Lin Xu

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Aligned, high-density semiconducting carbon nanotube arrays for high-performance electronics. Science, 2020, 368, 850-856.	6.0	308
2	Preparation, characterization and application of amino acid-based green ionic liquids. Green Chemistry, 2006, 8, 639.	4.6	306
3	Dirac-source field-effect transistors as energy-efficient, high-performance electronic switches. Science, 2018, 361, 387-392.	6.0	226
4	Gigahertz integrated circuits based on carbon nanotube films. Nature Electronics, 2018, 1, 40-45.	13.1	132
5	Schottky barrier heights in two-dimensional field-effect transistors: from theory to experiment. Reports on Progress in Physics, 2021, 84, 056501.	8.1	97
6	Sub-10Ânm two-dimensional transistors: Theory and experiment. Physics Reports, 2021, 938, 1-72.	10.3	80
7	Sub 10 nm Bilayer Bi₂O₂Se Transistors. Advanced Electronic Materials, 2019, 5, 1800720.	2.6	70
8	Radiofrequency transistors based on aligned carbon nanotube arrays. Nature Electronics, 2021, 4, 405-415.	13.1	67
9	Excellent Device Performance of Subâ€5â€nm Monolayer Tellurene Transistors. Advanced Electronic Materials, 2019, 5, 1900226.	2.6	65
10	Sub-5 nm Monolayer MoS₂ Transistors toward Low-Power Devices. ACS Applied Electronic Materials, 2021, 3, 1560-1571.	2.0	56
11	Ohmic contacts between monolayer WSe2 and two-dimensional titanium carbides. Carbon, 2018, 135, 125-133.	5.4	55
12	Performance Limit of Monolayer WSe₂ Transistors; Significantly Outperform Their MoS₂ Counterpart. ACS Applied Materials & Interfaces, 2020, 12, 20633-20644.	4.0	39
13	Sub-5-nm Monolayer Silicane Transistor: A First-Principles Quantum Transport Simulation. Physical Review Applied, 2020, 14, .	1.5	38
14	Lowering interface state density in carbon nanotube thin film transistors through using stacked Y2O3/HfO2 gate dielectric. Applied Physics Letters, 2018, 113, .	1.5	32
15	Can Carbon Nanotube Transistors Be Scaled Down to the Sub-5 nm Gate Length?. ACS Applied Materials & Interfaces, 2021, 13, 31957-31967.	4.0	32
16	Advances in Highâ€Performance Carbonâ€Nanotube Thinâ€Film Electronics. Advanced Electronic Materials, 2019, 5, 1900122.	2.6	27
17	Insight Into Ballisticity of Room-Temperature Carrier Transport in Carbon Nanotube Field-Effect Transistors. IEEE Transactions on Electron Devices, 2019, 66, 3535-3540.	1.6	26
18	Enhancementâ€Mode Fieldâ€Effect Transistors and Highâ€Speed Integrated Circuits Based on Aligned Carbon Nanotube Films. Advanced Functional Materials, 2022, 32, 2104539.	7.8	25

#	Article	IF	Citations
19	Performance Limit of Ultrathin GaAs Transistors. ACS Applied Materials & Interfaces, 2022, 14, 23597-23609.	4.0	22
20	Suppression of leakage current in carbon nanotube field-effect transistors. Nano Research, 2021, 14, 976-981.	5.8	21
21	Unusual Fermiâ€Level Pinning and Ohmic Contact at Monolayer Bi 2 O 2 Seâ€"Metal Interface. Advanced Theory and Simulations, 2019, 2, 1800178.	1.3	20
22	Planar Directionâ€Dependent Interfacial Properties in Monolayer In₂Se₃â€"Metal Contacts. Physica Status Solidi (B): Basic Research, 2020, 257, 1900198.	0.7	19
23	Sub-5 nm Gate Length Monolayer MoTe₂ Transistors. Journal of Physical Chemistry C, 2021, 125, 19394-19404.	1.5	19
24	Topological phase change transistors based on tellurium Weyl semiconductor. Science Advances, 2022, 8, .	4.7	17
25	nâ€Type Diracâ€Source Fieldâ€Effect Transistors Based on a Graphene/Carbon Nanotube Heterojunction. Advanced Electronic Materials, 2020, 6, 2000258.	2.6	16
26	Can ultra-thin Si FinFETs work well in the sub-10 nm gate-length region?. Nanoscale, 2021, 13, 5536-5544.	2.8	15
27	Bilayer Tellurene: A Potential pâ€Type Channel Material for Subâ€10 nm Transistors. Advanced Theory and Simulations, 2021, 4, 2000252.	1.3	14
28	Computational Study of Ohmic Contact at Bilayer InSe-Metal Interfaces: Implications for Field-Effect Transistors. ACS Applied Nano Materials, 2019, 2, 6898-6908.	2.4	13
29	Transconductance Amplification in Diracâ€Source Fieldâ€Effect Transistors Enabled by Graphene/Nanotube Hereojunctions. Advanced Electronic Materials, 2020, 6, 1901289.	2.6	6