

# Ankit Nalin Mehta

## List of Publications by Year in descending order

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22  
papers

554  
citations

687363

13  
h-index

752698

20  
g-index

22  
all docs

22  
docs citations

22  
times ranked

918  
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasma-Enhanced Atomic Layer Deposition of Two-Dimensional WS <sub>2</sub> from WF <sub>6</sub> , H <sub>2</sub> Plasma, and H <sub>2</sub> S. Chemistry of Materials, 2017, 29, 2927-2938.	6.7	74
2	Two-Dimensional Crystal Grain Size Tuning in WS <sub>2</sub> Atomic Layer Deposition: An Insight in the Nucleation Mechanism. Chemistry of Materials, 2018, 30, 7648-7663.	6.7	57
3	Formation mechanism of 2D SnS <sub>2</sub> and SnS by chemical vapor deposition using SnCl <sub>4</sub> and H <sub>2</sub> S. Journal of Materials Chemistry C, 2018, 6, 6172-6178.	5.5	56
4	Layer-controlled epitaxy of 2D semiconductors: bridging nanoscale phenomena to wafer-scale uniformity. Nanotechnology, 2018, 29, 425602.	2.6	48
5	Ultra-scaled MOCVD MoS <sub>2</sub> MOSFETs with 42nm contact pitch and 250 $\mu$ A/ $\mu$ m drain current. , 2019, , .		46
6	Nucleation mechanism during WS <sub>2</sub> plasma enhanced atomic layer deposition on amorphous Al <sub>2</sub> O <sub>3</sub> and sapphire substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	2.1	30
7	Engineering Wafer-Scale Epitaxial Two-Dimensional Materials through Sapphire Template Screening for Advanced High-Performance Nanoelectronics. ACS Nano, 2021, 15, 9482-9494.	14.6	26
8	Nucleation and growth mechanism of 2D SnS <sub>2</sub> by chemical vapor deposition: initial 3D growth followed by 2D lateral growth. 2D Materials, 2018, 5, 035006.	4.4	23
9	On the van der Waals Epitaxy of Homo-/Heterostructures of Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2020, 12, 27508-27517.	8.0	22
10	Reactive plasma cleaning and restoration of transition metal dichalcogenide monolayers. Npj 2D Materials and Applications, 2021, 5, .	7.9	19
11	Peculiar alignment and strain of 2D WSe <sub>2</sub> grown by van der Waals epitaxy on reconstructed sapphire surfaces. Nanotechnology, 2019, 30, 465601.	2.6	17
12	Effects of buried grain boundaries in multilayer MoS <sub>2</sub> . Nanotechnology, 2019, 30, 285705.	2.6	16
13	Importance of the substrate's surface evolution during the MOVPE growth of 2D-transition metal dichalcogenides. Nanotechnology, 2020, 31, 125604.	2.6	15
14	Unravelling stacking order in epitaxial bilayer MX <sub>2</sub> using 4D-STEM with unsupervised learning. Nanotechnology, 2020, 31, 445702.	2.6	15
15	Understanding noninvasive charge transfer doping of graphene: a comparative study. Journal of Materials Science: Materials in Electronics, 2018, 29, 5239-5252.	2.2	14
16	Structural characterization of SnS crystals formed by chemical vapour deposition. Journal of Microscopy, 2017, 268, 276-287.	1.8	12
17	Grain-Boundary-Induced Strain and Distortion in Epitaxial Bilayer MoS <sub>2</sub> Lattice. Journal of Physical Chemistry C, 2020, 124, 6472-6478.	3.1	12
18	Chemical vapor deposition of monolayer-thin WS <sub>2</sub> crystals from the WF <sub>6</sub> and H <sub>2</sub> S precursors at low deposition temperature. Journal of Chemical Physics, 2019, 150, 104703.	3.0	11

#	ARTICLE	IF	CITATIONS
19	Epitaxial registry and crystallinity of MoS <sub>2</sub> via molecular beam and metalorganic vapor phase van der Waals epitaxy. Applied Physics Letters, 2020, 117, .	3.3	11
20	Fundamental limitation of van der Waals homoepitaxy by stacking fault formation in WSe <sub>2</sub> . 2D Materials, 2020, 7, 025027.	4.4	11
21	Sources of variability in scaled MoS <sub>2</sub> FETs. , 2020, , .		11
22	Active area dependence of optoelectronic characteristics of perovskite LEDs. Journal of Materials Chemistry C, 2021, 9, 12661-12670.	5.5	8