

Qunfeng Cheng

List of Publications by Year in descending order

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106
papers

8,981
citations

31976

53
h-index

39675

94
g-index

117
all docs

117
docs citations

117
times ranked

8499
citing authors

#	ARTICLE	IF	CITATIONS
1	Layered nanocomposites inspired by the structure and mechanical properties of nacre. <i>Chemical Society Reviews</i> , 2012, 41, 1111-1129.	38.1	454
2	A Strong Integrated Strength and Toughness Artificial Nacre Based on Dopamine Cross-Linked Graphene Oxide. <i>ACS Nano</i> , 2014, 8, 9511-9517.	14.6	347
3	High-strength scalable MXene films through bridging-induced densification. <i>Science</i> , 2021, 374, 96-99.	12.6	297
4	High Mechanical Performance Composite Conductor: Multi-Walled Carbon Nanotube Sheet/Bismaleimide Nanocomposites. <i>Advanced Functional Materials</i> , 2009, 19, 3219-3225.	14.9	289
5	Super-tough MXene-functionalized graphene sheets. <i>Nature Communications</i> , 2020, 11, 2077.	12.8	289
6	Synergistic Toughening of Bioinspired Poly(vinyl alcohol)-Clay Nanofibrillar Cellulose Artificial Nacre. <i>ACS Nano</i> , 2014, 8, 2739-2745.	14.6	282
7	Ultratough Artificial Nacre Based on Conjugated Cross-Linked Graphene Oxide. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 3750-3755.	13.8	278
8	Bioinspired Layered Materials with Superior Mechanical Performance. <i>Accounts of Chemical Research</i> , 2014, 47, 1256-1266.	15.6	276
9	Use of Synergistic Interactions to Fabricate Strong, Tough, and Conductive Artificial Nacre Based on Graphene Oxide and Chitosan. <i>ACS Nano</i> , 2015, 9, 9830-9836.	14.6	239
10	Graphene-based artificial nacre nanocomposites. <i>Chemical Society Reviews</i> , 2016, 45, 2378-2395.	38.1	233
11	Janus interface materials: superhydrophobic air/solid interface and superoleophobic water/solid interface inspired by a lotus leaf. <i>Soft Matter</i> , 2011, 7, 5948.	2.7	203
12	A Strong Bio-Inspired Layered PNIPAM-Clay Nanocomposite Hydrogel. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 4676-4680.	13.8	198
13	Synergistic Toughening of Graphene Oxide-Molybdenum Disulfide-Thermoplastic Polyurethane Ternary Artificial Nacre. <i>ACS Nano</i> , 2015, 9, 708-714.	14.6	188
14	Bioinspired Graphene-Based Nanocomposites and Their Application in Flexible Energy Devices. <i>Advanced Materials</i> , 2016, 28, 7862-7898.	21.0	178
15	Super-tough artificial nacre based on graphene oxide via synergistic interface interactions of π - π stacking and hydrogen bonding. <i>Carbon</i> , 2017, 111, 807-812.	10.3	178
16	Functionalized Carbon Nanotube Sheet/Bismaleimide Nanocomposites: Mechanical and Electrical Performance Beyond Carbon Fiber Composites. <i>Small</i> , 2010, 6, 763-767.	10.0	175
17	Bioinspired graphene membrane with temperature tunable channels for water gating and molecular separation. <i>Nature Communications</i> , 2017, 8, 2011.	12.8	175
18	Learning from Nature: Constructing Integrated Graphene-Based Artificial Nacre. <i>ACS Nano</i> , 2015, 9, 2231-2234.	14.6	168

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19	Freeze Casting for Assembling Bioinspired Structural Materials. <i>Advanced Materials</i> , 2017, 29, 1703155.	21.0	160
20	Thermal conductivity of MWCNT/epoxy composites: The effects of length, alignment and functionalization. <i>Carbon</i> , 2012, 50, 2083-2090.	10.3	153
21	Strong sequentially bridged MXene sheets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 27154-27161.	7.1	148
22	Nacre-inspired integrated nanocomposites with fire retardant properties by graphene oxide and montmorillonite. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21194-21200.	10.3	144
23	High-Performance Nanocomposites Inspired by Nature. <i>Advanced Materials</i> , 2017, 29, 1702959.	21.0	138
24	Bioinspired Layered Composites Based on Flattened Double-Walled Carbon Nanotubes. <i>Advanced Materials</i> , 2012, 24, 1838-1843.	21.0	137
25	Electromagnetic interference shielding properties of carbon nanotube buckypaper composites. <i>Nanotechnology</i> , 2009, 20, 415702.	2.6	128
26	Nacre-inspired integrated strong and tough reduced graphene oxide-poly(acrylic acid) nanocomposites. <i>Nanoscale</i> , 2016, 8, 5649-5656.	5.6	124
27	High-strength scalable graphene sheets by freezing stretch-induced alignment. <i>Nature Materials</i> , 2021, 20, 624-631.	27.5	117
28	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.	7.1	114
29	Integrated Ternary Bioinspired Nanocomposites via Synergistic Toughening of Reduced Graphene Oxide and Double-Walled Carbon Nanotubes. <i>ACS Nano</i> , 2015, 9, 11568-11573.	14.6	110
30	Ultrastrong Bioinspired Graphene-Based Fibers via Synergistic Toughening. <i>Advanced Materials</i> , 2016, 28, 2834-2839.	21.0	108
31	Ultrastrong Graphene Films via Long-Chain Bridging. <i>Matter</i> , 2019, 1, 389-401.	10.0	108
32	Learning from nature: constructing high performance graphene-based nanocomposites. <i>Materials Today</i> , 2017, 20, 210-219.	14.2	104
33	Bioinspired Ternary Artificial Nacre Nanocomposites Based on Reduced Graphene Oxide and Nanofibrillar Cellulose. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10545-10550.	8.0	102
34	Understanding the relationship of performance with nanofiller content in the biomimetic layered nanocomposites. <i>Nanoscale</i> , 2013, 5, 6356.	5.6	97
35	Ultra-Tough Inverse Artificial Nacre Based on Epoxy-Graphene by Freeze-Casting. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7636-7640.	13.8	93
36	An underwater pH-responsive superoleophobic surface with reversibly switchable oil-adhesion. <i>Soft Matter</i> , 2012, 8, 6740.	2.7	89

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37	Inverse Nacre-like Epoxy-Graphene Layered Nanocomposites with Integration of High Toughness and Self-Monitoring. <i>Matter</i> , 2020, 2, 220-232.	10.0	87
38	Fabrication and properties of aligned multiwalled carbon nanotube-reinforced epoxy composites. <i>Journal of Materials Research</i> , 2008, 23, 2975-2983.	2.6	86
39	Superior Fatigue Resistant Bioinspired Graphene-Based Nanocomposite via Synergistic Interfacial Interactions. <i>Advanced Functional Materials</i> , 2017, 27, 1605636.	14.9	80
40	Strong bioinspired HPA-rGO nanocomposite films via interfacial interactions for flexible supercapacitors. <i>Nano Energy</i> , 2019, 58, 517-527.	16.0	79
41	Ultratough graphene/black phosphorus films. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 8727-8735.	7.1	74
42	Strong, Conductive, Foldable Graphene Sheets by Sequential Ionic and π - π Bridging. <i>Advanced Materials</i> , 2018, 30, e1802733.	21.0	73
43	Learning from nacre: Constructing polymer nanocomposites. <i>Composites Science and Technology</i> , 2017, 150, 141-166.	7.8	72
44	Thermoresponsive Graphene Membranes with Reversible Gating Regularity for Smart Fluid Control. <i>Advanced Functional Materials</i> , 2019, 29, 1808501.	14.9	70
45	Bioinspired Supertough Graphene Fiber through Sequential Interfacial Interactions. <i>ACS Nano</i> , 2018, 12, 8901-8908.	14.6	67
46	A Butterfly-Inspired Hierarchical Light-Trapping Structure towards a High-Performance Polarization-Sensitive Perovskite Photodetector. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 16456-16462.	13.8	67
47	Bioinspired Color Switchable Photonic Crystal Silicone Elastomer Kirigami. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14307-14312.	13.8	66
48	Bioinspired Green Composite Lotus Fibers. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3358-3361.	13.8	65
49	Stiff and tough PDMS-MMT layered nanocomposites visualized by AIE luminogens. <i>Nature Communications</i> , 2021, 12, 4539.	12.8	64
50	Synergistic reinforcing effect from graphene and carbon nanotubes. <i>Composites Communications</i> , 2018, 10, 122-128.	6.3	63
51	Near-Infrared-Driven Photocatalysts: Design, Construction, and Applications. <i>Small</i> , 2021, 17, e1904107.	10.0	63
52	Highly reflective superhydrophobic white coating inspired by poplar leaf hairs toward an effective "cool roof". <i>Energy and Environmental Science</i> , 2011, 4, 3364.	30.8	57
53	In situ characterization of structural changes and the fraction of aligned carbon nanotube networks produced by stretching. <i>Carbon</i> , 2012, 50, 3859-3867.	10.3	54
54	Robust Bioinspired Graphene Film via π - π Cross-linking. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 24987-24992.	8.0	53

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55	Ultratough Bioinspired Graphene Fiber <i>via</i> Sequential Toughening of Hydrogen and Ionic Bonding. ACS Nano, 2018, 12, 12638-12645.	14.6	53
56	Ultratough nacre-inspired epoxy-graphene composites with shape memory properties. Journal of Materials Chemistry A, 2019, 7, 2787-2794.	10.3	53
57	Fatigue Resistant Bioinspired Composite from Synergistic Two-Dimensional Nanocomponents. ACS Nano, 2017, 11, 7074-7083.	14.6	49
58	<i>Ex situ</i> concept for toughening the RTMable BMI matrix composites, Part I: Improving the interlaminar fracture toughness. Journal of Applied Polymer Science, 2008, 109, 1625-1634.	2.6	48
59	A new strategy for air-stable black phosphorus reinforced PVA nanocomposites. Journal of Materials Chemistry A, 2018, 6, 7142-7147.	10.3	47
60	Robust bioinspired graphene-based nanocomposites via synergistic toughening of zinc ions and covalent bonding. Journal of Materials Chemistry A, 2016, 4, 17073-17079.	10.3	44
61	Synergistically toughening nacre-like graphene nanocomposites via gel-film transformation. Journal of Materials Chemistry A, 2017, 5, 16386-16392.	10.3	43
62	Fatigue-Resistant Bioinspired Graphene-Based Nanocomposites. Advanced Functional Materials, 2017, 27, 1703459.	14.9	37
63	<i>Glycerol</i> -inspired Synergistic Interfacial Interactions for Constructing Ultrastrong Graphene-Based Nanocomposites. Advanced Functional Materials, 2018, 28, 1800924.	14.9	35
64	Design Principles of High-Performance Graphene Films: Interfaces and Alignment. Matter, 2020, 3, 696-707.	10.0	35
65	Thermochromic Artificial Nacre Based on Montmorillonite. ACS Applied Materials & Interfaces, 2017, 9, 24993-24998.	8.0	34
66	Enhancing the strength, toughness, and electrical conductivity of twist-spun carbon nanotube yarns by I^{\ominus} bridging. Carbon, 2019, 150, 268-274.	10.3	32
67	The fabrication of single-walled carbon nanotube/polyelectrolyte multilayer composites by layer-by-layer assembly and magnetic field assisted alignment. Nanotechnology, 2009, 20, 335601.	2.6	28
68	Bioinspired highly electrically conductive graphene-epoxy layered composites. RSC Advances, 2015, 5, 22283-22288.	3.6	28
69	Bioinspired robust nanocomposites of copper ions and hydroxypropyl cellulose synergistic toughening graphene oxide. Science China Technological Sciences, 2017, 60, 758-764.	4.0	27
70	Mimicking Nacre by Ice Templating. Angewandte Chemie - International Edition, 2017, 56, 934-935.	13.8	26
71	A Butterfly-inspired Hierarchical Light-Trapping Structure towards a High-Performance Polarization-sensitive Perovskite Photodetector. Angewandte Chemie, 2019, 131, 16608-16614.	2.0	26
72	Bioinspired graphene-based nanocomposites via ionic interfacial interactions. Composites Communications, 2018, 7, 16-22.	6.3	25

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73	Role of Interface Interactions in the Construction of GO-Based Artificial Nacres. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800107.	3.7	25
74	Micro-Nano Structure Functionalized Perovskite Optoelectronics: From Structure Functionalities to Device Applications. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	25
75	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.	1.6	23
76	Multiple Synergistic Toughening Graphene Nanocomposites through Cadmium Ions and Cellulose Nanocrystals. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800145.	3.7	23
77	Chemical Strategies for Making Strong Graphene Materials. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 18397-18410.	13.8	21
78	Strong, conductive aramid fiber functionalized by graphene. <i>Composites Part A: Applied Science and Manufacturing</i> , 2021, 140, 106161.	7.6	20
79	Bioinspired light-driven photonic crystal actuator with MXene-hydrogel muscle. <i>Cell Reports Physical Science</i> , 2022, 3, 100915.	5.6	19
80	Improvement of the Impact Damage Resistance of BMI/Graphite Laminates by the Ex-situ Method. <i>High Performance Polymers</i> , 2006, 18, 907-917.	1.8	18
81	<i>Ex-situ</i> concept for toughening the RTMable BMI matrix composites. II. Improving the compression after impact. <i>Journal of Applied Polymer Science</i> , 2008, 108, 2211-2217.	2.6	18
82	Low-Cost Coir Fiber Composite with Integrated Strength and Toughness. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 5450-5455.	6.7	18
83	Nacre inspired robust self-encapsulating flexible perovskite photodetector. <i>Nano Energy</i> , 2022, 98, 107254.	16.0	17
84	In silicon testing of the mechanical properties of graphene oxide-silk nanocomposites. <i>Acta Mechanica</i> , 2019, 230, 1413-1425.	2.1	16
85	Strong Reduced Graphene Oxide Coated <i>Bombyx mori</i> Silk. <i>Advanced Functional Materials</i> , 2021, 31, 2102923.	14.9	16
86	Ultra-Tough Inverse Artificial Nacre Based on Epoxy-Graphene by Freeze-Casting. <i>Angewandte Chemie</i> , 2019, 131, 7718-7722.	2.0	14
87	Preform-based toughening technology for RTMable high-temperature aerospace composites. <i>Science China Technological Sciences</i> , 2012, 55, 2255-2263.	4.0	13
88	Moiré-Potential-Induced Band Structure Engineering in Graphene and Silicene. <i>Small</i> , 2021, 17, e1903769.	10.0	9
89	Smart Nacre-Inspired Nanocomposites. <i>ChemPhysChem</i> , 2018, 19, 1980-1986.	2.1	8
90	Graphene Sheets: Strong, Conductive, Foldable Graphene Sheets by Sequential Ionic and π -Bridging (Adv. Mater. 36/2018). <i>Advanced Materials</i> , 2018, 30, 1870275.	21.0	5

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91	Bioinspired Color Switchable Photonic Crystal Silicone Elastomer Kirigami. <i>Angewandte Chemie</i> , 2021, 133, 14428-14433.	2.0	5
92	Comparative Characterization of Multiscale Carbon Fiber Composite with Long and Short MWCNTs at Higher Weight Fractions. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-9.	2.7	4
93	Science behind nacre: matrix-directed mineralization at ambient condition. <i>Science China Materials</i> , 2016, 59, 889-891.	6.3	4
94	Bioinspired graphene-based nanocomposites and their application in electronic devices. <i>Chinese Science Bulletin</i> , 2017, 62, 3173-3200.	0.7	3
95	Perlmutter-Mimetika durch Ice-templating. <i>Angewandte Chemie</i> , 2017, 129, 954-955.	2.0	2
96	Inside Cover: A Strong Bio-Inspired Layered PNIPAM-Clay Nanocomposite Hydrogel (<i>Angew. Chem. Int.</i>)	13.8	1
97	Innenrücktitelbild: Ultratough Artificial Nacre Based on Conjugated Cross-linked Graphene Oxide (<i>Angew. Chem.</i> 13/2013). <i>Angewandte Chemie</i> , 2013, 125, 3863-3863.	2.0	1
98	Nanocomposites: High-Performance Nanocomposites Inspired by Nature (<i>Adv. Mater.</i> 45/2017). <i>Advanced Materials</i> , 2017, 29, .	21.0	1
99	Multidisciplinary Efforts Advance Materials Research at Beihang University. <i>Advanced Materials</i> , 2017, 29, 1705873.	21.0	0
100	Freeze Casting: Freeze Casting for Assembling Bioinspired Structural Materials (<i>Adv. Mater.</i> 45/2017). <i>Advanced Materials</i> , 2017, 29, .	21.0	0
101	Bioinspired Nanocomposites: Fatigue-Resistant Bioinspired Graphene-Based Nanocomposites (<i>Adv. Funct.</i>)	14.9	0
102	Bioinspired Interfacial Materials and Devices at the School of Chemistry at Beihang University. <i>Advanced Functional Materials</i> , 2018, 28, 1805886.	14.9	0
103	Graphene Composites: Glycerol-Inspired Synergistic Interfacial Interactions for Constructing Ultrastrong Graphene-Based Nanocomposites (<i>Adv. Funct. Mater.</i> 49/2018). <i>Advanced Functional Materials</i> , 2018, 28, 1870347.	14.9	0
104	Rücktitelbild: Ultra-Tough Inverse Artificial Nacre Based on Epoxy-Graphene by Freeze-Casting (<i>Angew.</i>)	2.0	0
105	Chemical Strategies for Making Strong Graphene Materials. <i>Angewandte Chemie</i> , 2021, 133, 18545-18558.	2.0	0
106	Titelbild: Bioinspired Color Switchable Photonic Crystal Silicone Elastomer Kirigami (<i>Angew. Chem.</i>)	2.0	0