

# Xinming Li

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

96 papers	8,599 citations	49 h-index	92 g-index
99 ext. papers	9,692 ext. citations	10.7 avg, IF	6 L-index

#	Paper	IF	Citations
96	Graphene-on-silicon Schottky junction solar cells. <i>Advanced Materials</i> , <b>2010</b> , 22, 2743-8	24	910
95	Graphene and related two-dimensional materials: Structure-property relationships for electronics and optoelectronics. <i>Applied Physics Reviews</i> , <b>2017</b> , 4, 021306	17.3	368
94	Role of interfacial oxide in high-efficiency graphene-silicon Schottky barrier solar cells. <i>Nano Letters</i> , <b>2015</b> , 15, 2104-10	11.5	346
93	Flexible Piezoelectric-Induced Pressure Sensors for Static Measurements Based on Nanowires/Graphene Heterostructures. <i>ACS Nano</i> , <b>2017</b> , 11, 4507-4513	16.7	315
92	Large-area graphene-nanomesh/carbon-nanotube hybrid membranes for ionic and molecular nanofiltration. <i>Science</i> , <b>2019</b> , 364, 1057-1062	33.3	291
91	High Detectivity Graphene-Silicon Heterojunction Photodetector. <i>Small</i> , <b>2016</b> , 12, 595-601	11	285
90	Colloidal antireflection coating improves graphene-silicon solar cells. <i>Nano Letters</i> , <b>2013</b> , 13, 1776-81	11.5	277
89	Graphene Reinforced Carbon Nanotube Networks for Wearable Strain Sensors. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2078-2084	15.6	276
88	Large-Area Ultrathin Graphene Films by Single-Step Marangoni Self-Assembly for Highly Sensitive Strain Sensing Application. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 1322-1329	15.6	270
87	The physics and chemistry of graphene-on-surfaces. <i>Chemical Society Reviews</i> , <b>2017</b> , 46, 4417-4449	58.5	247
86	Tactile Sensing System Based on Arrays of Graphene Woven Microfabrics: Electromechanical Behavior and Electronic Skin Application. <i>ACS Nano</i> , <b>2015</b> , 9, 10867-75	16.7	220
85	A Wearable and Highly Sensitive Graphene Strain Sensor for Precise Home-Based Pulse Wave Monitoring. <i>ACS Sensors</i> , <b>2017</b> , 2, 967-974	9.2	194
84	Graphene/silicon nanowire Schottky junction for enhanced light harvesting. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 721-5	9.5	193
83	Structural engineering of gold thin films with channel cracks for ultrasensitive strain sensing. <i>Materials Horizons</i> , <b>2016</b> , 3, 248-255	14.4	177
82	Graphene sheets from worm-like exfoliated graphite. <i>Journal of Materials Chemistry</i> , <b>2009</b> , 19, 3367		173
81	Directly drawing self-assembled, porous, and monolithic graphene fiber from chemical vapor deposition grown graphene film and its electrochemical properties. <i>Langmuir</i> , <b>2011</b> , 27, 12164-71	4	166
80	Graphene/polyaniline woven fabric composite films as flexible supercapacitor electrodes. <i>Nanoscale</i> , <b>2015</b> , 7, 7318-22	7.7	154

79	Synergistic Effects of Plasmonics and Electron Trapping in Graphene Short-Wave Infrared Photodetectors with Ultrahigh Responsivity. <i>ACS Nano</i> , <b>2017</b> , 11, 430-437	16.7	153
78	Enhanced efficiency of graphene/silicon heterojunction solar cells by molecular doping. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 5736	13	145
77	A self-powered high-performance graphene/silicon ultraviolet photodetector with ultra-shallow junction: breaking the limit of silicon?. <i>Npj 2D Materials and Applications</i> , <b>2017</b> , 1,	8.8	144
76	Carbon/Silicon Heterojunction Solar Cells: State of the Art and Prospects. <i>Advanced Materials</i> , <b>2015</b> , 27, 6549-74	24	144
75	Flexible all solid-state supercapacitors based on chemical vapor deposition derived graphene fibers. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 17752-7	3.6	142
74	Graphene/semiconductor heterojunction solar cells with modulated antireflection and graphene work function. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 108-115	35.4	134
73	Effect of different gel electrolytes on graphene-based solid-state supercapacitors. <i>RSC Advances</i> , <b>2014</b> , 4, 36253-36256	3.7	129
72	In situ formation of a cellular graphene framework in thermoplastic composites leading to superior thermal conductivity. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 6164-6169	13	120
71	Ion doping of graphene for high-efficiency heterojunction solar cells. <i>Nanoscale</i> , <b>2013</b> , 5, 1945-8	7.7	119
70	Cobalt and nickel selenide nanowalls anchored on graphene as bifunctional electrocatalysts for overall water splitting. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 14789-14795	13	115
69	Centimeter-Scale CVD Growth of Highly Crystalline Single-Layer MoS Film with Spatial Homogeneity and the Visualization of Grain Boundaries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 12073-12081	9.5	99
68	Anomalous Behaviors of Graphene Transparent Conductors in Graphene/Silicon Heterojunction Solar Cells. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1029-1034	21.8	90
67	Ultrafast Dynamic Pressure Sensors Based on Graphene Hybrid Structure. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 24148-24154	9.5	89
66	Vertical junction photodetectors based on reduced graphene oxide/silicon Schottky diodes. <i>Nanoscale</i> , <b>2014</b> , 6, 4909-14	7.7	88
65	Hybrid heterojunction and photoelectrochemistry solar cell based on silicon nanowires and double-walled carbon nanotubes. <i>Nano Letters</i> , <b>2009</b> , 9, 4338-42	11.5	88
64	Highly flexible and adaptable, all-solid-state supercapacitors based on graphene woven-fabric film electrodes. <i>Small</i> , <b>2014</b> , 10, 2583-8	11	76
63	Self-Assembled Graphene Film as Low Friction Solid Lubricant in Macroscale Contact. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 21554-21562	9.5	73
62	Structural Engineering for High Sensitivity, Ultrathin Pressure Sensors Based on Wrinkled Graphene and Anodic Aluminum Oxide Membrane. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 24111-24117	9.5	70

61	Determination of band gaps of self-assembled carbon nanotube films using Tauc/Davis-Mott model. <i>Applied Physics A: Materials Science and Processing</i> , <b>2009</b> , 97, 341-344	2.6	70
60	Boosting supercapacitor performance of carbon fibres using electrochemically reduced graphene oxide additives. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 19550-6	3.6	69
59	Dynamically stretchable supercapacitors based on graphene woven fabric electrodes. <i>Nano Energy</i> , <b>2015</b> , 15, 83-91	17.1	69
58	High-performance Schottky heterojunction photodetector with directly grown graphene nanowalls as electrodes. <i>Nanoscale</i> , <b>2017</b> , 9, 6020-6025	7.7	63
57	Photo-Promoted Platinum Nanoparticles Decorated MoS <sub>2</sub> @Graphene Woven Fabric Catalyst for Efficient Hydrogen Generation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 10866-73	9.5	63
56	Hybrid graphene tunneling photoconductor with interface engineering towards fast photoresponse and high responsivity. <i>Npj 2D Materials and Applications</i> , <b>2017</b> , 1,	8.8	62
55	A Bubble-Derived Strategy to Prepare Multiple Graphene-Based Porous Materials. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1705879	15.6	59
54	Oil spill cleanup from sea water by carbon nanotube sponges. <i>Frontiers of Materials Science</i> , <b>2013</b> , 7, 170-176	2.5	57
53	Large-area self-assembled reduced graphene oxide/electrochemically exfoliated graphene hybrid films for transparent electrothermal heaters. <i>Applied Surface Science</i> , <b>2018</b> , 435, 809-814	6.7	57
52	Graphene-CdSe nanobelt solar cells with tunable configurations. <i>Nano Research</i> , <b>2011</b> , 4, 891-900	10	56
51	The graphene-semiconductor Schottky junction. <i>Physics Today</i> , <b>2016</b> , 69, 46-51	0.9	56
50	Properties of graphene-metal contacts probed by Raman spectroscopy. <i>Carbon</i> , <b>2018</b> , 127, 491-497	10.4	54
49	The Interaction between Quantum Dots and Graphene: The Applications in Graphene-Based Solar Cells and Photodetectors. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1804712	15.6	50
48	Role of hydrogen in the chemical vapor deposition growth of MoS <sub>2</sub> atomic layers. <i>Nanoscale</i> , <b>2015</b> , 7, 8398-404	7.7	49
47	Photo-induced selective gas detection based on reduced graphene oxide/Si Schottky diode. <i>Carbon</i> , <b>2015</b> , 84, 138-145	10.4	46
46	Restoring the photovoltaic effect in graphene-based van der Waals heterojunctions towards self-powered high-detectivity photodetectors. <i>Nano Energy</i> , <b>2019</b> , 57, 214-221	17.1	46
45	Synthetic Multifunctional Graphene Composites with Reshaping and Self-Healing Features via a Facile Biomineralization-Inspired Process. <i>Advanced Materials</i> , <b>2018</b> , 30, e1803004	24	45
44	MoS <sub>2</sub> Field-Effect Transistors With Lead Zirconate-Titanate Ferroelectric Gating. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 784-786	4.4	42

43	Fabrication of large area hexagonal boron nitride thin films for bendable capacitors. <i>Nano Research</i> , <b>2013</b> , 6, 602-610	10	42
42	Torsion sensors of high sensitivity and wide dynamic range based on a graphene woven structure. <i>Nanoscale</i> , <b>2014</b> , 6, 13053-9	7.7	42
41	Hybrid Heterojunction and Solid-State Photoelectrochemical Solar Cells. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400224	21.8	39
40	TiO <sub>2</sub> enhanced ultraviolet detection based on a graphene/Si Schottky diode. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 8133-8138	13	38
39	Organic bioelectronics for neural interfaces. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 6424-6430	7.1	37
38	High-Quality Monolithic Graphene Films via Laterally Stitched Growth and Structural Repair of Isolated Flakes for Transparent Electronics. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 7808-7815	9.6	35
37	Highly Crumpled All-Carbon Transistors for Brain Activity Recording. <i>Nano Letters</i> , <b>2017</b> , 17, 71-77	11.5	33
36	Hybrid thin films of graphene nanowhiskers and amorphous carbon as transparent conductors. <i>Chemical Communications</i> , <b>2010</b> , 46, 3502-4	5.8	32
35	Large-Area Flexible Core-Shell Graphene/Porous Carbon Woven Fabric Films for Fiber Supercapacitor Electrodes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, n/a-n/a	15.6	29
34	Galvanism of continuous ionic liquid flow over graphene grids. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 081605	3.4	28
33	Solid-Phase Coalescence of Electrochemically Exfoliated Graphene Flakes into a Continuous Film on Copper. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 3360-3366	9.6	27
32	High-Efficiency Large-Area Carbon Nanotube-Silicon Solar Cells. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600095	10.5	25
31	Synergistic Effects of Wrinkled Graphene and Plasmonics in Stretchable Hybrid Platform for Surface-Enhanced Raman Spectroscopy. <i>Advanced Optical Materials</i> , <b>2017</b> , 5, 1600715	8.1	19
30	CoNiFe Layered Double Hydroxide/RuO <sub>2</sub> Nanosheet Superlattice as Carbon-Free Electrocatalysts for Water Splitting and Li-O Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 33083-33093	9.5	18
29	Self-deposition of Pt nanoparticles on graphene woven fabrics for enhanced hybrid Schottky junctions and photoelectrochemical solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 1992-7	3.6	18
28	Integration of graphene sensor with electrochromic device on modulus-gradient polymer for instantaneous strain visualization. <i>2D Materials</i> , <b>2017</b> , 4, 035020	5.9	17
27	Ultrasensitive micro/nanocrack-based graphene nanowall strain sensors derived from the substrate's Poisson's ratio effect. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 10310-10317	13	15
26	Schottky diode characteristics and 1/f noise of high sensitivity reduced graphene oxide/Si heterojunction photodetector. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 124303	2.5	15

25	In Situ Dynamic Manipulation of Graphene Strain Sensor with Drastically Sensing Performance Enhancement. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 2000269	6.4	14
24	Tunable transport characteristics of double-gated graphene field-effect transistors using P(VDF-TrFE) ferroelectric gating. <i>Carbon</i> , <b>2016</b> , 96, 695-700	10.4	13
23	Temperature-dependent electrical transport properties in graphene/Pb(Zr <sub>0.4</sub> Ti <sub>0.6</sub> )O <sub>3</sub> field effect transistors. <i>Carbon</i> , <b>2015</b> , 93, 384-392	10.4	13
22	Fabrication of MoO/MoC-Layered Hybrid Structures by Direct Thermal Oxidation of MoC. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 10755-10762	9.5	13
21	Temperature-dependent transport and hysteretic behaviors induced by interfacial states in MoS field-effect transistors with lead-zirconate-titanate ferroelectric gating. <i>Nanotechnology</i> , <b>2017</b> , 28, 045204	3.4	12
20	NO <sub>2</sub> -induced performance enhancement of PEDOT:PSS/Si hybrid solar cells with a high efficiency of 13.44. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 7184-9	3.6	11
19	Amorphous Nitrogen Doped Carbon Films: A Novel Corrosion Resistant Coating Material. <i>Advanced Engineering Materials</i> , <b>2014</b> , 16, 532-538	3.5	11
18	Multi-layer graphene treated by O <sub>2</sub> plasma for transparent conductive electrode applications. <i>Materials Letters</i> , <b>2012</b> , 73, 187-189	3.3	11
17	All carbon coaxial supercapacitors based on hollow carbon nanotube sleeve structure. <i>Nanotechnology</i> , <b>2015</b> , 26, 045401	3.4	11
16	Advances in graphene-based polymer composites with high thermal conductivity <b>2018</b> , 2, 1-17		11
15	Poly (ethylene imine)-modulated transport behaviors of graphene field effect transistors with double Dirac points. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 134305	2.5	9
14	HfO <sub>2</sub> dielectric thickness dependence of electrical properties in graphene field effect transistors with double conductance minima. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 144301	2.5	9
13	Analog Sensing and Computing Systems with Low Power Consumption for Gesture Recognition. <i>Advanced Intelligent Systems</i> , <b>2021</b> , 3, 2000184	6	9
12	Design and applications of graphene-based flexible and wearable physical sensing devices. <i>2D Materials</i> , <b>2021</b> , 8, 022001	5.9	8
11	Enhanced performance of PEDOT:PSS/n-Si hybrid solar cell by HNO <sub>3</sub> treatment. <i>Applied Physics Express</i> , <b>2014</b> , 7, 031603	2.4	7
10	Water-driven actuation of Ornithoctonus huwena spider silk fibers. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 053103	3.4	6
9	Enhanced Photoresponse in Interfacial Gated Graphene Phototransistor With Ultrathin Al <sub>2</sub> O <sub>3</sub> Dielectric. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 987-990	4.4	6
8	Fabrication and field emission properties of multi-walled carbon nanotube/silicon nanowire array. <i>Journal of Physics and Chemistry of Solids</i> , <b>2010</b> , 71, 708-711	3.9	6

7	Force- and light-controlled electrical transport characteristics of carbon nanotube 1D/2D bulk junctions. <i>Chemical Physics Letters</i> , <b>2009</b> , 481, 224-228	2.5	4
6	Optimization of graphene/silicon heterojunction solar cells <b>2012</b> ,		3
5	Hybrid Materials: Synergistic Effects of Wrinkled Graphene and Plasmonics in Stretchable Hybrid Platform for Surface-Enhanced Raman Spectroscopy (Advanced Optical Materials 6/2017). <i>Advanced Optical Materials</i> , <b>2017</b> , 5,	8.1	1
4	Graphene: Synthetic Multifunctional Graphene Composites with Reshaping and Self-Healing Features via a Facile Biomineralization-Inspired Process (Adv. Mater. 34/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870253	24	1
3	Graphene Foams: A Bubble-Derived Strategy to Prepare Multiple Graphene-Based Porous Materials (Adv. Funct. Mater. 23/2018). <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1870161	15.6	1
2	Light emission of double-walled carbon nanotube filaments doped with yttrium and europium. <i>Science in China Series D: Earth Sciences</i> , <b>2009</b> , 52, 252-255		1
1	Quantum Dot and Heterojunction Solar Cells Containing Carbon Nanomaterials 237-266		