Tao Han

List of Publications by Year
in descending order

33 papers	291 citations	1051969 10 h-index	1181555 14 g-index
33 all docs	33 docs citations	33 times ranked	233 citing authors

#	Article	IF	Citations
1	A high performance trench gate tunneling field effect transistor based on quasi-broken gap energy band alignment heterojunction. Nanotechnology, 2022, 33, 225205.	1.3	6
2	Investigation of Negative Bias Temperature Instability Effect in Nano PDSOI PMOSFET. Micromachines, 2022, 13, 808.	1.4	0
3	MANet: Multi-Scale Aware-Relation Network for Semantic Segmentation in Aerial Scenes. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	2.7	14
4	Adjusting transmissivity based on grapheneâ€“h-BNâ€“graphene heterostructure as a tunable phononâ€“plasmon coupling system in mid-infrared band. Journal of Materials Science, 2021, 56, 3210-3219.	1.7	3
5	Synthesis and Spectral Characteristics Investigation of the 2D-2D vdWs Heterostructure Materials. International Journal of Molecular Sciences, 2021, 22, 1246.	1.8	2
6	Investigation of charge trapping mechanism in MoS₂ field effect transistor by incorporating Al into host La₂O₃ as gate dielectric. Nanotechnology, 2021, 32, 305201.	1.3	5
7	Low-Power OR Logic Ferroelectric In-Situ Transistor Based on a CuInP2S6/MoS2 Van Der Waals Heterojunction. Nanomaterials, 2021, 11, 1971.	1.9	5
8	Construction and electrical performance improvement of MoS₂ FET with graphene/metal contact. Optical Materials Express, 2021, 11, 3099.	1.6	2
9	Preparation and Research of Monolayer WS2 FETs Encapsulated by h-BN Material. Micromachines, 2021, 12, 1006.	1.4	5
10	First-Principles Study on the Effect of Strain on Single-Layer Molybdenum Disulfide. Nanomaterials, 2021, 11, 3127.	1.9	9
11	Improvement of Electrical Performance in Heterostructure Junctionless TFET Based on Dual Material Gate. Applied Sciences (Switzerland), 2020, 10, 126.	1.3	18
12	Comprehensive Performance Quasi-Non-Volatile Memory Compatible with Large-Scale Preparation by Chemical Vapor Deposition. Nanomaterials, 2020, 10, 1471.	1.9	4
13	Fabrication and Characterization of MoS2/h-BN and WS2/h-BN Heterostructures. Micromachines, 2020, 11, 1114.	1.4	11
14	Graphene Electro-Optical Switch Modulator by Adjusting Propagation Length Based on Hybrid Plasmonic Waveguide in Infrared Band. Sensors, 2020, 20, 2864.	2.1	8
15	TCAD simulation of a double Lâ€shaped gate tunnel fieldâ€effect transistor with a covered sourceâ€“channel. Micro and Nano Letters, 2020, 15, 272-276.	0.6	11
16	Electrical performance of InAs/GaAs_{0.1}Sb_{0.9} heterostructure junctionless TFET with dual-material gate and Gaussian-doped source. Semiconductor Science and Technology, 2020, 35, 095004.	1.0	13
17	Filtering Characteristics of Phonon Polaritons Waves Based on Dielectric-h-BN-Dielectric Structure in Mid-Infrared Band. Nanomaterials, 2020, 10, 878.	1.9	1
18	The Large-Scale Preparation and Optical Properties of MoS2/WS2 Vertical Hetero-Junction. Molecules, 2020, 25, 1857.	1.7	7

#	Article	IF	Citations
19	TCAD Simulation of the Doping-Less TFET with Ge/SiGe/Si Hetero-Junction and Hetero-Gate Dielectric for the Enhancement of Device Performance. Coatings, 2020, 10, 278.	1.2	4
20	Research on the Preparation and Spectral Characteristics of Graphene/TMDs Hetero-structures. Nanoscale Research Letters, 2020, 15, 219.	3.1	8
21	A Novel Dopingless Fin-Shaped SiGe Channel TFET with Improved Performance. Nanoscale Research Letters, 2020, 15, 202.	3.1	25
22	A novel Ge based overlapping gate dopingless tunnel FET with high performance. Japanese Journal of Applied Physics, 2019, 58, 100902.	0.8	9
23	Probing the Field-Effect Transistor with Monolayer MoS2 Prepared by APCVD. Nanomaterials, 2019, 9, 1209.	1.9	10
24	A Horizontal-Gate Monolayer MoS2 Transistor Based on Image Force Barrier Reduction. Nanomaterials, 2019, 9, 1245.	1.9	10
25	Design and Investigation of a Dual Material Gate Arsenic Alloy Heterostructure Junctionless TFET with a Lightly Doped Source. Applied Sciences (Switzerland), 2019, 9, 4104.	1.3	8
26	Design and Investigation of the High Performance Doping-Less TFET with Ge/Si0.6Ge0.4/Si Heterojunction. Micromachines, 2019, 10, 424.	1.4	10
27	A Doping-Less Tunnel Field-Effect Transistor with Si0.6Ge0.4 Heterojunction for the Improvement of the Onâ€“Off Current Ratio and Analog/RF Performance. Electronics (Switzerland), 2019, 8, 574.	1.8	9
28	Probing the Optical Properties of MoS2 on SiO2/Si and Sapphire Substrates. Nanomaterials, 2019, 9, 740.	1.9	25
29	Design and Investigation of the Junction-Less TFET with Ge/Si0.3Ge0.7/Si Heterojunction and Heterogeneous Gate Dielectric. Electronics (Switzerland), 2019, 8, 476.	1.8	14
30	Probing the Growth Improvement of Large-Size High Quality Monolayer MoS2 by APCVD. Nanomaterials, 2019, 9, 433.	1.9	9
31	Design and investigation of dopingless dual-gate tunneling transistor based on line tunneling. AIP Advances, 2019, 9, .	0.6	10
32	A New Electro-Optical Switch Modulator Based on the Surface Plasmon Polaritons of Graphene in Mid-Infrared Band. Sensors, 2019, 19, 89.	2.1	10
33	Research on the Factors Affecting the Growth of Large-Size Monolayer MoS2 by APCVD. Materials, 2018, 11, 2562.	1.3	6