubricating coating with self-adapting low friction characteristics. <i>Carbon</i> , 2023, 201, 1151-1159.	5.4	11
206	Bending deformable tension-shear model for nacre-like composites. <i>Journal of the Mechanics and Physics of Solids</i> , 2023, 171, 105132.	2.3	3
207	Nature-mimicking rigid tough interface in fibrous composites: Effect of polymer/GO combination. <i>Materials Today Communications</i> , 2022, 33, 104883.	0.9	0
208	High strength in combination with high toughness in layered intrinsic heterocyclic aramid films via constructing liquid crystal-like structure during gelation self-assembly. <i>European Polymer Journal</i> , 2023, 183, 111740.	2.6	1
209	Maximum utilization of nacre-mimetic composites by architecture manipulation and interface modification towards critical damage state. <i>Composites Science and Technology</i> , 2023, 233, 109893.	3.8	4
210	Tuning lattice strain in Quasi-2D Au-rGO nanohybrid catalysts for dimethylphenylsilane solid state silylation to disiloxane. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2023, 291, 116395.	1.7	0
211	Nacre-like graphene oxide nanocomposite with nanodiamonds as nanoasperities. <i>Diamond and Related Materials</i> , 2023, 135, 109878.	1.8	0
212	Mesoporous Carbon-Based Materials for Enhancing the Performance of Lithium-Sulfur Batteries. <i>International Journal of Molecular Sciences</i> , 2023, 24, 7291.	1.8	3
214	Review on natural fibre composites reinforced with nanoparticles. <i>Materials Today: Proceedings</i> , 2023, , .	0.9	4
215	Synthesis and Application of Mesoporous Materials: Process Status, Technical Problems, and Development Prospects: A Mini-Review. <i>Energy & Fuels</i> , 2023, 37, 3413-3427.	2.5	10
216	Interface modulations of high-performance graphene anticorrosion coatings. <i>Progress in Organic Coatings</i> , 2023, 178, 107463.	1.9	4
217	Electric Eel Biomimetics for Energy Storage and Conversion. <i>Small Methods</i> , 0, , .	4.6	4
225	Nature-inspired Green Supercapacitors: Advantages and Limitations. , 2023, , 291-325.		0

#	ARTICLE	IF	CITATIONS
229	Modern Perspective of Nanofiller. , 2024, , 1-24.		0
232	Functionalized Carbon Nanostructures Based on Metal-Organic Framework/Graphene-Derived Materials. , 2024, , 1-35.		0