Yingying Zhang

List of Publications by Citations

124 papers	8,643 citations	48 h-index	91 g-index
125 ext. papers	10,712 ext. citations	11.5 avg, IF	6.52 L-index

#	Paper	IF	Citations
124	Carbonized Silk Fabric for Ultrastretchable, Highly Sensitive, and Wearable Strain Sensors. *Advanced Materials*, **2016**, 28, 6640-8	24	584
123	Advanced Carbon for Flexible and Wearable Electronics. *Advanced Materials*, **2019**, 31, e1801072	24	458
122	Flexible and Highly Sensitive Pressure Sensors Based on Bionic Hierarchical Structures. *Advanced Functional Materials*, **2017**, 27, 1606066	15.6	372
121	Epidermis Microstructure Inspired Graphene Pressure Sensor with Random Distributed Spinosum for High Sensitivity and Large Linearity. *ACS Nano*, **2018**, 12, 2346-2354	16.7	361
120	Carbonized Cotton Fabric for High-Performance Wearable Strain Sensors. *Advanced Functional Materials*, **2017**, 27, 1604795	15.6	296
119	Carbonized Silk Nanofiber Membrane for Transparent and Sensitive Electronic Skin. *Advanced Functional Materials*, **2017**, 27, 1605657	15.6	293
118	Graphene Textile Strain Sensor with Negative Resistance Variation for Human Motion Detection. *ACS Nano*, **2018**, 12, 9134-9141	16.7	284
117	Growth of half-meter long carbon nanotubes based on Schulz-Flory distribution. *ACS Nano*, **2013**, 7, 6156-61	16.7	255
116	Polymer-embedded carbon nanotube ribbons for stretchable conductors. *Advanced Materials*, **2010**, 22, 3027-31	24	253
115	Superlubricity in centimetres-long double-walled carbon nanotubes under ambient conditions. *Nature Nanotechnology*, **2013**, 8, 912-6	28.7	243
114	Extremely Black Vertically Aligned Carbon Nanotube Arrays for Solar Steam Generation. *ACS Applied Materials & Interfaces*, **2017**, 9, 28596-28603	9.5	192
113	Air filtration in the free molecular flow regime: a review of high-efficiency particulate air filters based on carbon nanotubes. *Small*, **2014**, 10, 4543-61	11	189
112	Integrated textile sensor patch for real-time and multiplex sweat analysis. *Science Advances*, **2019**, 5, eaax0649	14.3	183
111	Multilayer Graphene Epidermal Electronic Skin. *ACS Nano*, **2018**, 12, 8839-8846	16.7	180
110	Carbon nanotube yarn strain sensors. *Nanotechnology*, **2010**, 21, 305502	3.4	177
109	An All-Silk-Derived Dual-Mode E-skin for Simultaneous Temperature-Pressure Detection. *ACS Applied Materials & Interfaces*, **2017**, 9, 39484-39492	9.5	151
108	Sheath-Core Graphite/Silk Fiber Made by Dry-Meyer-Rod-Coating for Wearable Strain Sensors. *ACS Applied Materials & Interfaces*, **2016**, 8, 20894-9	9.5	146

107	Self-Healable Multifunctional Electronic Tattoos Based on Silk and Graphene. *Advanced Functional Materials*, **2019**, 29, 1808695	15.6	143
106	Silk nanofibers as high efficient and lightweight air filter. *Nano Research*, **2016**, 9, 2590-2597	10	135
105	CVD growth of fingerprint-like patterned 3D graphene film for an ultrasensitive pressure sensor. *Nano Research*, **2018**, 11, 1124-1134	10	132
104	Feeding Single-Walled Carbon Nanotubes or Graphene to Silkworms for Reinforced Silk Fibers. *Nano Letters*, **2016**, 16, 6695-6700	11.5	129
103	Silk-Based Advanced Materials for Soft Electronics. *Accounts of Chemical Research*, **2019**, 52, 2916-2927	24.3	128
102	Carbonized silk georgette as an ultrasensitive wearable strain sensor for full-range human activity monitoring. *Journal of Materials Chemistry C*, **2017**, 5, 7604-7611	7.1	111
101	Integration of stiff graphene and tough silk for the design and fabrication of versatile electronic materials. *Advanced Functional Materials*, **2018**, 28, 1705291	15.6	109
100	Advanced carbon materials for flexible and wearable sensors. *Science China Materials*, **2017**, 60, 1026-1062	7.1	108
99	Producing superior composites by winding carbon nanotubes onto a mandrel under a poly(vinyl alcohol) spray. *Carbon*, **2011**, 49, 4786-4791	10.4	100
98	Horizontally aligned carbon nanotube arrays: growth mechanism, controlled synthesis, characterization, properties and applications. *Chemical Society Reviews*, **2017**, 46, 3661-3715	58.5	97
97	Substrate-induced Raman frequency variation for single-walled carbon nanotubes. *Journal of the American Chemical Society*, **2005**, 127, 17156-7	16.4	96
96	Weft-Knitted Fabric for a Highly Stretchable and Low-Voltage Wearable Heater. *Advanced Electronic Materials*, **2017**, 3, 1700193	6.4	95
95	Printable Smart Pattern for Multifunctional Energy-Management E-Textile. *Matter*, **2019**, 1, 168-179	12.7	92
94	Carbon Nanotube-Enhanced Growth of Silicon Nanowires as an Anode for High-Performance Lithium-Ion Batteries. *Advanced Energy Materials*, **2012**, 2, 87-93	21.8	85
93	Intrinsically Stretchable and Conductive Textile by a Scalable Process for Elastic Wearable Electronics. *ACS Applied Materials & Interfaces*, **2017**, 9, 13331-13338	9.5	84
92	Tailoring the morphology of carbon nanotube arrays: from spinnable forests to undulating foams. *ACS Nano*, **2009**, 3, 2157-62	16.7	83
91	Physical sensors for skin-inspired electronics. *Informa Materiy*, **2020**, 2, 184-211	23.1	80
90	Bioinspired Fluffy Fabric with In Situ Grown Carbon Nanotubes for Ultrasensitive Wearable Airflow Sensor. *Advanced Materials*, **2020**, 32, e1908214	24	80

89	Stable and Biocompatible Carbon Nanotube Ink Mediated by Silk Protein for Printed Electronics. *Advanced Materials*, **2020**, 32, e2000165	24	78
88	Splash-Resistant and Light-Weight Silk-Sheathed Wires for Textile Electronics. *Nano Letters*, **2018**, 18, 7085-7091	11.5	77
87	Fast Growth and Broad Applications of 25-Inch Uniform Graphene Glass. *Advanced Materials*, **2017**, 29, 1603428	24	75
86	Electrospun polyetherimide electret nonwoven for bi-functional smart face mask. *Nano Energy*, **2017**, 34, 562-569	17.1	73
85	Laser Writing of Janus Graphene/Kevlar Textile for Intelligent Protective Clothing. *ACS Nano*, **2020**, 14, 3219-3226	16.7	71
84	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, 3367-72	7.7	70
83	Measurement of specific heat and thermal conductivity of supported and suspended graphene by a comprehensive Raman optothermal method. *Nanoscale*, **2017**, 9, 10784-10793	7.7	68
82	Silk-Derived Highly Active Oxygen Electrocatalysts for Flexible and Rechargeable Zn□Air Batteries. *Chemistry of Materials*, **2019**, 31, 1023-1029	9.6	65
81	State of the art of single-walled carbon nanotube synthesis on surfaces. *Advanced Materials*, **2014**, 26, 5898-922	24	60
80	Controlled Synthesis of Ultralong Carbon Nanotubes with Perfect Structures and Extraordinary Properties. *Accounts of Chemical Research*, **2017**, 50, 179-189	24.3	56
79	Transfer-Medium-Free Nanofiber-Reinforced Graphene Film and Applications in Wearable Transparent Pressure Sensors. *ACS Nano*, **2019**, 13, 5541-5548	16.7	55
78	Optical visualization of individual ultralong carbon nanotubes by chemical vapour deposition of titanium dioxide nanoparticles. *Nature Communications*, **2013**, 4, 1727	17.4	54
77	Superelastic EGaIn Composite Fibers Sustaining 500% Tensile Strain with Superior Electrical Conductivity for Wearable Electronics. *ACS Applied Materials & Interfaces*, **2020**, 12, 6112-6118	9.5	52
76	Raman Spectra Variation of Partially Suspended Individual Single-Walled Carbon Nanotubes. *Journal of Physical Chemistry C*, **2007**, 111, 1983-1987	3.8	48
75	Superelastic wire-shaped supercapacitor sustaining 850% tensile strain based on carbon nanotube@graphene fiber. *Nano Research*, **2018**, 11, 2347-2356	10	46
74	Epitaxial superconducting □MoN films grown by a chemical solution method. *Journal of the American Chemical Society*, **2011**, 133, 20735-7	16.4	43
73	Natural Biopolymers for Flexible Sensing and Energy Devices. *Chinese Journal of Polymer Science (English Edition)*, **2020**, 38, 459-490	3.5	41
72	Silk-Derived 2D Porous Carbon Nanosheets with Atomically-Dispersed Fe-N -C Sites for Highly Efficient Oxygen Reaction Catalysts. *Small*, **2019**, 15, e1804966	11	40

71	Synthesis of three-dimensional carbon nanotube/graphene hybrid materials by a two-step chemical vapor deposition process. *Carbon*, **2015**, 86, 358-362	10.4	40
70	Temperature Coefficients of Raman Frequency of Individual Single-Walled Carbon Nanotubes. *Journal of Physical Chemistry C*, **2007**, 111, 14031-14034	3.8	38
69	Growth of large-area aligned pentagonal graphene domains on high-index copper surfaces. *Nano Research*, **2016**, 9, 2182-2189	10	38
68	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	9.5	37
67	Semiliquid Metal Enabled Highly Conductive Wearable Electronics for Smart Fabrics. *ACS Applied Materials & Interfaces*, **2019**, 11, 30019-30027	9.5	37
66	Laser-Heating Effect on Raman Spectra of Individual Suspended Single-Walled Carbon Nanotubes. *Journal of Physical Chemistry C*, **2007**, 111, 1988-1992	3.8	33
65	Electricity-Triggered Self-Healing of Conductive and Thermostable Vitrimer Enabled by Paving Aligned Carbon Nanotubes. *ACS Applied Materials & Interfaces*, **2020**, 12, 14315-14322	9.5	31
64	Spontaneous Alignment of Graphene Oxide in Hydrogel during 3D Printing for Multistimuli-Responsive Actuation. *Advanced Science*, **2020**, 7, 1903048	13.6	30
63	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	11.5	29
62	Smart Fibers and Textiles for Personal Health Management. *ACS Nano*, **2021**,	16.7	29
61	Fast and uniform growth of graphene glass using confined-flow chemical vapor deposition and its unique applications. *Nano Research*, **2016**, 9, 3048-3055	10	28
60	Interwall Friction and Sliding Behavior of Centimeters Long Double-Walled Carbon Nanotubes. *Nano Letters*, **2016**, 16, 1367-74	11.5	28
59	"Snowing" Graphene using Microwave Ovens. *Advanced Materials*, **2018**, 30, e1803189	24	28
58	The reason for the low density of horizontally aligned ultralong carbon nanotube arrays. *Carbon*, **2013**, 52, 232-238	10.4	25
57	Carbonized Chinese Art Paper-Based High-Performance Wearable Strain Sensor for Human Activity Monitoring. *ACS Applied Electronic Materials*, **2019**, 1, 2415-2421	4	21
56	Hierarchical carbon-nanotube/quartz-fiber films with gradient nanostructures for high efficiency and long service life air filters. *RSC Advances*, **2014**, 4, 54115-54121	3.7	21
55	Strain and friction induced by van der Waals interaction in individual single walled carbon nanotubes. *Applied Physics Letters*, **2007**, 90, 253113	3.4	21
54	Biomass-Derived Carbon Materials: Controllable Preparation and Versatile Applications. *Small*, **2021**, 17, e2008079	11	21

53	Multi-walled carbon nanotube-based carbon/carbon composites with three-dimensional network structures. *Nanoscale*, **2013**, 5, 6181-6	7.7	20
52	Mineral-Templated 3D Graphene Architectures for Energy-Efficient Electrodes. *Small*, **2018**, 14, e1801009	11	19
51	A high efficiency particulate air filter based on agglomerated carbon nanotube fluidized bed. *Carbon*, **2014**, 79, 424-431	10.4	19
50	A chemical solution approach for superconducting and hard epitaxial NbC film. *Chemical Communications*, **2010**, 46, 7837-9	5.8	19
49	Calcium Gluconate Derived Carbon Nanosheet Intrinsically Decorated with Nanopapillae for Multifunctional Printed Flexible Electronics. *ACS Applied Materials & Interfaces*, **2019**, 11, 20272-20280	9.5	18
48	Preloading catalysts in the reactor for repeated growth of horizontally aligned carbon nanotube arrays. *Carbon*, **2016**, 98, 157-161	10.4	18
47	Blue rose-inspired approach towards highly graphitic carbons for efficient electrocatalytic water splitting. *Carbon*, **2019**, 150, 21-26	10.4	17
46	Recyclable and electrically conducting carbon nanotube composite films. *Nanoscale*, **2010**, 2, 418-22	7.7	17
45	Ultrasensitive, Low-Voltage Operational, and Asymmetric Ionic Sensing Hydrogel for Multipurpose Applications. *Advanced Functional Materials*, **2020**, 30, 1909616	15.6	16
44	Sweat-Driven Silk-yarn Switches Enabled by Highly Aligned Gaps for Air-conditioning Textiles. *Advanced Fiber Materials*, **2019**, 1, 197-204	10.9	16
43	Hollow core-sheath nanocarbon spheres grown on carbonized silk fabrics for self-supported and nonenzymatic glucose sensing. *Nanoscale*, **2019**, 11, 11856-11863	7.7	15
42	Hydroxyapatite-containing silk fibroin nanofibrous scaffolds for tissue-engineered periosteum. *RSC Advances*, **2016**, 6, 19463-19474	3.7	15
41	Optical methods for determining thicknesses of few-layer graphene flakes. *Nanotechnology*, **2013**, 24, 505701	3.4	15
40	Growth of high-density parallel arrays of ultralong carbon nanotubes with catalysts pinned by silica nanospheres. *Carbon*, **2013**, 52, 535-540	10.4	15
39	Scanning probe lithography for nanoimprinting mould fabrication. *Nanotechnology*, **2006**, 17, 3018-3022	3.4	15
38	Flexible Electrodes for In Vivo and In Vitro Electrophysiological Signal Recording. *Advanced Healthcare Materials*, **2021**, 10, e2100646	10.1	15
37	A double-layered carbon nanotube array with super-hydrophobicity. *Carbon*, **2009**, 47, 3332-3336	10.4	14
36	H O-Etchant-Promoted Synthesis of High-Quality Graphene on Glass and Its Application in See-Through Thermochromic Displays. *Small*, **2020**, 16, e1905485	11	14

35	Observations of 3 nm Silk Nanofibrils Exfoliated from Natural Silkworm Silk Fibers **2020**, 2, 153-160		14
34	Electronic fibers and textiles: Recent progress and perspective. *IScience*, **2021**, 24, 102716	6.1	14
33	Volatile-nanoparticle-assisted optical visualization of individual carbon nanotubes and other nanomaterials. *Nanoscale*, **2016**, 8, 13437-44	7.7	13
32	Efficient synthesis of tailored magnetic carbon nanotubes via a noncovalent chemical route. *Nanoscale*, **2011**, 3, 668-73	7.7	13
31	Graphene/graphite sheet assisted growth of high-areal-density horizontally aligned carbon nanotubes. *Chemical Communications*, **2014**, 50, 11158-61	5.8	12
30	Visualization of Graphene on Various Substrates Based on Water Wetting Behavior. *Advanced Materials Interfaces*, **2016**, 3, 1500674	4.6	12
29	Facile manipulation of individual carbon nanotubes assisted by inorganic nanoparticles. *Nanoscale*, **2013**, 5, 6584-8	7.7	11
28	Aligned carbon nanotubes sandwiched in epitaxial NbC film for enhanced superconductivity. *Nanoscale*, **2012**, 4, 2268-71	7.7	11
27	Electrochemically Enabled Embedded Three-Dimensional Printing of Freestanding Gallium Wire-like Structures. *ACS Applied Materials & Interfaces*, **2020**,	9.5	11
26	Vitrimer-based soft actuators with multiple responsiveness and self-healing ability triggered by multiple stimuli. *Matter*, **2021**,	12.7	11
25	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	3.4	10
24	Fabrication of metallic nanostructures by negative nanoimprint lithography. *Nanotechnology*, **2005**, 16, 2779-2784	3.4	10
23	Smart semiliquid metal fibers with designed mechanical properties for room temperature stimulus response and liquid welding. *Applied Materials Today*, **2020**, 20, 100738	6.6	9
22	Application of Resonance Raman Spectroscopy in the Characterization of Single-Walled Carbon Nanotubes. *Acta Chimica Sinica*, **2012**, 70, 2293	3.3	8
21	Comparative studies of yield strength and elastic compressibility between nanocrystalline and bulk cobalt. *Journal of Applied Physics*, **2012**, 111, 113506	2.5	7
20	Biomimetic Mechanically Enhanced Carbon Nanotube Fibers by Silk Fibroin Infiltration. *Small*, **2021**, 17, e2100066	11	7
19	A novel cell-scale bio-nanogenerator based on electron-ion interaction for fast light power conversion. *Nanoscale*, **2018**, 10, 526-532	7.7	7
18	A One-Step Fabricated Sheath-Core Stretchable Fiber Based on Liquid Metal with Superior Electric Conductivity for Wearable Sensors and Heaters. *Advanced Materials Technologies*,2101618	6.8	6

17	Hydrophilic, Breathable, and Washable Graphene Decorated Textile Assisted by Silk Sericin for Integrated Multimodal Smart Wearables. *Advanced Functional Materials*,2200162	15.6	6
16	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	19.5	5
15	Seamless Graphene-Seal-Wrap as a Removable Protective Cover for Two-Dimensional Materials **2020**, 2, 215-219		4
14	Scratching of Graphene-Coated Cu Substrates Leads to Hardened Cu Interfaces with Enhanced Lubricity. *ACS Applied Nano Materials*, **2020**, 3, 1992-1998	5.6	4
13	Nanoscale color sensors made on semiconducting multi-wall carbon nanotubes. *Nano Research*, **2016**, 9, 1470-1479	10	4
12	Synthesis and Properties of Ultralong Carbon Nanotubes **2014**, 87-136		4
11	Modulus-Tailorable, Stretchable, and Biocompatible Carbonene Fiber for Adaptive Neural Electrode. *Advanced Functional Materials*,2107360	15.6	4
10	Numerical Evaluation and Prediction of Porous Implant Design and Flow Performance. *BioMed Research International*, **2018**, 2018, 1215021	3	4
9	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		3
8	Highly Regulatable Heat Conductance of Graphene–Sericin Hybrid for Responsive Textiles. *Advanced Functional Materials*,2111121	15.6	3
7	Sustainable Silk-Derived Multimode Carbon Dots. *Small*, **2021**, 17, e2103623	11	3
6	Epitaxial growth and physical properties of ternary nitride thin films by polymer-assisted deposition. *Applied Physics Letters*, **2016**, 109, 081907	3.4	2
5	Carbothermal shock enabled facile and fast growth of carbon nanotubes in a second. *Nano Research*,1	10	2
4	Silkworm Silk Fibers with Multiple Reinforced Properties Obtained through Feeding Ag Nanowires. *Advanced Fiber Materials*,1	10.9	1
3	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, 7604532	2.8	0
2	Concentration gradient induced in situ formation of MOF tubes. *Chemical Communications*, **2021**, 57, 7300-7303	5.8	0
1	Mechanically Reinforced Silkworm Silk Fiber by Hot Stretching.. *Research*, **2022**, 2022, 9854063	7.8	0