

Michael Schmidt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5077337/publications.pdf>

Version: 2024-02-01

79
papers

2,867
citations

236612

25
h-index

174990

52
g-index

81
all docs

81
docs citations

81
times ranked

4146
citing authors

#	ARTICLE	IF	CITATIONS
1	Charged Domain Wall and Polar Vortex Topologies in a Room-Temperature Magnetoelectric Multiferroic Thin Film. ACS Applied Materials & Interfaces, 2022, 14, 5525-5536.	4.0	7
2	Thermal characterization of direct wafer bonded Si-on-SiC. Applied Physics Letters, 2022, 120, 113503.	1.5	2
3	Compositional Tuning of the Aurivillius Phase Material $\text{Bi}_5\text{Ti}_3\text{Fe}_{1+x}\text{Nb}_x\text{O}_{15}$ ($0 \leq x \leq 0.4$) Grown by Chemical Solution Deposition and its Influence on the Structural, Magnetic, and Optical Properties of the Material. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 303-313.	1.7	4
4	Large-area growth of MoS_2 at temperatures compatible with integrating back-end-of-line functionality. 2D Materials, 2021, 8, 025008.	2.0	14
5	Probing Ferroelectric Behavior in Sub-10 nm Bismuth-Rich Aurivillius Films by Piezoresponse Force Microscopy. Microscopy and Microanalysis, 2021, , 1-11.	0.2	4
6	Persistence of Ferroelectricity Close to Unit-Cell Thickness in Structurally Disordered Aurivillius Phases. Chemistry of Materials, 2020, 32, 10511-10523.	3.2	9
7	Ferroelectric Behavior in Exfoliated 2D Aurivillius Oxide Flakes of Sub-Unit Cell Thickness. Advanced Electronic Materials, 2020, 6, 1901264.	2.6	18
8	Long-term stability of transparent n/p ZnO homojunctions grown by rf-sputtering at room-temperature. Journal of Materiomics, 2019, 5, 428-435.	2.8	8
9	Growth of $1\text{Te}^2\text{MoTe}_2$ by Thermally Assisted Conversion of Electrodeposited Tellurium Films. ACS Applied Energy Materials, 2019, 2, 521-530.	2.5	30
10	Diagnosis of phosphorus monolayer doping in silicon based on nanowire electrical characterisation. Journal of Applied Physics, 2018, 123, 125701.	1.1	19
11	Exploring ferroelectric and magnetic properties of Tb-substituted $m = 5$ layered Aurivillius phase thin films. Journal of Applied Physics, 2018, 123, .	1.1	17
12	Monolithic integration of patterned BaTiO_3 thin films on Ge wafers. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2018, 36, .	0.6	6
13	AsH_3 gas-phase <i>ex situ</i> doping 3D silicon structures. Journal of Applied Physics, 2018, 124, .	1.1	4
14	Electrochemically modified boron-doped diamond electrode with Pd and Pd-Sn nanoparticles for ethanol electrooxidation. Electrochimica Acta, 2017, 243, 310-319.	2.6	33
15	Stencil lithography of superconducting contacts on MBE-grown topological insulator thin films. Journal of Crystal Growth, 2017, 477, 183-187.	0.7	13
16	Synthesis and characterisation of cross-linked chitosan composites functionalised with silver and gold nanoparticles for antimicrobial applications. Science and Technology of Advanced Materials, 2017, 18, 528-540.	2.8	40
17	Rhenium-doped MoS_2 films. Applied Physics Letters, 2017, 111, .	1.5	40
18	Direct atomic scale determination of magnetic ion partition in a room temperature multiferroic material. Scientific Reports, 2017, 7, 1737.	1.6	32

#	ARTICLE	IF	CITATIONS
19	Probing Interface Defects in Top-Gated MoS ₂ Transistors with Impedance Spectroscopy. ACS Applied Materials & Interfaces, 2017, 9, 24348-24356.	4.0	38
20	Direct visualization of magnetic field induced magnetoelectric switching in multiferroic aurivillius phase thin films. Journal of the American Ceramic Society, 2017, 100, 975-987.	1.9	34
21	Structural and Electrical Investigation of MoS ₂ Thin Films Formed by Thermal Assisted Conversion of Mo Metal. ECS Journal of Solid State Science and Technology, 2016, 5, Q3016-Q3020.	0.9	6
22	(Invited) Evaluation of Few-Layer MoS ₂ Transistors with a Top Gate and HfO ₂ Dielectric. ECS Transactions, 2016, 75, 153-162.	0.3	10
23	Back-gated Nb-doped MoS ₂ junctionless field-effect-transistors. AIP Advances, 2016, 6, .	0.6	20
24	Air sensitivity of MoS ₂ , MoSe ₂ , MoTe ₂ , HfS ₂ , and HfSe ₂ . Journal of Applied Physics, 2016, 120, .	1.1	134
25	Isolating the Photovoltaic Junction: Atomic Layer Deposited TiO ₂ /RuO ₂ Alloy Schottky Contacts for Silicon Photoanodes. ACS Applied Materials & Interfaces, 2016, 8, 23763-23773.	4.0	25
26	Self-Healing Thermal Annealing: Surface Morphological Restructuring Control of GaN Nanorods. Crystal Growth and Design, 2016, 16, 6769-6775.	1.4	10
27	InAlN high electron mobility transistor Ti/Al/Ni/Au Ohmic contact optimisation assisted by in-situ high temperature transmission electron microscopy. Applied Physics Letters, 2015, 107, 113506.	1.5	6
28	Absence of Evidence % Evidence of Absence: Statistical Analysis of Inclusions in Multiferroic Thin Films. Scientific Reports, 2015, 4, 5712.	1.6	23
29	Investigation of Au-Hg amalgam formation on substrate-immobilized individual Au nanorods. Journal of Materials Chemistry C, 2015, 3, 8865-8872.	2.7	29
30	A study of the temperature dependence of the local ferroelectric properties of <i>c</i> -axis oriented Bi ₆ Ti ₃ Fe ₂ O ₁₈ Aurivillius phase thin films: Illustrating the potential of a novel lead-free perovskite material for high density memory applications. AIP Advances, 2015, 5, .	0.6	17
31	The Origin of Shape Sensitivity in Palladium-Catalyzed Suzuki-Miyaura Cross Coupling Reactions. Angewandte Chemie - International Edition, 2014, 53, 4142-4145.	7.2	116
32	Low sheet resistance titanium nitride films by low-temperature plasma-enhanced atomic layer deposition using design of experiments methodology. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, 031506.	0.9	24
33	A bottom-up fabrication method for the production of visible light active photonic crystals. Journal of Materials Chemistry C, 2014, 2, 1675-1682.	2.7	9
34	Stability, Oxidation, and Shape Evolution of PVP-Capped Pd Nanocrystals. Journal of Physical Chemistry C, 2014, 118, 6522-6530.	1.5	57
35	Atomic layer deposition of Cu with a carbene-stabilized Cu(silylamide). Journal of Materials Chemistry C, 2014, 2, 9205-9214.	2.7	16
36	Enhanced Catalytic Activity of High-Index Faceted Palladium Nanoparticles in Suzuki-Miyaura Coupling Due to Efficient Leaching Mechanism. ACS Catalysis, 2014, 4, 3105-3111.	5.5	83

#	ARTICLE	IF	CITATIONS
37	Magnetic Field-Induced Ferroelectric Switching in Multiferroic Aurivillius Phase Thin Films at Room Temperature. <i>Journal of the American Ceramic Society</i> , 2013, 96, 2339-2357.	1.9	154
38	Electrically active interface defects in the In _{0.53} Ga _{0.47} As MOS system. <i>Microelectronic Engineering</i> , 2013, 109, 182-188.	1.1	22
39	Shell@Core Coaxial NiO@Ni Nanowire Arrays as High Performance Enzymeless Glucose Sensor. <i>Journal of the Electrochemical Society</i> , 2013, 160, B207-B212.	1.3	14
40	InAlAs solar cell on a GaAs substrate employing a graded In _x Ga _{1-x} As InP metamorphic buffer layer. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	23
41	Directed self-assembly of PS-b-PMMA block copolymer using HSQ lines for translational alignment. <i>Journal of Materials Chemistry C</i> , 2013, 1, 1192-1196.	2.7	13
42	Investigation of electron mobility in surface-channel Al ₂ O ₃ /In _{0.53} Ga _{0.47} As MOSFETs. <i>Solid-State Electronics</i> , 2013, 88, 37-42.	0.8	6
43	Impact of Surface Nano-textured Stainless Steel Prepared by Focused Ion Beam on Endothelial Cell Growth. <i>Journal of Nanoscience and Nanotechnology</i> , 2013, 13, 5283-5290.	0.9	10
44	FIB Patterning of Stainless Steel for the Development of Nano-structured Stent Surfaces for Cardiovascular Applications. <i>Lecture Notes in Nanoscale Science and Technology</i> , 2013, , 391-416.	0.4	0
45	Optical Emission of a Strained Direct-Band-Gap Ge Quantum Well Embedded Inside InGaAs Alloy Layers. <i>Physical Review Letters</i> , 2013, 110, 177404.	2.9	24
46	Resist-Substrate interface tailoring for generating high-density arrays of Ge and Bi ₂ Se ₃ nanowires by electron beam lithography. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2012, 30, .	0.6	17
47	Room temperature ferroelectric and magnetic investigations and detailed phase analysis of Aurivillius phase Bi ₅ Ti ₃ Fe _{0.7} Co _{0.3} O ₁₅ thin films. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	40
48	Correlative Microscopy Study of FIB Patterned Stainless Steel Surfaces as Novel Nano-Structured Stents for Cardiovascular Applications. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1466, 26.	0.1	1
49	FIB Patterning of Stainless Steel for the Development of Nano-Structured Stent Surfaces for Cardiovascular Applications. <i>Journal of Physics: Conference Series</i> , 2012, 371, 012065.	0.3	6
50	Fluorine implantation in germanium for dopant diffusion control. <i>AIP Conference Proceedings</i> , 2012, , .	0.3	5
51	Competitive carrier interactions influencing the emission dynamics of GaAsSb-capped InAs quantum dots. <i>Applied Physics Letters</i> , 2012, 101, 231109.	1.5	6
52	Improved reliability of Al _{0.2} O ₃ /InGaAs/InP MOS structures through in-situ forming gas annealing. , 2012, , .		2
53	Biom mineralization Mechanism of Gold by Zygomycete Fungi <i>Rhizopus oryzae</i> . <i>ACS Nano</i> , 2012, 6, 6165-6173.	7.3	146
54	Impact of Forming Gas Annealing on the Performance of Surface-Channel In _{0.53} Ga _{0.47} As MOSFETs With an Al ₂ O ₃ Gate Dielectric. <i>IEEE Transactions on Electron Devices</i> , 2012, 59, 1084-1090.	1.6	52

#	ARTICLE	IF	CITATIONS
55	Silicon Nanocrystals in Liquid Media: Optical Properties and Surface Stabilization by Microplasma-Induced Non-Equilibrium Liquid Chemistry. <i>Advanced Functional Materials</i> , 2012, 22, 954-964.	7.8	72
56	The structural and electrical properties of the SrTa ₂ O ₆ /In _{0.53} Ga _{0.47} As/InP system. <i>Microelectronic Engineering</i> , 2011, 88, 1054-1057.	1.1	7
57	The curious case of thin-body Ge crystallization. <i>Applied Physics Letters</i> , 2011, 99, 131910.	1.5	19
58	Germanium Fin Structure Optimization for Future MugFET and FinFET Applications. <i>ECS Transactions</i> , 2011, 35, 27-34.	0.3	1
59	Si/SiO ₂ multiple quantum wells for all silicon tandem cells: Conductivity and photocurrent measurements. <i>Thin Solid Films</i> , 2008, 516, 6763-6766.	0.8	44
60	Interface Defects in HfO ₂ , LaSiO _x , and Gd ₂ O ₃ High-k/Metal-Gate Structures on Silicon. <i>Journal of the Electrochemical Society</i> , 2008, 155, G13.	1.3	46
61	<title>Light emission from erbium-doped nanocrystalline silicon/silicon dioxide layers under strong optical excitation</title>. , 2005, , .		0
62	Highly efficient sensitizing of erbium ion luminescence in size-controlled nanocrystalline Si/SiO ₂ superlattice structures. <i>Applied Physics Letters</i> , 2004, 84, 2512-2514.	1.5	37
63	High-efficiency erbium ion luminescence in silicon nanocrystal systems. <i>Physics of the Solid State</i> , 2004, 46, 104-108.	0.2	1
64	Comparative study of photoluminescence of undoped and erbium-doped size-controlled nanocrystalline Si-SiO ₂ multilayered structures. <i>Journal of Applied Physics</i> , 2004, 96, 2254-2260.	1.1	56
65	Fabrication and photoluminescence properties of erbium doped size-controlled silicon nanocrystals. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003, 105, 214-220.	1.7	24
66	Photoluminescence of Er ³⁺ ions in layers of quasi-ordered silicon nanocrystals in a silicon dioxide matrix. <i>Journal of Experimental and Theoretical Physics</i> , 2003, 97, 1123-1130.	0.2	0
67	Photoluminescence of Er ³⁺ -implanted amorphous hydrogenated silicon suboxides. <i>Physical Review B</i> , 2003, 68, .	1.1	23
68	Synthesis and size control of Si nanocrystals by SiO/SiO ₂ superlattices and Er doping. <i>Materials Research Society Symposia Proceedings</i> , 2002, 737, 331.	0.1	1
69	Size-controlled highly luminescent silicon nanocrystals: A SiO/SiO ₂ superlattice approach. <i>Applied Physics Letters</i> , 2002, 80, 661-663.	1.5	789
70	Bright luminescence from erbium doped nc-Si/SiO ₂ superlattices. <i>Journal of Non-Crystalline Solids</i> , 2002, 299-302, 678-682.	1.5	34
71	Size controlled nc-Si synthesis by SiO/SiO ₂ superlattices. <i>Journal of Non-Crystalline Solids</i> , 2002, 299-302, 1075-1078.	1.5	36
72	Er doping of nanocrystalline-Si/SiO ₂ superlattices. <i>Thin Solid Films</i> , 2001, 397, 211-215.	0.8	13

#	ARTICLE	IF	CITATIONS
73	Confinement effects in crystallization and Er doping of Si nanostructures. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2001, 11, 245-251.	1.3	12
74	Room temperature luminescence of Er doped nc-Si/SiO ₂ superlattices. <i>Journal of Non-Crystalline Solids</i> , 2000, 266-269, 608-613.	1.5	8
75	Local strain distribution of hexagonal GaN pyramids. <i>Journal of Crystal Growth</i> , 1998, 189-190, 630-633.	0.7	17
76	Direct imaging of local strain relaxation along the side facets and the edges of hexagonal GaN pyramids by cathodoluminescence microscopy. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 1998, 2, 552-556.	1.3	16
77	Vertical strain and doping gradients in thick GaN layers. <i>Applied Physics Letters</i> , 1997, 71, 2490-2492.	1.5	78
78	Strong morphological dependence of luminescence efficiency and emission wavelength in hexagonal GaN crystallites directly imaged by scanning cathodoluminescence microscopy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997, 50, 165-169.	1.7	11
79	Spatially resolved investigations of the excitonic luminescence in GaN. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1997, 50, 192-196.	1.7	2