Chris Sturm

List of Publications by Year
in descending order

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79 papers	2,135 citations	236925 25 h-index	233421 45 g-index
82 all docs	82 docs citations	82 times ranked	2604 citing authors

#	Article	IF	Citations
1	Angular position of singular optic axes for arbitrary dielectric tensors. Physical Review A, 2021, 103, .	2.5	1
2	Constitutive Relations for Optically Active Anisotropic Media: A Review. Advanced Photonics Research, 2021, 2, 2100160.	3.6	3
3	Strong coupling of Bloch surface waves and excitons in ZnO up to 430 K. New Journal of Physics, 2021, 23, 093031.	2.9	3
4	Epitaxial growth of rhombohedral Î²- and cubic Î³-CuI. Journal of Crystal Growth, 2021, 570, 126218.	1.5	6
5	Raman tensor determination of transparent uniaxial crystals and their thin filmsâ€"a-plane GaN as exemplary case. Applied Physics Letters, 2021, 119, 121109.	3.3	0
6	Dynamics of excitonâ€"polariton emission in CuI. APL Materials, 2021, 9, .	5.1	8
7	Control of magnetic properties in spinel ZnFe2O4 thin films through intrinsic defect manipulation. Journal of Applied Physics, 2020, 128, .	2.5	8
8	Dielectric function decomposition by dipole interaction distribution: application to triclinic K₂Cr₂O₇. New Journal of Physics, 2020, 22, 073041.	2.9	4
9	Solubility limit and material properties of a Î²-(AlxGa1â^'x)2O3 thin film with a lateral cation gradient on (00.1)Al2O3 by tin-assisted PLD. APL Materials, 2020, 8, 021103.	5.1	26
10	Control of phase formation of (Al x Ga1â€‰â^'â€‰x)2O3 thin films on c-plane Al2O3. Journal Physics D: Applied Physics, 2020, 53, 485105.	2.8	24
11	Dielectric tensor, optical activity, and singular optic axes of KTP in the spectral range 0.5â€"8.4 eV. Physical Review Materials, 2020, 4, .	2.4	6
12	Influence of the excitation conditions on the emission behavior of carbon nanodot-based planar microcavities. Physical Review Research, 2020, 2, .	3.6	2
13	Structural, optical, and electrical properties of orthorhombic Î²-(InxGa1â^'x)2O3 thin films. APL Materials, 2019, 7, .	5.1	34
14	Epitaxial stabilization of single phase Î²-(InxGa1â^'x)2O3 thin films up to x = 0.28 on c-sapphire and Î²-Ga2O3(001) templates by tin-assisted VCCS-PLD. APL Materials, 2019, 7, .	5.1	38
15	Voigt Exceptional Points in an Anisotropic ZnO-Based Planar Microcavity: Square-Root Topology, Polarization Vortices, and Circularity. Physical Review Letters, 2019, 123, 227401.	7.8	35
16	Tin-assisted heteroepitaxial PLD-growth of Î²-Ga2O3 thin films with high crystalline quality. APL Materials, 2019, 7, .	5.1	98
17	Applicability of the constitutive equations for the determination of the material properties of optically active materials. Optics Letters, 2019, 44, 1351.	3.3	8
18	Design of UV-crosslinked polymeric thin layers for encapsulation of piezoelectric ZnO nanowires for pressure-based fingerprint sensors. Journal of Materials Chemistry C, 2018, 6, 605-613.	5.5	16

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19	Coherent Polariton States in ZnO Nano- and Microstructures. , 2018, , .		0
20	Temperature dependence of the dielectric function of thin film CuI in the spectral range (0.6â€“8.3) eV. Applied Physics Letters, 2018, 113, 172102.	3.3	16
21	Photoinduced Heating of Graphitized Nanodiamonds Monitored by the Raman Diamond Peak. Journal of Physical Chemistry C, 2018, 122, 25685-25691.	3.1	5
22	Exceptional Points in the Dispersion of Optically Anisotropic Planar Microcavities. , 2018, , .		0
23	Exceptional points in anisotropic planar microcavities. Physical Review A, 2017, 95, .	2.5	22
24	Non-linear optical deformation potentials in uniaxially strained ZnO microwires. Applied Physics Letters, 2017, 110, .	3.3	2
25	Low-Temperature PLD-Growth of Ultrathin ZnO Nanowires by Using Zn x Al1â^'x O and Zn x Ga1â^'x O Seed Layers. Nanoscale Research Letters, 2017, 12, 134.	5.7	10
26	Exceptional points in anisotropic photonic structures: from non-Hermitian physics to possible device applications. Proceedings of SPIE, 2017, , .	0.8	1
27	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
28	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
29	Carrier density driven lasing dynamics in ZnO nanowires. Nanotechnology, 2016, 27, 225702.	2.6	28
30	UV-crosslinked Polymeric Materials for Encapsulation of ZnO Nanowires in Piezoelectric Fingerprint Sensors. Procedia Engineering, 2016, 168, 1135-1139.	1.2	3
31	Growth Kinetics of Ultrathin ZnO Nanowires Grown by Pulsed Laser Deposition. Procedia Engineering, 2016, 168, 1156-1159.	1.2	3
32	Selective growth of tilted ZnO nanoneedles and nanowires by PLD on patterned sapphire substrates. AIP Advances, 2016, 6, 095013.	1.3	2
33	Piezo-force and Vibration Analysis of ZnO Nanowire Arrays for Sensor Application. Procedia Engineering, 2016, 168, 1192-1195.	1.2	9
34	Dipole analysis of the dielectric function of color dispersive materials: Application to monoclinic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Ga</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 94, .	3.2	54
35	Contacting ZnO Individual Crystal Facets by Direct Write Lithography. ACS Applied Materials & Interfaces, 2016, 8, 23891-23898.	8.0	2
36	Singular optical axes in biaxial crystals and analysis of their spectral dispersion effects in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î²</mml:mi><mml:mo>â^'</mml:mo><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review A, 2016, 93, .	2.5	18

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37	Cavity polariton condensate in a disordered environment. Physical Review B, 2016, 93, .	3.2	11
38	Raman Tensor Formalism for Optically Anisotropic Crystals. Physical Review Letters, 2016, 116, 127401.	7.8	61
39	Raman tensor elements of Î²-Ga2O3. Scientific Reports, 2016, 6, 35964.	3.3	162
40	Nonequilibrium polariton condensate in a magnetic field. Physical Review B, 2015, 91, .	3.2	29
41	Dielectric tensor of monoclinic Ga₂O₃ single crystals in the spectral range 0.5â€“8.5 eV. APL Materials, 2015, 3, 106106.	5.1	81
42	Maxwell consideration of polaritonic quasi-particle Hamiltonians in multi-level systems. Applied Physics Letters, 2015, 107, .	3.3	25
43	Parametric relaxation in whispering gallery mode exciton-polariton condensates. Physical Review B, 2015, 91, .	3.2	14
44	All-optical phase modulation in a cavity-polariton Machâ€“Zehnder interferometer. Nature Communications, 2014, 5, 3278.	12.8	123
45	Ultrafast dynamics of the dielectric functions of ZnO and BaTiO3 thin films after intense femtosecond laser excitation. Journal of Applied Physics, 2014, 115, 053508.	2.5	18
46	Realization of a Double-Barrier Resonant Tunneling Diode for Cavity Polaritons. Physical Review Letters, 2013, 110, 236601.	7.8	118
47	Ballistic propagation of excitonâ€“polariton condensates in a ZnO-based microcavity. New Journal of Physics, 2012, 14, 013037.	2.9	54
48	Occupation behaviour of the lower exciton-polariton branch in ZnO-based microresonators. , 2011, , .		0
49	Structural properties of BaTiO[sub 3]âˆ•ZnO heterostructures and interfaces. AIP Conference Proceedings, 2011, , .	0.4	0
50	Determination of the refractive index of single crystal bulk samples and micro-structures. Thin Solid Films, 2011, 519, 2777-2781.	1.8	20
51	Optical properties of BaTiO3/ZnO heterostructures under the effect of an applied bias. Thin Solid Films, 2011, 519, 2933-2935.	1.8	10
52	Excitonâ€“polaritons in a ZnO-based microcavity: polarization dependence and nonlinear occupation. New Journal of Physics, 2011, 13, 033014.	2.9	10
53	Cavity-photon dispersion in one-dimensional confined microresonators with an optically anisotropic cavity material. Physical Review B, 2011, 83, .	3.2	14
54	One- and two-dimensional cavity modes in ZnO microwires. New Journal of Physics, 2011, 13, 103021.	2.9	31

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55	Charge carrier dynamics of ZnO and ZnO-BaTi0₃thin films. Journal of Physics: Conference Series, 2010, 210, 012048.	0.4	2
56	Observation of strong light-matter coupling by spectroscopic ellipsometry. Superlattices and Microstructures, 2010, 47, 19-23.	3.1	8
57	Whispering gallery modes in zinc oxide microâ€•and nanowires. Physica Status Solidi (B): Basic Research, 2010, 247, 1282-1293.	1.5	77
58	Twoâ€dimensional confined photonic wire resonators â€“ strong lightâ€“matter coupling. Physica Status Solidi (B): Basic Research, 2010, 247, 1351-1364.	1.5	17
59	Tubular magnetic nanostructures based on glancing angle deposited templates and atomic layer deposition. Physica Status Solidi (B): Basic Research, 2010, 247, 1365-1371.	1.5	25
60	Synthesis and physical properties of cylindrite micro tubes and lamellae. Physica Status Solidi (B): Basic Research, 2010, 247, 1335-1350.	1.5	7
61	Exciton-polaritons in ZnO microcavity resonators. AIP Conference Proceedings, 2010, , .	0.4	1
62	Identification of a donor-related recombination channel in ZnO thin films. Physical Review B, 2010, 81, .	3.2	14
63	Polarization behavior of the exciton-polariton emission of ZnO-based microresonators. Materials Research Society Symposia Proceedings, 2009, 1208, 1.	0.1	1
64	Strong exciton-photon coupling in ZnO based resonators. Journal of Vacuum Science & Technology B, 2009, 27, 1726.	1.3	10
65	Optical characterization of zinc oxide microlasers and microwire core-shell heterostructures. Journal of Vacuum Science & Technology B, 2009, 27, 1780.	1.3	6
66	ZnO nano-pillar Resonators with Coaxial Bragg-Reflectors. Materials Research Society Symposia Proceedings, 2009, 1178, 13.	0.1	2
67	Growth of Î²â€Ga₂O₃ on Al₂O₃ and GaAs using metalâ€organic vaporâ€phase epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 243-249.	1.8	77
68	Observation of strong excitonâ€“photon coupling at temperatures up to 410â€‰K. New Journal of Physics, 2009, 11, 073044.	2.9	42
69	Investigation of the free charge carrier properties at the ZnOâ€sapphire interface in aâ€plane ZnO films studied by generalized infrared ellipsometry. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1350-1353.	0.8	2
70	A Practical, Selfâ€Catalytic, Atomic Layer Deposition of Silicon Dioxide. Angewandte Chemie - International Edition, 2008, 47, 6177-6179.	13.8	127
71	Excitonâ€“phonon coupling and exciton thermalization in MgxZn1â^'xO thin films. Solid State Communications, 2008, 148, 570-572.	1.9	14
72	Whispering gallery mode lasing in zinc oxide microwires. Applied Physics Letters, 2008, 92, 241102.	3.3	192

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73	Magnetoresistance and anomalous Hall effect in magnetic ZnO films. Journal of Applied Physics, 2007, 101, 063918.	2.5	43
74	Luminescence and surface properties of MgxZn1âˆ’xO thin films grown by pulsed laser deposition. Journal of Applied Physics, 2007, 101, 083521.	2.5	49
75	The magnetotransport properties of Co-doped ZnO films. AIP Conference Proceedings, 2007, , .	0.4	0
76	Valence Band Structure of ZnO and MgxZn1âˆ’xO. Materials Research Society Symposia Proceedings, 2007, 1035, 1.	0.1	0
77	Optical Properties of Cylindrite. AIP Conference Proceedings, 2007, , .	0.4	3
78	Metal-insulator transition in Co-dopedZnO: Magnetotransport properties. Physical Review B, 2006, 73, .	3.2	83
79	Spin polarization in Zn0.95Co0.05O:(Al,Cu) thin films. Journal Physics D: Applied Physics, 2006, 39, 4920-4924.	2.8	11