# Masahiko Mori

List of Publications by Year
in descending order



| 113 | 1,320 | 361413 | 395702 |
|---|---|---|---|
| papers | citations | 20 h-index | 33 g-index |

| 113 | 113 | 113 | 1141 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Switching dynamics of silicon waveguide optical modulator driven by photothermally induced metal-insulator transition of vanadium dioxide cladding layer. Optics Express, 2020, 28, 37188. | 3.4 | 12 |
| 2 | Silicon waveguide optical modulator driven by metalâ€“insulator transition of vanadium dioxide cladding layer. Optics Express, 2019, 27, 4147. | 3.4 | 31 |
| 3 | 45-degree curved micro-mirror for vertical optical I/O of silicon photonics chip. Optics Express, 2019, 27, 19749. | 3.4 | 16 |
| 4 | High density optical card edge connector for polymer optical waveguide on printed circuit board. , 2018, , . | | 2 |
| 5 | Mirror-based polarization-insensitive broadband vertical optical coupling for Si waveguide. Japanese Journal of Applied Physics, 2017, 56, 090302. | 1.5 | 7 |
| 6 | Controlled initial orientation of liquid crystals in silicon optical switches with a groove array. , 2017, , . | | 0 |
| 7 | Compact and low-loss liquid crystal loaded Mach-Zehnder optical switch based on Si wire waveguide. IEICE Electronics Express, 2017, 14, 20170110-20170110. | 0.8 | 1 |
| 8 | Ultrahigh-Q photonic crystal nanocavities fabricated by CMOS process technologies. Optics Express, 2017, 25, 18165. | 3.4 | 41 |
| 9 | Mirror-based surface optical input/output technology with precise and arbitrary coupling angle for silicon photonic application. Japanese Journal of Applied Physics, 2017, 56, 04CH04. | 1.5 | 0 |
| 10 | Low-Loss Characteristics of a Multimode Polymer Optical Waveguide at 1.3 um Wavelength on an Electrical Hybrid LSI Package Substrate. , 2016, , . | | 5 |
| 11 | Raman scattering in hydrogenated amorphous silicon waveguides at telecommunication wavelengths. , 2016, , . | | 0 |
| 12 | Vertically Curved Si Waveguide Coupler with Low Loss and Flat Wavelength Window. Journal of Lightwave Technology, 2016, 34, 1567-1571. | 4.6 | 23 |
| 13 | Interlayer Polarization Beam Splitter Based on Asymmetrical Si Wire Directional Coupler. IEEE Photonics Technology Letters, 2016, 28, 1545-1548. | 2.5 | 7 |
| 14 | In-plane switching mode-based liquid-crystal hybrid Si wired Machâ€“Zehnder optical switch. Japanese Journal of Applied Physics, 2016, 55, 118003. | 1.5 | 7 |
| 15 | Broadband and Polarization-Independent Efficient Vertical Optical Coupling With 45Â° Mirror for Optical I/O of Si Photonics. Journal of Lightwave Technology, 2016, 34, 3012-3018. | 4.6 | 8 |
| 16 | 25-Gb/s Operation of a Polymer Optical Waveguide on an Electrical Hybrid LSI Package Substrate With Optical Card Edge Connector. Journal of Lightwave Technology, 2016, 34, 3006-3011. | 4.6 | 10 |
| 17 | Broadband and Polarization-Independent Efficient Vertical Optical Coupling With 45Â° Mirror for Optical I/O of Si Photonics. Journal of Lightwave Technology, 2016, 34, 978-984. | 4.6 | 8 |
| 18 | CMOS-compatible Vertical Si-waveguide Coupler Fabricated by Ion Implantation. , 2016, , . | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Hydrogenated amorphous silicon photonic devices on synthetic quartz glass substrate. , 2015, , . | | 0 |
| 20 | A method enabling height-control of chips for edge-emitting laser stacking. Japanese Journal of Applied Physics, 2015, 54, 04DB02. | 1.5 | 0 |
| 21 | Quantum Dot Laser for a Light Source of an Athermal Silicon Optical Interposer. Photonics, 2015, 2, 355-364. | 2.0 | 5 |
| 22 | Vertical silicon waveguide coupler bent by ion implantation. Optics Express, 2015, 23, 29449. | 3.4 | 33 |
| 23 | A 25-Gbps operation of polymer-based optical and electrical hybrid LSI package substrate with optical card edge connector. , 2015, , . | | 3 |
| 24 | Broadband and polarization-independent efficient vertical optical coupling with Si integrated 45 degree mirror. , 2015, , . | | 1 |
| 25 | Low-loss and low wavelength-dependence vertical interlayer transition for 3D silicon photonics. Optics Express, 2015, 23, 18602. | 3.4 | 23 |
| 26 | Spot-size converter with a SiO_2 spacer layer between tapered Si and SiON waveguides for fiber-to-chip coupling. Optics Express, 2015, 23, 21287. | 3.4 | 25 |
| 27 | Multi-channel Hybrid Integrated Light Source for Ultra-high-bandwidth Optical Interconnections and Its Structural Optimization for Low Power Consumption by Considering Thermal Interference between LD Arrays. Transactions of the Japan Institute of Electronics Packaging, 2014, 7, 94-103. | 0.4 | 6 |
| 28 | Over-1000-channel hybrid integrated light source with laser diode arrays on a silicon waveguide platform for ultra-high-bandwidth optical interconnections. , 2014, , . | | 3 |
| 29 | Carrier injection refractive index changes in low-temperature grown silicon waveguide. , 2014, , . | | 2 |
| 30 | Demonstration of 25-Gbps optical data links on silicon optical interposer using FPGA transceiver. , 2014, , . | | 4 |
| 31 | Athermal silicon optical interposers with quantum dot lasers operating from 25 to 125Â°C. Electronics Letters, 2014, 50, 1377-1378. | 1.0 | 0 |
| 32 | Silicon knife-edge taper fiber coupler using CMOS backend compatible process. , 2014, , . | | 1 |
| 33 | Optical-Time-Division Demultiplexing of 172 Gb/s to 43 Gb/s in a-Si:H Waveguides. IEEE Photonics Technology Letters, 2014, 26, 426-429. | 2.5 | 4 |
| 34 | Sub-1 dB/cm submicrometer-scale amorphous silicon waveguide for backend on-chip optical interconnect. Optics Express, 2014, 22, 4779. | 3.4 | 39 |
| 35 | Multichannel and high-density hybrid integrated light source with a laser diode array on a silicon optical waveguide platform for interchip optical interconnection. Photonics Research, 2014, 2, A19. | 7.0 | 32 |
| 36 | Multi-channel and high-density hybrid integrated light source by thermal management for low power consumption for ultra-high bandwidth optical interconnection. , 2014, , . | | 2 |

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|---|---|---|---|
| 37 | A Hybrid Integrated Light Source on a Silicon Platform Using a Trident Spot-Size Converter. Journal of Lightwave Technology, 2014, 32, 1329-1336. | 4.6 | 152 |
| 38 | Highly transpearent submicrometer-sclae amorphous silicon waveguide for backend optical interconnect. , 2014, , . | | 0 |
| 39 | Demonstration of over 1000-Channel Hybrid Integrated Light Source for Ultra-High Bandwidth Interchip Optical Interconnection. , 2014, , . | | 5 |
| 40 | Hybrid integration technology of laser source with laser diode arrays on silicon optical waveguide platform by flip-chip bonding for silicon photonics. , 2013, , . | | 3 |
| 41 | Compact and phase-error-robust multilayered AWG-based wavelength selective switch driven by a single LCOS. Optics Express, 2013, 21, 17131. | 3.4 | 17 |
| 42 | Observation of spontaneous Raman scattering in hydrogenated amorphous silicon wire waveguide at 1.55 Âμm. Electronics Letters, 2013, 49, 610-612. | 1.0 | 0 |
| 43 | Silicon knife-edge taper waveguide for ultralow-loss spot-size converter fabricated by photolithography. Applied Physics Letters, 2013, 102, . | 3.3 | 44 |
| 44 | First demonstration of a hybrid integrated light source on a Si platform using a quantum dot laser under wide temperature range. , 2013, , . | | 2 |
| 45 | 2.2 pJ/bit operation of hybrid integrated light source on a silicon optical interposer for optical interconnection. , 2013, , . | | 4 |
| 46 | MEMS mirror with slot structures suitable for flexible-grid WSS. IEICE Electronics Express, 2013, 10, 20120924-20120924. | 0.8 | 5 |
| 47 | Pattern-effect-free all-optical wavelength conversion using a hydrogenated amorphous silicon waveguide with ultra-fast carrier decay. Optics Letters, 2012, 37, 1382. | 3.3 | 37 |
| 48 | Basic Study of Coupling on Three-Dimensional Crossing of Si Photonic Wire Waveguide for Optical Interconnection on Inter or Inner Chip. Japanese Journal of Applied Physics, 2012, 51, 04DG12. | 1.5 | 4 |
| 49 | Demonstration of 125-Gbps optical interconnects integrated with lasers, optical splitters, optical modulators and photodetectors on a single silicon substrate. Optics Express, 2012, 20, B256. | 3.4 | 53 |
| 50 | High-density hybrid integrated light sources for photonics-electronics convergence system. , 2012, , . | | 0 |
| 51 | Nanometer-scale thickness control of amorphous silicon using isotropic wet-etching and low loss wire waveguide fabrication with the etched material. Applied Physics Letters, 2012, 100, 251108. | 3.3 | 23 |
| 52 | Ultranarrow Silicon Inverse Taper Waveguide Fabricated with Double-Patterning Photolithography for Low-Loss Spot-Size Converter. Applied Physics Express, 2012, 5, 052202. | 2.4 | 22 |
| 53 | Plasma deposited µc-Si:H wire waveguide. , 2012, , . | | 0 |
| 54 | Analysis of vertical coupling between a 2D photonic crystal cavity and a hydrogenated-amorphous-silicon-wire waveguide. Photonics and Nanostructures - Fundamentals and Applications, 2012, 10, 287-295. | 2.0 | 3 |

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| 55 | Transmission Characteristics of Hydrogenated Microcrystalline Silicon Wire Waveguide at a Wavelength of 1.55 $mu$m. Applied Physics Express, 2012, 5, 082501. | 2.4 | 4 |
| 56 | Multi-Channel and High-Density Hybrid Integrated Light Source on Silicon Optical Waveguide Platform. , 2012, , . | | 3 |
| 57 | Multi-Channel and High-Density Hybrid Integrated Light Source on Silicon Optical Waveguide Platform. , 2012, , . | | 1 |
| 58 | Basic Study of Coupling on Three-Dimensional Crossing of Si Photonic Wire Waveguide for Optical Interconnection on Inter or Inner Chip. Japanese Journal of Applied Physics, 2012, 51, 04DG12. | 1.5 | 2 |
| 59 | Fine thickness control of amorphous silicon by wet-etching for low loss wire waveguide. , 2011, , . | | 1 |
| 60 | High density hybrid integrated light source with a laser diode array on a silicon optical waveguide platform for inter-chip optical interconnection. , 2011, , . | | 29 |
| 61 | Phase error compensation for multilayered AWG in LCOS-based WSS. IEICE Electronics Express, 2011, 8, 2054-2060. | 0.8 | 2 |
| 62 | Reduced Lasing Threshold in Thiophene/Phenylene Co-Oligomer Crystalline Microdisks. Applied Physics Express, 2010, 3, 012702. | 2.4 | 20 |
| 63 | Fast aberration-correcting algorithm for an SLM-based optical switch. IEICE Electronics Express, 2010, 7, 1728-1734. | 0.8 | 2 |
| 64 | Microdisk lasers and field effect transistors of thiophene/phenylene co-oligomers by using high temperature deposition method. Organic Electronics, 2010, 11, 1192-1198. | 2.6 | 27 |
| 65 | Hydrogenated Amorphous Silicon Carbide Optical Waveguide for Telecommunication Wavelength Applications. Applied Physics Express, 2010, 3, 122201. | 2.4 | 20 |
| 66 | Highly stacked InGaAs quantum dot structures grown with two species of As. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C3C4-C3C8. | 1.2 | 19 |
| 67 | Four-wave mixing in hydrogenated amorphous silicon waveguides at 1.55 µm. , 2010, , . | | 0 |
| 68 | Design of two-dimensional photonic crystal nanocavities with low-refractive-index material cladding. Journal of Optics (United Kingdom), 2010, 12, 015108. | 2.2 | 4 |
| 69 | Analysis of two-dimensional photonic crystal L-type cavities with low-refractive-index material cladding. Journal of Optics (United Kingdom), 2010, 12, 075101. | 2.2 | 14 |
| 70 | Highly Stacked and High-Quality Quantum Dots Fabricated by Intermittent Deposition of InGaAs. Japanese Journal of Applied Physics, 2010, 49, 030211. | 1.5 | 24 |
| 71 | Ultrafast nonlinear effects in hydrogenated amorphous silicon wire waveguide. Optics Express, 2010, 18, 5668. | 3.4 | 99 |
| 72 | Miniband formation in InGaAs quantum dot superlattice. Applied Physics Letters, 2010, 97, . | 3.3 | 41 |

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| 73 | Ultra low-power and compact photonic crystal optical switch controlled by micro-heater directly attached on PhC layer. , 2009, , . | | 0 |
| 74 | Low threshold current operation of 1.3 µm Quantum Dots Laser with high mirror loss structure. , 2009, , . | | 0 |
| 75 | Laser-plasma scanning 3D display for putting digital contents in free space. , 2008, , . | | 29 |
| 76 | Spectral interferometric optical coherence tomography with nonlinear Î²-barium borate time gating. Optics Letters, 2002, 27, 403. | 3.3 | 22 |
| 77 | Smart pixels in a focal-plane image compression system. Optics and Laser Technology, 2002, 34, 429-437. | 4.6 | 0 |
| 78 | Phase-resolved correlation and its application to analysis of low-coherence interferograms. Optics Letters, 2001, 26, 90. | 3.3 | 9 |
| 79 | Analysis of spatiotemporal coupling in a femtosecond pulse shaper by the Wigner distribution function. Optical Engineering, 2001, 40, 1717. | 1.0 | 0 |
| 80 | Optical coherence tomography by spatio-temporal joint transform correlator. , 2000, 4087, 1282. | | 1 |
| 81 | <title>Optical learning neural network with fuzzy controlling</title>. , 2000, 4089, 676. | | 1 |
| 82 | <title>Pattern recognition neural-net by spatial mapping of biology visual field</title>. , 2000, , . | | 1 |
| 83 | <title>Spatio-temporal joint pulse shaper: analysis of the property by Wigner distribution function</title>. , 2000, 4089, 836. | | 0 |
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| 86 | Terminal Attractor Optical Associative Memory for Pattern Recognition. Japanese Journal of Applied Physics, 2000, 39, 908-911. | 1.5 | 8 |
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| 88 | Improvement of the generalization capability for a pattern-recognition neural network that uses a Gaussian-synapse neuron model. Applied Optics, 2000, 39, 770. | 2.1 | 2 |
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| 91 | Terminal attractor optical associative memory with adaptive control parameter. Optics Communications, 1998, 151, 353-365. | 2.1 | 3 |
| 92 | Optical learning neural network with a Pockels readout optical modulator. Applied Optics, 1998, 37, 2852. | 2.1 | 9 |
| 93 | Optical image transformations for fully parallel optical analog-to-digital conversion. Applied Optics, 1998, 37, 3607. | 2.1 | 3 |
| 94 | <title>Optical learning neural networks with two-dimensional structure</title>. , 1998, 3402, 226. | | 4 |
| 95 | <title>Real-time face recognition system with optical learning neural network</title>. , 1998, 3466, 240. | | 0 |
| 96 | Photon wall: three-dimensional control of femtosecond light pulse. , 1998, 3491, 700. | | 0 |
| 97 | Simplification of Space-Variant Parallel Logic Operations Using the Temporal Method. Optical Review, 1997, 4, 305-308. | 2.0 | 1 |
| 98 | Method to Determine the Effective Group Refractive Index of an Optical Waveguide Using a Steplike Optical Frequency Sweep Generator. Japanese Journal of Applied Physics, 1995, 34, L526-L528. | 1.5 | 0 |
| 99 | Optical Learning Neural Network Using a Selfoc Microlens Array for Pattern Recognition. Optical Review, 1994, 1, 44-46. | 2.0 | 5 |
| 100 | Reversal-input superposing technique for all-optical neural networks. Applied Optics, 1994, 33, 1477. | 2.1 | 8 |
| 101 | <title>Renewal method of weight matrix in optical neural network</title>. , 1993, , . | | 2 |
| 102 | Optical Learning Neural Network Using Selfoc Microlens Array. Japanese Journal of Applied Physics, 1992, 31, 1689-1693. | 1.5 | 20 |
| 103 | Binary logic operations using a beam-scanning laser diode. Optical Engineering, 1992, 31, 799. | 1.0 | 1 |
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| 105 | Transverse Mode Characteristics of a DBR-Surface Emitting Laser with Buried Heterostructure. Japanese Journal of Applied Physics, 1991, 30, 3879-3882. | 1.5 | 18 |
| 106 | Optical Implementation of Semantic Networks Based on Association. Japanese Journal of Applied Physics, 1990, 29, L1321-L1324. | 1.5 | 2 |
| 107 | Beam Scanning Binary Logic. Japanese Journal of Applied Physics, 1990, 29, L1268-L1269. | 1.5 | 2 |
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| 110 | Optical and electrical properties of C+-implanted GaAs. Nuclear Instruments & Methods in Physics Research B, 1989, 39, 457-460. | 1.4 | 3 |
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