

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

301 papers	6,937 citations	45 h-index	71 g-index
402 ext. papers	8,803 ext. citations	5.5 avg, IF	6.11 L-index

#	Paper	IF	Citations
301	Air-Stable Surface-Passivated Perovskite Quantum Dots for Ultra-Robust, Single- and Two-Photon-Induced Amplified Spontaneous Emission. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 5027-33	6.4	398
300	Ultralow Self-Doping in Two-dimensional Hybrid Perovskite Single Crystals. <i>Nano Letters</i> , <b>2017</b> , 17, 4759-4767	11.5	202
299	4.8 Gbit/s 16-QAM-OFDM transmission based on compact 450-nm laser for underwater wireless optical communication. <i>Optics Express</i> , <b>2015</b> , 23, 23302-9	3.3	189
298	Perovskite Nanocrystals as a Color Converter for Visible Light Communication. <i>ACS Photonics</i> , <b>2016</b> , 3, 1150-1156	6.3	171
297	A polydimethylsiloxane-coated metal structure for all-day radiative cooling. <i>Nature Sustainability</i> , <b>2019</b> , 2, 718-724	22.1	162
296	20-meter underwater wireless optical communication link with 1.5 Gbps data rate. <i>Optics Express</i> , <b>2016</b> , 24, 25502-25509	3.3	145
295	2.3 Gbit/s underwater wireless optical communications using directly modulated 520 nm laser diode. <i>Optics Express</i> , <b>2015</b> , 23, 20743-8	3.3	130
294	Surface Passivation of GaN Nanowires for Enhanced Photoelectrochemical Water-Splitting. <i>Nano Letters</i> , <b>2017</b> , 17, 1520-1528	11.5	129
293	Monolithic electrically injected nanowire array edge-emitting laser on (001) silicon. <i>Nano Letters</i> , <b>2014</b> , 14, 4535-41	11.5	127
292	High-speed colour-converting photodetector with all-inorganic CsPbBr perovskite nanocrystals for ultraviolet light communication. <i>Light: Science and Applications</i> , <b>2019</b> , 8, 94	16.7	125
291	InGaN/GaN disk-in-nanowire white light emitting diodes on (001) silicon. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 193102	3.4	117
290	Surface Restructuring of Hybrid Perovskite Crystals. <i>ACS Energy Letters</i> , <b>2016</b> , 1, 1119-1126	20.1	115
289	Going beyond 4 Gbps data rate by employing RGB laser diodes for visible light communication. <i>Optics Express</i> , <b>2015</b> , 23, 18746-53	3.3	104
288	Selective quantum-well intermixing in GaAs-AlGaAs structures using impurity-free vacancy diffusion. <i>IEEE Journal of Quantum Electronics</i> , <b>1997</b> , 33, 1784-1793	2	104
287	Highly transparent, low-haze, hybrid cellulose nanopaper as electrodes for flexible electronics. <i>Nanoscale</i> , <b>2016</b> , 8, 12294-306	7.7	95
286	2 Gbit/s data transmission from an unfiltered laser-based phosphor-converted white lighting communication system. <i>Optics Express</i> , <b>2015</b> , 23, 29779-87	3.3	90
285	Unambiguously Enhanced Ultraviolet Luminescence of AlGaIn Wavy Quantum Well Structures Grown on Large Misoriented Sapphire Substrate. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1905445	15.6	85

284	Communicating Using Spatial Mode Multiplexing: Potentials, Challenges, and Perspectives. <i>IEEE Communications Surveys and Tutorials</i> , <b>2019</b> , 21, 3175-3203	37.1	83
283	Phosphorous Diffuser Diverged Blue Laser Diode for Indoor Lighting and Communication. <i>Scientific Reports</i> , <b>2015</b> , 5, 18690	4.9	83
282	Droop-Free, Reliable, and High-Power InGaN/GaN Nanowire Light-Emitting Diodes for Monolithic Metal-Optoelectronics. <i>Nano Letters</i> , <b>2016</b> , 16, 4616-23	11.5	81
281	Optical constants of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> perovskite thin films measured by spectroscopic ellipsometry. <i>Optics Express</i> , <b>2016</b> , 24, 16586-94	3.3	76
280	Facile Formation of High-Quality InGaN/GaN Quantum-Disks-in-Nanowires on Bulk-Metal Substrates for High-Power Light-Emitters. <i>Nano Letters</i> , <b>2016</b> , 16, 1056-63	11.5	73
279	An enhanced surface passivation effect in InGaN/GaN disk-in-nanowire light emitting diodes for mitigating Shockley-Read-Hall recombination. <i>Nanoscale</i> , <b>2015</b> , 7, 16658-65	7.7	68
278	Unified Statistical Channel Model for Turbulence-Induced Fading in Underwater Wireless Optical Communication Systems. <i>IEEE Transactions on Communications</i> , <b>2019</b> , 67, 2893-2907	6.9	68
277	4-Gbit/s visible light communication link based on 16-QAM OFDM transmission over remote phosphor-film converted white light by using blue laser diode. <i>Optics Express</i> , <b>2015</b> , 23, 33656-66	3.3	66
276	Simple statistical channel model for weak temperature-induced turbulence in underwater wireless optical communication systems. <i>Optics Letters</i> , <b>2017</b> , 42, 2455-2458	3	61
275	High-Modulation-Efficiency, Integrated Waveguide Modulator-Laser Diode at 448 nm. <i>ACS Photonics</i> , <b>2016</b> , 3, 262-268	6.3	59
274	Performance Evaluation of Underwater Wireless Optical Communications Links in the Presence of Different Air Bubble Populations. <i>IEEE Photonics Journal</i> , <b>2017</b> , 9, 1-9	1.8	58
273	Improvement of organic light-emitting diodes performance by the insertion of a Si <sub>3</sub> N <sub>4</sub> layer. <i>Thin Solid Films</i> , <b>2000</b> , 363, 25-28	2.2	57
272	Roadmap to free space optics. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2020</b> , 37, A1841-7	1.7	57
271	Enhanced Etching, Surface Damage Recovery, and Submicron Patterning of Hybrid Perovskites using a Chemically Gas-Assisted Focused-Ion Beam for Subwavelength Grating Photonic Applications. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 137-42	6.4	55
270	Gigabit-per-second white light-based visible light communication using near-ultraviolet laser diode and red-, green-, and blue-emitting phosphors. <i>Optics Express</i> , <b>2017</b> , 25, 17480-17487	3.3	55
269	Pt/AlGaIn Nanoarchitecture: Toward High Responsivity, Self-Powered Ultraviolet-Sensitive Photodetection. <i>Nano Letters</i> , <b>2021</b> , 21, 120-129	11.5	55
268	Surface-Passivated AlGaIn Nanowires for Enhanced Luminescence of Ultraviolet Light Emitting Diodes. <i>ACS Photonics</i> , <b>2018</b> , 5, 964-970	6.3	54
267	Droop-free Al <sub>x</sub> Ga <sub>1-x</sub> N/Al <sub>y</sub> Ga <sub>1-y</sub> N quantum-disks-in-nanowires ultraviolet LED emitting at 337 nm on metal/silicon substrates. <i>Optics Express</i> , <b>2017</b> , 25, 1381-1390	3.3	54

- 266 Double Charged Surface Layers in Lead Halide Perovskite Crystals. *Nano Letters*, **2017**, 17, 2021-2027 11.5 52
- 265 Determination of band offsets at GaN/single-layer MoS<sub>2</sub> heterojunction. *Applied Physics Letters*, **2016**, 109, 032104 3.4 52
- 264 Deep-Ultraviolet Photodetection Using Single-Crystalline  $\beta$ -GaO/NiO Heterojunctions. *ACS Applied Materials & Interfaces*, **2019**, 11, 35095-35104 9.5 48
- 263 High Performance InAs/ $\text{In}_{0.53}\text{Ga}_{0.23}\text{Al}_{0.24}\text{As}$ /InP Quantum Dot 1.55  $\mu\text{m}$  Tunnel Injection Laser. *IEEE Journal of Quantum Electronics*, **2014**, 50, 7-14 2 48
- 262 Band Alignment at GaN/Single-Layer WSe Interface. *ACS Applied Materials & Interfaces*, **2017**, 9, 9110-9117 47
- 261 Light based underwater wireless communications. *Japanese Journal of Applied Physics*, **2018**, 57, 08PA061.4 47
- 260 Self-assembled InAs/InP quantum dots and quantum dashes: Material structures and devices. *Progress in Quantum Electronics*, **2014**, 38, 237-313 9.1 47
- 259 . *IEEE Journal of Selected Topics in Quantum Electronics*, **2008**, 14, 1230-1238 3.8 46
- 258 III-nitride nanowires on unconventional substrates: From materials to optoelectronic device applications. *Progress in Quantum Electronics*, **2018**, 61, 1-31 9.1 45
- 257 High-brightness semipolar (2021) blue InGaN/GaN superluminescent diodes for droop-free solid-state lighting and visible-light communications. *Optics Letters*, **2016**, 41, 2608-11 3 45
- 256 Unbiased photocatalytic hydrogen generation from pure water on stable Ir-treated In<sub>0.33</sub>Ga<sub>0.67</sub>N nanorods. *Nano Energy*, **2017**, 37, 158-167 17.1 43
- 255 A Review on Practical Considerations and Solutions in Underwater Wireless Optical Communication. *Journal of Lightwave Technology*, **2020**, 38, 421-431 4 41
- 254 High-speed 405-nm superluminescent diode (SLD) with 807-MHz modulation bandwidth. *Optics Express*, **2016**, 24, 20281-6 3.3 41
- 253 3.2 Gigabit-per-second Visible Light Communication Link with InGaN/GaN MQW Micro-photodetector. *Optics Express*, **2018**, 26, 3037-3045 3.3 39
- 252 Real-Time Video Transmission Over Different Underwater Wireless Optical Channels Using a Directly Modulated 520 nm Laser Diode. *Journal of Optical Communications and Networking*, **2017**, 9, 826 4.1 39
- 251 Designed growth and patterning of perovskite nanowires for lasing and wide color gamut phosphors with long-term stability. *Nano Energy*, **2020**, 73, 104801 17.1 39
- 250 Focused-ion beam patterning of organolead trihalide perovskite for subwavelength grating nanophotonic applications. *Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics*, **2015**, 33, 051207 1.3 37
- 249 Graded-Index Separate Confinement Heterostructure AlGaIn Nanowires: Toward Ultraviolet Laser Diodes Implementation. *ACS Photonics*, **2018**, 5, 3305-3314 6.3 37

248	71-Mbit/s ultraviolet-B LED communication link based on 8-QAM-OFDM modulation. <i>Optics Express</i> , <b>2017</b> , 25, 23267-23274	3.3	37
247	Highly Uniform, Self-Assembled AlGaIn Nanowires for Self-Powered Solar-Blind Photodetector with Fast-Response Speed and High Responsivity. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2000893	8.1	36
246	Photoinduced entropy of InGaIn/GaN p-i-n double-heterostructure nanowires. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 161110	3.4	35
245	Impact of N-plasma and Ga-irradiation on MoS <sub>2</sub> layer in molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 012101	3.4	34
244	Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy. <i>Small</i> , <b>2016</b> , 12, 2313-20	11	34
243	III-nitride disk-in-nanowire 1.2 $\mu$ m monolithic diode laser on (001)silicon. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 191107	3.4	33
242	Temperature-Induced Lattice Relaxation of Perovskite Crystal Enhances Optoelectronic Properties and Solar Cell Performance. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 137-143	6.4	32
241	. <i>IEEE Photonics Technology Letters</i> , <b>2012</b> , 24, 724-726	2.2	32
240	375-nm ultraviolet-laser based non-line-of-sight underwater optical communication. <i>Optics Express</i> , <b>2018</b> , 26, 12870-12877	3.3	31
239	On the phenomenon of large photoluminescence red shift in GaIn nanoparticles. <i>Nanoscale Research Letters</i> , <b>2013</b> , 8, 342	5	31
238	Two-step controllable electrochemical etching of tungsten scanning probe microscopy tips. <i>Review of Scientific Instruments</i> , <b>2012</b> , 83, 063708	1.7	31
237	High-power blue superluminescent diode for high CRI lighting and high-speed visible light communication. <i>Optics Express</i> , <b>2018</b> , 26, 26355-26364	3.3	31
236	Water splitting to hydrogen over epitaxially grown InGaIn nanowires on a metallic titanium/silicon template: reduced interfacial transfer resistance and improved stability to hydrogen. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 6922-6930	13	30
235	Exfoliation of Threading Dislocation-Free, Single-Crystalline, Ultrathin Gallium Nitride Nanomembranes. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2305-2311	15.6	30
234	Review of nanophotonics approaches using nanostructures and nanofabrication for III-nitrides ultraviolet-photonics devices. <i>Journal of Nanophotonics</i> , <b>2018</b> , 12, 1	1.1	28
233	Enhanced extraordinary optical transmission (EOT) through arrays of bridged nanohole pairs and their sensing applications. <i>Nanoscale</i> , <b>2014</b> , 6, 7917-23	7.7	26
232	On the realization of across wavy water-air-interface diffuse-line-of-sight communication based on an ultraviolet emitter. <i>Optics Express</i> , <b>2019</b> , 27, 19635-19649	3.3	26
231	Group-III-Nitride Superluminescent Diodes for Solid-State Lighting and High-Speed Visible Light Communications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2019</b> , 25, 1-10	3.8	25

- 230 Small signal modulation characteristics of red-emitting ( $\approx 610$  nm) III-nitride nanowire array lasers on (001) silicon. *Applied Physics Letters*, **2015**, 106, 071108 3.4 25
- 229 Semipolar III-nitride quantum well waveguide photodetector integrated with laser diode for on-chip photonic system. *Applied Physics Express*, **2017**, 10, 042201 2.4 24
- 228 InGaN/GaN nanowires epitaxy on large-area MoS<sub>2</sub> for high-performance light-emitters. *RSC Advances*, **2017**, 7, 26665-26672 3.7 24
- 227 Toward Self-Powered Internet of Underwater Things Devices. *IEEE Communications Magazine*, **2020**, 58, 68-73 9.1 24
- 226 Tapering-induced enhancement of light extraction efficiency of nanowire deep ultraviolet LED by theoretical simulations. *Photonics Research*, **2018**, 6, 457 6 24
- 225 Investigation of carrier dynamics on InAs quantum dots embedded in InGaAs/AlGaAs quantum wells based on time-resolved pump and probe differential photoluminescence. *Applied Physics Letters*, **2006**, 89, 181924 3.4 24
- 224 Real-Space Visualization of Energy Loss and Carrier Diffusion in a Semiconductor Nanowire Array Using 4D Electron Microscopy. *Advanced Materials*, **2016**, 28, 5106-11 24 23
- 223 Photon management of GaN-based optoelectronic devices via nanoscaled phenomena. *Progress in Quantum Electronics*, **2016**, 49, 1-25 9.1 23
- 222 Free-space optical channel characterization and experimental validation in a coastal environment. *Optics Express*, **2018**, 26, 6614-6628 3.3 22
- 221 A Simple FDTD Algorithm for Simulating EM-Wave Propagation in General Dispersive Anisotropic Material. *IEEE Transactions on Antennas and Propagation*, **2013**, 61, 1321-1326 4.9 22
- 220 Type-I band alignment at MoS<sub>2</sub>/In<sub>0.15</sub>Al<sub>0.85</sub>N lattice matched heterojunction and realization of MoS<sub>2</sub> quantum well. *Applied Physics Letters*, **2017**, 111, 092104 3.4 22
- 219 Efficient Weibull channel model for salinity induced turbulent underwater wireless optical communications **2017**, 22
- 218 A New Simple Model for Underwater Wireless Optical Channels in the Presence of Air Bubbles **2017**, 22
- 217 True Yellow Light-Emitting Diodes as Phosphor for Tunable Color-Rendering Index Laser-Based White Light. *ACS Photonics*, **2016**, 3, 2089-2095 6.3 21
- 216 Growth and development of *Arabidopsis thaliana* under single-wavelength red and blue laser light. *Scientific Reports*, **2016**, 6, 33885 4.9 21
- 215 Highly uniform ultraviolet-A quantum-confined AlGaIn nanowire LEDs on metal/silicon with a TaN interlayer. *Optical Materials Express*, **2017**, 7, 4214 2.6 21
- 214 Room temperature strong coupling effects from single ZnO nanowire microcavity. *Optics Express*, **2012**, 20, 11830-7 3.3 21
- 213 Quantum Dash Intermixing. *IEEE Journal of Selected Topics in Quantum Electronics*, **2008**, 14, 1239-1249 3.8 21

212	Ultraviolet-to-blue color-converting scintillating-fibers photoreceiver for 375-nm laser-based underwater wireless optical communication. <i>Optics Express</i> , <b>2019</b> , 27, 30450-30461	3.3	21
211	Semipolar InGa <sub>N</sub> /Ga <sub>N</sub> micro-photodetector for gigabit-per-second visible light communication. <i>Applied Physics Express</i> , <b>2020</b> , 13, 014001	2.4	20
210	Ultrabroad linewidth orange-emitting nanowires LED for high CRI laser-based white lighting and gigahertz communications. <i>Optics Express</i> , <b>2016</b> , 24, 19228-36	3.3	19
209	Semipolar InGa <sub>N</sub> quantum-well laser diode with integrated amplifier for visible light communications. <i>Optics Express</i> , <b>2018</b> , 26, A219-A226	3.3	19
208	Iron-Based Core-Shell Nanowires for Combinatorial Drug Delivery and Photothermal and Magnetic Therapy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 43976-43988	9.5	19
207	Multiple-wavelength integration in InGaAs-InGaAsP structures using pulsed laser irradiation-induced quantum-well intermixing. <i>IEEE Journal of Quantum Electronics</i> , <b>2004</b> , 40, 481-490	2	19
206	Unleashing the potential of molecular beam epitaxy grown AlGa <sub>N</sub> -based ultraviolet-spectrum nanowires devices. <i>Journal of Nanophotonics</i> , <b>2018</b> , 12, 1	1.1	19
205	Non-line-of-sight methodology for high-speed wireless optical communication in highly turbid water. <i>Optics Communications</i> , <b>2020</b> , 461, 125264	2	19
204	Vapor condensation with daytime radiative cooling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	19
203	Role of quantum-confined stark effect on bias dependent photoluminescence of N-polar Ga <sub>N</sub> /InGa <sub>N</sub> multi-quantum disk amber light emitting diodes. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 105702	2.5	18
202	Defect Annealing of InAs <sub>1-x</sub> AlGaAs Quantum-Dash-in-Asymmetric-Well Laser. <i>IEEE Photonics Technology Letters</i> , <b>2006</b> , 18, 2329-2331	2.2	18
201	Field Demonstrations of Wide-Beam Optical Communications Through Water-Air Interface. <i>IEEE Access</i> , <b>2020</b> , 8, 160480-160489	3.5	18
200	Investigation of Self-Injection Locked Visible Laser Diodes for High Bit-Rate Visible Light Communication. <i>IEEE Photonics Journal</i> , <b>2018</b> , 10, 1-11	1.8	18
199	Perovskite-Based Artificial Multiple Quantum Wells. <i>Nano Letters</i> , <b>2019</b> , 19, 3535-3542	11.5	17
198	Iridocytes Mediate Photonic Cooperation Between Giant Clams (Tridacninae) and Their Photosynthetic Symbionts. <i>Frontiers in Marine Science</i> , <b>2020</b> , 7,	4.5	17
197	Early detection of red palm weevil using distributed optical sensor. <i>Scientific Reports</i> , <b>2020</b> , 10, 3155	4.9	17
196	Continuous-wave optically pumped green perovskite vertical-cavity surface-emitter. <i>Optics Letters</i> , <b>2017</b> , 42, 3618-3621	3	17
195	Toward self-powered and reliable visible light communication using amorphous silicon thin-film solar cells. <i>Optics Express</i> , <b>2019</b> , 27, 34542-34551	3.3	17



194	Deep-ultraviolet integrated photonic and optoelectronic devices: A prospect of the hybridization of group IIIbtrides, IIIbides, and two-dimensional materials. <i>Journal of Semiconductors</i> , <b>2019</b> , 40, 121801	2.3	17
193	Observation of piezotronic and piezo-phototronic effects in n-InGaN nanowires/Ti grown by molecular beam epitaxy. <i>Nano Energy</i> , <b>2018</b> , 54, 264-271	17.1	17
192	Narrow-line InGaN/GaN green laser diode with high-order distributed-feedback surface grating. <i>Applied Physics Express</i> , <b>2019</b> , 12, 042007	2.4	16
191	Gbit/s ultraviolet-C diffuse-line-of-sight communication based on probabilistically shaped DMT and diversity reception. <i>Optics Express</i> , <b>2020</b> , 28, 9111-9122	3.3	16
190	Enhanced photoelectrochemical performance of InGaN-based nanowire photoanodes by optimizing the ionized dopant concentration. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 083105	2.5	15
189	OAM Mode Selection and SpaceTime Coding for Atmospheric Turbulence Mitigation in FSO Communication. <i>IEEE Access</i> , <b>2019</b> , 7, 88049-88057	3.5	15
188	Investigation of Chirped InAs/InGaAlAs/InP Quantum Dash Lasers as Broadband Emitters. <i>IEEE Journal of Quantum Electronics</i> , <b>2014</b> , 50, 51-61	2	15
187	Nanomembrane-Based, Thermal-Transport Biosensor for Living Cells. <i>Small</i> , <b>2017</b> , 13, 1603080	11	15
186	Effect of the interface glass on electrical performance of screen printed Ag thick-film contacts of Si solar cells. <i>Thin Solid Films</i> , <b>2010</b> , 518, e111-e113	2.2	15
185	480-nm distributed-feedback InGaN laser diode for 10.5-Gbit/s visible-light communication. <i>Optics Letters</i> , <b>2020</b> , 45, 742-745	3	15
184	Extraordinary Carrier Diffusion on CdTe Surfaces Uncovered by 4D Electron Microscopy. <i>Chem</i> , <b>2019</b> , 5, 706-718	16.2	14
183	. <i>Journal of Lightwave Technology</i> , <b>2019</b> , 37, 5083-5090	4	14
182	Superluminescent diodes using quantum dots superlattice. <i>Journal of Crystal Growth</i> , <b>2006</b> , 288, 153-156	6.6	14
181	Normalized differential method for improving the signal-to-noise ratio of a distributed acoustic sensor. <i>Applied Optics</i> , <b>2019</b> , 58, 4933-4938	1.7	14
180	AquaE-lite Hybrid-Solar-Cell Receiver-Modality for Energy-Autonomous Terrestrial and Underwater Internet-of-Things. <i>IEEE Photonics Journal</i> , <b>2020</b> , 12, 1-13	1.8	14
179	Bandgap measurements and the peculiar splitting of E2H phonon modes of InxAl1-xN nanowires grown by plasma assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 045701	2.5	14
178	Quantified hole concentration in AlGaIn nanowires for high-performance ultraviolet emitters. <i>Nanoscale</i> , <b>2018</b> , 10, 15980-15988	7.7	14
177	Near-Infrared OAM Communication Using 3D-Printed Microscale Spiral Phase Plates. <i>IEEE Communications Magazine</i> , <b>2019</b> , 57, 65-69	9.1	13



176	Enabling area-selective potential-energy engineering in InGaN/GaN quantum wells by post-growth intermixing. <i>Optics Express</i> , <b>2015</b> , 23, 7991-8	3.3	13
175	Direct Growth of III-Nitride Nanowire-Based Yellow Light-Emitting Diode on Amorphous Quartz Using Thin Ti Interlayer. <i>Nanoscale Research Letters</i> , <b>2018</b> , 13, 41	5	13
174	Catalyst-Free Vertical ZnO-Nanotube Array Grown on p-GaN for UV-Light-Emitting Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 27989-27996	9.5	13
173	Enhancing the Light-Extraction Efficiency of an AlGaIn Nanowire Ultraviolet Light-Emitting Diode by Using Nitride/Air Distributed Bragg Reflector Nanogratings. <i>IEEE Photonics Journal</i> , <b>2017</b> , 9, 1-8	1.8	13
172	Achieving Uniform Carrier Distribution in MBE-Grown Compositionally Graded InGaIn Multiple-Quantum-Well LEDs. <i>IEEE Photonics Journal</i> , <b>2015</b> , 7, 1-9	1.8	13
171	Aqua-Fi: Delivering Internet Underwater Using Wireless Optical Networks. <i>IEEE Communications Magazine</i> , <b>2020</b> , 58, 84-89	9.1	12
170	Generation of Multiple Energy Bandgaps Using a Gray Mask Process and Quantum Well Intermixing. <i>Japanese Journal of Applied Physics</i> , <b>2002</b> , 41, 1080-1084	1.4	12
169	Improved solar hydrogen production by engineered doping of InGaIn/GaN axial heterojunctions. <i>Optics Express</i> , <b>2019</b> , 27, A81-A91	3.3	12
168	Gallium Phosphide photoanode coated with TiO and CoO for stable photoelectrochemical water oxidation. <i>Optics Express</i> , <b>2019</b> , 27, A364-A371	3.3	12
167	Identifying structured light modes in a desert environment using machine learning algorithms. <i>Optics Express</i> , <b>2020</b> , 28, 9753-9763	3.3	12
166	A Unified Statistical Model for Atmospheric Turbulence-Induced Fading in Orbital Angular Momentum Multiplexed FSO Systems. <i>IEEE Transactions on Wireless Communications</i> , <b>2020</b> , 19, 888-900	9.6	12
165	A highly sensitive, large area, and self-powered UV photodetector based on coalesced gallium nitride nanorods/graphene/silicon (111) heterostructure. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 191103	3.4	12
164	Carbon nanotube-graphene composite film as transparent conductive electrode for GaIn-based light-emitting diodes. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 081902	3.4	12
163	A Novel Mirror-Aided Non-Imaging Receiver for Indoor 2times 2 MIMO-Visible Light Communication Systems. <i>IEEE Transactions on Wireless Communications</i> , <b>2017</b> , 16, 5630-5643	9.6	11
162	Imaging Localized Energy States in Silicon-Doped InGaIn Nanowires Using 4D Electron Microscopy. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 476-481	20.1	11
161	Flexible InGaIn nanowire membranes for enhanced solar water splitting. <i>Optics Express</i> , <b>2018</b> , 26, A640-A650	9.5	11
160	The effect of turbulence on NLOS underwater wireless optical communication channels [Invited]. <i>Chinese Optics Letters</i> , <b>2019</b> , 17, 100013	2.2	11
159	Survey of energy-autonomous solar cell receivers for satellite-air-ground-ocean optical wireless communication. <i>Progress in Quantum Electronics</i> , <b>2020</b> , 74, 100300	9.1	11

158	On the optical and microstrain analysis of graded InGaN/GaN MQWs based on plasma assisted molecular beam epitaxy. <i>Optical Materials Express</i> , <b>2016</b> , 6, 2052	2.6	11
157	Thermodynamic photoinduced disorder in AlGaIn nanowires. <i>AIP Advances</i> , <b>2017</b> , 7, 125113	1.5	10
156	Electron irradiation induced reduction of the permittivity in chalcogenide glass (As <sub>2</sub> S <sub>3</sub> ) thin film. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 044116	2.5	10
155	GaAs/AlGaAs photonic integrated circuits fabricated using impurity-free vacancy disordering <b>1995</b> , 2401, 74		10
154	Enhanced electro-optic performance of surface-treated nanowires: origin and mechanism of nanoscale current injection for reliable ultraviolet light-emitting diodes. <i>Optical Materials Express</i> , <b>2019</b> , 9, 203	2.6	10
153	Tunable Twisting Motion of Organic Linkers via Concentration and Hydrogen-Bond Formation. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 5900-5906	3.8	10
152	Hybrid concentrated radiative cooling and solar heating in a single system. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100338	6.1	10
151	A CNN-Based Structured Light Communication Scheme for Internet of Underwater Things Applications. <i>IEEE Internet of Things Journal</i> , <b>2020</b> , 7, 10038-10047	10.7	9
150	Visible light communication using DC-biased optical filter bank multi-carrier modulation <b>2018</b> ,		9
149	High Reflectivity YDH/SiO <sub>2</sub> Distributed Bragg Reflector for UV-C Wavelength Regime. <i>IEEE Photonics Journal</i> , <b>2018</b> , 10, 1-8	1.8	9
148	Semipolar GaN-based laser diodes for Gbit/s white lighting communication: devices to systems <b>2018</b> ,		9
147	Sustainable and Inexpensive Polydimethylsiloxane Sponges for Daytime Radiative Cooling. <i>Advanced Science</i> , <b>2021</b> , 8, e2102502	13.6	9
146	Dual-wavelength luminescent fibers receiver for wide field-of-view, Gb/s underwater optical wireless communication. <i>Optics Express</i> , <b>2021</b> , 29, 38014-38026	3.3	9
145	Wide-field-of-view optical detectors using fused fiber-optic tapers. <i>Optics Letters</i> , <b>2021</b> , 46, 1916-1919	3	9
144	Twofold Porosity and Surface Functionalization Effect on Pt-Porous GaN for High-Performance H <sub>2</sub> -Gas Sensors at Room Temperature. <i>ACS Omega</i> , <b>2019</b> , 4, 1678-1684	3.9	8
143	Ultraviolet-A LED Based on Quantum-Disks-In-AlGaIn-Nanowires Optimization and Device Reliability. <i>IEEE Photonics Journal</i> , <b>2018</b> , 10, 1-11	1.8	8
142	Bandwidth enhancement of wireless optical communication link using a near-infrared laser over turbid underwater channel <b>2017</b> ,		8
141	Anomalous photoluminescence thermal quenching of sandwiched single layer MoS <sub>2</sub> . <i>Optical Materials Express</i> , <b>2017</b> , 7, 3697	2.6	8

140	A flexible capacitive photoreceptor for the biomimetic retina.. <i>Light: Science and Applications</i> , <b>2022</b> , 11, 3	16.7	8
139	Laser-based visible light communications and underwater wireless optical communications: a device perspective <b>2019</b> ,		8
138	Accelerating vapor condensation with daytime radiative cooling <b>2019</b> ,		8
137	Photovoltage-Competing Dynamics in Photoelectrochemical Devices: Achieving Self-Powered Spectrally Distinctive Photodetection. <i>Advanced Functional Materials</i> ,2104515	15.6	8
136	Single-Crystalline All-Oxide $\text{III-VI}$ Heterostructures for Deep-Ultraviolet Photodetection. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> ,	9.5	8
135	Wireless optical transmission of 450 nm, 3.2 Gbit/s 16-QAM-OFDM signals over 6.6 m underwater channel <b>2016</b> ,		8
134	Wavy Architecture Thin-Film Transistor for Ultrahigh Resolution Flexible Displays. <i>Small</i> , <b>2018</b> , 14, 1703200	10	8
133	Tunable self-injection locked green laser diode. <i>Optics Letters</i> , <b>2018</b> , 43, 4931-4934	3	8
132	Demonstration of Photoelectrochemical-Type Photodetectors Using Seawater as Electrolyte for Portable and Wireless Optical Communication. <i>Advanced Optical Materials</i> ,2102839	8.1	8
131	7.4-Gbit/s Visible-Light Communication Utilizing Wavelength-Selective Semipolar Micro-Photodetector. <i>IEEE Photonics Technology Letters</i> , <b>2020</b> , 1-1	2.2	7
130	Diode junction temperature in ultraviolet AlGaIn quantum-disks-in-nanowires. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 015702	2.5	7
129	Going beyond 10-meter, Gbit/s underwater optical wireless communication links based on visible lasers <b>2017</b> ,		7
128	Simultaneous Distributed Acoustic and Temperature Sensing Using a Multimode Fiber. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2020</b> , 26, 1-7	3.8	7
127	A Review of Using Few-Mode Fibers for Optical Sensing. <i>IEEE Access</i> , <b>2020</b> , 8, 179592-179605	3.5	7
126	On the Reciprocity of Underwater Turbulent Channels. <i>IEEE Photonics Journal</i> , <b>2019</b> , 11, 1-9	1.8	7
125	Group-III-nitride and halide-perovskite semiconductor gain media for amplified spontaneous emission and lasing applications. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 143001	3	7
124	Compact scintillating-fiber/450-nm-laser transceiver for full-duplex underwater wireless optical communication system under turbulence.. <i>Optics Express</i> , <b>2022</b> , 30, 53-69	3.3	7
123	Semipolar InGaIn-based superluminescent diodes for solid-state lighting and visible light communications <b>2017</b> ,		6

122	Multi-wavelength emission from a single InGaN/GaN nanorod analyzed by cathodoluminescence hyperspectral imaging. <i>Scientific Reports</i> , <b>2018</b> , 8, 1742	4.9	6
121	Worst-case residual clipping noise power model for bit loading in LACO-OFDM <b>2018</b> ,		6
120	Spectral Analysis of Quantum-Dash Lasers: Effect of Inhomogeneous Broadening of the Active-Gain Region. <i>IEEE Journal of Quantum Electronics</i> , <b>2012</b> , 48, 608-615	2	6
119	Free-space optical channel characterization in a coastal environment. <i>Journal of Communications and Information Networks</i> , <b>2017</b> , 2, 100-106		6
118	Intrinsic Dynamics of Quantum-Dash Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2011</b> , 17, 1167-1174	3.8	6
117	Coupling Plasmonic Pt Nanoparticles with AlGaIn Nanostructures for Enhanced Broadband Photoelectrochemical-Detection Applications. <i>ACS Applied Nano Materials</i> ,	5.6	6
116	A Review of Distributed Fiber--optic Sensing in the Oil and Gas Industry. <i>Journal of Lightwave Technology</i> , <b>2021</b> , 1-1	4	6
115	Functionalization of Magnetic Nanowires for Active Targeting and Enhanced Cell-Killing Efficacy.. <i>ACS Applied Bio Materials</i> , <b>2020</b> , 3, 4789-4797	4.1	6
114	Nanoporous GaN/n-type GaN: A Cathode Structure for ITO-Free Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 3295-3303	20.1	6
113	Investigating the Performance of a Few-Mode Fiber for Distributed Acoustic Sensing. <i>IEEE Photonics Journal</i> , <b>2019</b> , 11, 1-10	1.8	5
112	<b>2013</b> ,		5
111	<b>2013</b> ,		5
110	Real-time Optical-Wireless Video Surveillance System for High Visual-fidelity Underwater Monitoring. <i>IEEE Photonics Journal</i> , <b>2022</b> , 1-1	1.8	5
109	The Impact of Vertical Salinity Gradient on Non-Line-of-Sight Underwater Optical Wireless Communication. <i>IEEE Photonics Journal</i> , <b>2021</b> , 1-1	1.8	5
108	Titanium Carbide MXene Nucleation Layer for Epitaxial Growth of High-Quality GaN Nanowires on Amorphous Substrates. <i>ACS Nano</i> , <b>2020</b> , 14, 2202-2211	16.7	5
107	Diffused-Line-of-Sight Communication for Mobile and Fixed Underwater Nodes. <i>IEEE Photonics Journal</i> , <b>2020</b> , 12, 1-13	1.8	5
106	Tunable Violet Laser Diode System for Optical Wireless Communication. <i>IEEE Photonics Technology Letters</i> , <b>2020</b> , 32, 546-549	2.2	5
105	Improved H <sub>2</sub> detection performance of GaN sensor with Pt/Sulfide treatment of porous active layer prepared by metal electroless etching. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 4614-4625	6.7	5

104	Towards Detecting Red Palm Weevil Using Machine Learning and Fiber Optic Distributed Acoustic Sensing. <i>Sensors</i> , <b>2021</b> , 21,	3.8	5
103	Ultrathin-Film Titania Photocatalyst on Nanocavity for CO Reduction with Boosted Catalytic Efficiencies. <i>Global Challenges</i> , <b>2018</b> , 2, 1800032	4.3	5
102	Optical Properties and First-Principles Study of CHNHPbBr Perovskite Structures. <i>ACS Omega</i> , <b>2020</b> , 5, 12313-12319	3.9	4
101	Piezotronic AlGaN nanowire Schottky junctions grown on a metal substrate. <i>AIP Advances</i> , <b>2020</b> , 10, 055014	3.4	4
100	First demonstration of orange-yellow light emitter devices in InGaP/InAlGaP laser structure using strain-induced quantum well intermixing technique <b>2016</b> ,		4
99	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2019</b> , 25, 1-7	3.8	4
98	Growth of Ordered Iron Oxide Nanowires for Photo-electrochemical Water Oxidation. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 8473-8480	6.1	4
97	Spectrally Resolved Characterization of Thermally Induced Underwater Turbulence Using a Broadband White-Light Interrogator. <i>IEEE Photonics Journal</i> , <b>2019</b> , 11, 1-9	1.8	4
96	Enhancing Carrier Injection Using Graded Superlattice Electron Blocking Layer for UVB Light-Emitting Diodes. <i>IEEE Photonics Journal</i> , <b>2014</b> , 6, 1-12	1.8	4
95	Growth of pattern-free InN micropylamids by metalorganic chemical vapor deposition. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2010</b> , 207, 1895-1899	1.6	4
94	Embossed Bragg Gratings Based on Organically Modified Silane Waveguides in InP. <i>Applied Optics</i> , <b>2000</b> , 39, 4942-5	1.7	4
93	Charging suppression in focused-ion beam fabrication of visible subwavelength dielectric grating reflector using electron conducting polymer. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2015</b> , 33, 06F701	1.3	4
92	Influences of ALD Al <sub>2</sub> O <sub>3</sub> on the surface band-bending of c-plane, Ga-face GaN. <i>Japanese Journal of Applied Physics</i> ,	1.4	4
91	Health-friendly high-quality white light using violet-green-red laser and InGaN nanowires-based true yellow nanowires light-emitting diodes <b>2017</b> ,		3
90	Direct Growth of Single Crystalline GaN Nanowires on Indium Tin Oxide-Coated Silica. <i>Nanoscale Research Letters</i> , <b>2019</b> , 14, 45	5	3
89	THz behavior originates from different arrangements of coalescent GaN nanorods grown on Si (111) and Si (100) substrates. <i>Applied Surface Science</i> , <b>2020</b> , 522, 146422	6.7	3
88	Spatially resolved investigation of competing nanocluster emission in quantum-disks-in-nanowires structure characterized by nanoscale cathodoluminescence. <i>Journal of Nanophotonics</i> , <b>2017</b> , 11, 026015	1.1	3
87	Underwater wireless optical communications: From system-level demonstrations to channel modelling <b>2017</b> ,		3

86	Generation of J0-Bessel-Gauss beam by a heterogeneous refractive index map. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2012</b> , 29, 1252-8	1.8	3
85	Thermal Annealing induced relaxation of compressive strain in porous GaN structures <b>2012</b> ,		3
84	GHz modulation bandwidth from single-longitudinal mode violet-blue VCSEL using nonpolar InGaN/GaN QWs <b>2016</b> ,		3
83	Towards Early Detection of Red Palm Weevil Using Optical Fiber Distributed Acoustic Sensor <b>2019</b> ,		3
82	2.4-Gbps Ultraviolet-C Solar-Blind Communication Based on Probabilistically Shaped DMT Modulation <b>2020</b> ,		3
81	. <i>IEEE Open Journal of the Communications Society</i> , <b>2021</b> , 2, 2597-2615	6.7	3
80	Toward Automatic Subsea Operations Using Real-Time Underwater Optical Wireless Sensor Networks. <i>IEEE Photonics Journal</i> , <b>2022</b> , 14, 1-8	1.8	3
79	Demonstration of a low-complexity memory-polynomial-aided neural network equalizer for CAP visible-light communication with superluminescent diode. <i>Opto-Electronic Advances</i> , <b>2020</b> , 3, 200009-200009	6.5	3
78	Near-Infrared Wireless Optical Communication with Particulates In-Suspension over the Underwater Channel <b>2017</b> ,		3
77	Underwater wireless optical communications: Opportunity, challenges and future prospects commentary on Recent progress in and perspectives of underwater wireless optical communication□ <i>Progress in Quantum Electronics</i> , <b>2020</b> , 73, 100275	9.1	3
76	Crosstalk Suppression in Structured Light Free-Space Optical Communication. <i>IEEE Open Journal of the Communications Society</i> , <b>2020</b> , 1, 1623-1631	6.7	3
75	Quantifying the Transverse-Electric-Dominant 260 nm Emission from Molecular Beam Epitaxy-Grown GaN-Quantum-Disks Embedded in AlN Nanowires: A Comprehensive Optical and Morphological Characterization. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 41649-41658	9.5	3
74	InGaN-based nanowires development for energy harvesting and conversion applications. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 121103	2.5	3
73	Toward Large-Scale GaO Membranes via Quasi-Van Der Waals Epitaxy on Epitaxial Graphene Layers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 13410-13418	9.5	3
72	Heteroepitaxial Ga2O3 on Conductive Ceramic Templates: Toward Ultrahigh Gain Deep-Ultraviolet Photodetection. <i>Advanced Materials Technologies</i> , <b>2021</b> , 6, 2100142	6.8	3
71	High gain semiconductor optical amplifier □Laser diode at visible wavelength <b>2016</b> ,		3
70	Domain-Size-Dependent Residual Stress Governs the Phase-Transition and Photoluminescence Behavior of Methylammonium Lead Iodide. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008088	15.6	3
69	Blue Laser Diode System With an Enhanced Wavelength Tuning Range. <i>IEEE Photonics Journal</i> , <b>2020</b> , 12, 1-10	1.8	2

68	Effect of annealing InGaP/InAlGaP laser structure at 950°C on laser characteristics. <i>Journal of Nanophotonics</i> , <b>2016</b> , 10, 036004	1.1	2
67	GHz modulation enabled using large extinction ratio waveguide-modulator integrated with 404 nm GaN laser diode <b>2016</b> ,		2
66	Modeling and Experimental Study of The Vibration Effects in Urban Free-Space Optical Communication Systems. <i>IEEE Photonics Journal</i> , <b>2019</b> , 11, 1-13	1.8	2
65	Integrated photonic platform based on semipolar InGaN/GaN multiple section laser diodes <b>2017</b> ,		2
64	Red to Near-Infrared Emission from InGaN/GaN Quantum-Disks-in-Nanowires LED <b>2014</b> ,		2
63	Reduced thermal quenching in indium-rich self-organized InGaN/GaN quantum dots. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 063506	2.5	2
62	A possible approach on optical analogues of gravitational attractors. <i>Optics Express</i> , <b>2013</b> , 21, 8298-310	3.3	2
61	Characteristics of AlN/GaN nanowire Bragg mirror grown on (001) silicon by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 181102	3.4	2
60	The Dynamic Characteristics and Linewidth Enhancement Factor of Quasi-Supercontinuum Self-Assembled Quantum Dot Lasers. <i>IEEE Journal of Quantum Electronics</i> , <b>2009</b> , 45, 1177-1182	2	2
59	Fundamental and Dynamic Properties of Intermixed InGaAs-InGaAsP Quantum-Well Lasers. <i>IEEE Journal of Quantum Electronics</i> , <b>2010</b> , 46, 1368-1374	2	2
58	Through wafer via hole by reactive ion etching of GaAs <b>2002</b> ,		2
57	Development of a laser holographic interference lithography system <b>1999</b> ,		2
56	Effect of etch pit density of InP substrate on the stability of InGaAs/InGaAsP quantum well laser materials <b>1999</b> , 3896, 207		2
55	Deposition of potassium lithium niobate films by sol-gel method <b>1999</b> ,		2
54	Efficient channel modeling of structured light in turbulence using generative adversarial networks.. <i>Optics Express</i> , <b>2022</b> , 30, 7238-7252	3.3	2
53	Self-powered weather station for remote areas and difficult-access locations.. <i>Optics Express</i> , <b>2022</b> , 30, 2668-2679	3.3	2
52	All-inorganic halide-perovskite polymer-fiber-photodetector for high-speed optical wireless communication.. <i>Optics Express</i> , <b>2022</b> , 30, 9823-9840	3.3	2
51	Boosted ultraviolet photodetection of AlGaIn quantum-disk nanowires via rational surface passivation. <i>Journal Physics D: Applied Physics</i> , <b>2022</b> , 55, 125101	3	2



50	Functional integrity and stable high-temperature operation of planarized ultraviolet-A Al <sub>x</sub> Ga <sub>1-x</sub> N/AlyGa <sub>1-y</sub> N multiple-quantum-disk nanowire LEDs with charge-conduction promoting interlayer <b>2019</b> ,		2
49	3.8-Gbit/s visible light communication (VLC) based on 443-nm superluminescent diode and bit-loading discrete-multiple-tone (DMT) modulation scheme <b>2020</b> ,		2
48	Design and Deployment of Mobile FSO Communication System <b>2017</b> ,		2
47	Electrical characterization of solar-blind deep-ultraviolet (Al <sub>0.28</sub> Ga <sub>0.72</sub> ) <sub>2</sub> O <sub>3</sub> Schottky photodetectors grown on silicon by pulsed laser deposition <b>2019</b> ,		2
46	Study on laser-based white light sources <b>2019</b> ,		2
45	Sensing within the OTDR dead-zone using a two-mode fiber. <i>Optics Letters</i> , <b>2020</b> , 45, 2969-2972	3	2
44	Time-Energy Quantum Uncertainty: Quantifying the Effectiveness of Surface Defect Passivation Protocols for Low-Dimensional Semiconductors. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 409-418	4	2
43	Characterization of epitaxial titanium nitride mediated single-crystal nickel oxide grown on MgO-(100) and Si-(100). <i>AIP Advances</i> , <b>2020</b> , 10, 065318	1.5	2
42	Colloidal PbS Quantum Dots for Visible-to-Near-Infrared Optical Internet of Things. <i>IEEE Photonics Journal</i> , <b>2021</b> , 13, 1-11	1.8	2
41	Giant clam inspired high-speed photo-conversion for ultraviolet optical wireless communication. <i>Optical Materials Express</i> , <b>2021</b> , 11, 1515	2.6	2
40	Sustained Solar-Powered Electrocatalytic H <sub>2</sub> Production by Seawater Splitting Using Two-Dimensional Vanadium Disulfide. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 8572-8580	8.3	2
39	InGaN/GaN nanowire LEDs and lasers <b>2016</b> ,		2
38	InAs/GaAs quantum-dot intermixing: comparison of various dielectric encapsulants. <i>Optical Engineering</i> , <b>2015</b> , 54, 107107	1.1	1
37	Nanowires: Enhanced Optoelectronic Performance of a Passivated Nanowire-Based Device: Key Information from Real-Space Imaging Using 4D Electron Microscopy (Small 17/2016). <i>Small</i> , <b>2016</b> , 12, 2312	11	1
36	Tunable Dual-Wavelength Self-injection Locked InGaN/GaN Green Laser Diode. <i>IEEE Access</i> , <b>2019</b> , 7, 143324-143330	15.6	1
35	Nanomembranes: Exfoliation of Threading Dislocation-Free, Single-Crystalline, Ultrathin Gallium Nitride Nanomembranes (Adv. Funct. Mater. 16/2014). <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2412-2412		1
34	Performance evaluation of underwater wireless optical communications links in the presence of different air bubble populations <b>2017</b> ,		1
33	<b>2015</b> ,		1

32	The formation of hexagonal-shaped InGaN-nanodisk on GaN-nanowire observed in plasma source molecular beam epitaxy <b>2014</b> ,		1
31	Effect of active medium inhomogeneity on lasing characteristics of InAs/InP quantum-dash lasers <b>2010</b> ,		1
30	Multi-axis micromirror for optical coherence tomography. <i>Procedia Chemistry</i> , <b>2009</b> , 1, 1147-1150		1
29	Multiple-channel InGaAs/InGaAsP electro-absorption intensity modulator fabricated using low-energy-phosphorus-ion-implantation-induced intermixing <b>2000</b> , 4087, 490		1
28	All-day radiative cooling using beam-controlled architectures <b>2019</b> ,		1
27	Producing OAM Information Carriers using Micro-structured Spiral Phase Plates <b>2019</b> ,		1
26	Prism-based tunable InGaN/GaN self-injection locked blue laser diode system: study of temperature, injection ratio, and stability. <i>Journal of Nanophotonics</i> , <b>2020</b> , 14, 1	1.1	1
25	Lattice Orientation Heredity in the Transformation of 2D Epitaxial Films. <i>Advanced Materials</i> , <b>2021</b> , e2105490	1.1	1
24	Visible diode lasers for high bitrate underwater wireless optical communications <b>2019</b> ,		1
23	Blue Superluminescent Diodes with GHz Bandwidth Exciting Perovskite Nanocrystals for High CRI White Lighting and High-Speed VLC <b>2019</b> ,		1
22	Large-Scale Sub-1-nm Random Gaps Approaching the Quantum Upper Limit for Quantitative Chemical Sensing. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 2001634	8.1	1
21	Engineering Band-Type Alignment in CsPbBr Perovskite-Based Artificial Multiple Quantum Wells. <i>Advanced Materials</i> , <b>2021</b> , 33, e2005166	24	1
20	Impact of Wavelength on the Path-loss of Turbid Underwater Communication Systems <b>2019</b> ,		1
19	High-Speed Ultraviolet-C Photodetector Based on Frequency Down-Converting CsPbBr <sub>3</sub> Perovskite Nanocrystals on Silicon Platform <b>2019</b> ,		1
18	High Power GaN-Based Blue Superluminescent Diode Exceeding 450 mW <b>2018</b> ,		1
17	Enhanced performance of 450 nm GaN laser diodes with an optical feedback for high bit-rate visible light communication <b>2018</b> ,		1
16	Silicon-integrated monocrystalline oxide/nitride heterostructures for deep-ultraviolet optoelectronics. <i>Optical Materials Express</i> , <b>2021</b> , 11, 4130	2.6	0
15	Reduction of the beam pointing error for improved free-space optical communication link performance. <i>IFAC Journal of Systems and Control</i> , <b>2021</b> , 16, 100154	0.9	0

- 14 Single-Port Superluminescent-Diode Gain-Chip for Tunable Single-Wavelength and Dual-Wavelength Blue-Laser. *IEEE Photonics Journal*, **2021**, 13, 1-11 1.8 o
- 13 Visible-Light Laser Diodes and Superluminescent Diodes: Characteristics and Applications1-17 o
- 12 Simultaneous Lightwave and Power Transfer for Internet of Things Devices. *Energies*, **2022**, 15, 2814 3.1 o
- 11 Sputtered SiO<sub>2</sub> Induced Atomic Interdiffusion in Semiconductor Nano Heterostructures. *Advanced Materials Research*, **2007**, 31, 33-35 0.5
- 10 Nano-Scale Bandgap Engineering Using Nitrogen Implantation: Quantum-Well, Quantum-Dash and Quantum-Dot Nanostructures. *Advanced Materials Research*, **2007**, 31, 182-184 0.5
- 9 Broadband Emission in InAs/InGaAlAs Quantum-Dash-in-Well Laser. *Advanced Materials Research*, **2007**, 31, 173-175 0.5
- 8 Experimental and theoretical study of multiple cations intermixing in InP-based quantum dot-in-well structure **2006**, 6129, 11
- 7 Spatial Bandgap Tuning in Long Wavelength InAs Quantum Dots-in-Well Laser Structure. *Materials Research Society Symposia Proceedings*, **2005**, 891, 1
- 6 Quantum well intermixing of GaAs/AlGaAs laser structure using one-step rapid thermal oxidation of AlAs **1999**, 3896, 184
- 5 Nanogap Structures: Large-Scale Sub-1-nm Random Gaps Approaching the Quantum Upper Limit for Quantitative Chemical Sensing (Advanced Optical Materials 24/2020). *Advanced Optical Materials*, **2020**, 8, 2070095 8.1
- 4 Heteroepitaxial Ga<sub>2</sub>O<sub>3</sub> on Conductive Ceramic Templates: Toward Ultrahigh Gain Deep-Ultraviolet Photodetection (Adv. Mater. Technol. 9/2021). *Advanced Materials Technologies*, **2021**, 6, 2170052 6.8
- 3 Theory and Practice of Orbital Angular Momentum and Beyond1-32
- 2 Optical Wavefront Detection: A Beginner Tutorial1-21
- 1 Harvesting Electricity by Harnessing Nature: Bioelectricity, Triboelectricity, and Method of Storage1-25