

Du Xiang

List of Publications by Year in descending order

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35
papers

2,200
citations

331259

21
h-index

377514

34
g-index

35
all docs

35
docs citations

35
times ranked

3973
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface transfer doping induced effective modulation on ambipolar characteristics of few-layer black phosphorus. <i>Nature Communications</i> , 2015, 6, 6485.	5.8	335
2	Electron-Doping-Enhanced Trion Formation in Monolayer Molybdenum Disulfide Functionalized with Cesium Carbonate. <i>ACS Nano</i> , 2014, 8, 5323-5329.	7.3	211
3	Two-dimensional multibit optoelectronic memory with broadband spectrum distinction. <i>Nature Communications</i> , 2018, 9, 2966.	5.8	211
4	Colossal Ultraviolet Photoresponsivity of Few-Layer Black Phosphorus. <i>ACS Nano</i> , 2015, 9, 8070-8077.	7.3	204
5	Gap States Assisted MoO ₃ Nanobelt Photodetector with Wide Spectrum Response. <i>Scientific Reports</i> , 2014, 4, 4891.	1.6	146
6	Water-Catalyzed Oxidation of Few-Layer Black Phosphorous in a Dark Environment. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9131-9135.	7.2	141
7	Crested two-dimensional transistors. <i>Nature Nanotechnology</i> , 2019, 14, 223-226.	15.6	129
8	Surface Functionalization of Black Phosphorus via Potassium toward High-Performance Complementary Devices. <i>Nano Letters</i> , 2017, 17, 4122-4129.	4.5	117
9	Surface Transfer Doping-Induced, High-Performance Graphene/Silicon Schottky Junction-Based, Self-Powered Photodetector. <i>Small</i> , 2015, 11, 4829-4836.	5.2	103
10	Nonvolatile and Programmable Photodoping in MoTe ₂ for Photoresist-Free Complementary Electronic Devices. <i>Advanced Materials</i> , 2018, 30, e1804470.	11.1	70
11	Electron transport and visible light absorption in a plasmonic photocatalyst based on strontium niobate. <i>Nature Communications</i> , 2017, 8, 15070.	5.8	64
12	Improving carrier mobility in two-dimensional semiconductors with rippled materials. <i>Nature Electronics</i> , 2022, 5, 489-496.	13.1	52
13	Polarized Light-Emitting Diodes Based on Anisotropic Excitons in Few-Layer ReS ₂ . <i>Advanced Materials</i> , 2020, 32, e2001890.	11.1	49
14	Oxygen induced strong mobility modulation in few-layer black phosphorus. <i>2D Materials</i> , 2017, 4, 021007.	2.0	45
15	Direct Observation of Semiconductor-Metal Phase Transition in Bilayer Tungsten Diselenide Induced by Potassium Surface Functionalization. <i>ACS Nano</i> , 2018, 12, 2070-2077.	7.3	44
16	Anomalous Broadband Spectrum Photodetection in 2D Rhenium Disulfide Transistor. <i>Advanced Optical Materials</i> , 2019, 7, 1901115.	3.6	37
17	Black phosphorus inverter devices enabled by in-situ aluminum surface modification. <i>Nano Research</i> , 2019, 12, 531-536.	5.8	33
18	Significantly enhanced optoelectronic performance of tungsten diselenide phototransistor via surface functionalization. <i>Nano Research</i> , 2017, 10, 1282-1291.	5.8	30

#	ARTICLE	IF	CITATIONS
19	Dielectric Engineered Two-Dimensional Neuromorphic Transistors. Nano Letters, 2021, 21, 3557-3565.	4.5	30
20	Improving chemical vapor deposition graphene conductivity using molybdenum trioxide: An <i>in-situ</i> field effect transistor study. Applied Physics Letters, 2013, 103, .	1.5	27
21	Out-of-Plane Homojunction Enabled High Performance SnS ₂ Lateral Phototransistor. Advanced Optical Materials, 2020, 8, 1901971.	3.6	27
22	Water-Catalyzed Oxidation of Few-Layer Black Phosphorous in a Dark Environment. Angewandte Chemie, 2017, 129, 9259-9263.	1.6	16
23	Controlling phase transition in WSe ₂ towards ideal n-type transistor. Nano Research, 2021, 14, 2703-2710.	5.8	13
24	Tuning the electronic properties of ZnO nanowire field effect transistors via surface functionalization. Nanotechnology, 2015, 26, 095202.	1.3	12
25	Van der Waals Heterostructures with Tunable Tunneling Behavior Enabled by MoO ₃ Surface Functionalization. Advanced Optical Materials, 2020, 8, 1901867.	3.6	11
26	Fused computing and storage in a 2D transistor. Nature Nanotechnology, 2019, 14, 642-643.	15.6	9
27	Nondestructive hole doping enabled photocurrent enhancement of layered tungsten diselenide. 2D Materials, 2019, 6, 024002.	2.0	7
28	Monolayer transistors at wafer scales. Nature Electronics, 2021, 4, 868-869.	13.1	7
29	Optically Controllable 2D Material/Complex Oxide Heterointerface. Advanced Science, 2020, 7, 2002393.	5.6	5
30	Native Oxide Seeded Spontaneous Integration of Dielectrics on Exfoliated Black Phosphorus. ACS Applied Materials & Interfaces, 2020, 12, 24411-24418.	4.0	5
31	Modulation of Spin Dynamics in 2D Transition-Metal Dichalcogenide via Strain-Driven Symmetry Breaking. Advanced Science, 2022, , 2200816.	5.6	4
32	Artificially created interfacial states enabled van der Waals heterostructure memory device. Nanotechnology, 2022, 33, 175201.	1.3	3
33	Fabrication of patternable Janus transition-metal dichalcogenides assisted by electron beam irradiation. Applied Physics Letters, 2022, 120, 221901.	1.5	2
34	Photodoping: Nonvolatile and Programmable Photodoping in MoTe ₂ for Photoresist-Free Complementary Electronic Devices (Adv. Mater. 52/2018). Advanced Materials, 2018, 30, 1870402.	11.1	1
35	TMD-Based Phototransistors: Anomalous Broadband Spectrum Photodetection in 2D Rhenium Disulfide Transistor (Advanced Optical Materials 23/2019). Advanced Optical Materials, 2019, 7, 1970088.	3.6	0