

# Susumu Noda

## List of Publications by Year in descending order

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278  
papers

18,440  
citations

23500

58  
h-index

12233

133  
g-index

279  
all docs

279  
docs citations

279  
times ranked

8706  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | High-Q photonic nanocavity in a two-dimensional photonic crystal. <i>Nature</i> , 2003, 425, 944-947.  | 13.7 | 2,493     |
| 2  | Ultra-high-Q photonic double-heterostructure nanocavity. <i>Nature Materials</i> , 2005, 4, 207-210.   | 13.3 | 1,246     |
| 3  | Full Three-Dimensional Photonic Bandgap Crystals at Near-Infrared Wavelengths. <i>Science</i> , 2000, 289, 604-606.  | 6.0  | 1,042     |
| 4  | Trapping and emission of photons by a single defect in a photonic bandgap structure. <i>Nature</i> , 2000, 407, 608-610.   | 13.7 | 1,037     |
| 5  | Spontaneous-emission control by photonic crystals and nanocavities. <i>Nature Photonics</i> , 2007, 1, 449-458.  | 15.6 | 842       |
| 6  | Coherent two-dimensional lasing action in surface-emitting laser with triangular-lattice photonic crystal structure. <i>Applied Physics Letters</i> , 1999, 75, 316-318. | 1.5  | 650       |
| 7  | Polarization Mode Control of Two-Dimensional Photonic Crystal Laser by Unit Cell Structure Design. <i>Science</i> , 2001, 293, 1123-1125.                                | 6.0  | 583       |
| 8  | Fine-tuned high-Q photonic-crystal nanocavity. <i>Optics Express</i> , 2005, 13, 1202.   | 1.7  | 488       |
| 9  | Watt-class high-power, high-beam-quality photonic-crystal lasers. <i>Nature Photonics</i> , 2014, 8, 406-411.  | 15.6 | 429       |
| 10 | Waveguides and waveguide bends in two-dimensional photonic crystal slabs. <i>Physical Review B</i> , 2000, 62, 4488-4492.  | 1.1  | 379       |
| 11 | GaN Photonic-Crystal Surface-Emitting Laser at Blue-Violet Wavelengths. <i>Science</i> , 2008, 319, 445-447.   | 6.0  | 358       |
| 12 | Photonic Devices Based on In-Plane Hetero Photonic Crystals. <i>Science</i> , 2003, 300, 1537-1537.  | 6.0  | 282       |
| 13 | Lasers producing tailored beams. <i>Nature</i> , 2006, 441, 946-946.   | 13.7 | 261       |
| 14 | Conversion of broadband to narrowband thermal emission through energy recycling. <i>Nature Photonics</i> , 2012, 6, 535-539.   | 15.6 | 256       |
| 15 | Analytical Perspective for Bound States in the Continuum in Photonic Crystal Slabs. <i>Physical Review Letters</i> , 2014, 113, 037401.                                  | 2.9  | 249       |
| 16 | Multidirectionally distributed feedback photonic crystal lasers. <i>Physical Review B</i> , 2002, 65, .  | 1.1  | 241       |
| 17 | Dynamic control of the Q factor in a photonic crystal nanocavity. <i>Nature Materials</i> , 2007, 6, 862-865.  | 13.3 | 241       |
| 18 | Strong coupling between distant photonic nanocavities and its dynamic control. <i>Nature Photonics</i> , 2012, 6, 56-61.   | 15.6 | 219       |

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|----|---|------|-----------|
| 19 | A micrometre-scale Raman silicon laser with a microwatt threshold. <i>Nature</i> , 2013, 498, 470-474.  | 13.7 | 218       |
| 20 | APPLIED PHYSICS: Seeking the Ultimate Nanolaser. <i>Science</i> , 2006, 314, 260-261.   | 6.0  | 212       |
| 21 | Analysis of the experimental Q factors (~ 1 million) of photonic crystal nanocavities. <i>Optics Express</i> , 2006, 14, 1996.  | 1.7  | 205       |
| 22 | On-chip beam-steering photonic-crystal lasers. <i>Nature Photonics</i> , 2010, 4, 447-450.  | 15.6 | 199       |
| 23 | Highly confined waveguides and waveguide bends in three-dimensional photonic crystal. <i>Applied Physics Letters</i> , 1999, 75, 3739-3741.   | 1.5  | 188       |
| 24 | Photonic crystal nanocavity with a Q-factor of ~9 million. <i>Optics Express</i> , 2014, 22, 916.   | 1.7  | 173       |
| 25 | Wider bandwidth with high transmission through waveguide bends in two-dimensional photonic crystal slabs. <i>Applied Physics Letters</i> , 2002, 80, 1698-1700.                       | 1.5  | 169       |
| 26 | Double-lattice photonic-crystal resonators enabling high-brightness semiconductor lasers with symmetric narrow-divergence beams. <i>Nature Materials</i> , 2019, 18, 121-128.         | 13.3 | 157       |
| 27 | Room temperature continuous wave operation of a surface-emitting two-dimensional photonic crystal diode laser. <i>Optics Express</i> , 2004, 12, 1562.                                | 1.7  | 156       |
| 28 | Photonic crystal nanocavity with a Q factor exceeding eleven million. <i>Optics Express</i> , 2017, 25, 1769.   | 1.7  | 156       |
| 29 | Optimization of photonic crystal nanocavities based on deep learning. <i>Optics Express</i> , 2018, 26, 32704.  | 1.7  | 144       |
| 30 | In-plane-type channel drop filter in a two-dimensional photonic crystal slab. <i>Applied Physics Letters</i> , 2004, 84, 2226-2228.   | 1.5  | 136       |
| 31 | Surface-emitting channel drop filters using single defects in two-dimensional photonic crystal slabs. <i>Applied Physics Letters</i> , 2001, 79, 2690-2692.                           | 1.5  | 134       |
| 32 | Investigation of high-Q channel drop filters using donor-type defects in two-dimensional photonic crystal slabs. <i>Applied Physics Letters</i> , 2003, 83, 1512-1514.                | 1.5  | 126       |
| 33 | Theoretical investigation of a two-dimensional photonic crystal slab with truncated cone air holes. <i>Applied Physics Letters</i> , 2003, 82, 1661-1663.                             | 1.5  | 125       |
| 34 | Optical properties of three-dimensional photonic crystals based on III-V semiconductors at infrared to near-infrared wavelengths. <i>Applied Physics Letters</i> , 1999, 75, 905-907. | 1.5  | 120       |
| 35 | Ultrahigh-Q Nanocavities in Two-Dimensional Photonic Crystal Slabs. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2006, 12, 1123-1134.                              | 1.9  | 115       |
| 36 | Design of Photonic Crystal Nanocavity With Q-Factor of $\sim 10^9$ . <i>Journal of Lightwave Technology</i> , 2008, 26, 1532-1539.  | 2.7  | 112       |

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|----|--|------|-----------|
| 37 | Photonic-Crystal Surface-Emitting Lasers: Review and Introduction of Modulated-Photonic Crystals. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-7.                         | 1.9  | 111       |
| 38 | Lasing band-edge identification for a surface-emitting photonic crystal laser. IEEE Journal on Selected Areas in Communications, 2005, 23, 1335-1340.  | 9.7  | 106       |
| 39 | Design of a channel drop filter by using a donor-type cavity with high-quality factor in a two-dimensional photonic crystal slab. Applied Physics Letters, 2003, 82, 1341-1343.                  | 1.5  | 101       |
| 40 | Three-dimensional coupled-wave model for square-lattice photonic crystal lasers with transverse electric polarization: A general approach. Physical Review B, 2011, 84, .                        | 1.1  | 101       |
| 41 | Demonstration of two-dimensional photonic crystals based on silicon carbide. Optics Express, 2011, 19, 11084.  | 1.7  | 99        |
| 42 | Compositional inhomogeneity and immiscibility of a GaInN ternary alloy. Applied Physics Letters, 1997, 71, 906-908.  | 1.5  | 98        |
| 43 | Statistical studies of photonic heterostructure nanocavities with an average Q factor of three million. Optics Express, 2011, 19, 11916.   | 1.7  | 97        |
| 44 | Partially disordered photonic-crystal thin films for enhanced and robust photovoltaics. Applied Physics Letters, 2012, 100, .  | 1.5  | 93        |
| 45 | Effects of fluctuation in air hole radii and positions on optical characteristics in photonic crystal heterostructure nanocavities. Physical Review B, 2009, 79, .                               | 1.1  | 86        |
| 46 | Alignment and stacking of semiconductor photonic bandgaps by wafer-fusion. Journal of Lightwave Technology, 1999, 17, 1948-1955.   | 2.7  | 85        |
| 47 | Two-dimensional photonic-crystal-slab channel-drop filter with flat-top response. Optics Express, 2005, 13, 2512.  | 1.7  | 85        |
| 48 | Photonic crystal efficiency boost. Nature Photonics, 2009, 3, 129-130.   | 15.6 | 84        |
| 49 | Higher-order vector beams produced by photonic-crystal lasers. Optics Express, 2011, 19, 11963.  | 1.7  | 82        |
| 50 | Three-dimensional coupled-wave analysis for square-lattice photonic crystal surface emitting lasers with transverse-electric polarization: finite-size effects. Optics Express, 2012, 20, 15945. | 1.7  | 81        |
| 51 | Realization of three-dimensional guiding of photons in photonic crystals. Nature Photonics, 2013, 7, 133-137.  | 15.6 | 80        |
| 52 | Ultra-high-Q photonic crystal nanocavities based on 4H silicon carbide. Optica, 2019, 6, 991.  | 4.8  | 78        |
| 53 | Highly efficient in-plane channel drop filter in a two-dimensional heterophotonic crystal. Applied Physics Letters, 2005, 86, 241101.  | 1.5  | 75        |
| 54 | Second-harmonic generation in a silicon-carbide-based photonic crystal nanocavity. Optics Letters, 2014, 39, 1768.   | 1.7  | 72        |

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|----|--|------|-----------|
| 55 | Single-peak narrow-bandwidth mid-infrared thermal emitters based on quantum wells and photonic crystals. <i>Applied Physics Letters</i> , 2013, 102, .                                 | 1.5  | 71        |
| 56 | Experimental demonstration of complete photonic band gap in two-dimensional photonic crystal slabs. <i>Applied Physics Letters</i> , 2005, 87, 061107.                                 | 1.5  | 65        |
| 57 | Time-domain measurement of picosecond light-pulse propagation in a two-dimensional photonic crystal-slab waveguide. <i>Applied Physics Letters</i> , 2004, 84, 4690-4692.              | 1.5  | 62        |
| 58 | Near-infrared-to-visible highly selective thermal emitters based on an intrinsic semiconductor. <i>Science Advances</i> , 2016, 2, e1600499.   | 4.7  | 61        |
| 59 | Recent Progresses and Future Prospects of Two- and Three-Dimensional Photonic Crystals. <i>Journal of Lightwave Technology</i> , 2006, 24, 4554-4567.                                  | 2.7  | 60        |
| 60 | Silicon carbide-based photonic crystal nanocavities for ultra-broadband operation from infrared to visible wavelengths. <i>Applied Physics Letters</i> , 2011, 99, 201102.             | 1.5  | 59        |
| 61 | Multichannel add/drop filter based on in-plane hetero photonic Crystals. <i>Journal of Lightwave Technology</i> , 2005, 23, 1449-1455.   | 2.7  | 54        |
| 62 | Coupled-wave model for square-lattice two-dimensional photonic crystal with transverse-electric-like mode. <i>Applied Physics Letters</i> , 2006, 89, 021101.                          | 1.5  | 54        |
| 63 | Photonic-crystal lasers with two-dimensionally arranged gain and loss sections for high-peak-power short-pulse operation. <i>Nature Photonics</i> , 2021, 15, 311-318.                 | 15.6 | 53        |
| 64 | Accurate alignment of a photonic crystal nanocavity with an embedded quantum dot based on optical microscopic photoluminescence imaging. <i>Applied Physics Letters</i> , 2013, 102, . | 1.5  | 52        |
| 65 | Dually modulated photonic crystals enabling high-power high-beam-quality two-dimensional beam scanning lasers. <i>Nature Communications</i> , 2020, 11, 3487.                          | 5.8  | 48        |
| 66 | Coupled-Wave Theory for Square-Lattice Photonic Crystal Lasers With TE Polarization. <i>IEEE Journal of Quantum Electronics</i> , 2010, 46, 788-795.                                   | 1.0  | 47        |
| 67 | Analysis of coupling between two-dimensional photonic crystal waveguide and external waveguide. <i>Applied Physics Letters</i> , 2002, 81, 3729-3731.                                  | 1.5  | 45        |
| 68 | Characterization of line-defect-waveguide lasers in two-dimensional photonic-crystal slabs. <i>Applied Physics Letters</i> , 2004, 84, 5395-5397.                                      | 1.5  | 45        |
| 69 | Role of interfaces in heterophotonic crystals for manipulation of photons. <i>Physical Review B</i> , 2005, 71, .  | 1.1  | 43        |
| 70 | Improvement in the quality factors for photonic crystal nanocavities via visualization of the leaky components. <i>Optics Express</i> , 2016, 24, 9541.                                | 1.7  | 42        |
| 71 | Photonic-crystal lasers with high-quality narrow-divergence symmetric beams and their application to LiDAR. <i>JPhys Photonics</i> , 2021, 3, 022006.                                  | 2.2  | 42        |
| 72 | Ultrahigh-Q photonic crystal nanocavities fabricated by CMOS process technologies. <i>Optics Express</i> , 2017, 25, 18165.  | 1.7  | 41        |

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|----|---|-----|-----------|
| 73 | Iterative optimization of photonic crystal nanocavity designs by using deep neural networks. Nanophotonics, 2019, 8, 2243-2256.   | 2.9 | 41        |
| 74 | On-demand transfer of trapped photons on a chip. Science Advances, 2016, 2, e1501690.   | 4.7 | 39        |
| 75 | General recipe to realize photonic-crystal surface-emitting lasers with 100-W-to-1-kW single-mode operation. Nature Communications, 2022, 13, .                                       | 5.8 | 39        |
| 76 | Analysis of high-Q photonic crystal L3 nanocavities designed by visualization of the leaky components. Optics Express, 2017, 25, 367.   | 1.7 | 37        |
| 77 | Investigation of a channel-add/drop-filtering device using acceptor-type point defects in a two-dimensional photonic-crystal slab. Applied Physics Letters, 2003, 83, 407-409.        | 1.5 | 36        |
| 78 | Ultra-compact 32-channel drop filter with 100 GHz spacing. Optics Express, 2014, 22, 4692.  | 1.7 | 35        |
| 79 | Dynamic wavelength tuning of channel-drop device in two-dimensional photonic crystal slab. Electronics Letters, 2005, 41, 37.   | 0.5 | 34        |
| 80 | Suppression of multiple photon absorption in a SiC photonic crystal nanocavity operating at 155 $\mu$ m. Optics Express, 2012, 20, 14789.   | 1.7 | 34        |
| 81 | Ultrahigh-Q photonic crystal nanocavities in wide optical telecommunication bands. Optics Express, 2012, 20, 22743.   | 1.7 | 33        |
| 82 | Investigation of short wavelength intersubband transitions in InGaAs/AlAs quantum wells on GaAs substrate. Journal of Applied Physics, 1997, 82, 3385-3391.                           | 1.1 | 32        |
| 83 | Pump-probe measurement of ultrafast all-optical modulation based on intersubband transition in n-doped quantum wells. Applied Physics Letters, 2000, 77, 19-21.                       | 1.5 | 32        |
| 84 | Three-dimensional photonic crystals based on double-angled etching and wafer-fusion techniques. Applied Physics Letters, 2006, 89, 123106.  | 1.5 | 31        |
| 85 | Observation of ultrafast all-optical modulation based on intersubband transition in n-doped quantum wells by using free electron laser. Applied Physics Letters, 1996, 69, 4136-4138. | 1.5 | 30        |
| 86 | Spectrally selective thermal radiation based on intersubband transitions and photonic crystals. Optics Express, 2009, 17, 19190.  | 1.7 | 30        |
| 87 | Progress in Photonic-Crystal Surface-Emitting Lasers. Photonics, 2019, 6, 96.   | 0.9 | 29        |
| 88 | High-Efficiency Thermophotovoltaic System That Employs an Emitter Based on a Silicon Rod-Type Photonic Crystal. ACS Photonics, 2020, 7, 80-87.  | 3.2 | 29        |
| 89 | Controlling vertical optical confinement in two-dimensional surface-emitting photonic-crystal lasers by shape of air holes. Optics Express, 2008, 16, 18485.                          | 1.7 | 28        |
| 90 | Raman shift and strain effect in high-Q photonic crystal silicon nanocavity. Optics Express, 2015, 23, 3951.  | 1.7 | 27        |

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|-----|---|------|-----------|
| 91  | Comprehensive analysis of photonic-crystal surface-emitting lasers via time-dependent three-dimensional coupled-wave theory. <i>Physical Review B</i> , 2019, 99, .                           | 1.1  | 27        |
| 92  | Analysis of a Line-Defect Waveguide on a Silicon-on-Insulator Two-Dimensional Photonic-Crystal Slab. <i>Journal of Lightwave Technology</i> , 2004, 22, 2787-2792.                            | 2.7  | 26        |
| 93  | High-Q resonant modes in a photonic crystal heterostructure nanocavity and applicability to a Raman silicon laser. <i>Physical Review B</i> , 2013, 88, .                                     | 1.1  | 26        |
| 94  | Photonic Crystal Devices in Silicon Photonics. <i>Proceedings of the IEEE</i> , 2018, 106, 2183-2195.   | 16.4 | 26        |
| 95  | Integrated Near-Field Thermophotovoltaic Device Overcoming Blackbody Limit. <i>ACS Photonics</i> , 2021, 8, 2466-2472.  | 3.2  | 26        |
| 96  | High-Precision Alignment and Bonding System for the Fabrication of 3-D Nanostructures. <i>Journal of Microelectromechanical Systems</i> , 2007, 16, 1140-1144.                                | 1.7  | 25        |
| 97  | Glass-embedded two-dimensional silicon photonic crystal devices with a broad bandwidth waveguide and a high quality nanocavity. <i>Optics Express</i> , 2010, 18, 19361.                      | 1.7  | 25        |
| 98  | Higher-order resonant modes in a photonic heterostructure nanocavity. <i>Applied Physics Letters</i> , 2008, 92, .  | 1.5  | 24        |
| 99  | On-chip integration and high-speed switching of multi-wavelength narrowband thermal emitters. <i>Applied Physics Letters</i> , 2016, 108, .   | 1.5  | 24        |
| 100 | Fabrication of photonic crystal structures by tertiary-butyl arsine-based metal-organic vapor-phase epitaxy for photonic crystal lasers. <i>Applied Physics Express</i> , 2016, 9, 062702.    | 1.1  | 24        |
| 101 | Resonant-Wavelength Control of Nanocavities by Nanometer-Scaled Adjustment of Two-Dimensional Photonic Crystal Slab Structures. <i>IEEE Photonics Technology Letters</i> , 2008, 20, 532-534. | 1.3  | 23        |
| 102 | Impact of nonpolar AlGaIn quantum wells on deep ultraviolet laser diodes. <i>Journal of Applied Physics</i> , 2011, 110, 043115.  | 1.1  | 23        |
| 103 | Photonic crystal microcrystalline silicon solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2015, 23, 1475-1483.   | 4.4  | 23        |
| 104 | Phase-shift effect on a two-dimensional surface-emitting photonic-crystal laser. <i>Applied Physics Letters</i> , 2005, 86, 111113.   | 1.5  | 22        |
| 105 | Symmetrically glass-clad photonic crystal nanocavities with ultrahigh quality factors. <i>Optics Letters</i> , 2011, 36, 91.  | 1.7  | 22        |
| 106 | Needle-like focus generation by radially polarized halo beams emitted by photonic-crystal ring-cavity laser. <i>Applied Physics Letters</i> , 2012, 101, .                                    | 1.5  | 22        |
| 107 | Electrical Modulation of Narrowband GaN/AlGaIn Quantum-Well Photonic Crystal Thermal Emitters in Mid-Wavelength Infrared. <i>ACS Photonics</i> , 2019, 6, 1565-1571.                          | 3.2  | 21        |
| 108 | Design of photonic-crystal surface-emitting lasers with enhanced in-plane optical feedback for high-speed operation. <i>Optics Express</i> , 2020, 28, 5050.                                  | 1.7  | 21        |

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|-----|---|------|-----------|
| 109 | Enhancement of photocurrent in ultrathin active-layer photodetecting devices with photonic crystals. <i>Applied Physics Letters</i> , 2012, 101, .  | 1.5  | 20        |
| 110 | Air-Hole Retained Growth by Molecular Beam Epitaxy for Fabricating GaAs-Based Photonic-Crystal Lasers. <i>Applied Physics Express</i> , 2013, 6, 042002.  | 1.1  | 20        |
| 111 | Experimental Demonstration of Quasi-resonant Absorption in Silicon Thin Films for Enhanced Solar Light Trapping. <i>ACS Photonics</i> , 2014, 1, 304-309.   | 3.2  | 20        |
| 112 | High-Q-factor nanobeam photonic crystal cavities in bulk silicon carbide. <i>Applied Physics Letters</i> , 2018, 113, .   | 1.5  | 20        |
| 113 | Strongly asymmetric wavelength dependence of optical gain in nanocavity-based Raman silicon lasers. <i>Optica</i> , 2018, 5, 1256.  | 4.8  | 20        |
| 114 | Implementing a Raman silicon nanocavity laser for integrated optical circuits by using a (100) SOI wafer with a 45-degree-rotated top silicon layer. <i>OSA Continuum</i> , 2019, 2, 2098.                          | 1.8  | 20        |
| 115 | Carrier relaxation dynamics in an ultrafast all-optical modulator using an intersubband transition. <i>Applied Physics Letters</i> , 2001, 79, 4509-4511.   | 1.5  | 19        |
| 116 | Line-defect waveguide laser integrated with a point defect in a two-dimensional photonic crystal slab. <i>Applied Physics Letters</i> , 2005, 86, 171106.   | 1.5  | 19        |
| 117 | Controlled spontaneous-emission phenomena in semiconductor slabs with a two-dimensional photonic bandgap. <i>Journal of Optics</i> , 2006, 8, S131-S138.  | 1.5  | 19        |
| 118 | Green GaInN photonic-crystal light-emitting diodes with small surface recombination effect. <i>Applied Physics Letters</i> , 2011, 98, .  | 1.5  | 19        |
| 119 | Lasing Dynamics of Optically-Pumped Ultralow-Threshold Raman Silicon Nanocavity Lasers. <i>Physical Review Applied</i> , 2018, 10, .  | 1.5  | 19        |
| 120 | Pump and probe measurement of intersubband relaxation time in short-wavelength intersubband transition. <i>Applied Physics Letters</i> , 1999, 74, 1418-1420.   | 1.5  | 18        |
| 121 | Ultrahigh-Q Photonic Nanocavity Devices on a Dual Thickness SOI Substrate Operating at Both 1.31 and 1.55 $\mu\text{m}$ Telecommunication Wavelength Bands. <i>Laser and Photonics Reviews</i> , 2019, 13, 1800258. | 4.4  | 18        |
| 122 | Continuous-wave lasing operation of 1.3- $\mu\text{m}$ wavelength InP-based photonic crystal surface-emitting lasers using MOVPE regrowth. <i>Optics Express</i> , 2020, 28, 35483.                                 | 1.7  | 18        |
| 123 | Reduction in surface recombination and enhancement of light emission in silicon photonic crystals treated by high-pressure water-vapor annealing. <i>Applied Physics Letters</i> , 2010, 97, 121111.                | 1.5  | 16        |
| 124 | Mode stability in photonic-crystal surface-emitting lasers with large $\hat{\rho}$ 1DL. <i>Applied Physics Letters</i> , 2014, 104, .   | 1.5  | 16        |
| 125 | Electrically controlled on-demand photon transfer between high-Q photonic crystal nanocavities on a silicon chip. <i>Nature Photonics</i> , 2022, 16, 113-118.  | 15.6 | 16        |
| 126 | Tandem photonic-crystal thin films surpassing Lambertian light-trapping limit over broad bandwidth and angular range. <i>Applied Physics Letters</i> , 2014, 104, .   | 1.5  | 15        |



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|-----|---|-----|-----------|
| 127 | Band structure observation of 2D photonic crystal with various V-shaped air-hole arrangements. IEICE Electronics Express, 2009, 6, 966-971.   | 0.3 | 14        |
| 128 | Air-hole design in a vertical direction for high-power two-dimensional photonic-crystal surface-emitting lasers. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1204.        | 0.9 | 14        |
| 129 | Sub-100-nW-threshold Raman silicon laser designed by a machine-learning method that optimizes the product of the cavity Q-factors. Optics Express, 2021, 29, 17053.                                   | 1.7 | 14        |
| 130 | Thermal management for CW operation of large-area double-lattice photonic-crystal lasers. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 3882.                               | 0.9 | 14        |
| 131 | Linearly-Polarized Single-Lobed Beam in a Surface-Emitting Photonic-Crystal Laser. Applied Physics Express, 0, 1, 062002.   | 1.1 | 12        |
| 132 | Structural Optimization of Photonic Crystals for Enhancing Optical Absorption of Thin Film Silicon Solar Cell Structures. IEEE Photonics Journal, 2014, 6, 1-10.                                      | 1.0 | 12        |
| 133 | Photonic Crystal Lasers Fabricated by MOVPE Based on Organic Arsenic Source. IEEE Photonics Technology Letters, 2017, 29, 1739-1742.  | 1.3 | 12        |
| 134 | Characterization of a distributed feedback laser with air/semiconductor gratings embedded by the wafer fusion technique. IEEE Journal of Quantum Electronics, 1999, 35, 1277-1283.                    | 1.0 | 11        |
| 135 | Adiabatic transfer scheme of light between strongly coupled photonic crystal nanocavities. Physical Review B, 2013, 87, .   | 1.1 | 11        |
| 136 | Detrimental Fluctuation of Frequency Spacing Between the Two High-Quality Resonant Modes in a Raman Silicon Nanocavity Laser. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-12. | 1.9 | 11        |
| 137 | Statistical evaluation of Q factors of fabricated photonic crystal nanocavities designed by using a deep neural network. Applied Physics Express, 2020, 13, 012002.                                   | 1.1 | 11        |
| 138 | Fabrication and characterization of an L3 nanocavity designed by an iterative machine-learning method. APL Photonics, 2021, 6, .  | 3.0 | 11        |
| 139 | Detection of negatively ionized air by using a Raman silicon nanocavity laser. Optics Express, 2021, 29, 16228.   | 1.7 | 11        |
| 140 | Valence band effective mass of non-c-plane nitride heterostructures. Journal of Applied Physics, 2010, 107, .   | 1.1 | 10        |
| 141 | Fabrication of 3D Photonic Crystals toward Arbitrary Manipulation of Photons in Three Dimensions. Photonics, 2016, 3, 36.   | 0.9 | 10        |
| 142 | Demonstration of a mid-wavelength infrared narrowband thermal emitter based on GaN/AlGaIn quantum wells and a photonic crystal. Applied Physics Letters, 2017, 110, .                                 | 1.5 | 10        |
| 143 | Ultra-short pulse propagation in 3D GaAs photonic crystals. Optical and Quantum Electronics, 2002, 34, 37-43.   | 1.5 | 9         |
| 144 | Theoretical analysis of light emission from a coupled system of a photonic nanocavity and a quantum dot. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2828-2830.          | 0.8 | 9         |

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|-----|---|------|-----------|
| 145 | Microcrystalline-Silicon Solar Cells With Photonic Crystals on the Top Surface. IEEE Journal of Photovoltaics, 2017, 7, 950-956.  | 1.5  | 9         |
| 146 | Wavelength-selective thermal emitters using Si-rods on MgO. Applied Physics Letters, 2018, 112, .   | 1.5  | 9         |
| 147 | Self-consistent analysis of photonic-crystal surface-emitting lasers under continuous-wave operation. Optics Express, 2021, 29, 25118.  | 1.7  | 9         |
| 148 | Ultrafast all optical modulation based on intersubband transition in semiconductor quantum wells. Optical and Quantum Electronics, 2001, 33, 963-973.                                     | 1.5  | 8         |
| 149 | Enhanced radiative recombination rate for electron-hole droplets in a silicon photonic crystal nanocavity. Physical Review B, 2017, 96, .   | 1.1  | 8         |
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