

# Li Tao

## List of Publications by Year in descending order

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Version: 2024-02-01

82  
papers

5,808  
citations

136740

32  
h-index

123241

61  
g-index

82  
all docs

82  
docs citations

82  
times ranked

9268  
citing authors

#	ARTICLE	IF	CITATIONS
1	Silicene field-effect transistors operating at room temperature. <i>Nature Nanotechnology</i> , 2015, 10, 227-231.	15.6	1,429
2	Graphene Electronic Tattoo Sensors. <i>ACS Nano</i> , 2017, 11, 7634-7641.	7.3	476
3	High-Performance, Highly Bendable MoS <sub>2</sub> Transistors with High-K Dielectrics for Flexible Low-Power Systems. <i>ACS Nano</i> , 2013, 7, 5446-5452.	7.3	445
4	Flexible Black Phosphorus Ambipolar Transistors, Circuits and AM Demodulator. <i>Nano Letters</i> , 2015, 15, 1883-1890.	4.5	394
5	Atomristor: Nonvolatile Resistance Switching in Atomic Sheets of Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2018, 18, 434-441.	4.5	375
6	Toward air-stable multilayer phosphorene thin-films and transistors. <i>Scientific Reports</i> , 2015, 5, 8989.	1.6	344
7	Silicene, silicene derivatives, and their device applications. <i>Chemical Society Reviews</i> , 2018, 47, 6370-6387.	18.7	261
8	Synthesis of High Quality Monolayer Graphene at Reduced Temperature on Hydrogen-Enriched Evaporated Copper (111) Films. <i>ACS Nano</i> , 2012, 6, 2319-2325.	7.3	160
9	Shape-specific polymeric nanomedicine: emerging opportunities and challenges. <i>Experimental Biology and Medicine</i> , 2011, 236, 20-29.	1.1	130
10	Selective Mechanical Transfer of Graphene from Seed Copper Foil Using Rate Effects. <i>ACS Nano</i> , 2015, 9, 1325-1335.	7.3	104
11	A blister test for interfacial adhesion of large-scale transferred graphene. <i>Carbon</i> , 2014, 69, 390-400.	5.4	88
12	Toward 300 mm Wafer-Scalable High-Performance Polycrystalline Chemical Vapor Deposited Graphene Transistors. <i>ACS Nano</i> , 2014, 8, 10471-10479.	7.3	87
13	Large-Area Dry Transfer of Single-Crystalline Epitaxial Bismuth Thin Films. <i>Nano Letters</i> , 2016, 16, 6931-6938.	4.5	87
14	Graphene Synthesis via Magnetic Inductive Heating of Copper Substrates. <i>ACS Nano</i> , 2013, 7, 7495-7499.	7.3	77
15	Uniform Wafer-Scale Chemical Vapor Deposition of Graphene on Evaporated Cu (111) Film with Quality Comparable to Exfoliated Monolayer. <i>Journal of Physical Chemistry C</i> , 2012, 116, 24068-24074.	1.5	69
16	Support-Free Transfer of Ultrasoother Graphene Films Facilitated by Self-Assembled Monolayers for Electronic Devices and Patterns. <i>ACS Nano</i> , 2016, 10, 1404-1410.	7.3	69
17	Enhanced sensitivity of graphene ammonia gas sensors using molecular doping. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	68
18	Silicon Nanosheets: Crossover between Multilayer Silicene and Diamond-like Growth Regime. <i>ACS Nano</i> , 2017, 11, 3376-3382.	7.3	61

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19	Embedded-gate graphene transistors for high-mobility detachable flexible nanoelectronics. Applied Physics Letters, 2012, 100, .	1.5	60
20	High-Performance Current Saturating Graphene Field-Effect Transistor With Hexagonal Boron Nitride Dielectric on Flexible Polymeric Substrates. IEEE Electron Device Letters, 2013, 34, 172-174.	2.2	53
21	Direct Delamination of Graphene for High-Performance Plastic Electronics. Small, 2014, 10, 694-698.	5.2	52
22	Multi-finger flexible graphene field effect transistors with high bendability. Applied Physics Letters, 2012, 101, .	1.5	42
23	Direct Observation of Poly(Methyl Methacrylate) Removal from a Graphene Surface. Chemistry of Materials, 2017, 29, 2033-2039.	3.2	41
24	Mixed-mode traction-separation relations between graphene and copper by blister tests. International Journal of Solids and Structures, 2016, 84, 147-159.	1.3	39
25	Large-Area Graphene Electrodes: Using CVD to facilitate applications in commercial touchscreens, flexible nanoelectronics, and neural interfaces. IEEE Nanotechnology Magazine, 2015, 9, 6-14.	0.9	38
26	Contactless tracking of humans using non-contact triboelectric sensing technology: Enabling new assistive applications for the elderly and the visually impaired. Nano Energy, 2021, 90, 106486.	8.2	38
27	Lithographically defined uniform worm-shaped polymeric nanoparticles. Nanotechnology, 2010, 21, 095301.	1.3	37
28	Exceptional texture evolution induced by multi-pass cold drawing of magnesium alloy. Materials and Design, 2017, 135, 267-274.	3.3	37
29	Chemical-sensitive graphene modulator with a memory effect for internet-of-things applications. Microsystems and Nanoengineering, 2016, 2, 16018.	3.4	36
30	Clean graphene interfaces by selective dry transfer for large area silicon integration. Nanoscale, 2016, 8, 7523-7533.	2.8	35
31	Two-Dimensional Pnictogen for Field-Effect Transistors. Research, 2019, 2019, 1046329.	2.8	34
32	Deposition and patterning of diamondlike carbon as antiwear nanoimprint templates. Journal of Vacuum Science & Technology B, 2006, 24, 2993.	1.3	32
33	Efficient Full-Color Boron Nitride Quantum Dots for Thermostable Flexible Displays. ACS Nano, 2021, 15, 14610-14617.	7.3	32
34	Flexible and Wearable Hybrid RF and Solar Energy Harvesting System. IEEE Transactions on Antennas and Propagation, 2022, 70, 2223-2233.	3.1	30
35	Vis-NIR photodetector with microsecond response enabled by 2D bismuth/Si(111) heterojunction. 2D Materials, 2021, 8, 035002.	2.0	27
36	Mixed-Mode Interactions Between Graphene and Substrates by Blister Tests. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	1.1	25

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37	Characterizing nanoimprint profile shape and polymer flow behavior using visible light angular scatterometry. <i>Journal of Vacuum Science &amp; Technology B</i> , 2007, 25, 2396.	1.3	24
38	Transparent Nanoscale Polyimide Gate Dielectric for Highly Flexible Electronics. <i>Advanced Electronic Materials</i> , 2018, 4, 1700043.	2.6	24
39	Inductively heated synthesized graphene with record transistor mobility on oxidized silicon substrates at room temperature. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	21
40	Enhanced fully-biodegradable Mg/PLA composite rod: Effect of surface modification of Mg-2Zn wire on the interfacial bonding. <i>Surface and Coatings Technology</i> , 2018, 350, 722-731.	2.2	21
41	Self-reinforced biodegradable Mg-2Zn alloy wires/polylactic acid composite for orthopedic implants. <i>Composites Science and Technology</i> , 2018, 162, 198-205.	3.8	21
42	Disassembling Silicene from Native Substrate and Transferring onto an Arbitrary Target Substrate. <i>Advanced Functional Materials</i> , 2020, 30, 2004546.	7.8	21
43	Mechanical and Biological Properties of a Biodegradable Mg-Zn-Ca Porous Alloy. <i>Orthopaedic Surgery</i> , 2018, 10, 160-168.	0.7	19
44	Improvement of graphene field-effect transistors by hexamethyldisilazane surface treatment. <i>Applied Physics Letters</i> , 2014, 105, 033117.	1.5	18
45	Conductive Porous MXene for Bionic, Wearable, and Precise Gesture Motion Sensors. <i>Research</i> , 2021, 2021, 9861467.	2.8	18
46	Durable diamond-like carbon templates for UV nanoimprint lithography. <i>Nanotechnology</i> , 2008, 19, 105302.	1.3	17
47	Thermoelectric effect and devices on $\text{In}_2\text{S}_3$ and $\text{SnS}_2$ Xenes. <i>Informa-Materially</i> , 2021, 3, 271-292.	8.5	17
48	Anisotropic thermoelectric effect and field-effect devices in epitaxial bismuthene on Si (111). <i>Nanotechnology</i> , 2020, 31, 475202.	1.3	17
49	Intrinsic memristive mechanisms in 2D layered materials for high-performance memory. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	15
50	Effects of the thickness and laser irradiation on the electrical properties of e-beam evaporated 2D bismuth. <i>Nanoscale</i> , 2021, 13, 2648-2657.	2.8	13
51	Nanofabrication down to 10 nm on a plastic substrate. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011, 29, 06FG07.	0.6	12
52	Thermosensitive hydrogel-functionalized gold nanorod/mesoporous MnO <sub>2</sub> nanoparticles for tumor cell-triggered drug delivery. <i>Materials Science and Engineering C</i> , 2021, 131, 112504.	3.8	12
53	Towards the Realization of Graphene Based Flexible Radio Frequency Receiver. <i>Electronics (Switzerland)</i> , 2015, 4, 933-946.	1.8	11
54	Suppression of Copper Thin Film Loss during Graphene Synthesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 1527-1532.	4.0	11

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55	INVERSION OF THE ELECTRICAL AND OPTICAL PROPERTIES OF PARTIALLY OXIDIZED HEXAGONAL BORON NITRIDE. Nano, 2014, 09, 1450002.	0.5	10
56	Towards the design and fabrication of graphene based flexible GHz radio receiver systems. , 2014, , .		9
57	Morphology Optimization of Bi <sub>2</sub> Se <sub>3</sub> Thin Films for Enhanced Thermoelectric Performance. Crystal Growth and Design, 2021, 21, 6737-6743.	1.4	8
58	State-of-the-art graphene transistors on hexagonal boron nitride, high-k, and polymeric films for GHz flexible analog nanoelectronics. , 2012, , .		7
59	Physical vapor deposited 2D bismuth for CMOS technology. Journal of Semiconductors, 2020, 41, 081001.	2.0	7
60	Surface energy induced patterning of organic and inorganic materials on heterogeneous Si surfaces. Journal of Vacuum Science & Technology B, 2007, 25, 1993.	1.3	6
61	Electrospun Mg/poly(lactic-co-glycolic acid) composite scaffold for urethral reconstruction. Journal of Materials Science, 2020, 55, 13216-13231.	1.7	6
62	Physical characterization of nanoimprinted polymer nanostructures using visible light angular scatterometry. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2008, 7, 013008.	1.0	5
63	Graphene frequency doubler with record 3GHz bandwidth and the maximum conversion gain prospects. , 2012, , .		5
64	Interfacial adhesion studies for step and flash imprint lithography. , 2008, , .		3
65	Prospects and challenges in low-dimensional materials and devices for Internet of things. , 2020, , 291-327.		3
66	Multi-Interface-Induced Thermal Conductivity Reduction and Thermoelectric Performance Improvement in a Cu-Ni Alloy. ACS Applied Energy Materials, 0, , .	2.5	3
67	Graphene Raman imaging and spectroscopy processing: characterization of graphene growth. , 2012, , .		2
68	Enhancement of graphene field-effect transistor by surface treatment. , 2014, , .		2
69	Visible light angular scatterometry for nanolithography. , 2007, , .		1
70	Surface energy induced patterning of polymer nanostructures for cancer diagnosis and therapy. , 2007, , .		1
71	Highly bendable high-mobility graphene field effect transistors with multi-finger embedded gates on flexible substrates. , 2012, , .		1
72	Efficient trust chain model based on turing machine. Security and Communication Networks, 2015, 8, 2-12.	1.0	1

#	ARTICLE	IF	CITATIONS
73	(Invited) silicene and phosphorene: Progress on the intriguing case of buckled atomic sheets. , 2015, , .		1
74	Encapsulated Silicene Field-Effect Transistors. Nanoscience and Technology, 2018, , 235-254.	1.5	1
75	Bismuthene. , 2022, , 173-196.		1
76	Integration paths for Xenos. , 2022, , 405-438.		1
77	Wafer-scale synthesis and transfer of high quality monolayer graphene for nanoelectronics. , 2011, , .		0
78	Wafer-scale graphene technology and GHz nanoelectronics (invited). , 2011, , .		0
79	Graphene-Si heterogeneous nanotechnology. , 2013, , .		0
80	Invited Talk1. , 2016, , .		0
81	Thermoelectric and Photoelectric Effects of 2D Bismuth for Flexible Electronics. , 2021, , .		0
82	Energy-efficient Flexible Ammonia Sensors Enabled by Polypyrrole-Graphene. , 2021, , .		0