

Nobuhiko Ozaki

List of Publications by Year in descending order

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112
papers

1,059
citations

430442

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454577

30
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112
all docs

112
docs citations

112
times ranked

863
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Photonic crystal and quantum dot technologies for all-optical switch and logic device. <i>New Journal of Physics</i> , 2006, 8, 208-208. | 1.2 | 126 |
| 2 | Silicon nanowhiskers grown on a hydrogen-terminated silicon {111} surface. <i>Applied Physics Letters</i> , 1998, 73, 3700-3702. | 1.5 | 123 |
| 3 | Suppression of ferromagnetism due to hole doping in Zn _{1-x} Cr _x Te grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2005, 87, 192116. | 1.5 | 51 |
| 4 | Significant Enhancement of Ferromagnetism in Zn _{1-x} Cr _x Te Doped with Iodine as an n-Type Dopant. <i>Physical Review Letters</i> , 2006, 97, 037201. | 2.9 | 47 |
| 5 | Broadband waveguide intersection with low crosstalk in two-dimensional photonic crystal circuits by using topology optimization. <i>Optics Express</i> , 2006, 14, 9502. | 1.7 | 38 |
| 6 | High transmission recovery of slow light in a photonic crystal waveguide using a hetero group velocity waveguide. <i>Optics Express</i> , 2007, 15, 7974. | 1.7 | 38 |
| 7 | Misleading fringes in TEM images and diffraction patterns of Si nanocrystallites. <i>Crystal Research and Technology</i> , 2003, 38, 1082-1086. | 0.6 | 31 |
| 8 | Growth and magnetic properties of novel ferromagnetic semiconductor (Zn, Cr)Te. <i>Science and Technology of Advanced Materials</i> , 2005, 6, 558-564. | 2.8 | 30 |
| 9 | Topology optimization of waveguide bends with wide, flat bandwidth in air-bridge-type photonic crystal slabs. <i>Journal of Applied Physics</i> , 2007, 101, 113108. | 1.1 | 27 |
| 10 | Magnetic properties of MBE-grown Zn _{1-x} Cr _x Te. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 957-960. | 0.8 | 26 |
| 11 | Sequential Operations of Quantum Dot/Photonic Crystal All-Optical Switch With High Repetitive Frequency Pumping. <i>Journal of Lightwave Technology</i> , 2009, 27, 1241-1247. | 2.7 | 26 |
| 12 | Hydrogen Generation by Laser Irradiation of Carbon Powder in Water. <i>Journal of Physical Chemistry C</i> , 2013, 117, 18281-18285. | 1.5 | 24 |
| 13 | Superluminescent diode with a broadband gain based on self-assembled InAs quantum dots and segmented contacts for an optical coherence tomography light source. <i>Journal of Applied Physics</i> , 2016, 119, 083107. | 1.1 | 23 |
| 14 | Precise control of dry etching for nanometer scale air-hole arrays in two-dimensional GaAs/AlGaAs photonic crystal slabs. <i>Optics Communications</i> , 2007, 275, 257-267. | 1.0 | 22 |
| 15 | Near-infrared superluminescent diode using stacked self-assembled InAs quantum dots with controlled emission wavelengths. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 04EG10. | 0.8 | 21 |
| 16 | Gallium Nitride Superluminescent Light Emitting Diodes for Optical Coherence Tomography Applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 1-11. | 1.9 | 21 |
| 17 | Selective area growth of InAs quantum dots with a metal mask towards optical integrated circuit devices. <i>Journal of Crystal Growth</i> , 2007, 301-302, 771-775. | 0.7 | 20 |
| 18 | Formation mechanism of nanocatalysts for the growth of silicon nanowires on a hydrogen-terminated Si {111} surface template. <i>Applied Physics Letters</i> , 2003, 82, 979-981. | 1.5 | 19 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Integration of Emission-Wavelength-Controlled InAs Quantum Dots for Ultra-Broadband Near-Infrared Light Source. <i>Nanomaterials and Nanotechnology</i> , 2014, 4, 26. | 1.2 | 18 |
| 20 | Imaging of spectral-domain optical coherence tomography using a superluminescent diode based on InAs quantum dots emitting broadband spectrum with Gaussian-like shape. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 04DG07. | 0.8 | 16 |
| 21 | Monolithically grown multi-color InAs quantum dots as a spectral-shape-controllable near-infrared broadband light source. <i>Applied Physics Letters</i> , 2013, 103, . | 1.5 | 15 |
| 22 | Development of a broadband superluminescent diode based on self-assembled InAs quantum dots and demonstration of high-axial-resolution optical coherence tomography imaging. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 225105. | 1.3 | 15 |
| 23 | Growth of InAs/GaAs quantum dots with central emission wavelength of 1.05 μm using In-flush technique for broadband near-infrared light source. <i>Journal of Crystal Growth</i> , 2013, 378, 501-505. | 0.7 | 13 |
| 24 | Magnetic and structural properties of MBE-grown $\text{Zn}_{1-x}\text{Cr}_x\text{Te}$ films. <i>Journal of Physics Condensed Matter</i> , 2004, 16, S5773-S5776. | 0.7 | 12 |
| 25 | Observation of silicon surface nanoholes by scanning tunneling microscopy. <i>Surface Science</i> , 2001, 493, 547-554. | 0.8 | 11 |
| 26 | Magnetic Behaviors of Ferromagnetic Semiconductor $\text{Zn}_{1-x}\text{Cr}_x\text{Te}$ Grown by MBE. <i>Journal of Superconductivity and Novel Magnetism</i> , 2005, 18, 29-32. | 0.5 | 11 |
| 27 | Extending emission wavelength of InAs/GaAs quantum dots beyond 1.3 μm by using quantum dot bi-layer for broadband light source. <i>Journal of Crystal Growth</i> , 2013, 378, 553-557. | 0.7 | 11 |
| 28 | Multi-color quantum dot ensembles grown in selective-areas for shape-controlled broadband light source. <i>Journal of Crystal Growth</i> , 2011, 323, 191-193. | 0.7 | 10 |
| 29 | Topology optimised photonic crystal waveguide intersections with high-transmittance and low crosstalk. <i>Electronics Letters</i> , 2006, 42, 1031. | 0.5 | 9 |
| 30 | Operation of an InAs quantum-dot embedded GaAs photonic crystal slab waveguide laser by using two-photon pumping for photonics integrated circuits. <i>AIP Advances</i> , 2016, 6, 065215. | 0.6 | 9 |
| 31 | Gallium nitride light sources for optical coherence tomography. , 2017, , . | | 9 |
| 32 | Selective-area-growth of InAs-QDs with different absorption wavelengths via developed metal-mask/MBE method for integrated optical devices. <i>Applied Surface Science</i> , 2008, 254, 7968-7971. | 3.1 | 8 |
| 33 | Alcohol additive effect in hydrogen generation from water with carbon by photochemical reaction. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 05FZ03. | 0.8 | 8 |
| 34 | Optical characterization of In-flushed InAs/GaAs quantum dots emitting a broadband spectrum with multiple peaks at $\sim 1.1 \mu\text{m}$. <i>Nanoscale Research Letters</i> , 2015, 10, 231. | 3.1 | 8 |
| 35 | Electrically Driven Near-Infrared Broadband Light Source with Gaussian-Like Spectral Shape Based on Multiple InAs Quantum Dots. <i>IEICE Transactions on Electronics</i> , 2016, E99.C, 381-384. | 0.3 | 8 |
| 36 | Growth of silicon nanowires on H-terminated Si {111} surface templates studied by transmission electron microscopy. <i>Microscopy (Oxford, England)</i> , 2005, 54, i25-i29. | 0.7 | 7 |

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|----|---|-----|-----------|
| 37 | Fluorescence XAFS Study on Local Structure around Cr Atoms Doped in ZnTe. AIP Conference Proceedings, 2007, , . | 0.3 | 7 |
| 38 | Molecular beam epitaxial growth of site-controlled InAs quantum dot arrays using templates fabricated by the Nano-Jet Probe method. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1794-1796. | 1.3 | 7 |
| 39 | Site-controlled InAs quantum dot formation grown on the templates fabricated by the Nano-Jet Probe method. Journal of Crystal Growth, 2009, 311, 1819-1821. | 0.7 | 7 |
| 40 | Size dependent optical properties of quinacridonequinone nanoparticles prepared by liquid laser ablation in water. Chemical Physics Letters, 2012, 552, 102-107. | 1.2 | 7 |
| 41 | Ultra-small near-infrared multi-wavelength light source using a heterojunction photonic crystal waveguide and self-assembled InAs quantum dots. Japanese Journal of Applied Physics, 2017, 56, 050303. | 0.8 | 7 |
| 42 | Selective growth of stacked InAs quantum dots by using the templates formed by the Nano-Jet Probe. Applied Surface Science, 2008, 254, 7821-7823. | 3.1 | 6 |
| 43 | Topology optimization of a wavelength-selective Y-junction for 2D photonic crystal waveguides. Journal Physics D: Applied Physics, 2008, 41, 175109. | 1.3 | 6 |
| 44 | Monolithic Fabrication of Two-Color InAs Quantum Dots for Integrated Optical Devices by Using a Rotational Metal Mask. Japanese Journal of Applied Physics, 2009, 48, 065502. | 0.8 | 6 |
| 45 | Broadband Light Source Based on Four-Color Self-Assembled InAs Quantum Dot Ensembles Monolithically Grown in Selective Areas. IEICE Transactions on Electronics, 2012, E95-C, 247-250. | 0.3 | 6 |
| 46 | Growth of quantum three-dimensional structure of InGaAs emitting at $\sim 1 \mu\text{m}$ applicable for a broadband near-infrared light source. Journal of Crystal Growth, 2017, 477, 230-234. | 0.7 | 6 |
| 47 | Advanced quantum dot and photonic crystal technologies for integrated nanophotonic circuits. Microelectronics Journal, 2009, 40, 736-740. | 1.1 | 5 |
| 48 | Broadband emission centered at $\sim 1 \mu\text{m}$ with a Gaussian-like spectrum by stacking In-flushed QD layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1361-1364. | 0.8 | 5 |
| 49 | High-resolution and nondestructive profile measurement by spectral-domain optical coherence tomography with a visible broadband light source for optical-device fabrication. Japanese Journal of Applied Physics, 2016, 55, 08RE05. | 0.8 | 5 |
| 50 | Strain Balancing of Metal-Organic Vapour Phase Epitaxy InAs/GaAs Quantum Dot Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-8. | 1.9 | 5 |
| 51 | Tunable external cavity laser diode based on wavelength controlled self-assembled InAs quantum dots for swept-source optical coherence tomography applications at 1100 nm wavelength band. , 2019, , . | | 5 |
| 52 | Optical properties of Si nanowires on a Si {111} surface. Materials Research Society Symposia Proceedings, 1999, 588, 98. | 0.1 | 4 |
| 53 | Spectral and temporal photoluminescence behavior of colloidal PbS quantum dots. Superlattices and Microstructures, 2015, 79, 123-134. | 1.4 | 4 |
| 54 | Area-selective and Site-controlled InAs Quantum-dot Growth Techniques for Photonic Crystal-based Ultra-small Integrated Circuit. , 2008, , 405-420. | | 4 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Measurements of Optical Non-linearity Induced Phase-Shifts of Signal Pulse with Repetitive Control Pulses in Photonic Crystal/Quantum Dot Waveguide. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , . | 0.0 | 3 |
| 56 | Selective growth of InAs quantum dots using In nano-dot arrays formed by nano-jet probe method. Journal of Crystal Growth, 2007, 301-302, 726-730. | 0.7 | 3 |
| 57 | Optical flip-flop based on coupled ultra-small Mach-Zehnder all-optical switches. , 2008, , . | | 3 |
| 58 | WIDEBAND OPERATION OF 2D PHOTONIC CRYSTAL DIRECTIONAL COUPLER WITH TOPOLOGY OPTIMIZED WAVEGUIDE BENDS. Journal of Nonlinear Optical Physics and Materials, 2010, 19, 543-550. | 1.1 | 3 |
| 59 | Bandwidth enhancement in an InGaN/GaN three-section superluminescent diode for optical coherence tomography. Applied Physics Letters, 2020, 117, . | 1.5 | 3 |
| 60 | 1.1 μ m waveband tunable laser using emission-wavelength-controlled InAs quantum dots for swept-source optical coherence tomography applications. Japanese Journal of Applied Physics, 2021, 60, SBBE02. | 0.8 | 3 |
| 61 | Numerical investigation of highly efficient and tunable terahertz-wave generation using a low-group-velocity and low-dispersion two-dimensional GaAs photonic crystal waveguide. Japanese Journal of Applied Physics, 2020, 59, 090903. | 0.8 | 3 |
| 62 | Magnetotransport and magnetic properties of p-Zn _{1-x} MnxTe:N “Carrier-induced ferromagnetism. Physica Status Solidi (B): Basic Research, 2004, 241, 668-671. | 0.7 | 2 |
| 63 | Selective-Area Growth of Self-Assembled InAs-QDs by Metal Mask Method for Optical Integrated Circuit Applications. Materials Research Society Symposia Proceedings, 2006, 959, 1. | 0.1 | 2 |
| 64 | Optical-Nonlinearity-Induced Phase Shift via Selective-Area Grown InAs Quantum Dots in a Photonic Crystal Waveguide. Japanese Journal of Applied Physics, 2008, 47, 2893-2896. | 0.8 | 2 |
| 65 | Formation of Nanoparticles of Organic Molecules by Liquid Laser Ablation. Materials Research Society Symposia Proceedings, 2012, 1455, 49. | 0.1 | 2 |
| 66 | Non-destructive inspection of semiconductor optical waveguide using optical coherence tomography with visible broadband light source. , 2017, , . | | 2 |
| 67 | Non-destructive and non-contact measurement of semiconductor optical waveguide using optical coherence tomography with a visible broadband light source. Japanese Journal of Applied Physics, 2018, 57, 08PE03. | 0.8 | 2 |
| 68 | In-situ estimation of emission wavelength of embedded InAs QDs using RHEED intensity measurements. Journal of Crystal Growth, 2022, 588, 126657. | 0.7 | 2 |
| 69 | Fabrication of periodic nanohole multilayer structure on silicon surface toward photonic crystal. Physica B: Condensed Matter, 2001, 308-310, 1222-1225. | 1.3 | 1 |
| 70 | Topology Optimization for Photonic Crystal Waveguide with Wide and Flat Bandwidths in Ultra-Fast All-Optical Switch (PC-SMZ). , 2006, , . | | 1 |
| 71 | Topology Optimization for Photonic Crystal Waveguide Intersection with Wide and Flat Bandwidths in Ultra-Fast All-Optical Switch (PC-SMZ). , 2006, , . | | 1 |
| 72 | Monolithic growth of InAs-QDs with different absorption wavelengths in different areas for integrated optical devices. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , . | 0.0 | 1 |

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|----|---|-----|-----------|
| 73 | Photonic crystal all-optical switches. , 2010, , 241-275. | | 1 |
| 74 | Evolution of nanophotonics from semiconductor photonic crystal device to metal/semiconductor plasmonic device. , 2010, , . | | 1 |
| 75 | InAs quantum-dots laser utilizing GaAs W1 type photonic-crystal slab line-defect waveguide. , 2011, , . | | 1 |
| 76 | Modification of optical response in quantum dots embedded in a photonic crystal waveguide via photonic band engineering. Materials Research Society Symposia Proceedings, 2012, 1438, 29. | 0.1 | 1 |
| 77 | Emission wavelength control of InAs/GaAs quantum dots using an As ₂ source for near-infrared broadband light source applications. Applied Physics Express, 2021, 14, 055501. | 1.1 | 1 |
| 78 | VLS Growth of Si nanowhiskers on a H-terminated Si{111} surface. Materials Research Society Symposia Proceedings, 1998, 536, 305. | 0.1 | 1 |
| 79 | Advanced Growth Techniques of InAs-system Quantum Dots for Integrated Nanophotonic Circuits. , 2008, , 529-551. | | 1 |
| 80 | Novel amorphization process in silicon induced by electron irradiation. Journal of Non-Crystalline Solids, 2002, 299-302, 793-797. | 1.5 | 0 |
| 81 | Nucleation and growth processes of silicon nanowires. Materials Research Society Symposia Proceedings, 2004, 832, 353. | 0.1 | 0 |
| 82 | Magnetic Properties of undoped and N-doped Zn _{1-x} Cr _x Te Grown by MBE. AIP Conference Proceedings, 2005, , . | 0.3 | 0 |
| 83 | Photonic Crystals and Quantum Dots: Towards Integrated Optics for Advanced Ultra-Fast All-Optical Signal Processing. , 2006, , . | | 0 |
| 84 | New Design for Wide/Flat Bandwidth in Photonic Crystal-Based SMZ All-Optical Device (PC-SMZ). , 2006, , . | | 0 |
| 85 | Magneto-optical study of ferromagnetic semiconductor (Zn,Cr)Te. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4102-4105. | 0.8 | 0 |
| 86 | Planar focusing lens grating for vertical coupling on 2D photonic crystal slab waveguide. , 2006, , . | | 0 |
| 87 | Topology Optimization for Photonic Crystal Waveguide Bends with Wide and Flat Bandwidths in Air-Bride type Photonic Crystal Slabs. , 2007, , . | | 0 |
| 88 | Selective Formation of High Density InAs Quantum Dot Arrays Using Templates Fabricated by the Nano-Jet Probe. Indium Phosphide and Related Materials Conference (IPRM), IEEE International Conference on, 2007, , . | 0.0 | 0 |
| 89 | InAs Quantum Dots Grown on Selective Areas with a Metal Mask for Photonic-Crystal-Based Ultra-Small and Ultra-Fast All Optical Devices. Indium Phosphide and Related Materials Conference (IPRM), IEEE International Conference on, 2007, , . | 0.0 | 0 |
| 90 | Design and fabrication of nano-photonics-based all-optical flip-flop switch. , 2008, , . | | 0 |

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| 91 | In situ Metal Mask for Selective Area Growth of Thin Epitaxial Layers. Japanese Journal of Applied Physics, 2008, 47, 2987-2990. | 0.8 | 0 |
| 92 | Nanophotonic technologies for innovative all- optical signal processor using photonic crystals and quantum dots. , 2009, , . | | 0 |
| 93 | Photonic Crystal and Quantum Dot Technologies for Ultra-small and Ultra-fast All-optical Flip-flop. ECS Transactions, 2009, 16, 31-37. | 0.3 | 0 |
| 94 | Nanophotonics technology for advanced quantum dot/photonic crystal device and metal/semiconductor plasmonic device. , 2010, , . | | 0 |
| 95 | Enhancement upconversion luminescence in InAs-quantum dots embedded GaAs photonic-crystal slab line-defect waveguide. , 2013, , . | | 0 |
| 96 | Spectral-domain optical coherence tomography with a white light developed for optical device fabrication. , 2015, , . | | 0 |
| 97 | Application of Liquid Laser Ablation: Organic Nanoparticle Formation and Hydrogen Gas Generation. , 0, , . | | 0 |
| 98 | Emission wavelength variation of InAs quantum dots grown on GaAs using As ₂ molecules in molecular beam epitaxy. , 2016, , . | | 0 |
| 99 | Preparation of Ag ₂ Se QDs with excellent aqueous dispersion stability by organic coating with aqueous ATRP. Polymer Bulletin, 2019, 76, 4753-4768. | 1.7 | 0 |
| 100 | OCT with a Visible Broadband Light Source Applied to High-Resolution Nondestructive Inspection for Semiconductor Optical Devices. , 0, , . | | 0 |
| 101 | Criterion for Removing a Delayed Peak from the Ultrafast Nonlinear Response of Photonic Crystal / Quantum Dot Waveguides. , 2007, , . | | 0 |
| 102 | In situ Metal Mask for Selective Area Growth of Thin Epitaxial Layers. , 2007, , . | | 0 |
| 103 | Optical-Nonlinearity-Induced Phase Shift via Selective Area Grown InAs-QDs in a Photonic Crystal Waveguide. , 2007, , . | | 0 |
| 104 | Acceleration of the refractive index response in nonlinear photonic crystal / quantum dot waveguides via the Purcell effect. , 2008, , . | | 0 |
| 105 | Selective-area growth of 4-color InAs-QD ensembles for broadband light source. , 2011, , . | | 0 |
| 106 | Nanophotonics Based on Semiconductor-Photonic Crystal/Quantum Dot and Metal-/Semiconductor-Plasmonics. IEICE Transactions on Electronics, 2012, E95-C, 178-187. | 0.3 | 0 |
| 107 | Growth and Optical Characterizations of InAs-QDs Emitting at 1 ^μ m with a Broadband Spectrum for a Light Source for Biomedical Optical Coherence Tomography. Zairyo/Journal of the Society of Materials Science, Japan, 2013, 62, 679-682. | 0.1 | 0 |
| 108 | Broadband near-infrared superluminescent diode based on stacked multi-color InAs/GaAs quantum dots. , 2013, , . | | 0 |

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|-----|---|-----|-----------|
| 109 | Optical Coherence Tomography Imaging by Using a Superluminescent Diode Based on InAs/GaAs Quantum Dots. , 2014, , . | | 0 |
| 110 | Broadband Gain Superluminescent Diode Based on Self-assembled InAs Quantum Dots with Segmented Contacts. , 2015, , . | | 0 |
| 111 | Development of a Broadband Superluminescent Diode Based on Self-Assembled Quantum Dots for Optical Coherence Tomography Applications. The Review of Laser Engineering, 2019, 47, 578. | 0.0 | 0 |
| 112 | Near-infrared dual-wavelength surface-emitting light source using InAs quantum dots resonant with vertical cavity modes. Japanese Journal of Applied Physics, 2022, 61, SD1003. | 0.8 | 0 |