Akshay A Murthy

List of Publications by Year
in descending order

30	1,082	516710 16	526287 27
papers	citations	h-index	g-index

31	31	31	1990
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Substrate-induced strain and charge doping in CVD-grown monolayer MoS2. Applied Physics Letters, 2017, 111, .	3.3	168
2	Superior Plasmonic Photodetectors Based on Au@MoS₂ Coreâ€“Shell Heterostructures. ACS Nano, 2017, 11, 10321-10329.	14.6	150
3	Au@MoS₂ Coreâ€“Shell Heterostructures with Strong Lightâ€“Matter Interactions. Nano Letters, 2016, 16, 7696-7702.	9.1	139
4	Morphological Engineering of Winged Au@MoS₂ Heterostructures for Electrocatalytic Hydrogen Evolution. Nano Letters, 2018, 18, 7104-7110.	9.1	96
5	Systematic Study of Oxygen Vacancy Tunable Transport Properties of Fewâ€Layer MoO_{3â^'}_x Enabled by Vaporâ€Based Synthesis. Advanced Functional Materials, 2017, 27, 1605380.	14.9	91
6	Lithography-free IR polarization converters via orthogonal in-plane phonons in Î±-MoO3 flakes. Nature Communications, 2020, 11, 5771.	12.8	54
7	Site-Specific Positioning and Patterning of MoS₂ Monolayers: The Role of Au Seeding. ACS Nano, 2018, 12, 8970-8976.	14.6	50
8	Intrinsic Transport in 2D Heterostructures Mediated through h-BN Tunneling Contacts. Nano Letters, 2018, 18, 2990-2998.	9.1	39
9	Nanoparticle@MoS₂ Coreâ€“Shell Architecture: Role of the Core Material. Chemistry of Materials, 2018, 30, 4675-4682.	6.7	31
10	Polarization Reflector/Color Filter at Visible Frequencies via Anisotropic Î±â€MoO₃. Advanced Optical Materials, 2020, 8, 2000088.	7.3	30
11	Largeâ€Scale Fabrication of MoS₂ Ribbons and Their Lightâ€Induced Electronic/Thermal Properties: Dichotomies in the Structural and Defect Engineering. Advanced Functional Materials, 2018, 28, 1704863.	14.9	25
12	Optically Active 1D MoS₂ Nanobelts. ACS Applied Materials & Interfaces, 2018, 10, 6799-6804.	8.0	23
13	Direct Visualization of Electric-Field-Induced Structural Dynamics in Monolayer Transition Metal Dichalcogenides. ACS Nano, 2020, 14, 1569-1576.	14.6	23
14	Valley-selective optical Stark effect of exciton-polaritons in a monolayer semiconductor. Nature Communications, 2021, 12, 4530.	12.8	22
15	Tuning of Optical Phonons in Î±-MoO₃â€“VO₂ Multilayers. ACS Applied Materials & Interfaces, 2021, 13, 48981-48987.	8.0	22
16	MoS2-capped CuxS nanocrystals: a new heterostructured geometry of transition metal dichalcogenides for broadband optoelectronics. Materials Horizons, 2019, 6, 587-594.	12.2	18
17	Spatial Mapping of Hotâ€Spots at Lateral Heterogeneities in Monolayer Transition Metal Dichalcogenides. Advanced Materials, 2019, 31, 1808244.	21.0	16
18	TOF-SIMS analysis of decoherence sources in superconducting qubits. Applied Physics Letters, 2022, 120, .	3.3	15

#	Article	IF	Citations
19	Topology of transition metal dichalcogenides: the case of the coreâ€“shell architecture. Nanoscale, 2020, 12, 23897-23919.	5.6	14
20	Making the most of your electrons: Challenges and opportunities in characterizing hybrid interfaces with STEM. Materials Today, 2021, 50, 100-115.	14.2	13
21	Mechanistic Investigation of Molybdenum Disulfide Defect Photoluminescence Quenching by Adsorbed Metallophthalocyanines. Journal of the American Chemical Society, 2021, 143, 17153-17161.	13.7	12
22	Structural defects in transition metal dichalcogenide core-shell architectures. Applied Physics Letters, 2021, 118, .	3.3	8
23	Direct Patterning of Optoelectronic Nanostructures Using Encapsulated Layered Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2022, 14, 23775-23784.	8.0	8
24	Au@MoS₂@WS₂ Coreâ€“Shell Architectures: Combining Vapor Phase and Solution-Based Approaches. Journal of Physical Chemistry C, 2020, 124, 2627-2633.	3.1	7
25	Abrupt Thermal Shock of (NH₄)₂Mo₃S₁₃ Leads to Ultrafast Synthesis of Porous Ensembles of MoS₂ Nanocrystals for High Gain Photodetectors. ACS Applied Materials & Interfaces, 2018, 10, 38193-38200.	8.0	5
26	Spatial Mapping of Electrostatic Fields in 2D Heterostructures. Nano Letters, 2021, 21, 7131-7137.	9.1	2
27	Electronic Biasing of Monolayer Transition Metal Dichalcogenides in a TEM. Microscopy and Microanalysis, 2019, 25, 1904-1905.	0.4	0
28	Identification of Anion Sites in BiCuXO (X= Se, S) Heteroanionic Materials. Microscopy and Microanalysis, 2019, 25, 2106-2107.	0.4	0
29	Emerging Opportunities in STEM to Characterize Soft-Hard Interfaces. Microscopy and Microanalysis, 2021, 27, 616-618.	0.4	0
30	Spatial Mapping of Electrostatics and Dynamics in Quantum Materials. Microscopy and Microanalysis, 2021, 27, 1436-1438.	0.4	0