Yingying Zhang

List of Publications by Year
in descending order

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125 papers	12,871 citations	28274 55 h-index	23533 111 g-index
125 all docs	125 docs citations	125 times ranked	12724 citing authors

#	Article	IF	Citations
1	Advanced Carbon for Flexible and Wearable Electronics. Advanced Materials, 2019, 31, e1801072.	21.0	779
2	Carbonized Silk Fabric for Ultrastretchable, Highly Sensitive, and Wearable Strain Sensors. Advanced Materials, 2016, 28, 6640-6648.	21.0	749
3	Epidermis Microstructure Inspired Graphene Pressure Sensor with Random Distributed Spinosum for High Sensitivity and Large Linearity. ACS Nano, 2018, 12, 2346-2354.	14.6	579
4	Flexible and Highly Sensitive Pressure Sensors Based on Bionic Hierarchical Structures. Advanced Functional Materials, 2017, 27, 1606066.	14.9	522
5	Graphene Textile Strain Sensor with Negative Resistance Variation for Human Motion Detection. ACS Nano, 2018, 12, 9134-9141.	14.6	455
6	Carbonized Silk Nanofiber Membrane for Transparent and Sensitive Electronic Skin. Advanced Functional Materials, 2017, 27, 1605657.	14.9	413
7	Carbonized Cotton Fabric for Highâ€Performance Wearable Strain Sensors. Advanced Functional Materials, 2017, 27, 1604795.	14.9	383
8	Integrated textile sensor patch for real-time and multiplex sweat analysis. Science Advances, 2019, 5, eaax0649.	10.3	345
9	Growth of Half-Meter Long Carbon Nanotubes Based on Schulzâ€“Flory Distribution. ACS Nano, 2013, 7, 6156-6161.	14.6	308
10	Superlubricity in centimetres-long double-walled carbon nanotubes under ambient conditions. Nature Nanotechnology, 2013, 8, 912-916.	31.5	305
11	Air Filtration in the Free Molecular Flow Regime: A Review of Highâ€Efficiency Particulate Air Filters Based on Carbon Nanotubes. Small, 2014, 10, 4543-4561.	10.0	279
12	Polymerâ€Embedded Carbon Nanotube Ribbons for Stretchable Conductors. Advanced Materials, 2010, 22, 3027-3031.	21.0	277
13	Extremely Black Vertically Aligned Carbon Nanotube Arrays for Solar Steam Generation. ACS Applied Materials & Interfaces, 2017, 9, 28596-28603.	8.0	270
14	Multilayer Graphene Epidermal Electronic Skin. ACS Nano, 2018, 12, 8839-8846.	14.6	257
15	Selfâ€Healable Multifunctional Electronic Tattoos Based on Silk and Graphene. Advanced Functional Materials, 2019, 29, 1808695.	14.9	236
16	Silk-Based Advanced Materials for Soft Electronics. Accounts of Chemical Research, 2019, 52, 2916-2927.	15.6	232
17	An All-Silk-Derived Dual-Mode E-skin for Simultaneous Temperatureâ€“Pressure Detection. ACS Applied Materials & Interfaces, 2017, 9, 39484-39492.	8.0	210
18	Carbon nanotube yarn strain sensors. Nanotechnology, 2010, 21, 305502.	2.6	201

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19	Sheathâ€“Core Graphite/Silk Fiber Made by Dry-Meyer-Rod-Coating for Wearable Strain Sensors. ACS Applied Materials & Interfaces, 2016, 8, 20894-20899.	8.0	196
20	CVD growth of fingerprint-like patterned 3D graphene film for an ultrasensitive pressure sensor. Nano Research, 2018, 11, 1124-1134.	10.4	185
21	Stable and Biocompatible Carbon Nanotube Ink Mediated by Silk Protein for Printed Electronics. Advanced Materials, 2020, 32, e2000165.	21.0	184
22	Silk nanofibers as high efficient and lightweight air filter. Nano Research, 2016, 9, 2590-2597.	10.4	181
23	Printable Smart Pattern for Multifunctional Energy-Management E-Textile. Matter, 2019, 1, 168-179.	10.0	172
24	Feeding Single-Walled Carbon Nanotubes or Graphene to Silkworms for Reinforced Silk Fibers. Nano Letters, 2016, 16, 6695-6700.	9.1	171
25	Advanced carbon materials for flexible and wearable sensors. Science China Materials, 2017, 60, 1026-1062.	6.3	170
26	Physical sensors for skinâ€inspired electronics. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 184-211.	17.3	159
27	Laser Writing of Janus Graphene/Kevlar Textile for Intelligent Protective Clothing. ACS Nano, 2020, 14, 3219-3226.	14.6	159
28	Horizontally aligned carbon nanotube arrays: growth mechanism, controlled synthesis, characterization, properties and applications. Chemical Society Reviews, 2017, 46, 3661-3715.	38.1	153
29	Integration of Stiff Graphene and Tough Silk for the Design and Fabrication of Versatile Electronic Materials. Advanced Functional Materials, 2018, 28, 1705291.	14.9	148
30	Carbonized silk georgette as an ultrasensitive wearable strain sensor for full-range human activity monitoring. Journal of Materials Chemistry C, 2017, 5, 7604-7611.	5.5	147
31	Bioinspired Fluffy Fabric with In Situ Grown Carbon Nanotubes for Ultrasensitive Wearable Airflow Sensor. Advanced Materials, 2020, 32, e1908214.	21.0	146
32	Weftâ€Knitted Fabric for a Highly Stretchable and Lowâ€Voltage Wearable Heater. Advanced Electronic Materials, 2017, 3, 1700193.	5.1	133
33	Smart Fibers and Textiles for Personal Health Management. ACS Nano, 2021, 15, 12497-12508.	14.6	124
34	Electrospun polyetherimide electret nonwoven for bi-functional smart face mask. Nano Energy, 2017, 34, 562-569.	16.0	119
35	Producing superior composites by winding carbon nanotubes onto a mandrel under a poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1	10.3	114
36	Superelastic EGaIn Composite Fibers Sustaining 500% Tensile Strain with Superior Electrical Conductivity for Wearable Electronics. ACS Applied Materials & Interfaces, 2020, 12, 6112-6118.	8.0	113

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37	Intrinsically Stretchable and Conductive Textile by a Scalable Process for Elastic Wearable Electronics. ACS Applied Materials & Interfaces, 2017, 9, 13331-13338.	8.0	111
38	Measurement of specific heat and thermal conductivity of supported and suspended graphene by a comprehensive Raman optothermal method. Nanoscale, 2017, 9, 10784-10793.	5.6	110
39	Biomassâ€Derived Carbon Materials: Controllable Preparation and Versatile Applications. Small, 2021, 17, e2008079.	10.0	105
40	Substrate-Induced Raman Frequency Variation for Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2005, 127, 17156-17157.	13.7	103
41	Splash-Resistant and Light-Weight Silk-Sheathed Wires for Textile Electronics. Nano Letters, 2018, 18, 7085-7091.	9.1	98
42	Tailoring the Morphology of Carbon Nanotube Arrays: From Spinnable Forests to Undulating Foams. ACS Nano, 2009, 3, 2157-2162.	14.6	96
43	Transfer-Medium-Free Nanofiber-Reinforced Graphene Film and Applications in Wearable Transparent Pressure Sensors. ACS Nano, 2019, 13, 5541-5548.	14.6	96
44	Carbon Nanotubeâ€Enhanced Growth of Silicon Nanowires as an Anode for Highâ€Performance Lithiumâ€Ion Batteries. Advanced Energy Materials, 2012, 2, 87-93.	19.5	90
45	Fast Growth and Broad Applications of 25â€inch Uniform Graphene Glass. Advanced Materials, 2017, 29, 1603428.	21.0	90
46	Silk-Derived Highly Active Oxygen Electrocatalysts for Flexible and Rechargeable Znâ€“Air Batteries. Chemistry of Materials, 2019, 31, 1023-1029.	6.7	84
47	Controlled Synthesis of Ultralong Carbon Nanotubes with Perfect Structures and Extraordinary Properties. Accounts of Chemical Research, 2017, 50, 179-189.	15.6	83
48	In situ fabrication of depth-type hierarchical CNT/quartz fiber filters for high efficiency filtration of sub-micron aerosols and high water repellency. Nanoscale, 2013, 5, 3367.	5.6	82
49	State of the Art of Singleâ€Walled Carbon Nanotube Synthesis on Surfaces. Advanced Materials, 2014, 26, 5898-5922.	21.0	71
50	Superelastic wire-shaped supercapacitor sustaining 850% tensile strain based on carbon nanotube@graphene fiber. Nano Research, 2018, 11, 2347-2356.	10.4	70
51	Natural Biopolymers for Flexible Sensing and Energy Devices. Chinese Journal of Polymer Science (English Edition), 2020, 38, 459-490.	3.8	69
52	Molybdenum Disulfide Nanosheets Aligned Vertically on Carbonized Silk Fabric as Smart Textile for Wearable Pressure-Sensing and Energy Devices. ACS Applied Materials & Interfaces, 2020, 12, 11825-11832.	8.0	67
53	Semiliquid Metal Enabled Highly Conductive Wearable Electronics for Smart Fabrics. ACS Applied Materials & Interfaces, 2019, 11, 30019-30027.	8.0	65
54	Silkâ€Derived 2D Porous Carbon Nanosheets with Atomicallyâ€Dispersed Feâ€N_xâ€C Sites for Highly Efficient Oxygen Reaction Catalysts. Small, 2019, 15, e1804966.	10.0	64

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55	Flexible Electrodes for In Vivo and In Vitro Electrophysiological Signal Recording. Advanced Healthcare Materials, 2021, 10, e2100646.	7.6	62
56	Optical visualization of individual ultralong carbon nanotubes by chemical vapour deposition of titanium dioxide nanoparticles. Nature Communications, 2013, 4, 1727.	12.8	60
57	Electricity-Triggered Self-Healing of Conductive and Thermostable Vitrimer Enabled by Paving Aligned Carbon Nanotubes. ACS Applied Materials & Interfaces, 2020, 12, 14315-14322.	8.0	60
58	Electronic fibers and textiles: Recent progress and perspective. IScience, 2021, 24, 102716.	4.1	60
59	Hydrophilic, Breathable, and Washable Graphene Decorated Textile Assisted by Silk Sericin for Integrated Multimodal Smart Wearables. Advanced Functional Materials, 2022, 32, .	14.9	54
60	Raman Spectra Variation of Partially Suspended Individual Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2007, 111, 1983-1987.	3.1	51
61	Spontaneous Alignment of Graphene Oxide in Hydrogel during 3D Printing for Multistimuliâ€Responsive Actuation. Advanced Science, 2020, 7, 1903048.	11.2	51
62	Synthesis of three-dimensional carbon nanotube/graphene hybrid materials by a two-step chemical vapor deposition process. Carbon, 2015, 86, 358-362.	10.3	50
63	Epitaxial Superconducting Î´-MoN Films Grown by a Chemical Solution Method. Journal of the American Chemical Society, 2011, 133, 20735-20737.	13.7	48
64	Microribbons composed of directionally self-assembled nanoflakes as highly stretchable ionic neural electrodes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14667-14675.	7.1	48
65	â€œSnowingâ€•Graphene using Microwave Ovens. Advanced Materials, 2018, 30, e1803189.	21.0	47
66	Temperature Coefficients of Raman Frequency of Individual Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2007, 111, 14031-14034.	3.1	44
67	Growth of large-area aligned pentagonal graphene domains on high-index copper surfaces. Nano Research, 2016, 9, 2182-2189.	10.4	44
68	Carbonized Chinese Art Paper-Based High-Performance Wearable Strain Sensor for Human Activity Monitoring. ACS Applied Electronic Materials, 2019, 1, 2415-2421.	4.3	38
69	Vitrimer-based soft actuators with multiple responsiveness and self-healing ability triggered by multiple stimuli. Matter, 2021, 4, 3354-3365.	10.0	38
70	Observations of 3 nm Silk Nanofibrils Exfoliated from Natural Silkworm Silk Fibers. , 2020, 2, 153-160.		37
71	Laser-Heating Effect on Raman Spectra of Individual Suspended Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2007, 111, 1988-1992.	3.1	36
72	Interwall Friction and Sliding Behavior of Centimeters Long Double-Walled Carbon Nanotubes. Nano Letters, 2016, 16, 1367-1374.	9.1	36

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73	A Oneâ€Step Fabricated Sheathâ€Core Stretchable Fiber Based on Liquid Metal with Superior Electric Conductivity for Wearable Sensors and Heaters. Advanced Materials Technologies, 2022, 7, .	5.8	36
74	Hollow coreâ€“sheath nanocarbon spheres grown on carbonized silk fabrics for self-supported and nonenzymatic glucose sensing. Nanoscale, 2019, 11, 11856-11863.	5.6	33
75	Sweat-Driven Silk-yarn Switches Enabled by Highly Aligned Gaps for Air-conditioning Textiles. Advanced Fiber Materials, 2019, 1, 197-204.	16.1	33
76	Fast and uniform growth of graphene glass using confined-flow chemical vapor deposition and its unique applications. Nano Research, 2016, 9, 3048-3055.	10.4	32
77	Blue rose-inspired approach towards highly graphitic carbons for efficient electrocatalytic water splitting. Carbon, 2019, 150, 21-26.	10.3	30
78	Electrochemically Enabled Embedded Three-Dimensional Printing of Freestanding Gallium Wire-like Structures. ACS Applied Materials & Interfaces, 2020, 12, 53966-53972.	8.0	30
79	Ultrasensitive, Lowâ€Voltage Operational, and Asymmetric Ionic Sensing Hydrogel for Multipurpose Applications. Advanced Functional Materials, 2020, 30, 1909616.	14.9	29
80	Hierarchical carbon-nanotube/quartz-fiber films with gradient nanostructures for high efficiency and long service life air filters. RSC Advances, 2014, 4, 54115-54121.	3.6	28
81	The reason for the low density of horizontally aligned ultralong carbon nanotube arrays. Carbon, 2013, 52, 232-238.	10.3	27
82	Multi-walled carbon nanotube-based carbon/carbon composites with three-dimensional network structures. Nanoscale, 2013, 5, 6181.	5.6	27
83	Smart semiliquid metal fibers with designed mechanical properties for room temperature stimulus response and liquid welding. Applied Materials Today, 2020, 20, 100738.	4.3	26
84	A high efficiency particulate air filter based on agglomerated carbon nanotube fluidized bed. Carbon, 2014, 79, 424-431.	10.3	25
85	Calcium Gluconate Derived Carbon Nanosheet Intrinsically Decorated with Nanopapillae for Multifunctional Printed Flexible Electronics. ACS Applied Materials & Interfaces, 2019, 11, 20272-20280.	8.0	25
86	A chemical solution approach for superconducting and hard epitaxial NbC film. Chemical Communications, 2010, 46, 7837.	4.1	24
87	Strain and friction induced by van der Waals interaction in individual single walled carbon nanotubes. Applied Physics Letters, 2007, 90, 253113.	3.3	22
88	Preloading catalysts in the reactor for repeated growth of horizontally aligned carbon nanotube arrays. Carbon, 2016, 98, 157-161.	10.3	21
89	Mineralâ€Templated 3D Graphene Architectures for Energyâ€Efficient Electrodes. Small, 2018, 14, e1801009.	10.0	21
90	Biomimetic Mechanically Enhanced Carbon Nanotube Fibers by Silk Fibroin Infiltration. Small, 2021, 17, e2100066.	10.0	21

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91	Sustainable Silkâ€Derived Multimode Carbon Dots. Small, 2021, 17, e2103623.	10.0	21
92	Highly Regulatable Heat Conductance of Grapheneâ€“Sericin Hybrid for Responsive Textiles. Advanced Functional Materials, 2022, 32, .	14.9	21
93	H₂Oâ€Etchantâ€Promoted Synthesis of Highâ€Quality Graphene on Glass and Its Application in Seeâ€Through Thermochromic Displays. Small, 2020, 16, e1905485.	10.0	20
94	Optical methods for determining thicknesses of few-layer graphene flakes. Nanotechnology, 2013, 24, 505701.	2.6	19
95	Hydroxyapatite-containing silk fibroin nanofibrous scaffolds for tissue-engineered periosteum. RSC Advances, 2016, 6, 19463-19474.	3.6	18
96	Scanning probe lithography for nanoimprinting mould fabrication. Nanotechnology, 2006, 17, 3018-3022.	2.6	17
97	Recyclable and electrically conducting carbon nanotube composite films. Nanoscale, 2010, 2, 418-422.	5.6	17
98	Growth of high-density parallel arrays of ultralong carbon nanotubes with catalysts pinned by silica nanospheres. Carbon, 2013, 52, 535-540.	10.3	17
99	A double-layered carbon nanotube array with super-hydrophobicity. Carbon, 2009, 47, 3332-3336.	10.3	16
100	Volatile-nanoparticle-assisted optical visualization of individual carbon nanotubes and other nanomaterials. Nanoscale, 2016, 8, 13437-13444.	5.6	15
101	Modulusâ€Tailorable, Stretchable, and Biocompatible Carbonene Fiber for Adaptive Neural Electrode. Advanced Functional Materials, 2022, 32, 2107360.	14.9	15
102	Silkworm Silk Fibers with Multiple Reinforced Properties Obtained through Feeding Ag Nanowires. Advanced Fiber Materials, 2022, 4, 547-555.	16.1	15
103	Fabrication of metallic nanostructures by negative nanoimprint lithography. Nanotechnology, 2005, 16, 2779-2784.	2.6	14
104	Efficient synthesis of tailored magnetic carbon nanotubesvia a noncovalent chemical route. Nanoscale, 2011, 3, 668-673.	5.6	14
105	Graphene/graphite sheet assisted growth of high-areal-density horizontally aligned carbon nanotubes. Chemical Communications, 2014, 50, 11158-11161.	4.1	14
106	Visualization of Graphene on Various Substrates Based on Water Wetting Behavior. Advanced Materials Interfaces, 2016, 3, 1500674.	3.7	14
107	Facile manipulation of individual carbon nanotubes assisted by inorganic nanoparticles. Nanoscale, 2013, 5, 6584.	5.6	12
108	Aligned carbon nanotubes sandwiched in epitaxial NbC film for enhanced superconductivity. Nanoscale, 2012, 4, 2268.	5.6	11

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109	Carbothermal shock enabled facile and fast growth of carbon nanotubes in a second. Nano Research, 2022, 15, 2576-2581.	10.4	11
110	Thermochemical Hole Burning on DPA(TCNQ)2 and MEM(TCNQ)2 Charge Transfer Complexes Using a Scanning Tunneling Microscope. Journal of Physical Chemistry B, 2004, 108, 14800-14803.	2.6	10
111	A novel cell-scale bio-nanogenerator based on electronâ€“ion interaction for fast light power conversion. Nanoscale, 2018, 10, 526-532.	5.6	10
112	Application of Resonance Raman Spectroscopy in the Characterization of Single-Walled Carbon Nanotubes. Acta Chimica Sinica, 2012, 70, 2293.	1.4	9
113	Comparative studies of yield strength and elastic compressibility between nanocrystalline and bulk cobalt. Journal of Applied Physics, 2012, 111, .	2.5	7
114	Investigation on the Formation Mechanism of Double-Layer Vertically Aligned Carbon Nanotube Arrays via Single-Step Chemical Vapour Deposition. Nano-Micro Letters, 2017, 9, 12.	27.0	7
115	Synthesis and Properties of Ultralong Carbon Nanotubes. , 2014, , 87-136.		6
116	Nanoscale color sensors made on semiconducting multi-wall carbon nanotubes. Nano Research, 2016, 9, 1470-1479.	10.4	6
117	Seamless Graphene-Seal-Wrap as a Removable Protective Cover for Two-Dimensional Materials. , 2020, 2, 215-219.		6
118	Scratching of Graphene-Coated Cu Substrates Leads to Hardened Cu Interfaces with Enhanced Lubricity. ACS Applied Nano Materials, 2020, 3, 1992-1998.	5.0	6
119	Numerical Evaluation and Prediction of Porous Implant Design and Flow Performance. BioMed Research International, 2018, 2018, 1-13.	1.9	5
120	Mechanically Reinforced Silkworm Silk Fiber by Hot Stretching. Research, 2022, 2022, 9854063.	5.7	5
121	Fabrication of metal suspending nanostructures by nanoimprint lithography (NIL) and isotropic reactive ion etching (RIE). Science in China Series D: Earth Sciences, 2009, 52, 1181-1186.	0.9	4
122	Hemodynamic Impact of Stenting on Carotid Bifurcation: A Potential Role of the Stented Segment and External Carotid Artery. Computational and Mathematical Methods in Medicine, 2021, 2021, 1-9.	1.3	4
123	Epitaxial growth and physical properties of ternary nitride thin films by polymer-assisted deposition. Applied Physics Letters, 2016, 109, 081907.	3.3	2
124	Concentration gradient induced in situ formation of MOF tubes. Chemical Communications, 2021, 57, 7300-7303.	4.1	1
125	Microfabrication of Single-Wall Carbon Nanotube One-Dimensional Unit. , 2006, , .		0