# Lin Xu

List of Publications by Year
in descending order



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|---|---|---|---|
| 29 papers | 1,863 citations | 361045 20 h-index | 476904 29 g-index |
| 29 all docs | 29 docs citations | 29 times ranked | 1900 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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 |
| 2 | Performance Limit of Ultrathin GaAs Transistors. ACS Applied Materials & Interfaces, 2022, 14, 23597-23609. | 4.0 | 22 |
| 3 | Topological phase change transistors based on tellurium Weyl semiconductor. Science Advances, 2022, 8, . | 4.7 | 17 |
| 4 | Suppression of leakage current in carbon nanotube field-effect transistors. Nano Research, 2021, 14, 976-981. | 5.8 | 21 |
| 5 | Bilayer Tellurene: A Potential pâ€Type Channel Material for Subâ€10 nm Transistors. Advanced Theory and Simulations, 2021, 4, 2000252. | 1.3 | 14 |
| 6 | Sub-5 nm Monolayer MoS<sub>2</sub> Transistors toward Low-Power Devices. ACS Applied Electronic Materials, 2021, 3, 1560-1571. | 2.0 | 56 |
| 7 | Schottky barrier heights in two-dimensional field-effect transistors: from theory to experiment. Reports on Progress in Physics, 2021, 84, 056501. | 8.1 | 97 |
| 8 | Radiofrequency transistors based on aligned carbon nanotube arrays. Nature Electronics, 2021, 4, 405-415. | 13.1 | 67 |
| 9 | 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 |
| 10 | Sub-5 nm Gate Length Monolayer MoTe<sub>2</sub> Transistors. Journal of Physical Chemistry C, 2021, 125, 19394-19404. | 1.5 | 19 |
| 11 | Sub-10Ânm two-dimensional transistors: Theory and experiment. Physics Reports, 2021, 938, 1-72. | 10.3 | 80 |
| 12 | Can ultra-thin Si FinFETs work well in the sub-10 nm gate-length region?. Nanoscale, 2021, 13, 5536-5544. | 2.8 | 15 |
| 13 | Planar Directionâ€Dependent Interfacial Properties in Monolayer In<sub>2</sub>Se<sub>3</sub>â€“Metal Contacts. Physica Status Solidi (B): Basic Research, 2020, 257, 1900198. | 0.7 | 19 |
| 14 | Sub-5-nm Monolayer Silicane Transistor: A First-Principles Quantum Transport Simulation. Physical Review Applied, 2020, 14, . | 1.5 | 38 |
| 15 | Aligned, high-density semiconducting carbon nanotube arrays for high-performance electronics. Science, 2020, 368, 850-856. | 6.0 | 308 |
| 16 | nâ€Type Diracâ€Source Fieldâ€Effect Transistors Based on a Graphene/Carbon Nanotube Heterojunction. Advanced Electronic Materials, 2020, 6, 2000258. | 2.6 | 16 |
| 17 | Transconductance Amplification in Diracâ€Source Fieldâ€Effect Transistors Enabled by Graphene/Nanotube Hereojunctions. Advanced Electronic Materials, 2020, 6, 1901289. | 2.6 | 6 |
| 18 | Performance Limit of Monolayer WSe<sub>2</sub> Transistors; Significantly Outperform Their MoS<sub>2</sub> Counterpart. ACS Applied Materials & Interfaces, 2020, 12, 20633-20644. | 4.0 | 39 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | 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 |
| 20 | 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 |
| 21 | Advances in Highâ€Performance Carbonâ€Nanotube Thinâ€Film Electronics. Advanced Electronic Materials, 2019, 5, 1900122. | 2.6 | 27 |
| 22 | Excellent Device Performance of Subâ€5â€nm Monolayer Tellurene Transistors. Advanced Electronic Materials, 2019, 5, 1900226. | 2.6 | 65 |
| 23 | 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 |
| 24 | Sub 10 nm Bilayer Bi<sub>2</sub>O<sub>2</sub>Se Transistors. Advanced Electronic Materials, 2019, 5, 1800720. | 2.6 | 70 |
| 25 | Ohmic contacts between monolayer WSe2 and two-dimensional titanium carbides. Carbon, 2018, 135, 125-133. | 5.4 | 55 |
| 26 | Gigahertz integrated circuits based on carbon nanotube films. Nature Electronics, 2018, 1, 40-45. | 13.1 | 132 |
| 27 | 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 |
| 28 | Dirac-source field-effect transistors as energy-efficient, high-performance electronic switches. Science, 2018, 361, 387-392. | 6.0 | 226 |
| 29 | Preparation, characterization and application of amino acid-based green ionic liquids. Green Chemistry, 2006, 8, 639. | 4.6 | 306 |