

RÃ¼diger Schmidt-Grund

List of Publications by Year in descending order

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118
papers

2,950
citations

186265

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189892

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121
all docs

121
docs citations

121
times ranked

3559
citing authors

#	ARTICLE	IF	CITATIONS
1	Transient birefringence and dichroism in ZnO studied with fs-time-resolved spectroscopic ellipsometry. <i>Physical Review Research</i> , 2021, 3, .	3.6	8
2	Broadband femtosecond spectroscopic ellipsometry. <i>Review of Scientific Instruments</i> , 2021, 92, 033104.	1.3	14
3	Analysis of temperature-dependent and time-resolved ellipsometry spectra of Ge. , 2021, , .		0
4	Impact of Defects on Magnetic Properties of Spinel Zinc Ferrite Thin Films. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 1900630.	1.5	18
5	Hybrid GA-gradient method for thin films ellipsometric data evaluation. <i>Journal of Computational Science</i> , 2020, 47, 101201.	2.9	3
6	Control of magnetic properties in spinel ZnFe ₂ O ₄ thin films through intrinsic defect manipulation. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	8
7	Ultrafast dynamics of hot charge carriers in an oxide semiconductor probed by femtosecond spectroscopic ellipsometry. <i>New Journal of Physics</i> , 2020, 22, 083066.	2.9	21
8	Influence of the excitation conditions on the emission behavior of carbon nanodot-based planar microcavities. <i>Physical Review Research</i> , 2020, 2, .	3.6	2
9	Molybdenum silicide in infrared emitting devices. , 2020, , .		0
10	Band gap renormalization in n-type GeSn alloys made by ion implantation and flash lamp annealing. <i>Journal of Applied Physics</i> , 2019, 125, .	2.5	9
11	Transient dielectric functions of Ge, Si, and InP from femtosecond pump-probe ellipsometry. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	14
12	On the Optical Properties of Thin-Film Vanadium Dioxide from the Visible to the Far Infrared. <i>Annalen Der Physik</i> , 2019, 531, 1900188.	2.4	135
13	Coherent Polariton Modes and Lasing in ZnO Nano- and Microwires. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1800462.	1.5	5
14	Femtosecond-time-resolved imaging of the dielectric function of ZnO in the visible to near-IR spectral range. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	10
15	Voigt Exceptional Points in an Anisotropic ZnO-Based Planar Microcavity: Square-Root Topology, Polarization Vortices, and Circularity. <i>Physical Review Letters</i> , 2019, 123, 227401.	7.8	35
16	Coherent Polariton States in ZnO Nano- and Microstructures. , 2018, , .		0
17	Temperature dependence of the dielectric function of thin film CuI in the spectral range (0.6–8.3) eV. <i>Applied Physics Letters</i> , 2018, 113, 172102.	3.3	16
18	Strain and Band-Gap Engineering in $\text{Ge} - \text{Sn}$ Alloys via P	3.8	17

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19	Tunable and switchable lasing in a ZnO microwire cavity at room temperature. Journal Physics D: Applied Physics, 2018, 51, 425305.	2.8	6
20	Spatiotemporal Evolution of Coherent Polariton Modes in ZnO Microwire Cavities at Room Temperature. Nano Letters, 2018, 18, 6820-6825.	9.1	15
21	Exceptional Points in the Dispersion of Optically Anisotropic Planar Microcavities. , 2018, , .		0
22	Exceptional points in anisotropic planar microcavities. Physical Review A, 2017, 95, .	2.5	22
23	Investigation of the graphitization process of ion-beam irradiated diamond using ellipsometry, Raman spectroscopy and electrical transport measurements. Carbon, 2017, 121, 512-517.	10.3	16
24	Exceptional points in anisotropic photonic structures: from non-Hermitian physics to possible device applications. Proceedings of SPIE, 2017, , .	0.8	1
25	Dynamical Tuning of Nanowire Lasing Spectra. Nano Letters, 2017, 17, 6637-6643.	9.1	19
26	Temperature dependence of the dielectric tensor of monoclinic Ga2O3 single crystals in the spectral range 1.0â€“8.5 eV. Applied Physics Letters, 2017, 111, .	3.3	15
27	Lasing in cuprous iodide microwires. Applied Physics Letters, 2017, 111, .	3.3	14
28	Epsilon-Near-Zero Substrate Engineering for Ultrathin-Film Perfect Absorbers. Physical Review Applied, 2017, 8, .	3.8	88
29	Optically anisotropic media: New approaches to the dielectric function, singular axes, microcavity modes and Raman scattering intensities. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600295.	2.4	24
30	Optical properties of epitaxial Na0.5Bi0.5TiO3 lead-free piezoelectric thin films: Ellipsometric and theoretical studies. Applied Surface Science, 2017, 421, 367-372.	6.1	10
31	Carrier density driven lasing dynamics in ZnO nanowires. Nanotechnology, 2016, 27, 225702.	2.6	28
32	Absorptive lasing mode suppression in ZnO nano- and microcavities. Applied Physics Letters, 2016, 109, .	3.3	12
33	Ellipsometric investigation of ZnFe2O4 thin films in relation to magnetic properties. Applied Physics Letters, 2016, 108, .	3.3	14
34	Temperature dependent self-compensation in Al- and Ga-doped Mg0.05Zn0.95O thin films grown by pulsed laser deposition. Journal of Applied Physics, 2016, 120, .	2.5	4
35	Dipole analysis of the dielectric function of color dispersive materials: Application to monoclinic $\epsilon(\omega) = \epsilon_{\infty} + \sum_j \frac{f_j}{\omega_j^2 - \omega^2 - i\gamma_j \omega}$ Physical Review B, 2016, 94, .	3.2	14
36	Coexistence of strong and weak coupling in ZnO nanowire cavities. EPJ Applied Physics, 2016, 74, 30502.	0.7	3

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37	Cavity polariton condensate in a disordered environment. <i>Physical Review B</i> , 2016, 93, .	3.2	11
38	Raman Tensor Formalism for Optically Anisotropic Crystals. <i>Physical Review Letters</i> , 2016, 116, 127401.	7.8	61
39	Raman tensor elements of $\hat{\Gamma}^2$ -Ga ₂ O ₃ . <i>Scientific Reports</i> , 2016, 6, 35964.	3.3	162
40	Comparative study of optical and magneto-optical properties of normal, disordered, and inverse spinel-type oxides. <i>Physica Status Solidi (B): Basic Research</i> , 2016, 253, 429-436.	1.5	22
41	Dielectric tensor of monoclinic Ga ₂ O ₃ single crystals in the spectral range 0.5–8.5 eV. <i>APL Materials</i> , 2015, 3, 106106.	5.1	81
42	Maxwell consideration of polaritonic quasi-particle Hamiltonians in multi-level systems. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	25
43	Doping efficiency and limits in (Mg,Zn)O:Al,Ga thin films with two-dimensional lateral composition spread. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 2850-2855.	1.8	14
44	Parametric relaxation in whispering gallery mode exciton-polariton condensates. <i>Physical Review B</i> , 2015, 91, .	3.2	14
45	Electronic excitations and structure of Li ₂ IrO ₃ thin films grown on ZrO ₂ :Y (001) substrates. <i>Journal of Applied Physics</i> , 2015, 117, 025304.	2.5	10
46	Lattice parameters and Raman-active phonon modes of $\hat{\Gamma}^2$ -(Al _x Ga _{1-x}) ₂ O ₃ . <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	75
47	Dielectric function in the spectral range (0.5–8.5)eV of an (Al _x) ₂ O ₃ . <i>Journal of Applied Physics</i> , 2015, 117, 165307.	2.5	48
48	Redshift of large wave vector LO phonon modes in wurtzite semiconductors due to the presence of free charge carriers. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 167-170.	2.5	4
49	Phonon-assisted lasing in ZnO microwires at room temperature. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	12
50	Dielectric function in the NIR-VUV spectral range of (In _x Ga _{1-x}) ₂ O ₃ thin films. <i>Journal of Applied Physics</i> , 2014, 116, 053510.	2.5	27
51	Temperature dependence of the dielectric function in the spectral range (0.5–8.5) eV of an In ₂ O ₃ thin film. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	11
52	Lattice parameters and Raman-active phonon modes of (In _x Ga _{1-x}) ₂ O ₃ for $x \leq 0.4$. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	59
53	An extended Drude model for the in-situ spectroscopic ellipsometry analysis of ZnO thin layers and surface modifications. <i>Thin Solid Films</i> , 2014, 571, 437-441.	1.8	9
54	Hydrogen influence on the electrical and optical properties of ZnO thin films grown under different atmospheres. <i>Thin Solid Films</i> , 2014, 556, 18-22.	1.8	12

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55	Ultrafast dynamics of the dielectric functions of ZnO and BaTiO ₃ thin films after intense femtosecond laser excitation. <i>Journal of Applied Physics</i> , 2014, 115, 053508.	2.5	18
56	Raman active phonon modes of cubic In ₂ O ₃ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2014, 8, 554-559.	2.4	73
57	Electronic transitions and dielectric function tensor of a YMnO ₃ single crystal in the NIR-VUV spectral range. <i>RSC Advances</i> , 2014, 4, 33549-33554.	3.6	15
58	Inhibition and Enhancement of the Spontaneous Emission of Quantum Dots in Micropillar Cavities with Radial-Distributed Bragg Reflectors. <i>ACS Nano</i> , 2014, 8, 9970-9978.	14.6	30
59	Improving the Optical Properties of Self-Catalyzed GaN Microrods toward Whispering Gallery Mode Lasing. <i>ACS Photonics</i> , 2014, 1, 990-997.	6.6	37
60	Vacuum ultraviolet dielectric function of ZnFe ₂ O ₄ thin films. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	18
61	Surface- and point-defect-related Raman scattering in wurtzite semiconductors excited above the band gap. <i>New Journal of Physics</i> , 2013, 15, 113048.	2.9	21
62	Temperature dependent dielectric function in the near-infrared to vacuum-ultraviolet ultraviolet spectral range of alumina and yttria stabilized zirconia thin films. <i>Journal of Applied Physics</i> , 2013, 114, 223509.	2.5	2
63	Tuning of the Physical Properties in Mixed Valence Inorganic Solids by Oriented Cationic and Anionic Substitutions. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2012, 638, 1640-1640.	1.2	0
64	Ballistic propagation of exciton-polariton condensates in a ZnO-based microcavity. <i>New Journal of Physics</i> , 2012, 14, 013037.	2.9	54
65	The (Mg,Zn)O Alloy. , 2012, , 257-319.		12
66	Occupation behaviour of the lower exciton-polariton branch in ZnO-based microresonators. , 2011, , .		0
67	Structural properties of BaTiO ₃ /ZnO heterostructures and interfaces. <i>AIP Conference Proceedings</i> , 2011, , .	0.4	0
68	Determination of the refractive index of single crystal bulk samples and micro-structures. <i>Thin Solid Films</i> , 2011, 519, 2777-2781.	1.8	20
69	Optical properties of BaTiO ₃ /ZnO heterostructures under the effect of an applied bias. <i>Thin Solid Films</i> , 2011, 519, 2933-2935.	1.8	10
70	Exciton-polaritons in a ZnO-based microcavity: polarization dependence and nonlinear occupation. <i>New Journal of Physics</i> , 2011, 13, 033014.	2.9	10
71	Cavity-photon dispersion in one-dimensional confined microresonators with an optically anisotropic cavity material. <i>Physical Review B</i> , 2011, 83, .	3.2	14
72	Strain distribution in bent ZnO microwires. <i>Applied Physics Letters</i> , 2011, 98, 031105.	3.3	46

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73	One- and two-dimensional cavity modes in ZnO microwires. <i>New Journal of Physics</i> , 2011, 13, 103021.	2.9	31
74	Charge carrier dynamics of ZnO and ZnO-BaTiO ₃ thin films. <i>Journal of Physics: Conference Series</i> , 2010, 210, 012048.	0.4	2
75	PLD Growth of High Reflective All-Oxide Bragg Reflectors for ZnO Resonators. <i>AIP Conference Proceedings</i> , 2010, , .	0.4	4
76	Observation of strong light-matter coupling by spectroscopic ellipsometry. <i>Superlattices and Microstructures</i> , 2010, 47, 19-23.	3.1	8
77	Whispering gallery modes in zinc oxide micro- and nanowires. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 1282-1293.	1.5	77
78	Two-dimensional confined photonic wire resonators – strong light-matter coupling. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 1351-1364.	1.5	17
79	Synthesis and physical properties of cylindrite micro tubes and lamellae. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 1335-1350.	1.5	7
80	Exciton-polaritons in ZnO microcavity resonators. <i>AIP Conference Proceedings</i> , 2010, , .	0.4	1
81	Oxide Thin Film Heterostructures on Large Area, with Flexible Doping, Low Dislocation Density, and Abrupt Interfaces: Grown by Pulsed Laser Deposition. <i>Laser Chemistry</i> , 2010, 2010, 1-27.	0.5	22
82	Polarization behavior of the exciton-polariton emission of ZnO-based microresonators. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1208, 1.	0.1	1
83	Strong exciton-photon coupling in ZnO based resonators. <i>Journal of Vacuum Science & Technology B</i> , 2009, 27, 1726.	1.3	10
84	Optical characterization of zinc oxide microlasers and microwire core-shell heterostructures. <i>Journal of Vacuum Science & Technology B</i> , 2009, 27, 1780.	1.3	6
85	ZnO nano-pillar Resonators with Coaxial Bragg-Reflectors. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1178, 13.	0.1	2
86	Observation of strong exciton-photon coupling at temperatures up to 410 K. <i>New Journal of Physics</i> , 2009, 11, 073044.	2.9	42
87	Exciton-polariton formation at room temperature in a planar ZnO resonator structure. <i>Applied Physics B: Lasers and Optics</i> , 2008, 93, 331-337.	2.2	40
88	Investigation of the free charge carrier properties at the ZnO-sapphire interface in plane ZnO films studied by generalized infrared ellipsometry. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1350-1353.	0.8	2
89	Structural and optical properties of ZnO ₂ and Al ₂ O ₃ thin films and Bragg reflectors grown by pulsed laser deposition. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1240-1243.	0.8	18
90	A Practical, Self-Catalytic, Atomic Layer Deposition of Silicon Dioxide. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 6177-6179.	13.8	127

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91	Optical Properties of ZnO and Related Compounds. Springer Series in Materials Science, 2008, , 79-124.	0.6	34
92	Whispering gallery mode lasing in zinc oxide microwires. Applied Physics Letters, 2008, 92, 241102.	3.3	192
93	Characterization of an optically pumped ZnO-based 3rd order distributed feedback laser. , 2008, , .		0
94	Vacuum Ultraviolet Dielectric Function and Band Structure of ZnO. Journal of the Korean Physical Society, 2008, 53, 88-93.	0.7	8
95	Intensity of Optical Absorption Close to the Band Edge in Strained ZnO Films. Journal of the Korean Physical Society, 2008, 53, 123-126.	0.7	1
96	Magnetoresistance and anomalous Hall effect in magnetic ZnO films. Journal of Applied Physics, 2007, 101, 063918.	2.5	43
97	Luminescence and surface properties of Mg _x Zn _{1-x} O thin films grown by pulsed laser deposition. Journal of Applied Physics, 2007, 101, 083521.	2.5	49
98	Demonstration of an ultraviolet ZnO-based optically pumped third order distributed feedback laser. Applied Physics Letters, 2007, 91, 111108.	3.3	20
99	Temperature-dependence of the refractive index and the optical transitions at the fundamental band-gap of ZnO. AIP Conference Proceedings, 2007, , .	0.4	15
100	Valence Band Structure of ZnO and Mg _x Zn _{1-x} O. Materials Research Society Symposia Proceedings, 2007, 1035, 1.	0.1	0
101	ZnO micro-pillar resonators with coaxial Bragg reflectors. AIP Conference Proceedings, 2007, , .	0.4	1
102	ZnO based planar and micropillar resonators. Superlattices and Microstructures, 2007, 41, 360-363.	3.1	15
103	Cathodoluminescence of large-area PLD grown ZnO thin films measured in transmission and reflection. Applied Physics A: Materials Science and Processing, 2007, 88, 89-93.	2.3	6
104	Metal-insulator transition in Co-doped ZnO: Magnetotransport properties. Physical Review B, 2006, 73, .	3.2	83
105	RBS studies on coated micro-dimensional glass fibers used as micro-resonators. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 387-389.	1.4	1
106	Magnetoresistance in pulsed laser deposited 3d transition metal doped ZnO films. Thin Solid Films, 2006, 515, 2549-2554.	1.8	20
107	Properties of (InGa)As/GaAs QW (Î» = 1.2 Åµm) facet-coated edge emitting diode laser. Laser Physics, 2006, 16, 441-446.	1.2	2
108	Refractive indices and band-gap properties of rocksalt Mg _x Zn _{1-x} O (0.68 ≤ x ≤ 1). Journal of Applied Physics, 2006, 99, 123701.	2.5	55

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109	Magnetoresistance effects in Zn _{0.90} Co _{0.10} O films. Journal of Applied Physics, 2006, 100, 013904.	2.5	26
110	Cylindric resonators with coaxial Bragg reflectors. , 2005, , .		3
111	a-Si/SiO _x Bragg-reflectors on micro-structured InP. Thin Solid Films, 2005, 483, 257-260.	1.8	3
112	Band-to-band transitions and optical properties of Mg _x Zn _{1-x} O (0 ≤ x ≤ 1) films. AIP Conference Proceedings, 2005, , .	0.4	6
113	UV-VUV spectroscopic ellipsometry of ternary Mg _x Zn _{1-x} O (0 ≤ x ≤ 0.53) thin films. Thin Solid Films, 2004, 455-456, 500-504.	1.8	43
114	Advances of pulsed laser deposition of ZnO thin films. Annalen Der Physik, 2004, 13, 59-60.	2.4	17
115	Dielectric functions (1 to 5 eV) of wurtzite Mg _x Zn _{1-x} O (x = 0.29) thin films. Applied Physics Letters, 2003, 82, 2260-2262.	3.3	165
116	Plasma-enhanced chemical vapor deposition of SiO _x /SiN _x Bragg reflectors. Thin Solid Films, 2002, 416, 224-232.	1.8	20
117	Polarization-dependent optical transitions at the fundamental band gap and higher critical points of wurtzite ZnO. , 0, , .		0
118	Coherent acoustic phonon oscillations and transient critical point parameters of Ge from femtosecond pump-probe ellipsometry. Physica Status Solidi - Rapid Research Letters, 0, , .	2.4	2