

# Sikandar Aftab

## List of Publications by Year in descending order

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Version: 2024-02-01

30  
papers

698  
citations

394286

19  
h-index

552653

26  
g-index

31  
all docs

31  
docs citations

31  
times ranked

627  
citing authors

#	ARTICLE	IF	CITATIONS
1	MoTe <sub>2</sub> van der Waals homojunction p <sup>+</sup> n diode with low resistance metal contacts. <i>Nanoscale</i> , 2019, 11, 9518-9525.	2.8	54
2	Thickness-dependent resistive switching in black phosphorus CBRAM. <i>Journal of Materials Chemistry C</i> , 2019, 7, 725-732.	2.7	51
3	Comparison of Electrical and Photoelectrical Properties of ReS <sub>2</sub> Field-Effect Transistors on Different Dielectric Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 32501-32509.	4.0	44
4	Asymmetric electrode incorporated 2D GeSe for self-biased and efficient photodetection. <i>Scientific Reports</i> , 2020, 10, 9374.	1.6	38
5	Highly stable binary composite of nickel silver sulfide ( NiAg <sub>2</sub> S ) synthesized using the hydrothermal approach for high performance supercapattery applications. <i>International Journal of Energy Research</i> , 2022, 46, 11346-11358.	2.2	37
6	High mobility ReSe <sub>2</sub> field effect transistors: Schottky-barrier-height-dependent photoresponsivity and broadband light detection with Co decoration. <i>2D Materials</i> , 2020, 7, 015010.	2.0	36
7	WSe <sub>2</sub> Homojunction p <sup>+</sup> n Diode Formed by Photoinduced Activation of Mid-Gap Defect States in Boron Nitride. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 42007-42015.	4.0	34
8	NIR self-powered photodetection and gate tunable rectification behavior in 2D GeSe/MoSe <sub>2</sub> heterojunction diode. <i>Scientific Reports</i> , 2021, 11, 3688.	1.6	34
9	Two-dimensional electronic devices modulated by the activation of donor-like states in boron nitride. <i>Nanoscale</i> , 2020, 12, 18171-18179.	2.8	28
10	Formation of an MoTe <sub>2</sub> based Schottky junction employing ultra-low and high resistive metal contacts. <i>RSC Advances</i> , 2019, 9, 10017-10023.	1.7	27
11	Carrier polarity modulation of molybdenum ditelluride (MoTe <sub>2</sub> ) for phototransistor and switching photodiode applications. <i>Nanoscale</i> , 2020, 12, 15687-15696.	2.8	26
12	Van der Waals Multi-Heterostructures (PN, PIN, and NPN) for Dynamic Rectification in 2D Materials. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001479.	1.9	24
13	Switching photodiodes based on (2D/3D) PdSe <sub>2</sub> /Si heterojunctions with a broadband spectral response. <i>Journal of Materials Chemistry C</i> , 2021, 9, 3998-4007.	2.7	24
14	Single nanoflake-based PtSe <sub>2</sub> p <sup>+</sup> n junction (in-plane) formed by optical excitation of point defects in BN for ultrafast switching photodiodes. <i>Journal of Materials Chemistry C</i> , 2021, 9, 199-207.	2.7	23
15	Gate Tunable Transport in Graphene/MoS <sub>2</sub> /(Cr/Au) Vertical Field-Effect Transistors. <i>Nanomaterials</i> , 2018, 8, 14.	1.9	22
16	A facile route to enhance the mobility of MoTe <sub>2</sub> field effect transistor via chemical doping. <i>Superlattices and Microstructures</i> , 2020, 147, 106698.	1.4	22
17	Van der Waals heterojunction diode composed of WS <sub>2</sub> flake placed on p-type Si substrate. <i>Nanotechnology</i> , 2018, 29, 045201.	1.3	21
18	A reversible and stable doping technique to invert the carrier polarity of MoTe <sub>2</sub> . <i>Nanotechnology</i> , 2021, 32, 285701.	1.3	21

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19	Gate Modulation of the Spin-orbit Interaction in Bilayer Graphene Encapsulated by WS <sub>2</sub> films. Scientific Reports, 2018, 8, 3412.	1.6	20
20	Lateral PIN (p-MoTe <sub>2</sub> /Intrinsic-MoTe <sub>2</sub> /n-MoTe <sub>2</sub> ) Homojunction Photodiodes. ACS Applied Nano Materials, 2022, 5, 6455-6462.	2.4	19
21	Enhanced electrochemical performance of battery-grade cobalt phosphate via magnetron sputtered copper interfacial layer for potential supercapattery applications. International Journal of Energy Research, 2021, 45, 18658-18669.	2.2	14
22	ReSe <sub>2</sub> /metal interface for hydrogen gas sensing. Journal of Colloid and Interface Science, 2021, 603, 511-517.	5.0	12
23	Platinum Disulfide (PtS <sub>2</sub> ) and Silicon Pyramids: Efficient 2D/3D Heterojunction Tunneling and Breakdown Diodes. ACS Applied Electronic Materials, 2022, 4, 917-924.	2.0	12
24	Gate dependent phonon shift in tungsten disulfide (WS <sub>2</sub> ) field effect transistor. Materials Research Express, 2019, 6, 115909.	0.8	11
25	Synergistic effect of magnetron sputtered silver nano-islands and Co <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> for high performance supercapattery devices. Journal of Electroanalytical Chemistry, 2021, 898, 115612.	1.9	11
26	An effectual enhancement to the electrical conductivity of graphene FET by silver nanoparticles. Diamond and Related Materials, 2020, 106, 107833.	1.8	10
27	Investigation of magnetron sputtered Ni@Cu/ WS <sub>2</sub> as an electrode material for potential supercapattery devices. International Journal of Energy Research, 2022, 46, 7334-7347.	2.2	8
28	Flexible Diodes with Low Breakdown Voltage for Steep Slope Transistors and One Diode-One Resistor Applications. Advanced Electronic Materials, 2022, 8, .	2.6	8
29	Effect of an optimal oxide layer on the efficiency of graphene-silicon Schottky junction solar cell. International Journal of Energy Research, 2021, 45, 18173-18181.	2.2	4
30	Self-biased photovoltaic behavior in van der Waals MoTe <sub>2</sub> /MoSe <sub>2</sub> heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114912.	1.3	3