

Two-dimensional non-volatile programmable p<sup>n</sup> junctions

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Floating-Gate Manipulated Graphene-Black Phosphorus Heterojunction for Nonvolatile Ambipolar Schottky Junction Memories, Memory Inverter Circuits, and Logic Rectifiers. <i>Nano Letters</i> , 2017, 17, 6353-6359.	4.5	87
2	Enhanced broadband photoresponse of a self-powered photodetector based on vertically grown SnS layers via the pyro-phototronic effect. <i>Nanoscale</i> , 2017, 9, 19201-19208.	2.8	70
3	Controllable Carrier Type in Boron Phosphide Nanowires Toward Homostructural Optoelectronic Devices. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 10296-10303.	4.0	20
4	Atomically thin $\pi$ - $n$ junctions based on two-dimensional materials. <i>Chemical Society Reviews</i> , 2018, 47, 3339-3358.	18.7	231
5	Nonvolatile infrared memory in MoS <sub>2</sub> /PbS van der Waals heterostructures. <i>Science Advances</i> , 2018, 4, eaap7916.	4.7	161
6	Quantum oscillation in carrier transport in two-dimensional junctions. <i>Nanoscale</i> , 2018, 10, 7912-7917.	2.8	5
7	Room-Temperature Carbon Nanotube Single-Electron Transistors with Mechanical Buckling-Defined Quantum Dots. <i>Advanced Electronic Materials</i> , 2018, 4, 1700628.	2.6	8
8	WSe <sub>2</sub> /GeSe heterojunction photodiode with giant gate tunability. <i>Nano Energy</i> , 2018, 49, 103-108.	8.2	73
9	2D Layered Material-Based van der Waals Heterostructures for Optoelectronics. <i>Advanced Functional Materials</i> , 2018, 28, 1706587.	7.8	279
10	Predicting Two-Dimensional C <sub>3</sub> B <sub>3</sub> N van der Waals $\pi$ - $n$ Heterojunction with Strong Interlayer Electron Coupling and Enhanced Photocurrent. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 858-862.	2.1	74
11	Mobility Engineering in Vertical Field Effect Transistors Based on Van der Waals Heterostructures. <i>Advanced Materials</i> , 2018, 30, 1704435.	11.1	51
12	Floating-gate controlled programmable non-volatile black phosphorus PNP junction memory. <i>Nanoscale</i> , 2018, 10, 3148-3152.	2.8	22
13	Carrier Transport and Photoresponse in GeSe/MoS <sub>2</sub> Heterojunction $\pi$ - $n$ Diodes. <i>Small</i> , 2018, 14, e1704559.	5.2	32
14	Enhanced performance of a graphene/GaAs self-driven near-infrared photodetector with upconversion nanoparticles. <i>Nanoscale</i> , 2018, 10, 8023-8030.	2.8	84
15	Capacitance-voltage analysis of electrical properties for WSe <sub>2</sub> field effect transistors with high-k encapsulation layer. <i>Nanotechnology</i> , 2018, 29, 065703.	1.3	4
16	Nanogap-Engineerable Electromechanical System for Ultralow Power Memory. <i>Advanced Science</i> , 2018, 5, 1700588.	5.6	11
17	Gate-tunable and high optoelectronic performance in multilayer WSe <sub>2</sub> $\pi$ - $n$ diode. <i>Journal of Materials Chemistry C</i> , 2018, 6, 11673-11678.	2.7	23
18	Ultimate limit in size and performance of WSe <sub>2</sub> vertical diodes. <i>Nature Communications</i> , 2018, 9, 5371.	5.8	63

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19	High-Performance Photoinduced Memory with Ultrafast Charge Transfer Based on MoS <sub>2</sub> /SWCNTs Network Van Der Waals Heterostructure. <i>Small</i> , 2019, 15, e1804661.	5.2	42
20	Band Structure Engineering in 2D Materials for Optoelectronic Applications. <i>Advanced Materials Technologies</i> , 2018, 3, 1800072.	3.0	78
21	Analysis of the relationship between the contact barrier and rectification ratio in a two-dimensional P $\epsilon$ N heterojunction. <i>Semiconductor Science and Technology</i> , 2018, 33, 114012.	1.0	8
22	Multiphysics Modeling and Simulation of Carrier Dynamics and Thermal Transport in Monolayer MoS <sub>2</sub> /WSe <sub>2</sub> Heterojunction. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 4542-4547.	1.6	1
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24	Approaching the Schottky-Mott limit in van der Waals metal-semiconductor junctions. <i>Nature</i> , 2018, 557, 696-700.	13.7	1,279
25	Two-dimensional multibit optoelectronic memory with broadband spectrum distinction. <i>Nature Communications</i> , 2018, 9, 2966.	5.8	211
26	The ambipolar transport behavior of WSe <sub>2</sub> transistors and its analogue circuits. <i>NPG Asia Materials</i> , 2018, 10, 703-712.	3.8	124
27	Electronics and Optoelectronics Based on Two-Dimensional Materials. <i>Journal of the Korean Physical Society</i> , 2018, 73, 1-15.	0.3	16
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32	Phosphorene/ZnO Nano-Heterojunctions for Broadband Photonic Nonvolatile Memory Applications. <i>Advanced Materials</i> , 2018, 30, e1801232.	11.1	98
33	High-performance, multifunctional devices based on asymmetric van der Waals heterostructures. <i>Nature Electronics</i> , 2018, 1, 356-361.	13.1	197
34	Multifunctional devices from asymmetry. <i>Nature Electronics</i> , 2018, 1, 331-332.	13.1	3
35	Doping engineering and functionalization of two-dimensional metal chalcogenides. <i>Nanoscale Horizons</i> , 2019, 4, 26-51.	4.1	238
36	Multifunctional anti-ambipolar p-n junction based on MoTe <sub>2</sub> /MoS <sub>2</sub> heterostructure. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	35

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38	WO <sub>3</sub> â€“WS <sub>2</sub> Vertical Bilayer Heterostructures with High Photoluminescence Quantum Yield. Journal of the American Chemical Society, 2019, 141, 11754-11758.	6.6	69
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49	Metallic contact induced van der Waals gap in a MoS <sub>2</sub> FET. Nanoscale, 2019, 11, 18246-18254.	2.8	13
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59	Dry release transfer of graphene and few-layer h-BN by utilizing thermoplasticity of polypropylene carbonate. <i>Npj 2D Materials and Applications</i> , 2019, 3, .	3.9	60
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68	Thickness Tunable Wedding-Cake-like MoS <sub>2</sub> Flakes for High-Performance Optoelectronics. <i>ACS Nano</i> , 2019, 13, 3649-3658.	7.3	75
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78	Recent Advances in Black Phosphorus-Based Electronic Devices. <i>Advanced Electronic Materials</i> , 2019, 5, 1800666.	2.6	31
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82	Tuning electronic structure and optical properties of C <sub>3</sub> N by B doping. <i>Physica B: Condensed Matter</i> , 2020, 577, 411807.	1.3	2
83	Direct Growth of Perovskite Crystals on Metallic Electrodes for High-Performance Electronic and Optoelectronic Devices. <i>Small</i> , 2020, 16, e1906185.	5.2	20
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