

# 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  | Reactive plasma cleaning and restoration of transition metal dichalcogenide monolayers. Npj 2D Materials and Applications, 2021, 5, .  | 7.9  | 19        |
| 2  | 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        |
| 3  | Active area dependence of optoelectronic characteristics of perovskite LEDs. Journal of Materials Chemistry C, 2021, 9, 12661-12670.   | 5.5  | 8         |
| 4  | Importance of the substrate's surface evolution during the MOVPE growth of 2D-transition metal dichalcogenides. Nanotechnology, 2020, 31, 125604.  | 2.6  | 15        |
| 5  | Unravelling stacking order in epitaxial bilayer MX <sub>2</sub> using 4D-STEM with unsupervised learning. Nanotechnology, 2020, 31, 445702.  | 2.6  | 15        |
| 6  | 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        |
| 7  | 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        |
| 8  | On the van der Waals Epitaxy of Homo-/Heterostructures of Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2020, 12, 27508-27517.   | 8.0  | 22        |
| 9  | Fundamental limitation of van der Waals homoepitaxy by stacking fault formation in WSe <sub>2</sub> . 2D Materials, 2020, 7, 025027.   | 4.4  | 11        |
| 10 | Sources of variability in scaled MoS <sub>2</sub> FETs. , 2020, , .  |      | 11        |
| 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 | 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        |
| 13 | Effects of buried grain boundaries in multilayer MoS <sub>2</sub> . Nanotechnology, 2019, 30, 285705.  | 2.6  | 16        |
| 14 | Ultra-scaled MOCVD MoS <sub>2</sub> MOSFETs with 42nm contact pitch and 250 $\mu\text{A}/\mu\text{m}$ drain current. , 2019, , .   |      | 46        |
| 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 | 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        |
| 17 | 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        |
| 18 | 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        |

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|----|---|-----|-----------|
| 19 | 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        |
| 20 | Layer-controlled epitaxy of 2D semiconductors: bridging nanoscale phenomena to wafer-scale uniformity. Nanotechnology, 2018, 29, 425602.  | 2.6 | 48        |
| 21 | 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        |
| 22 | Structural characterization of SnS crystals formed by chemical vapour deposition. Journal of Microscopy, 2017, 268, 276-287.  | 1.8 | 12        |