Gang Qiu

List of Publications by Year in descending order

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38 papers	3,594 citations	257357 24 h-index	526166 27 g-index
38 all docs	38 docs citations	38 times ranked	4243 citing authors

#	Article	IF	Citations
1	Field-effect transistors made from solution-grown two-dimensional tellurene. Nature Electronics, 2018, 1, 228-236.	13.1	591
2	Steep-slope hysteresis-free negative capacitance MoS2 transistors. Nature Nanotechnology, 2018, 13, 24-28.	15.6	422
3	A ferroelectric semiconductor field-effect transistor. Nature Electronics, 2019, 2, 580-586.	13.1	317
4	One-Dimensional van der Waals Material Tellurium: Raman Spectroscopy under Strain and Magneto-Transport. Nano Letters, 2017, 17, 3965-3973.	4.5	272
5	High-Performance Depletion/Enhancement-ode eta -Ga2O3 on Insulator (GOOI) Field-Effect Transistors With Record Drain Currents of 600/450 mA/mm. IEEE Electron Device Letters, 2017, 38, 103-106.	2.2	247
6	Ferroelectric Field-Effect Transistors Based on MoS₂ and CuInP₂S₆ Two-Dimensional van der Waals Heterostructure. ACS Nano, 2018, 12, 6700-6705.	7.3	246
7	Tellurene: its physical properties, scalable nanomanufacturing, and device applications. Chemical Society Reviews, 2018, 47, 7203-7212.	18.7	214
8	Controlled Growth of a Large-Size 2D Selenium Nanosheet and Its Electronic and Optoelectronic Applications. ACS Nano, 2017, 11, 10222-10229.	7.3	189
9	Î²-Ga2O3 on insulator field-effect transistors with drain currents exceeding 1.5â€‰A/mm and their self-heating effect. Applied Physics Letters, 2017, 111, .	1.5	170
10	Raman response and transport properties of tellurium atomic chains encapsulated in nanotubes. Nature Electronics, 2020, 3, 141-147.	13.1	126
11	Al2O3/ $eta $ -Ga2O3(-201) Interface Improvement Through Piranha Pretreatment and Postdeposition Annealing. IEEE Electron Device Letters, 2016, 37, 1411-1414.	2.2	109
12	Thermoelectric Performance of 2D Tellurium with Accumulation Contacts. Nano Letters, 2019, 19, 1955-1962.	4.5	81
13	Observation of Optical and Electrical In-Plane Anisotropy in High-Mobility Few-Layer ZrTe₅. Nano Letters, 2016, 16, 7364-7369.	4.5	80
14	Quantum Hall effect of Weyl fermions in n-type semiconducting tellurene. Nature Nanotechnology, 2020, 15, 585-591.	15.6	63
15	Quantum Transport and Band Structure Evolution under High Magnetic Field in Few-Layer Tellurene. Nano Letters, 2018, 18, 5760-5767.	4.5	60
16	Epitaxial Growth of 1D Atomic Chain Based Se Nanoplates on Monolayer ReS₂ for Highâ€Performance Photodetectors. Advanced Functional Materials, 2018, 28, 1806254.	7.8	52
17	Data-driven and probabilistic learning of the process-structure-property relationship in solution-grown tellurene for optimized nanomanufacturing of high-performance nanoelectronics. Nano Energy, 2019, 57, 480-491.	8.2	44
18	Ultrafast photoinduced band splitting and carrier dynamics in chiral tellurium nanosheets. Nature Communications, 2020, 11, 3991.	5.8	39

#	Article	IF	Citations
19	The resurrection of tellurium as an elemental two-dimensional semiconductor. Npj 2D Materials and Applications, 2022, 6, .	3.9	36
20	Solar-Blind UV Photodetector Based on Atomic Layer-Deposited Cu₂O and Nanomembrane Î²-Ga₂O₃ pn Oxide Heterojunction. ACS Omega, 2019, 4, 20756-20761.	1.6	35
21	Hybrid dual-channel phototransistor based on 1D t-Se and 2D ReS2 mixed-dimensional heterostructures. Nano Research, 2019, 12, 669-674.	5.8	34
22	Imaging Carrier Inhomogeneities in Ambipolar Tellurene Field Effect Transistors. Nano Letters, 2019, 19, 1289-1294.	4.5	31
23	Gate-tunable strong spin-orbit interaction in two-dimensional tellurium probed by weak antilocalization. Physical Review B, 2020, 101, .	1.1	29
24	How Important Is the Metalâ€“Semiconductor Contact for Schottky Barrier Transistors: A Case Study on Few-Layer Black Phosphorus?. ACS Omega, 2017, 2, 4173-4179.	1.6	24
25	Write disturb analyses on half-selected cells of cross-point RRAM arrays. , 2014, , .		18
26	Ultrafast Laserâ€Shockâ€Induced Confined Metaphase Transformation for Direct Writing of Black Phosphorus Thin Films. Advanced Materials, 2018, 30, 1704405.	11.1	17
27	High-Performance Few-Layer Tellurium CMOS Devices Enabled by Atomic Layer Deposited Dielectric Doping Technique. , 2018, , .		16
28	Mesoscopic Transport of Quantum Anomalous Hall Effect in the Submicron Size Regime. Physical Review Letters, 2022, 128, .	2.9	12
29	Few-layer black phosporous PMOSFETs with BN/Al<inf>2</inf>O<inf>3</inf> bilayer gate dielectric: Achieving I<inf>on</inf>=850Î¼A/Î¼m, g<inf>m</inf>=340Î¼S/Î¼m, and R<inf>c</inf>=0.58kÎ©·Î¼m. , 2016, , .		10
30	Bilayer Quantum Hall States in an n-Type Wide Tellurium Quantum Well. Nano Letters, 2021, 21, 7527-7533.	4.5	6
31	Wafer-scale Material-device Correlation of Tellurene MOSFETs. , 2018, , .		2
32	Selenene and Tellurene. , 2022, , 197-224.		2
33	Degradation Characteristics of Resistive Switching Memory Devices Correlated with Electric Field Induced Ion-Migration Effect of Anode. Chinese Physics Letters, 2013, 30, 117104.	1.3	0
34	Chemical Exfoliation of Black Phosphorus for Nanoelectronics Applications. MRS Advances, 2017, 2, 3697-3702.	0.5	0
35	2D Ferroelectric $pmb{mathrm{CuInP}_{2}mathrm{S}_{6}}$: Synthesis, ReRAM, and FeRAM. , 2018, , .		0
36	(Invited) High-Performance 2D Tellurium Transistors Towards CMOS Logic Applications. ECS Meeting Abstracts, 2019, , .	0.0	0

#	Article	IF	Citations
37	Microscopic origin of inhomogeneous transport in four-terminal tellurene devices. Applied Physics Letters, 2020, 117, .	1.5	0
38	High-Frequency Tellurene MOSFETs with Biased Contacts. , 2021, , .		0