Yifan Nie

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9465580/publications.pdf

Version: 2024-02-01

31 papers	1,923 citations	331670 21 h-index	434195 31 g-index
32 all docs	32 docs citations	32 times ranked	3798 citing authors

#	Article	IF	Citations
1	Polarity governs atomic interaction through two-dimensional materials. Nature Materials, 2018, 17, 999-1004.	27.5	182
2	Realizing Large-Scale, Electronic-Grade Two-Dimensional Semiconductors. ACS Nano, 2018, 12, 965-975.	14.6	172
3	Systematic study of electronic structure and band alignment of monolayer transition metal dichalcogenides in Van der Waals heterostructures. 2D Materials, 2017, 4, 015026.	4.4	160
4	Alloying conducting channels for reliable neuromorphic computing. Nature Nanotechnology, 2020, 15, 574-579.	31.5	160
5	Pocketlike Active Site of Rh₁/MoS₂ Single-Atom Catalyst for Selective Crotonaldehyde Hydrogenation. Journal of the American Chemical Society, 2019, 141, 19289-19295.	13.7	141
6	Charge Mediated Reversible Metalâ€“Insulator Transition in Monolayer MoTe₂ and W_xMo_{1â€“x}Te₂ Alloy. ACS Nano, 2016, 10, 7370-7375.	14.6	133
7	Site-dependent multicomponent doping strategy for Ni-rich LiNi_{1â^'2y}Co_yMn_yO₂ (y = 1/12) cathode materials for Li-ion batteries. Journal of Materials Chemistry A, 2017, 5, 25303-25313.	10.3	119
8	Nucleation and growth of WSe ₂ : enabling large grain transition metal dichalcogenides. 2D Materials, 2017, 4, 045019.	4.4	96
9	Quantum-Confined Electronic States Arising from the MoirÃ© Pattern of MoS₂â€“WSe₂ Heterobilayers. Nano Letters, 2018, 18, 1849-1855.	9.1	91
10	A kinetic Monte Carlo simulation method of van der Waals epitaxy for atomistic nucleation-growth processes of transition metal dichalcogenides. Scientific Reports, 2017, 7, 2977.	3.3	72
11	Graphene-assisted spontaneous relaxation towards dislocation-free heteroepitaxy. Nature Nanotechnology, 2020, 15, 272-276.	31.5	71
12	Stable and Active Oxidation Catalysis by Cooperative Lattice Oxygen Redox on SmMn₂O₅ Mullite Surface. Journal of the American Chemical Society, 2019, 141, 10722-10728.	13.7	64
13	Quantum Transport and Band Structure Evolution under High Magnetic Field in Few-Layer Tellurene. Nano Letters, 2018, 18, 5760-5767.	9.1	60
14	First principles kinetic Monte Carlo study on the growth patterns of WSe ₂ monolayer. 2D Materials, 2016, 3, 025029.	4.4	59
15	Obstacles toward unity efficiency of LiNi 1-2x Co x Mn x O 2 (xÂ=Â0Ââ^¼Â1/3) (NCM) cathode materials: Insights from ab initio calculations. Journal of Power Sources, 2017, 340, 217-228.	7.8	57
16	Ab Initio Study on Surface Segregation and Anisotropy of Ni-Rich LiNi_{1â€“2y}Co_yMn_yO₂ (NCM) (y â‰ 0.1) Cathodes. ACS Applied Materials & Interfaces, 2018, 10, 6673-6680.	8.0	50
17	Controlling nucleation of monolayer WSe 2 during metal-organic chemical vapor deposition growth. 2D Materials, 2016, 3, 025015.	4.4	42
18	Higher superconducting transition temperature by breaking the universal pressure relation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2004-2008.	7.1	39

#	Article	IF	Citations
19	Flat Bands and Mechanical Deformation Effects in the MoirÃ© Superlattice of MoS₂-WSe₂ Heterobilayers. ACS Nano, 2020, 14, 7564-7573.	14.6	38
20	Dislocation driven spiral and non-spiral growth in layered chalcogenides. Nanoscale, 2018, 10, 15023-15034.	5.6	24
21	Tuning electronic transport in epitaxial graphene-based van der Waals heterostructures. Nanoscale, 2016, 8, 8947-8954.	5.6	21
22	Defect-mediated ripening of core-shell nanostructures. Nature Communications, 2022, 13, 2211.	12.8	17
23	Ligand-induced reduction concerted with coating by atomic layer deposition on the example of TiO₂-coated magnetite nanoparticles. Chemical Science, 2019, 10, 2171-2178.	7.4	11
24	Theoretical Demonstration of the Ionic Barristor. Nano Letters, 2016, 16, 2090-2095.	9.1	9
25	WSe ₂ homojunctions and quantum dots created by patterned hydrogenation of epitaxial graphene substrates. 2D Materials, 2019, 6, 021001.	4.4	7
26	Chemical and physical adsorption of a H2O molecule on a metal doped Zr (0001) surface. Journal of Nuclear Materials, 2014, 452, 493-499.	2.7	6
27	Chemisorption of a hydrogen adatom on metal doped Î± -Zr (0ÂºÂºÂº1) surfaces in a vacuum and an implicit solvation environment. Nuclear Materials and Energy, 2017, 13, 28-34.	1.3	6
28	Characteristics of Interlayer Tunneling Field-Effect Transistors Computed by a â€œDFT-Bardeenâ€•Method. Journal of Electronic Materials, 2017, 46, 1378-1389.	2.2	5
29	First principles study of the Mn-doping effect on the physical and chemical properties of mullite-family Al₂SiO₅. Physical Chemistry Chemical Physics, 2017, 19, 24991-25001.	2.8	5
30	Charge-transfer modified embedded atom method dynamic charge potential for Liâ€“Coâ€“O system. Journal of Physics Condensed Matter, 2017, 29, 475903.	1.8	3
31	A new route of synthesizing atomically thin 2D materials embedded in bulk oxides. Journal of Applied Physics, 2021, 130, 035302.	2.5	0