

# Robert RÄnder

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3036291/publications.pdf>

Version: 2024-02-01

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  | Role of free-carrier interaction in strong-field excitations in semiconductors. <i>Physical Review B</i> , 2021, 104, .  | 3.2  | 1         |
| 2  | Polarization Dependent Excitation and High Harmonic Generation from Intense Mid-IR Laser Pulses in ZnO. <i>Nanomaterials</i> , 2021, 11, 4.  | 4.1  | 9         |
| 3  | Polarization dependent multiphoton absorption in ZnO thin films. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 055102.   | 2.8  | 6         |
| 4  | Conversionless efficient and broadband laser light diffusers for high brightness illumination applications. <i>Nature Communications</i> , 2020, 11, 1437.   | 12.8 | 52        |
| 5  | Transition Metal and Rare Earth Element Doped Zinc Oxide Nanowires for Optoelectronics. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1800604.   | 1.5  | 30        |
| 6  | Strong Light-Field Driven Nanolasers. <i>Nano Letters</i> , 2019, 19, 3563-3568.   | 9.1  | 4         |
| 7  | Tailoring Spectral and Temporal Properties of Semiconductor Nanowire Lasers. <i>Advanced Optical Materials</i> , 2019, 7, 1900504.   | 7.3  | 9         |
| 8  | Single nanowire defined emission properties of ZnO nanowire arrays. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 295101.  | 2.8  | 4         |
| 9  | Electroluminescence of intrashell transitions in Eu doped single ZnO nanowires. <i>Nanotechnology</i> , 2019, 30, 095201.  | 2.6  | 5         |
| 10 | Improving gas sensing by CdTe decoration of individual Aerographite microtubes. <i>Nanotechnology</i> , 2019, 30, 065501.  | 2.6  | 8         |
| 11 | Review on the dynamics of semiconductor nanowire lasers. <i>Semiconductor Science and Technology</i> , 2018, 33, 033001.   | 2.0  | 24        |
| 12 | Damage recovery and dopant migration of Eu <sup>+</sup> ion implanted KTiOAsO <sub>4</sub> crystals. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2018, 435, 209-213.                          | 1.4  | 1         |
| 13 | Hard X-ray Generation from ZnO Nanowire Targets in a Non-Relativistic Regime of Laser-Solid Interactions. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1728.   | 2.5  | 10        |
| 14 | Paramagnetic, NIR luminescent Nd <sup>3+</sup> and Gd <sup>3+</sup> doped fluorapatite as contrast agent for multimodal biomedical imaging. <i>Journal of the American Ceramic Society</i> , 2018, 101, 4441-4446. | 3.8  | 2         |
| 15 | Excitation Energy Dependent Ultrafast Luminescence Behavior of CdS Nanostructures. <i>ACS Photonics</i> , 2017, 4, 1067-1075.  | 6.6  | 9         |
| 16 | Local atomic environment of the Cu-related defect in zinc oxide. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 145105.   | 2.8  | 1         |
| 17 | Growth of <sup>18</sup> O isotopically enriched ZnO nanorods by two novel VPT methods. <i>Journal of Crystal Growth</i> , 2017, 460, 85-93.  | 1.5  | 2         |
| 18 | Dynamical Tuning of Nanowire Lasing Spectra. <i>Nano Letters</i> , 2017, 17, 6637-6643.  | 9.1  | 19        |

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|----|---|------|-----------|
| 19 | High temperature limit of semiconductor nanowire lasers. Applied Physics Letters, 2017, 110, 173103.  | 3.3  | 12        |
| 20 | Enhanced absorption and cavity effects of three-photon pumped ZnO nanowires. Applied Physics Letters, 2017, 111, 213106.  | 3.3  | 7         |
| 21 | Carrier density driven lasing dynamics in ZnO nanowires. Nanotechnology, 2016, 27, 225702.  | 2.6  | 28        |
| 22 | Mode Switching and Filtering in Nanowire Lasers. Nano Letters, 2016, 16, 2878-2884.   | 9.1  | 25        |
| 23 | FAST/SPS sintering of nanocrystalline zinc oxide 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        |
| 24 | Ultrafast ZnO nanowire lasers: nanoplasmonic acceleration of gain dynamics at the surface plasmon polariton frequency. , 2016, , .  |      | 0         |
| 25 | Nature of AX Centers in Antimony-Doped Cadmium Telluride Nanobelts. Nano Letters, 2015, 15, 974-980.  | 9.1  | 10        |
| 26 | Ultrafast Dynamics of Lasing Semiconductor Nanowires. Nano Letters, 2015, 15, 4637-4643.  | 9.1  | 51        |
| 27 | Polarization features of optically pumped CdS nanowire lasers. Journal Physics D: Applied Physics, 2014, 47, 394012.  | 2.8  | 23        |
| 28 | 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       |
| 29 | Amphoteric Nature of Sn in CdS Nanowires. Nano Letters, 2014, 14, 518-523.  | 9.1  | 32        |
| 30 | 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        |
| 31 | Gate modulation of below-band-gap photoconductivity in ZnO nanowire field-effect-transistors. Journal Physics D: Applied Physics, 2014, 47, 394014.   | 2.8  | 6         |
| 32 | 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       |
| 33 | Improving the Optical Properties of Self-Catalyzed GaN Microrods toward Whispering Gallery Mode Lasing. ACS Photonics, 2014, 1, 990-997.  | 6.6  | 37        |
| 34 | Ultrafast plasmonic nanowire lasers near the surface plasmon frequency. Nature Physics, 2014, 10, 870-876.  | 16.7 | 262       |
| 35 | Intense Intrashell Luminescence of Eu-Doped Single ZnO Nanowires at Room Temperature by Implantation Created Eu <sup>3+</sup> Complexes. Nano Letters, 2014, 14, 4523-4528.   | 9.1  | 63        |
| 36 | Intense intracore luminescence and waveguide properties of single Co-doped ZnO nanowires. Physica Status Solidi - Rapid Research Letters, 2013, 7, 886-889.   | 2.4  | 9         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Continuous Wave Nanowire Lasing. Nano Letters, 2013, 13, 3602-3606.                       | 9.1 | 52        |
| 38 | Low threshold room-temperature lasing of CdS nanowires. Nanotechnology, 2012, 23, 365204. | 2.6 | 48        |