David A B Miller

List of Publications by Year in descending order

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		4146	4117
429	32,728	87	175
papers	citations	h-index	g-index
432	432	432	14055
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Photonic chips embrace piezo-optomechanics. Nature Photonics, 2022, 16, 10-11.	31.4	1
2	Separating arbitrary free-space beams with an integrated photonic processor. Light: Science and Applications, 2022, 11, .	16.6	26
3	Wavelength-Division Multiplexed Optical Cryptocurrency. , 2021, , .		Ο
4	Coherent self-control of free-space optical beams with integrated silicon photonic meshes. Photonics Research, 2021, 9, 2196.	7.0	15
5	Getting to femtojoule optics $\hat{a} \in \hat{~}$ what physics and what technology?. , 2021, , .		1
6	The New Multimode Optics - Understanding and Exploiting Controllable Complexity. , 2021, , .		0
7	Self-Configuring Complex Photonic Circuits. , 2021, , .		0
8	Adapting Mach–Zehnder Mesh Equalizers in Direct-Detection Mode-Division-Multiplexed Links. Journal of Lightwave Technology, 2020, 38, 723-735.	4.6	27
9	Programmable photonic circuits. Nature, 2020, 586, 207-216.	27.8	598
10	Inference in artificial intelligence with deep optics and photonics. Nature, 2020, 588, 39-47.	27.8	418
11	Parallel Programming of an Arbitrary Feedforward Photonic Network. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-13.	2.9	42
12	Analyzing and generating multimode optical fields using self-configuring networks. Optica, 2020, 7, 794.	9.3	26
13	Parallel Fault-Tolerant Programming and Optimization of Photonic Neural Networks. , 2020, , .		1
14	Photonics to save energy and increase density in information processing. , 2020, , .		0
15	Optics for digital information processing. , 2020, , 433-461.		0
16	Finding the right modes for communicating with optics. , 2020, , .		0
17	Saving Energy and Increasing Density in Information Processing Using Photonics. , 2020, , .		2
18	Experimental band structure spectroscopy along a synthetic dimension. Nature Communications, 2019, 10, 3122.	12.8	95

#	Article	IF	CITATIONS
19	Matrix Optimization on Universal Unitary Photonic Devices. Physical Review Applied, 2019, 11, .	3.8	97
20	Experimental Demonstration of Dynamical Input Isolation in Nonadiabatically Modulated Photonic Cavities. ACS Photonics, 2019, 6, 162-169.	6.6	13
21	Waves, modes, communications, and optics: a tutorial. Advances in Optics and Photonics, 2019, 11, 679.	25.5	92
22	Self-configuring integrated photonic networks for communications, switching and processing. , 2018, , .		0
23	Attojoule Optoelectronics for Low-Energy Information Processing and Communications. Journal of Lightwave Technology, 2017, 35, 346-396.	4.6	464
24	Universal modal radiation laws for all thermal emitters. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4336-4341.	7.1	93
25	Communications expands its space. Nature Photonics, 2017, 11, 5-8.	31.4	60
26	Better choices than optical angular momentum multiplexing for communications. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9755-E9756.	7.1	12
27	Meshing optics with applications. Nature Photonics, 2017, 11, 403-404.	31.4	47
28	Unscrambling light—automatically undoing strong mixing between modes. Light: Science and Applications, 2017, 6, e17110-e17110.	16.6	149
29	Arbitrary and self-configuring photonic circuits for sensing and processing. , 2017, , .		0
30	Setting up meshes of interferometers – reversed local light interference method. Optics Express, 2017, 25, 29233.	3.4	43
31	Arbitrary and Reconfigurable Optics $\hat{a} \in $ New Opportunities for Integrated Photonics. , 2017, , .		0
32	Novel Integrated and Self-Configuring Photonic Architectures for Sensing, Communications and Processing. , 2017, , .		0
33	60  dB high-extinction auto-configured Mach–Zehnder interferometer. Optics Letters, 2016, 41, 5318	. 3.3	87
34	Arbitrary and Self-Configuring Optics $\hat{a} \in$ $``$ New Opportunities for Integrated and Nano Photonics. , 2016, , .		0
35	Arbitrary self-configuring optics with silicon photonics. , 2015, , .		0

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37	Perfect optics with imperfect components. Optica, 2015, 2, 747.	9.3	234
38	Design of large scale plasmonic nanoslit arrays for arbitrary mode conversion and demultiplexing. Optics Express, 2014, 22, 646.	3.4	10
39	Nanophotonics and interconnects - Status and future directions. , 2014, , .		Ο
40	Design of large scale plasmonic nanoslit arrays for arbitrary mode conversion and demultiplexing. Proceedings of SPIE, 2014, , .	0.8	0
41	Designing Arbitrary Linear Optical Components Without Calculations. , 2014, , .		0
42	Arbitrary Optical Transformations Without Calculations. , 2014, , .		0
43	Surface-Normal Ge/SiGe Asymmetric Fabry–Perot Optical Modulators Fabricated on Silicon Substrates. Journal of Lightwave Technology, 2013, 31, 3995-4003.	4.6	19
44	Highly Tailored Computational Electromagnetics Methods for Nanophotonic Design and Discovery. Proceedings of the IEEE, 2013, 101, 484-493.	21.3	21
45	Ge/SiGe quantum well asymmetric Fabry-Perot modulators on silicon substrates. , 2013, , .		0
46	New device concepts for low-energy high-density interconnects. , 2013, , .		0
47	Attojoule optoelectronics - Why and how. , 2013, , .		2
48	Nanoscale resonant-cavity-enhanced Germanium photodetectors with lithographically defined spectral response for improved performance at telecommunications wavelengths. , 2013, , .		3
49	Energy-per-Bit Limits in Plasmonic Integrated Photodetectors. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 3800210-3800210.	2.9	12
50	Modal Source Radiator Model for Arbitrary Two-Dimensional Arrays of Subwavelength Apertures on Metal Films. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 4601110-4601110.	2.9	4
51	Low-voltage broad-band electroabsorption from thin Ge/SiGe quantum wells epitaxially grown on silicon. Optics Express, 2013, 21, 867.	3.4	46
52	Separating arbitrary overlapping spatial modes losslessly and without calculations. , 2013, , .		0
53	Self-aligning universal beam coupler. Optics Express, 2013, 21, 6360.	3.4	149
54	Reconfigurable add-drop multiplexer for spatial modes. Optics Express, 2013, 21, 20220.	3.4	64

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55	Establishing Optimal Wave Communication Channels Automatically. Journal of Lightwave Technology, 2013, 31, 3987-3994.	4.6	53
56	How complicated must an optical component be?. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2013, 30, 238.	1.5	39
57	Nanoscale resonant-cavity-enhanced germanium photodetectors with lithographically defined spectral response for improved performance at telecommunications wavelengths. Optics Express, 2013, 21, 10228.	3.4	27
58	Self-configuring universal linear optical component [Invited]. Photonics Research, 2013, 1, 1.	7.0	331
59	Designing Linear Optical Components. Optics and Photonics News, 2013, 24, 38.	0.5	11
60	Light emission from strained germanium. Nature Photonics, 2013, 7, 162-163.	31.4	8
61	Energy-per-bit and noise limits in plasmonic intergrated photodetectors. Proceedings of SPIE, 2013, , .	0.8	0
62	Scalable optical transmitter and receiver based on cascaded nanoresonator modulators and multiwavelength laser. , 2013, , .		1
63	B-CALM: AN OPEN-SOURCE MULTI-GPU-BASED 3D-FDTD WITH MULTI-POLE DISPERSION FOR PLASMONICS. Progress in Electromagnetics Research, 2013, 138, 467-478.	4.4	10
64	Low-Energy Optoelectronics for Interconnects. , 2013, , .		1
65	Nanoscale Integrated Planar Multispectral Image Sensors. , 2013, , .		0
66	Routing and Detection of Light on Deeply Subwavelength scale in Two-conductor Metallic Slot Waveguides. , 2012, , .		0
67	Energy consumption in optical modulators for interconnects. Optics Express, 2012, 20, A293.	3.4	182
68	All linear optical devices are mode converters. Optics Express, 2012, 20, 23985.	3.4	98
69	Ge/SiGe asymmetric Fabry-Perot quantum well electroabsorption modulators. Optics Express, 2012, 20, 29164.	3.4	24
70	Selective area growth of germanium and germanium/silicon-germanium quantum wells in silicon waveguides for on-chip optical interconnect applications. Optical Materials Express, 2012, 2, 1336.	3.0	10
71	Self-aligned silicon fins in metallic slits as a platform for planar wavelength-selective nanoscale resonant photodetectors. Optics Express, 2012, 20, 22735.	3.4	13
72	Ultra-compact photonic crystal waveguide spatial mode converter and its connection to the optical diode effect. Optics Express, 2012, 20, 28388.	3.4	156

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73	Routing and photodetection in subwavelength plasmonic slot waveguides. Nanophotonics, 2012, 1, 9-16.	6.0	40
74	B-CALM: an open-source GPU-based 3D-FDTD with multi-pole dispersion for plasmonics. Proceedings of SPIE, 2012, , .	0.8	1
75	Light Emission in Ge Quantum Wells. , 2012, , .		Ο
76	Optical Transmission through Arbitrarily Located Subwavelength Apertures on Metal Films. , 2012, , .		0
77	Energy use in optical modulators. , 2012, , .		0
78	Ge/SiGe Quantum Well Waveguide Modulator Monolithically Integrated With SOI Waveguides. IEEE Photonics Technology Letters, 2012, 24, 461-463.	2.5	78
79	Temperature dependence of Ge quantum well light emitting diode on Si substrate. , 2012, , .		0
80	Selective-Area Growth of Ge and Ge/SiGe Quantum Wells in 3 $\hat{l}^1\!\!/ m$ Silicon-on-Insulator Waveguides. , 2012, , .		0
81	A micromachining-based technology for enhancing germanium light emission via tensile strain. Nature Photonics, 2012, 6, 398-405.	31.4	190
82	B-CALM: An open-source GPU-based 3D-FDTD with multi-pole dispersion for plasmonics. Optical and Quantum Electronics, 2012, 44, 285-290.	3.3	11
83	Investigation of Limits to the Optical Performance of Asymmetric Fabry-Perot Electroabsorption Modulators. IEEE Journal of Quantum Electronics, 2012, 48, 198-209.	1.9	20
84	Simple Electroabsorption Calculator for Designing 1310 nm and 1550 nm Modulators Using Germanium Quantum Wells. IEEE Journal of Quantum Electronics, 2012, 48, 187-197.	1.9	35
85	The Roles of Optics in Information Processing. , 2012, , .		Ο
86	Self-aligned Silicon Fins in Metallic Slits as a Platform for Planar Tunable Nanoscale Resonant Photodetectors. , 2012, , .		0
87	B-CALM: An open-source GPU-based 3D-FDTD with multi-pole dispersion for plasmonics. , 2011, , .		3
88	Ge quantum well resonator modulators. , 2011, , .		2
89	A Ge/SiGe quantum well waveguide modulator monolithically integrated with SOI waveguides. , 2011, , .		8
90	Multiple-Wavelength Focusing of Surface Plasmons with a Nonperiodic Nanoslit Coupler. Nano Letters, 2011, 11, 2693-2698.	9.1	133

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91	Strained germanium thin film membrane on silicon substrate for optoelectronics. Optics Express, 2011, 19, 25866.	3.4	114
92	Design methodology for compact photonic-crystal-based wavelength division multiplexers. Optics Letters, 2011, 36, 591.	3.3	44
93	Tensile-strained germanium-on-insulator substrate fabrication for silicon-compatible optoelectronics. Optical Materials Express, 2011, 1, 1121.	3.0	37
94	Indirect absorption in germanium quantum wells. AIP Advances, 2011, 1, .	1.3	26
95	Thin Dielectric Spacer for the Monolithic Integration of Bulk Germanium or Germanium Quantum Wells With Silicon-on-Insulator Waveguides. IEEE Photonics Journal, 2011, 3, 739-747.	2.0	19
96	Simple electroabsorption calculator for germanium quantum well devices. , 2011, , .		0
97	Nanometallic concentration for enhanced photodetection. , 2011, , .		0
98	Selective epitaxial growth of Ge/Si0.15Ge0.85 quantum wells on Si substrate using reduced pressure chemical vapor deposition. Applied Physics Letters, 2011, 98, .	3.3	34
99	Design Methodology for Compact Photonic Crystal Wavelength Division Multiplexers. , 2011, , .		0
100	Device Challenges and Opportunities for Optical Interconnects. , 2011, , .		0
101	A Novel Optoelectronic Device Complimentary to Photodetector. , 2011, , .		0
102	Are optical transistors the logical next step?. Nature Photonics, 2010, 4, 3-5.	31.4	436
103	The role of optics in computing. Nature Photonics, 2010, 4, 406-406.	31.4	45
104	Ultrafast absorption recovery in germanium/silicon-germanium quantum wells. , 2010, , .		0
105	Integration of germanium quantum well structures on a silicon-on-insulator waveguide platform for optical modulator applications. , 2010, , .		2
106	Optical Interconnects. , 2010, , .		6
107	Optical interconnects to electronic chips. Applied Optics, 2010, 49, F59.	2.1	179
108	Measurement and modeling of ultrafast carrier dynamics and transport in germanium/silicon-germanium quantum wells. Optics Express, 2010, 18, 25596.	3.4	42

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109	Simple electroabsorption model for germanium quantum well devices. , 2010, , .		1
110	Si-Ge surface-normal asymmetric fabry-perot quantum-confined stark effect electroabsorption modulator. , 2010, , .		0
111	Intervalley scattering and field screening in germanium/silicon-germanium quantum wells. , 2010, , .		0
112	Spot size effects in asymmetric fabry-perot electroabsorption modulators. , 2010, , .		2
113	Photonics for interconnect inside machines. , 2010, , .		0
114	Si-Ge surface-normal asymmetric Fabry-Perot quantum-confined stark effect electroabsorption modulator. , 2010, , .		4
115	Simple electroabsorption model for silicongermanium/germanium quantum well devices. , 2010, , .		1
116	Device Requirements for Optical Interconnects to CMOS Silicon Chips. , 2010, , .		56
117	Si-Ge Surface-Normal Asymmetric Fabry-Perot Electroabsorption Modulator. , 2010, , .		0
118	Fundamental Limits to Optical Components. , 2010, , .		0
119	Quantum Wells and Nanophotonics: Physics, Applications and Limits. , 2009, , .		0
120	Effect of uniaxial-strain on Ge p-i-n photodiodes integrated on Si. Applied Physics Letters, 2009, 95, .	3.3	13
121	Device requirements for dense interconnects. , 2009, , .		0
122	Plasmonic device in silicon CMOS. Electronics Letters, 2009, 45, 706.	1.0	28
123	Low capacitance CMOS silicon photodetectors for optical clock injection. Applied Physics A: Materials Science and Processing, 2009, 95, 1129-1135.	2.3	7
124	Device Requirements for Optical Interconnects to Silicon Chips. Proceedings of the IEEE, 2009, 97, 1166-1185.	21.3	1,642
125	Modal analysis and coupling in metal-insulator-metal waveguides. Physical Review B, 2009, 79, .	3.2	124
126	High efficiency monolithic photodetectors for integrated optoelectronics in the near infrared. , 2009, , .		2

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127	Design and Analysis of CMOS-Controlled Tunable Photodetectors for Multiwavelength Discrimination. Journal of Lightwave Technology, 2009, 27, 5451-5460.	4.6	2
128	Electrically controlled modulation in a photonic crystal nanocavity. Optics Express, 2009, 17, 15409.	3.4	26
129	Metal-dielectric-metal plasmonic waveguide devices for manipulating light at the nanoscale. Chinese Optics Letters, 2009, 7, 302-308.	2.9	79
130	High-Efficiency p-i-n Photodetectors on Selective-Area-Grown Ge for Monolithic Integration. IEEE Electron Device Letters, 2009, 30, 1161-1163.	3.9	46
131	Modeling of Plasmonic Waveguide Components and Networks. Journal of Computational and Theoretical Nanoscience, 2009, 6, 1808-1826.	0.4	35
132	Commentary: Metallic nanodevices for chip-scale optical interconnects. Journal of Nanophotonics, 2009, 3, 030302.	1.0	8
133	Ge Quantum Well Modulators on Si. ECS Transactions, 2009, 16, 851-856.	0.5	1
134	Fundamental Limit for Optical Devices. , 2009, , .		0
135	Nanometre-scale germanium photodetector enhanced by a near-infrared dipole antenna. Nature Photonics, 2008, 2, 226-229.	31.4	606
136	Characteristic Impedance Model for Plasmonic Metal Slot Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1473-1478.	2.9	31
137	Material Properties of Si-Ge/Ge Quantum Wells. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1082-1089.	2.9	61
138	Transmission Line and Equivalent Circuit Models for Plasmonic Waveguide Components. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1462-1472.	2.9	119
139	Optical Spatial Quantization for Higher Performance Analog-to-Digital Conversion. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 2143-2150.	4.6	10
140	Optical switching based on high-speed phased array optical beam steering. Applied Physics Letters, 2008, 92, .	3.3	37
141	Novel devices for optical interconnects to chips. , 2008, , .		0
142	Monolithic Integration of GaAs/AlGaAs Phase Modulator and Photodetector for RF Photonics. , 2008, ,		0
143	Germanium on Silicon Modulators and Nanometallic-Enhanced Detectors for Optical Interconnects. , 2008, , .		0

144 Plasmonic device in Si CMOS. , 2008, , .

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145	Balanced computing with nanophotonic interconnects. , 2008, , .		0
146	High-speed optical beam-steering based on phase-arrayed waveguides. Journal of Vacuum Science & Technology B, 2008, 26, 2124-2126.	1.3	21
147	C-band side-entry Ge quantum-well electroabsorption modulator on SOI operating at 1â€V swing. Electronics Letters, 2008, 44, 49.	1.0	57
148	Wideband, Low Driving Voltage Traveling-Wave Mach–Zehnder Modulator for RF Photonics. IEEE Photonics Technology Letters, 2008, 20, 517-519.	2.5	24
149	Devices for optical interconnects to chips. , 2008, , .		0
150	Fundamental Limits in Linear One-Dimensional Slow Light Structures. , 2008, , .		0
151	Material properties in Si-Ge/Ge quantum wells for silicon-integrated electro-absorption devices. , 2008, , .		0
152	Novel Si-based Optoelectronic Switching Device: Light to Latch. , 2007, , .		0
153	Recent Advances in Germanium Quantum Well Structures - A New Modulation Mechanism for Silicon-Compatible Optics. , 2007, , .		0
154	Novel Si-based CMOS Optoelectronic Switching Device Operating in the Near Infrared. , 2007, , .		0
155	Optical Link on Silicon Employing Ge/SiGe Quantum Well Structures. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	1
156	Joining optics and electronics for information processing and communication. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	1
157	Fundamental Limit to Linear One-Dimensional Slow Light Structures. Physical Review Letters, 2007, 99, 203903.	7.8	82
158	Nanostructured optics and optoelectronics for dense optical interconnects. , 2007, , .		1
159	Optical Spatially Quantized High Performance Analog-to-digital Conversion. , 2007, , .		2
160	Nanostructured Optics and Optoelectronics for Dense Optical Interconnects. , 2007, , .		0
161	SiGe optoelectronic metal-oxide semiconductor field-effect transistor. Optics Letters, 2007, 32, 2022.	3.3	25
162	The Fundamental Limit to Optical Components. Optics and Photonics News, 2007, 18, 27.	0.5	2

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163	Fundamental limit for optical components. Journal of the Optical Society of America B: Optical Physics, 2007, 24, A1.	2.1	65
164	Optical modulator on silicon employing germanium quantum wells. Optics Express, 2007, 15, 5851.	3.4	187
165	An Optical Interconnect Transceiver at 1550 nm Using Low-Voltage Electroabsorption Modulators Directly Integrated to CMOS. Journal of Lightwave Technology, 2007, 25, 3739-3747.	4.6	14
166	The Quantum Confined Stark Effect in Ge/SiGe Quantum Wells: An efficient electroabsorption mechanism for silicon-based applications. , 2007, , .		0
167	Femtosecond carrier dynamics in Ge/SiGe quantum wells. , 2007, , .		5
168	Ge–SiGe Quantum-Well Waveguide Photodetectors on Silicon for the Near-Infrared. IEEE Photonics Technology Letters, 2007, 19, 1631-1633.	2.5	56
169	Devices for Optical Interconnects to Chips. , 2007, , .		0
170	Silicon Germanium CMOS Optoelectronic Switching Device: Bringing Light to Latch. IEEE Transactions on Electron Devices, 2007, 54, 3252-3259.	3.0	35
171	Material properties in SiGe/Ge quantum wells. , 2007, , .		1
172	Optical Modulator on Si Employing Ge Quantum Wells. , 2007, , .		1
173	Fundamental Limit to Delay-Bandwidth Product in One-Dimensional Linear Optical Structures. , 2007, , .		1
174	Germanium Quantum-Well Photonic Devices on Silicon. , 2007, , .		0
175	Waveguide Electroabsorption Modulator on Si Employing Ge/SiGe Quantum Wells. , 2007, , .		0
176	Nonlinear Optical Effects in InxGa(1-x)As Quantum Systems for Saturable Absorbers. , 2006, , .		0
177	Ge/SiGe Quantum Confined Stark Effect Modulators on Silicon. , 2006, , .		0
178	Systematic Photonic Crystal Device Design: Global and Local Optimization and Sensitivity Analysis. IEEE Journal of Quantum Electronics, 2006, 42, 266-279.	1.9	27
179	C-shaped nanoaperture-enhanced germanium photodetector. Optics Letters, 2006, 31, 1519.	3.3	90
180	Integrated photonic switches for nanosecond packet-switched optical wavelength conversion. Optics Express, 2006, 14, 361.	3.4	14

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181	On perfect cloaking. Optics Express, 2006, 14, 12457.	3.4	229
182	Quantum-Confined Stark Effect in Ge/SiGe Quantum Wells on Si for Optical Modulators. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1503-1513.	2.9	150
183	Straightening out light. Nature Materials, 2006, 5, 83-84.	27.5	14
184	Self-aligned via and trench for metal contact in III-V semiconductor devices. Journal of Vacuum Science & Technology B, 2006, 24, 1117.	1.3	4
185	Optoelectronic switches based on diffusive conduction. Journal of Applied Physics, 2006, 100, 043107.	2.5	0
186	Temporal and spectral nonspecularities in reflection at surface plasmon resonance. Applied Physics Letters, 2006, 89, 041102.	3.3	5
187	Limit to the performance of optical components. , 2006, , .		2
188	Germanium electroabsorption devices on silicon for optical interconnects. , 2006, , .		0
189	Systematic photonic crystal device global and local optimization, and sensitivity analysis. , 2005, 6017, 20.		1
190	Interferometric sensors for spectral imaging. Sensors and Actuators A: Physical, 2005, 120, 110-114.	4.1	12
191	Strong quantum-confined Stark effect in germanium quantum-well structures on silicon. Nature, 2005, 437, 1334-1336.	27.8	725
192	Novel electrically controlled rapidly wavelength selective photodetection using MSMs. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 184-189.	2.9	10
193	Multifunctional integrated photonic switches. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 86-96.	2.9	22
194	Misalignment-tolerant surface-normal low-voltage modulator for optical interconnects. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 338-342.	2.9	37
195	Novel on-chip fully monolithic integration of GaAs devices with completely fabricated Si CMOS circuits. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 1278-1283.	2.9	5
196	Intimate monolithic integration of chip-scale photonic circuits. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 1255-1265.	2.9	9
197	Silicon-Based Micro-Fourier Spectrometer. IEEE Transactions on Electron Devices, 2005, 52, 419-426.	3.0	26

198 Spectral shaping of electrically controlled MSM-based rapidly tunable photodetectors. , 2005, , .

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199	Single ultrafast diffusive conduction based optoelectronic switch for multi-channel operation. , 2005, , .		0
200	Self-Aligning Planarization and Passivation for Integration Applications in Ill–V Semiconductor Devices. IEEE Transactions on Semiconductor Manufacturing, 2005, 18, 182-189.	1.7	16
201	Linear differential electro-optic conversion of sampled voltage signals using a MSM and multiple quantum well modulators. , 2005, , .		0
202	Opportunities for optics to silicon chips. , 2005, , .		3
203	Quantum-confined Stark effect electroabsorption in Ge/SiGe quantum wells on silicon substrates. , 2005, , .		0
204	Linear electro-optic conversion of sampled voltage signals using a low-temperature-grown GaAs MSM and a multiple quantum well modulator. , 2005, , .		0
205	Limits on the performance of dispersive thin-film stacks. Applied Optics, 2005, 44, 3349.	2.1	34
206	Demonstration of systematic photonic crystal device design and optimization by low-rank adjustments: an extremely compact mode separator. Optics Letters, 2005, 30, 141.	3.3	85
207	Photonic crystal device sensitivity analysis with Wannier basis gradients. Optics Letters, 2005, 30, 302.	3.3	15
208	Relationship between the superprism effect in one-dimensional photonic crystals and spatial dispersion in nonperiodic thin-film stacks. Optics Letters, 2005, 30, 2475.	3.3	18
209	MSM-based integrated CMOS wavelength-tunable optical receiver. IEEE Photonics Technology Letters, 2005, 17, 1271-1273.	2.5	14
210	A single transverse-mode monolithically integrated long vertical-cavity surface-emitting laser. IEEE Photonics Technology Letters, 2005, 17, 1366-1368.	2.5	6
211	Wannier basis design and optimization of a photonic crystal waveguide crossing. IEEE Photonics Technology Letters, 2005, 17, 1875-1877.	2.5	38
212	Spectral shaping of electrically controlled MSM-based tunable photodetectors. IEEE Photonics Technology Letters, 2005, 17, 2158-2160.	2.5	3
213	Multifunctional Integrated Photonic Switches for Nanosecond Packet-Switched Wavelength Conversion. , 2005, , .		1
214	Limits to Photonics for Information. , 2005, , .		0
215	High-speed optical switching based on diffusive conduction in an optical waveguide with surface-normal optical control. Journal of Applied Physics, 2004, 95, 2258-2263.	2.5	3
216	Optically controlled electroabsorption modulators for unconstrained wavelength conversion. Applied Physics Letters, 2004, 84, 469-471.	3.3	25

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217	Designing for beam propagation in periodic and nonperiodic photonic nanostructures: Extended Hamiltonian method. Physical Review E, 2004, 70, 036612.	2.1	27

218 Electrical characterizations of smart hydrogel based on chitosan/poly(diallydimethylammonium) Tj ETQq0 0 0 rgBT /Overlock d Tf 50 70

219	Receiverless detection schemes for optical clock distribution. , 2004, , .		4
220	Scalable Wavelength-Converting Crossbar Switches. IEEE Photonics Technology Letters, 2004, 16, 2305-2307.	2.5	13
221	Dual-diode quantum-well modulator for C-band wavelength conversion and broadcasting. Optics Express, 2004, 12, 310.	3.4	17
222	Monolithically-integrated long vertical cavity surface emitting laser incorporating a concave micromirror on a glass substrate. Optics Express, 2004, 12, 3967.	3.4	21
223	Multilayer Thin-Film Stacks With Steplike Spatial Beam Shifting. Journal of Lightwave Technology, 2004, 22, 612-618.	4.6	30
224	Pump–Probe Measurements of CMOS Detector Rise Time in the Blue. Journal of Lightwave Technology, 2004, 22, 2213-2217.	4.6	17
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