Robert RÃ¶der

List of Publications by Year
in descending order

38 papers	1,246 citations	430874 18 h-index	361022 35 g-index
39 all docs	39 docs citations	39 times ranked	1974 citing authors

#	Article	IF	Citations
1	Ultrafast plasmonic nanowire lasers near the surface plasmon frequency. Nature Physics, 2014, 10, 870-876.	16.7	262
2	Single Step Integration of ZnO Nano- and Microneedles in Si Trenches by Novel Flame Transport Approach: Whispering Gallery Modes and Photocatalytic Properties. ACS Applied Materials & Interfaces, 2014, 6, 7806-7815.	8.0	156
3	Flash Sintering of Nanocrystalline Zinc Oxide and its Influence on Microstructure and Defect Formation. Journal of the American Ceramic Society, 2014, 97, 1728-1735.	3.8	131
4	Intense Intrashell Luminescence of Eu-Doped Single ZnO Nanowires at Room Temperature by Implantation Created Euâ€“O_i Complexes. Nano Letters, 2014, 14, 4523-4528.	9.1	63
5	FAST/SPS sintering of nanocrystalline zinc oxideâ€”Part I: Enhanced densification and formation of hydrogen-related defects in presence of adsorbed water. Journal of the European Ceramic Society, 2016, 36, 1207-1220.	5.7	56
6	Continuous Wave Nanowire Lasing. Nano Letters, 2013, 13, 3602-3606.	9.1	52
7	Conversionless efficient and broadband laser light diffusers for high brightness illumination applications. Nature Communications, 2020, 11, 1437.	12.8	52
8	Ultrafast Dynamics of Lasing Semiconductor Nanowires. Nano Letters, 2015, 15, 4637-4643.	9.1	51
9	Low threshold room-temperature lasing of CdS nanowires. Nanotechnology, 2012, 23, 365204.	2.6	48
10	Highly efficient visible-light driven photocatalysts: a case of zinc stannate based nanocrystal assemblies. Journal of Materials Chemistry A, 2014, 2, 4157-4167.	10.3	40
11	Improving the Optical Properties of Self-Catalyzed GaN Microrods toward Whispering Gallery Mode Lasing. ACS Photonics, 2014, 1, 990-997.	6.6	37
12	Amphoteric Nature of Sn in CdS Nanowires. Nano Letters, 2014, 14, 518-523.	9.1	32
13	Transition Metal and Rare Earth Element Doped Zinc Oxide Nanowires for Optoelectronics. Physica Status Solidi (B): Basic Research, 2019, 256, 1800604.	1.5	30
14	Carrier density driven lasing dynamics in ZnO nanowires. Nanotechnology, 2016, 27, 225702.	2.6	28
15	Mode Switching and Filtering in Nanowire Lasers. Nano Letters, 2016, 16, 2878-2884.	9.1	25
16	Review on the dynamics of semiconductor nanowire lasers. Semiconductor Science and Technology, 2018, 33, 033001.	2.0	24
17	Polarization features of optically pumped CdS nanowire lasers. Journal Physics D: Applied Physics, 2014, 47, 394012.	2.8	23
18	Dynamical Tuning of Nanowire Lasing Spectra. Nano Letters, 2017, 17, 6637-6643.	9.1	19

#	Article	IF	Citations
19	High temperature limit of semiconductor nanowire lasers. Applied Physics Letters, 2017, 110, 173103.	3.3	12
20	Nature of AX Centers in Antimony-Doped Cadmium Telluride Nanobelts. Nano Letters, 2015, 15, 974-980.	9.1	10
21	Hard X-ray Generation from ZnO Nanowire Targets in a Non-Relativistic Regime of Laser-Solid Interactions. Applied Sciences (Switzerland), 2018, 8, 1728.	2.5	10
22	Intense intraâ€3d luminescence and waveguide properties of single Coâ€doped ZnO nanowires. Physica Status Solidi - Rapid Research Letters, 2013, 7, 886-889.	2.4	9
23	Excitation Energy Dependent Ultrafast Luminescence Behavior of CdS Nanostructures. ACS Photonics, 2017, 4, 1067-1075.	6.6	9
24	Tailoring Spectral and Temporal Properties of Semiconductor Nanowire Lasers. Advanced Optical Materials, 2019, 7, 1900504.	7.3	9
25	Polarization Dependent Excitation and High Harmonic Generation from Intense Mid-IR Laser Pulses in ZnO. Nanomaterials, 2021, 11, 4.	4.1	9
26	Improving gas sensing by CdTe decoration of individual Aerographite microtubes. Nanotechnology, 2019, 30, 065501.	2.6	8
27	Enhanced absorption and cavity effects of three-photon pumped ZnO nanowires. Applied Physics Letters, 2017, 111, 213106.	3.3	7
28	Gate modulation of below-band-gap photoconductivity in ZnO nanowire field-effect-transistors. Journal Physics D: Applied Physics, 2014, 47, 394014.	2.8	6
29	Polarization dependent multiphoton absorption in ZnO thin films. Journal Physics D: Applied Physics, 2020, 53, 055102.	2.8	6
30	Electroluminescence of intrashell transitions in Eu doped single ZnO nanowires. Nanotechnology, 2019, 30, 095201.	2.6	5
31	Strong Light-Field Driven Nanolasers. Nano Letters, 2019, 19, 3563-3568.	9.1	4
32	Single nanowire defined emission properties of ZnO nanowire arrays. Journal Physics D: Applied Physics, 2019, 52, 295101.	2.8	4
33	Growth of 18 O isotopicallyÂenriched ZnO nanorods by two novel VPT methods. Journal of Crystal Growth, 2017, 460, 85-93.	1.5	2
34	Paramagnetic, NIR â€luminescent Nd 3+ â€•and Gd 3+ â€doped fluorapatite as contrast agent for multimodal biomedical imaging. Journal of the American Ceramic Society, 2018, 101, 4441-4446.	3.8	2
35	Local atomic environment of the Cu-related defect in zinc oxide. Journal Physics D: Applied Physics, 2017, 50, 145105.	2.8	1
36	Damage recovery and dopant migration of Eu+ ion implanted KTiOAsO4 crystals. Nuclear Instruments & Methods in Physics Research B, 2018, 435, 209-213.	1.4	1

#	Article	IF	Citations
37	Role of free-carrier interaction in strong-field excitations in semiconductors. Physical Review B, 2021, 104, .	3.2	1
38	Ultrafast ZnO nanowire lasers: nanoplasmonic acceleration of gain dynamics at the surface plasmon polariton frequency. , 2016, , .		0