Daniel Lizzit

List of Publications by Year
in descending order

42	643	623699	642715
papers	citations	14 h-index	23 g-index

42	42	42	918
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transition metal carbides (MXenes) for efficient NiO-based inverted perovskite solar cells. Nano Energy, 2021, 82, 105771.	16.0	74
2	Epitaxial growth of single-orientation high-quality MoS ₂ monolayers. 2D Materials, 2018, 5, 035012.	4.4	65
3	Novel single-layer vanadium sulphide phases. 2D Materials, 2018, 5, 045009.	4.4	48
4	Performance Benchmarking and Effective Channel Length for Nanoscale InAs, ${m In}_{0.53}{m Ga}_{0.47}{m As}$, and sSi n-MOSFETs. IEEE Transactions on Electron Devices, 2014, 61, 2027-2034.	3.0	39
5	Ion Implantation as an Approach for Structural Modifications and Functionalization of Ti₃C₂T_x MXenes. ACS Nano, 2021, 15, 4245-4255.	14.6	37
6	Performance projection of III-V ultra-thin-body, FinFET, and nanowire MOSFETs for two next-generation technology nodes. , 2016, , .		29
7	Spin Structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>K</mml:mi></mml:math> Valleys in Single-Layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow>	7.8	28
8	80% Valley Polarization of Free Carriers in Singly Oriented Single-Layer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> on Au(111). Physical Review Letters, 2019, 123, 236802.	7.8	27
9	A new formulation for surface roughness limited mobility in bulk and ultra-thin-body metalâ€“oxideâ€“semiconductor transistors. Journal of Applied Physics, 2014, 116, .	2.5	26
10	An Improved Surface Roughness Scattering Model for Bulk, Thin-Body, and Quantum-Well MOSFETs. IEEE Transactions on Electron Devices, 2016, 63, 2306-2312.	3.0	20
11	Analysis of the Performance of n-Type FinFETs With Strained SiGe Channel. IEEE Transactions on Electron Devices, 2013, 60, 1884-1891.	3.0	19
12	Photoemission investigation of oxygen intercalated epitaxial graphene on Ru(0001). Surface Science, 2018, 678, 57-64.	1.9	18
13	Growth and structure of singly oriented single-layer tungsten disulfide on Au(111). Physical Review Materials, 2019, 3, .	2.4	18
14	The impact of interface states on the mobility and drive current of <mml:math altimg="si36.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd"	1.4	17
15	Compositional Phase Change of Early Transition Metal Diselenide (VSe₂ and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2000497.	3.7	17
16	Surface roughness limited mobility modeling in ultra-thin SOI and quantum well III-V MOSFETs. , 2013, , .		14
17	Mixed Cation Halide Perovskite under Environmental and Physical Stress. Materials, 2021, 14, 3954.	2.9	14
18	Momentum-resolved linear dichroism in bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> Physical Review B, 2019, 100, .	3.2	13

#	Article	IF	Citations
19	Layer and orbital interference effects in photoemission from transition metal dichalcogenides. Physical Review B, 2019, 100, .	3.2	11
20	Benchmarking of 3-D MOSFET Architectures: Focus on the Impact of Surface Roughness and Self-Heating. IEEE Transactions on Electron Devices, 2018, 65, 3646-3653.	3.0	10
21	Simulation analysis of III–V n-MOSFETs: Channel materials, Fermi level pinning and biaxial strain. , 2014, , .		9
22	Improved surface-roughness scattering and mobility models for multi-gate FETs with arbitrary cross-section and biasing scheme. Journal of Applied Physics, 2017, 121, .	2.5	9
23	Spectroscopic view of ultrafast charge carrier dynamics in single- and bilayer transition metal dichalcogenide semiconductors. Journal of Electron Spectroscopy and Related Phenomena, 2021, 250, 147093.	1.7	9
24	Dual-Route Hydrogenation of the Graphene/Ni Interface. ACS Nano, 2019, 13, 1828-1838.	14.6	8
25	Electronâ€“phonon coupling in single-layer MoS2. Surface Science, 2019, 681, 64-69.	1.9	7
26	Interfacial two-dimensional oxide enhances photocatalytic activity of graphene/titania via electronic structure modification. Carbon, 2020, 157, 350-357.	10.3	7
27	Resistance hysteresis correlated with synchrotron radiation surface studies in atomic sp² layers of carbon synthesized on ferroelectric (001) lead zirconate titanate in an ultrahigh vacuum. RSC Advances, 2020, 10, 1522-1534.	3.6	7
28	Limitations to Electrical Probing of Spontaneous Polarization in Ferroelectric-Dielectric Heterostructures. IEEE Journal of the Electron Devices Society, 2022, 10, 324-333.	2.1	7
29	Strong ferromagnetic coupling and tunable easy magnetization directions of FexCo1â^'x layer(s) intercalated under graphene. Applied Surface Science, 2020, 527, 146599.	6.1	5
30	Anisotropic strain in epitaxial single-layer molybdenum disulfide on Ag(110). Nanoscale, 2021, 13, 18789-18798.	5.6	5
31	Surface roughness limited mobility in multi-gate FETs with arbitrary cross-section. , 2016, , .		4
32	Quasi-Ballistic $Gamma $ - and L-Valleys Transport in Ultrathin Body Strained (111) GaAs nMOSFETs. IEEE Transactions on Electron Devices, 2016, 63, 4685-4692.	3.0	4
33	Growth Mechanism and Thermal Stability of a MoS₂â€“Graphene Interface: A High-Resolution Core-Level Photoelectron Spectroscopy Study. Journal of Physical Chemistry C, 2020, 124, 20889-20897.	3.1	4
34	CO adsorption, reduction and oxidation on Pb(Zr,Ti)O3(001) surfaces associated with negatively charged gold nanoparticles. Catalysis Today, 2021, 366, 141-154.	4.4	4
35	Toward computationally efficient Multi-Subband Monte Carlo simulations of nanoscale MOSFETs. , 2013, , .		3
36	The impact of interface states on the mobility and the drive current of III-V MOSFETs. , 2014, , .		2

#	Article	IF	Citations
37	Improved surface roughness modeling and mobility projections in thin film MOSFETs. , 2015, , .		2
38	State-of-the-art semi-classical Monte Carlo method for carrier transport in nanoscale transistors. , 2015, , .		2
39	A Multi-Subband Monte Carlo study of electron transport in strained SiGe n-type FinFETs. , 2012, , .		1
40	On the optimization of SiGe and III-V compound hetero-junction Tunnel FET devices. , 2013, , .		1
41	New device concepts, transistor architectures and materials for high performance and energy efficient CMOS circuits in the forthcoming era of 3D integrated circuits. , 2018, , .		0
42	Modeling Nanoscale IIIâ€“V Channel MOSFETs with the Self-Consistent Multi-Valley/Multi-Subband Monte Carlo Approach. Electronics (Switzerland), 2021, 10, 2472.	3.1	0