

Thorsten Schultz

List of Publications by Year in descending order

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40
papers

1,484
citations

393982

19
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315357

38
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41
all docs

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docs citations

41
times ranked

2614
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface Termination Dependent Work Function and Electronic Properties of TiC_2T_x MXene. <i>Chemistry of Materials</i> , 2019, 31, 6590-6597.	3.2	359
2	Direct determination of monolayer MoS_2 and WSe_2 exciton binding energies on insulating and metallic substrates. <i>2D Materials</i> , 2018, 5, 025003.	2.0	142
3	Growth of Nb-Doped Monolayer WS_2 by Liquid-Phase Precursor Mixing. <i>ACS Nano</i> , 2019, 13, 10768-10775.	7.3	102
4	Tin-assisted heteroepitaxial PLD-growth of $\text{In}_x\text{Ga}_{1-x}\text{O}_3$ thin films with high crystalline quality. <i>APL Materials</i> , 2019, 7, .	2.2	98
5	Surface State Density Determines the Energy Level Alignment at Hybrid Perovskite/Electron Acceptors Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 41546-41552.	4.0	89
6	Reliable Work Function Determination of Multicomponent Surfaces and Interfaces: The Role of Electrostatic Potentials in Ultraviolet Photoelectron Spectroscopy. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700324.	1.9	61
7	Electronic Properties of a 1D Intrinsic/p-Doped Heterojunction in a 2D Transition Metal Dichalcogenide Semiconductor. <i>ACS Nano</i> , 2017, 11, 9128-9135.	7.3	58
8	Tuning the work function of GaN with organic molecular acceptors. <i>Physical Review B</i> , 2016, 93, .	1.1	40
9	Demonstration of the key substrate-dependent charge transfer mechanisms between monolayer MoS_2 and molecular dopants. <i>Communications Physics</i> , 2019, 2, .	2.0	38
10	The optical signatures of molecular-doping induced polarons in poly(3-hexylthiophene-2,5-diyl): individual polymer chains versus aggregates. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2870-2879.	2.7	32
11	Modulation of the Work Function by the Atomic Structure of Strong Organic Electron Acceptors on $\text{HfSi}(111)$. <i>Advanced Electronic Materials</i> , 2019, 5, 1800891.	2.6	30
12	Epitaxial $\text{In}-(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ thin films and heterostructures grown by tin-assisted VCCS-PLD. <i>APL Materials</i> , 2019, 7, .	2.2	30
13	Excited-State Charge Transfer Enabling MoS_2 /Phthalocyanine Photodetectors with Extended Spectral Sensitivity. <i>Journal of Physical Chemistry C</i> , 2020, 124, 2837-2843.	1.5	30
14	Influence of Oxygen Deficiency on the Rectifying Behavior of Transparent-Semiconducting-Oxide/Metal Interfaces. <i>Physical Review Applied</i> , 2018, 9, .	1.5	29
15	Solubility limit and material properties of a $\text{In}-(\text{Al}_x\text{Ga}_{1-x})_2\text{O}_3$ thin film with a lateral cation gradient on $(00.1)\text{Al}_2\text{O}_3$ by tin-assisted PLD. <i>APL Materials</i> , 2020, 8, 021103.	2.2	26
16	Thermally Activated Gold-Mediated Transition Metal Dichalcogenide Exfoliation and a Unique Gold-Mediated Transfer. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 2000408.	1.2	25
17	The Schottky-Mott Rule Expanded for Two-Dimensional Semiconductors: Influence of Substrate Dielectric Screening. <i>ACS Nano</i> , 2021, 15, 14794-14803.	7.3	25
18	A Multifunctional Interlayer for Solution Processed High Performance Indium Oxide Transistors. <i>Scientific Reports</i> , 2018, 8, 10946.	1.6	23

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19	Impact of surface states and bulk doping level on hybrid inorganic/organic semiconductor interface energy levels. Journal of Applied Physics, 2018, 123, 245501.	1.1	22
20	Type-II Energy Level Alignment at the PTCDA/Monolayer MoS ₂ Interface Promotes Resonance Energy Transfer and Luminescence Enhancement. Advanced Science, 2021, 8, 2100215.	5.6	19
21	Importance of Substrate Work Function Homogeneity for Reliable Ionization Energy Determination by Photoelectron Spectroscopy. Physica Status Solidi (B): Basic Research, 2019, 256, 1800299.	0.7	18
22	The Interlayer Method: A Universal Tool for Energy Level Alignment Tuning at Inorganic/Organic Semiconductor Heterojunctions. Advanced Functional Materials, 2021, 31, 2010174.	7.8	18
23	Microstructure and Elastic Constants of Transition Metal Dichalcogenide Monolayers from Friction and Shear Force Microscopy. Advanced Materials, 2018, 30, e1803748.	11.1	16
24	Electronic properties of hybrid organic/inorganic semiconductor pn-junctions. Journal of Physics Condensed Matter, 2019, 31, 064002.	0.7	16
25	Position-locking of volatile reaction products by atmosphere and capping layers slows down photodecomposition of methylammonium lead triiodide perovskite. RSC Advances, 2020, 10, 17534-17542.	1.7	16
26	Morphology-controlled MoS ₂ by low-temperature atomic layer deposition. Nanoscale, 2020, 12, 20404-20412.	2.8	14
27	Band Offsets at In-(Al,In)Ga _{1-x} O ₃ /MgO Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 8879-8885.	4.0	14
28	Two-dimensional plasmonic polarons in n-doped monolayer MoS ₂ . Physical Review B, 2021, 103, .	1.1	13
29	Conductive Polymer Work Function Changes due to Residual Water: Impact of Temperature-Dependent Dielectric Constant. Advanced Electronic Materials, 2020, 6, 2000408.	2.6	12
30	Temperature-Dependent Electronic Ground-State Charge Transfer in van der Waals Heterostructures. Advanced Materials, 2021, 33, e2008677.	11.1	12
31	Electronic band dispersion determination in azimuthally disordered transition-metal dichalcogenide monolayers. Communications Physics, 2019, 2, .	2.0	11
32	Strain states and relaxation for α -Al _x Ga _{1-x} O ₃ thin films on prismatic planes of α -Al ₂ O ₃ in the full composition range: Fundamental difference of a- and m-epitaxial planes in the manifestation of shear strain and lattice tilt. Journal of Materials Research, 2021, 36, 4816-4831.	1.2	9
33	Atomic Layer Deposition of MoS ₂ Decorated TiO ₂ Nanotubes for Photoelectrochemical Water Splitting. Advanced Materials Interfaces, 2022, 9, .	1.9	8
34	Disentangling Bulk and Interface Phenomena in a Molecularly Doped Polymer Semiconductor. Advanced Optical Materials, 2021, 9, 2002039.	3.6	6
35	Energy Level Alignment at the C ₆₀ /Monolayer WS ₂ Interface on Insulating and Conductive Substrates. Advanced Electronic Materials, 2021, 7, 2100425.	2.6	6
36	Benzocyclobutene polymer as an additive for a benzocyclobutene-fullerene: application in stable perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 9347-9353.	5.2	6

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37	The energy level alignment of the ferroceneâ€“EGaIn interface studied with photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 13458-13467.	1.3	5
38	Direct observation of state-filling at hybrid tin oxide/organic interfaces. Applied Physics Letters, 2019, 114, .	1.5	4
39	Tuning material properties of amorphous zinc oxynitride thin films by magnesium addition. APL Materials, 2021, 9, 021120.	2.2	2
40	Energy level tuning at inorganic/organic semiconductor heterojunctions. , 2016, , .		0