Swastik Kar

List of Publications by Year
in descending order

37 papers	1,959 citations	361413 20 h-index	361022 35 g-index
37 all docs	37 docs citations	37 times ranked	3895 citing authors

#	Article	IF	Citations
1	Quantum Materials Manufacturing. Advanced Materials, 2023, 35, e2109892.	21.0	4
2	Wafer-Scale Lateral Self-Assembly of Mosaic Ti₃C₂T_{<i>x</i>} MXene Monolayer Films. ACS Nano, 2021, 15, 625-636.	14.6	48
3	Twistronics: a turning point in 2D quantum materials. Electronic Structure, 2021, 3, 014004.	2.8	40
4	MoS₂ Nanosheets with Narrowest Excitonic Line Widths Grown by Flow-Less Direct Heating of Bulk Powders: Implications for Sensing and Detection. ACS Applied Nano Materials, 2021, 4, 2583-2593.	5.0	3
5	In Vivo Partial Restoration of Neural Activity across Severed Mouse Spinal Cord Bridged with Ultralong Carbon Nanotubes. ACS Applied Bio Materials, 2021, 4, 4071-4078.	4.6	3
6	Nonlinear Dark-Field Imaging of One-Dimensional Defects in Monolayer Dichalcogenides. Nano Letters, 2020, 20, 284-291.	9.1	34
7	Development of use-specific high-performance cyber-nanomaterial optical detectors by effective choice of machine learning algorithms. Machine Learning: Science and Technology, 2020, 1, 025007.	5.0	9
8	Evidence of a purely electronic two-dimensional lattice at the interface of TMD/Bi₂Se₃ heterostructures. Nanoscale, 2019, 11, 15929-15938.	5.6	21
9	Widely tunable Bi ₂ Se ₃ /transition metal dichalcogenide 2D heterostructures for write-read-erase-reuse applications. 2D Materials, 2019, 6, 041003.	4.4	9
10	Transition Metal Dichalcogenide Thin Films for Precise Optical Wavelength Estimation Using Bayesian Inference. ACS Applied Nano Materials, 2019, 2, 4075-4084.	5.0	9
11	Oxygen-Induced In Situ Manipulation of the Interlayer Coupling and Exciton Recombination in Bi₂Se₃/MoS₂ 2D Heterostructures. ACS Applied Materials & Interfaces, 2019, 11, 15913-15921.	8.0	19
12	Active Control of Coherent Dynamics in Hybrid Plasmonic MoS₂ Monolayers with Dressed Phonons. ACS Photonics, 2019, 6, 1645-1655.	6.6	7
13	Probing the interlayer interaction between dissimilar 2D heterostructures by <i>in situ</i> rearrangement of their interface. 2D Materials, 2019, 6, 035022.	4.4	9
14	A roadmap for electronic grade 2D materials. 2D Materials, 2019, 6, 022001.	4.4	205
15	Resonant Raman and Exciton Coupling in High-Quality Single Crystals of Atomically Thin Molybdenum Diselenide Grown by Vapor-Phase Chalcogenization. ACS Nano, 2018, 12, 740-750.	14.6	34
16	Organic Photovoltaics with Stacked Graphene Anodes. ACS Applied Energy Materials, 2018, 1, 17-21.	5.1	11
17	High Performance Graphene-Based Electrochemical Double Layer Capacitors Using 1-Butyl-1-methylpyrrolidinium tris (pentafluoroethyl) trifluorophosphate Ionic Liquid as an Electrolyte. Electronics (Switzerland), 2018, 7, 229.	3.1	8
18	Vaporâ€Phaseâ€Gatingâ€Induced Ultrasensitive Ion Detection in Graphene and Singleâ€Walled Carbon Nanotube Networks. Advanced Materials, 2017, 29, 1606883.	21.0	3

#	Article	IF	Citations
19	Tunable and laser-reconfigurable 2D heterocrystals obtained by epitaxial stacking of crystallographically incommensurate Bi ₂ Se ₃ and MoS ₂ atomic layers. Science Advances, 2017, 3, e1601741.	10.3	39
20	Layer dependence of the electronic band alignment of few-layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Si</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> meas	3.2	35
21	Grapheneâ€“aluminum nitride NEMS resonant infrared detector. Microsystems and Nanoengineering, 2016, 2, 16026.	7.0	60
22	Charge transfer in crystalline germanium/monolayer MoS₂heterostructures prepared by chemical vapor deposition. Nanoscale, 2016, 8, 18675-18681.	5.6	25
23	Protecting the properties of monolayer MoS2 on silicon based substrates with an atomically thin buffer. Scientific Reports, 2016, 6, 20890.	3.3	64
24	Chemical sensing based on graphene-aluminum nitride nano plate resonators. , 2015, , .		1
25	Atomically thin layers of Bâ€“Nâ€“Câ€“O with tunable composition. Science Advances, 2015, 1, e1500094.	10.3	55
26	Chemical Vapor Deposition Synthesized Atomically Thin Molybdenum Disulfide with Optoelectronic-Grade Crystalline Quality. ACS Nano, 2015, 9, 8822-8832.	14.6	132
27	Direct and Scalable Deposition of Atomically Thin Low-Noise MoS₂ Membranes on Apertures. ACS Nano, 2015, 9, 7352-7359.	14.6	79
28	Ultrafast Intrinsic Photoresponse and Direct Evidence of Sub-gap States in Liquid Phase Exfoliated MoS2Thin Films. Scientific Reports, 2015, 5, 11272.	3.3	57
29	Quantum Carrier Reinvestment-Induced Ultrahigh and Broadband Photocurrent Responses in Grapheneâ€“Silicon Junctions. ACS Nano, 2014, 8, 10270-10279.	14.6	105
30	Sculpting carbon bonds for allotropic transformation through solid-state re-engineering of â€“sp2 carbon. Nature Communications, 2014, 5, 4941.	12.8	7
31	Voltage-switchable photocurrents in single-walled carbon nanotubeâ€“silicon junctions for analog and digital optoelectronics. Nature Photonics, 2014, 8, 239-243.	31.4	61
32	Adhesion of graphene sheet on nano-patterned substrates with nano-pillar array. Journal of Applied Physics, 2013, 113, 244303.	2.5	16
33	Single transistor oscillator based on a Graphene-Aluminum Nitride nano plate resonator. , 2013, , .		9
34	Tunable Grapheneâ€“Silicon Heterojunctions for Ultrasensitive Photodetection. Nano Letters, 2013, 13, 909-916.	9.1	538
35	Carbon Nanotubes and Graphene Nanoribbons: Potentials for Nanoscale Electrical Interconnects. Electronics (Switzerland), 2013, 2, 280-314.	3.1	28
36	Effect of 1- Pyrene Carboxylic-Acid Functionalization of Graphene on Its Capacitive Energy Storage. Journal of Physical Chemistry C, 2012, 116, 20688-20693.	3.1	85

#	Article	IF	Citations
37	Metalâˆ’Semiconductor Transition in Single-Walled Carbon Nanotubes Induced by Low-Energy Electron Irradiation. Nano Letters, 2005, 5, 1575-1579.	9.1	87