Connie J Chang-Hasnain

List of Publications by Year in Descending Order

310 papers	9,160 citations	45 h-index	85 g-index
427 ext. papers	11,254 ext. citations	4 avg, IF	6.15 L-index

#	Paper	IF	Citations
310	Effect of Transmission-Line Contact Length on the 50-Gbit/s Data Encoding Performance of a Multimode VCSEL. *Photonics*, **2022**, 9, 114	2.2	0
309	Resonant-cavity-enhanced p-i-n photodetector using a high-contrast-grating for 940nm.. *Optics Express*, **2022**, 30, 9298-9306	3.3	
308	Wavelength-Demultiplexed Laser Interferometry for Metrology. *IEEE Photonics Journal*, **2021**, 13, 1-9	1.8	
307	Octave bandwidth photonic fishnet-achromatic-metalens. *Nature Communications*, **2020**, 11, 3205	17.4	46
306	Feasibility of Using High-Contrast Grating as a Point-of-Care Sensor for Therapeutic Drug Monitoring of Immunosuppressants. *IEEE Journal of Translational Engineering in Health and Medicine*, **2020**, 8, 2800206	3	2
305	Resonant-antiresonant coupled cavity VCSELs. *Optics Express*, **2019**, 27, 1798-1807	3.3	7
304	VCSEL Array for 3D Sensing **2019**,		2
303	Monolithic high-contrast metastructure for beam-shaping VCSELs. *Optica*, **2018**, 5, 10	8.6	28
302	Recent advances in high-contrast metastructures, metasurfaces, and photonic crystals. *Advances in Optics and Photonics*, **2018**, 10, 180	16.7	69
301	Ultracompact Position-Controlled InP Nanopillar LEDs on Silicon with Bright Electroluminescence at Telecommunication Wavelengths. *ACS Photonics*, **2017**, 4, 695-702	6.3	20
300	III⁄V Compound Semiconductor Nanopillars Monolithically Integrated to Silicon Photonics. *ACS Photonics*, **2017**, 4, 1021-1025	6.3	7
299	Wavelength-Swept VCSELs. *IEEE Journal of Selected Topics in Quantum Electronics*, **2017**, 23, 1-16	3.8	30
298	Site-Controlled Growth of Monolithic InGaAs/InP Quantum Well Nanopillar Lasers on Silicon. *Nano Letters*, **2017**, 17, 2697-2702	11.5	27
297	Room-temperature Fabry-Perot resonances in suspended InGaAs/InP quantum-well nanopillars on a silicon substrate. *Optics Express*, **2017**, 25, 271-277	3.3	3
296	Very high efficiency optical coupler for silicon nanophotonic waveguide and single mode optical fiber. *Optics Express*, **2017**, 25, 18462-18473	3.3	30
295	Widely tunable 1060-nm VCSEL with high-contrast grating mirror. *Optics Express*, **2017**, 25, 11844-11854	3.3	17
294	Nanopillar quantum well lasers directly grown on silicon and emitting at silicon-transparent wavelengths. *Optica*, **2017**, 4, 717	8.6	37

293	MEMS-tunable VCSELs using 2D high-contrast gratings. *Optics Letters*, **2017**, 42, 823-826	3	16
292	Ultrahigh Responsivity-Bandwidth Product in a Compact InP Nanopillar Phototransistor Directly Grown on Silicon. *Scientific Reports*, **2016**, 6, 33368	4.9	19
291	Widely tunable 1060-nm high-contrast grating VCSEL **2016**,		1
290	Integrated plasmonic refractive index sensor based on grating/metal film resonant structure **2016**,		5
289	High-efficiency aperiodic two-dimensional high-contrast-grating hologram **2016**,		3
288	Room-Temperature InGaAs/InP Quantum-Well-in-Nanopillar Laser Directly Grown on Silicon **2016**,		1
287	Efficient Electroluminescence from III/V Quantum-Well-in-Nanopillar Light Emitting Diodes Directly Grown on Silicon **2016**,		1
286	Integration of III-V Nanopillar Resonator to In-Plane Silicon Waveguides **2016**,		3
285	Beam-Shaping Single-Mode VCSEL With A High-Contrast Grating Mirror **2016**,		2
284	Surface-normal electro-optic spatial light modulator using graphene integrated on a high-contrast grating resonator. *Optics Express*, **2016**, 24, 26035-26043	3.3	30
283	. *Journal of Lightwave Technology*, **2016**, 34, 2079-2084	4	2
282	Progress and prospects of silicon-based design for optical phased array **2016**,		2
281	High-contrast grating resonators for label-free detection of disease biomarkers. *Scientific Reports*, **2016**, 6, 27482	4.9	32
280	High-Q and low-loss chalcogenide waveguide for nonlinear supercontinuum generation **2016**,		4
279	Compact On-Chip Optical Components Based on Multimode Interference Design Using High-Contrast Grating Hollow-Core Waveguides. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22, 279-287	3.8	1
278	Illumination Angle Insensitive Single Indium Phosphide Tapered Nanopillar Solar Cell. *Nano Letters*, **2015**, 15, 4961-7	11.5	22
277	Flexible photonic metastructures for tunable coloration. *Optica*, **2015**, 2, 255	8.6	110
276	Theory and design of two-dimensional high-contrast-grating phased arrays. *Optics Express*, **2015**, 23, 24508-24	3.3	20

275	Heterogeneously integrated long-wavelength VCSEL using silicon high contrast grating on an SOI substrate. *Optics Express*, **2015**, 23, 2512-23	3.3	48
274	Wurtzite-Phased InP Micropillars Grown on Silicon with Low Surface Recombination Velocity. *Nano Letters*, **2015**, 15, 7189-98	11.5	16
273	Design Rule of 2D High Contrast Gratings and Engineering of Orbital Angular Momentum of Light **2015**,		1
272	Integrated Optics Using High Contrast Gratings **2015**, 57-105		1
271	Laser optomechanics. *Scientific Reports*, **2015**, 5, 13700	4.9	25
270	Surface-normal coupled four-wave mixing in a high contrast gratings resonator. *Optics Express*, **2015**, 23, 29565-72	3.3	14
269	Surface-normal Coupled Four-wave Mixing in a High Contrast Grating Resonator **2015**,		1
268	InP nanowire avalanche photodiode and bipolar junction phototransistor integrated on silicon substrate **2014**,		1
267	High brightness InP micropillars grown on silicon with Fermi level splitting larger than 1 eV. *Nano Letters*, **2014**, 14, 3235-40	11.5	17
266	Long-Wavelength Tunable Detector Using High-Contrast Grating. *IEEE Journal of Selected Topics in Quantum Electronics*, **2014**, 20, 178-185	3.8	7
265	Metastable growth of pure wurtzite InGaAs microstructures. *Nano Letters*, **2014**, 14, 4757-62	11.5	16
264	Nanopillar lasers directly grown on silicon with heterostructure surface passivation. *ACS Nano*, **2014**, 8, 6833-9	16.7	19
263	Tailoring the optical characteristics of microsized InP nanoneedles directly grown on silicon. *Nano Letters*, **2014**, 14, 183-90	11.5	40
262	Composition homogeneity in InGaAs/GaAs core-shell nanopillars monolithically grown on silicon. *ACS Applied Materials & Interfaces*, **2014**, 6, 16706-11	9.5	7
261	Nanophotonic integrated circuits from nanoresonators grown on silicon. *Nature Communications*, **2014**, 5, 4325	17.4	39
260	Breakthroughs in Photonics 2013: Advances in Nanoantennas. *IEEE Photonics Journal*, **2014**, 6, 1-6	1.8	7
259	Comprehensive model of 1550 nm MEMS-tunable high-contrast-grating VCSELs. *Optics Express*, **2014**, 22, 8541-55	3.3	7
258	A 32 □2 optical phased array using polysilicon sub-wavelength high-contrast-grating mirrors. *Optics Express*, **2014**, 22, 19029-39	3.3	30

257	High speed optical phased array using high contrast grating all-pass filters. *Optics Express*, **2014**, 22, 20038-44	3.3	33
256	Three-dimensional whispering gallery modes in InGaAs nanoneedle lasers on silicon. *Applied Physics Letters*, **2014**, 105, 111105	3.4	8
255	Valence band splitting in wurtzite InGaAs nanoneedles studied by photoluminescence excitation spectroscopy. *ACS Nano*, **2014**, 8, 11440-6	16.7	8
254	1550-nm wavelength-tunable HCG VCSELs **2014**,		1
253	Optical phased array using high contrast gratings for two dimensional beamforming and beamsteering. *Optics Express*, **2013**, 21, 12238-48	3.3	46
252	High speed, ultra-compact spectrometer using high contrast grating swept-wavelength detector **2013**,		2
251	High quality InGaP micropillars directly grown on silicon **2013**,		2
250	High-Contrast Grating VCSELs. *Springer Series in Optical Sciences*, **2013**, 291-317	0.5	
249	High-quality InP nanoneedles grown on silicon. *Applied Physics Letters*, **2013**, 102, 012115	3.4	28
248	Unconventional growth mechanism for monolithic integration of III-V on silicon. *ACS Nano*, **2013**, 7, 100-7	16.7	44
247	Experimental and theoretical study of wide hysteresis cycles in 1550 nm VCSELs under optical injection. *Optics Express*, **2013**, 21, 3125-32	3.3	23
246	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 1701311-1701311	3.8	52
245	Elastic energy relaxation and critical thickness for plastic deformation in the core-shell InGaAs/GaAs nanopillars. *Journal of Applied Physics*, **2013**, 113, 104311	2.5	20
244	Optical phase modulation based on directly modulated reflection-mode OIL-VCSEL. *Optics Express*, **2013**, 21, 22114-23	3.3	7
243	Single crystalline InGaAs nanopillar grown on polysilicon with dimensions beyond the substrate grain size limit. *Nano Letters*, **2013**, 13, 5931-7	11.5	17
242	Sub-cycle QAM modulation for VCSEL-based optical fiber links. *Optics Express*, **2013**, 21, 1830-9	3.3	1
241	Optical beamsteering using an 8 □8 MEMS phased array with closed-loop interferometric phase control. *Optics Express*, **2013**, 21, 2807-15	3.3	41
240	Physics of high contrast gratings: a band diagram insight **2013**,		5

239	Tunable 1550nm VCSELs using high-contrast grating for next-generation networks **2013**,		3
238	Ultra-compact Optical Switch Using High Contrast Grating Hollow-core Waveguide **2013**,		1
237	. *IEEE Photonics Journal*, **2012**, 4, 1372-1380	1.8	1
236	. *Proceedings of the IEEE*, **2012**, 100, 1600-1603	14.3	
235	. *Proceedings of the IEEE*, **2012**, 100, 1604-1643	14.3	32
234	A Message From the JLT Editor-in-Chief: State of the Journal *Journal of Lightwave Technology*, **2012**, 30, 2741-2742	4	
233	Characteristics of InP nanoneedles grown on silicon by low-temperature MOCVD **2012**,		1
232	. *Journal of Lightwave Technology*, **2012**, 30, 3640-3646	4	7
231	**2012**,		1
230	Experimental characterization on high contrast grating reflectivity **2012**,		1
229	Low-loss slow light inside high contrast grating waveguide **2012**,		2
228	Novel high efficiency vertical to in-plane optical coupler **2012**,		5
227	. *Journal of Lightwave Technology*, **2012**, 30, 3647-3652	4	40
226	Slow-light high contrast metastructure hollow-core waveguides **2012**,		2
225	Low loss hollow-core waveguide on a silicon substrate. *Nanophotonics*, **2012**, 1, 23-29	6.3	26
224	High-contrast gratings for integrated optoelectronics. *Advances in Optics and Photonics*, **2012**, 4, 379	16.7	300
223	Physics of near-wavelength high contrast gratings. *Optics Express*, **2012**, 20, 10888-95	3.3	91
222	Nanolasers grown on silicon-based MOSFETs. *Optics Express*, **2012**, 20, 12171-6	3.3	28

221	High-speed avalanche photodiodes using III∇ nanopillars monolithically grown on silicon **2012**,		4
220	An ellipse model for cavity mode behavior of optically injection-locked VCSELs. *Optics Express*, **2012**, 20, 6980-8	3.3	7
219	Optical phased array for far field beam steering with varied HCG **2012**,		2
218	Half-cycle QAM modulation for VCSEL-based optical links **2012**,		2
217	Fast-Light to Slow-Light Switching in a Laser Cavity. *IEEE Photonics Technology Letters*, **2011**, 23, 971-973	2.2	1
216	GaAs-based nanoneedle light emitting diode and avalanche photodiode monolithically integrated on a silicon substrate. *Nano Letters*, **2011**, 11, 385-90	11.5	81
215	Beyond-Bandwidth Electrical Pulse Modulation of a TO-Can Packaged VCSEL for 10 Gbit/s Injection-Locked NRZ-to-RZ Transmission. *Journal of Lightwave Technology*, **2011**, 29, 830-841	4	26
214	Matrix Fabry-Perot resonance mechanism in high-contrast gratings. *Optics Letters*, **2011**, 36, 1704-6	3	49
213	High-contrast gratings as a new platform for integrated optoelectronics. *Semiconductor Science and Technology*, **2011**, 26, 014043	1.8	63
212	High Reflectivity Subwavelength Metal Grating for VCSEL Applications **2011**,		2
211	Nanolasers grown on silicon. *Nature Photonics*, **2011**, 5, 170-175	33.9	387
210	Growth kinetics of GaAs nanoneedles on silicon and sapphire substrates. *Applied Physics Letters*, **2011**, 98, 153113	3.4	6
209	Double-Resonant Enhancement of Surface Enhanced Raman Scattering Using High Contrast Grating Resonators **2011**,		1
208	GaAs nanoneedles grown on sapphire. *Applied Physics Letters*, **2011**, 98, 123101	3.4	31
207	Novel Three-dimensional Hollow-core Waveguide Using High-contrast Sub-wavelength Grating **2011**,		1
206	Photoluminescence properties of InAs nanowires grown on GaAs and Si substrates. *Nanotechnology*, **2010**, 21, 335705	3.4	35
205	High contrast gratings for integrated optoelectronics **2010**,		2
204	**2010**,		1

203	Second-harmonic generation from a single wurtzite GaAs nanoneedle. *Applied Physics Letters*, **2010**, 96, 051110	3.4	44
202	Polarized zone-center phonon modes of wurtzite GaAs. *Physical Review B*, **2010**, 81,	3.3	8
201	Multiwavelength HCG-VCSEL array **2010**,		2
200	All-semiconductor nanolasers on silicon **2010**,		2
199	Planar high-numerical-aperture low-loss focusing reflectors and lenses using subwavelength high contrast gratings. *Optics Express*, **2010**, 18, 12606-14	3.3	160
198	1550 nm high contrast grating VCSEL. *Optics Express*, **2010**, 18, 15461-6	3.3	72
197	Bandwidth enhancement of injection-locked distributed reflector lasers with wirelike active regions. *Optics Express*, **2010**, 18, 16370-8	3.3	11
196	Theoretical analysis of subwavelength high contrast grating reflectors. *Optics Express*, **2010**, 18, 16973-88	3.3	205
195	Long distance single-mode fiber transmission of multimode VCSELs by injection locking. *Optics Express*, **2010**, 18, 20552-7	3.3	9
194	Reflection-mode optical injection locking. *Optics Express*, **2010**, 18, 20887-93	3.3	11
193	Dispersion properties of high-contrast grating hollow-core waveguides. *Optics Letters*, **2010**, 35, 4099-101	3	11
192	Performance of a Multi-Gb/s 60 GHz Radio Over Fiber System Employing a Directly Modulated Optically Injection-Locked VCSEL. *Journal of Lightwave Technology*, **2010**, 28, 2436-2444	4	28
191	Monolithically integrated multi-wavelength VCSEL arrays using high-contrast gratings. *Optics Express*, **2010**, 18, 694-9	3.3	50
190	Long-Wavelength High-Contrast Grating Vertical-Cavity Surface-Emitting Laser. *IEEE Photonics Journal*, **2010**, 2, 415-422	1.8	39
189	1550 nm high contrast grating VCSEL using proton-implant-defined aperture **2010**,		1
188	Multi-Gbps ASK and QPSK-modulated 60 GHz RoF Link using an Optically Injection Locked VCSEL **2010**,		4
187	Single Crystalline GaAs Nanoneedles Grown on 46% Lattice-Mismatched Sapphire with Bright Luminescence **2010**,		1
186	Planar, High Numerical-aperture Lens Using Sub-wavelength High Contrast Grating **2010**,		1

185	Ultra-compact Optical Coupler and Splitter using High-Contrast Grating Hollow-Core Waveguide **2010**,		1
184	Novel Inverse-tone High Contrast Grating Reflector **2010**,		1
183	A Linear High-Contrast Gratings Hollow-Core Waveguide and its System Level Performance **2010**,		2
182	Optoelectronic Oscillators Using Direct-Modulated Semiconductor Lasers Under Strong Optical Injection. *IEEE Journal of Selected Topics in Quantum Electronics*, **2009**, 15, 572-577	3.8	42
181	High-Contrast Grating VCSELs. *IEEE Journal of Selected Topics in Quantum Electronics*, **2009**, 15, 869-878	3.8	59
180	High-Index-Contrast Grating (HCG) and Its Applications in Optoelectronic Devices. *IEEE Journal of Selected Topics in Quantum Electronics*, **2009**, 15, 1485-1499	3.8	93
179	A novel ultra-low loss hollow-core waveguide using subwavelength high-contrast gratings. *Optics Express*, **2009**, 17, 1508-17	3.3	54
178	Greatly enhanced slow and fast light in chirped pulse semiconductor optical amplifiers: theory and experiments. *Optics Express*, **2009**, 17, 2188-97	3.3	7
177	Core-shell InGaAs/GaAs quantum well nanoneedles grown on silicon with silicon-transparent emission. *Optics Express*, **2009**, 17, 7831-6	3.3	34
176	Greatly increased fiber transmission distance with an optically injection-locked vertical-cavity surface-emitting laser. *Optics Express*, **2009**, 17, 13785-91	3.3	17
175	22-Gb/s Long Wavelength VCSELs. *Optics Express*, **2009**, 17, 17547-54	3.3	32
174	Size effect of high contrast gratings in VCSELs. *Optics Express*, **2009**, 17, 24002-7	3.3	31
173	Reconfigurable Multifunctional Operation Using Optical Injection-Locked Vertical-Cavity Surface-Emitting Lasers. *Journal of Lightwave Technology*, **2009**, 27, 2958-2963	4	4
172	On the Go to Reduce Time to Publication: A Message from the Editor-in-Chief. *Journal of Lightwave Technology*, **2009**, 27, 1063-1063	4	
171	Low Birefringence and 2-D Optical Confinement of Hollow Waveguide With Distributed Bragg Reflector and High-Index-Contrast Grating. *IEEE Photonics Journal*, **2009**, 1, 135-143	1.8	18
170	Electron spin polarization induced by linearly polarized light in a (110) GaAs quantum-well waveguide. *Physical Review Letters*, **2009**, 102, 206604	7.4	8
169	Novel 2D High-Contrast Grating Hollow-Core Waveguide **2009**,		1
168	GaAs Nanoneedle Photodetector Monolithically Grown on a (111) Si Substrate by MOCVD **2009**,		1

167	A nanoelectromechanical tunable laser. *Nature Photonics*, **2008**, 2, 180-184	33.9	137
166	A New Amplifier Model for Resonance Enhancement of Optically Injection-Locked Lasers. *IEEE Photonics Technology Letters*, **2008**, 20, 395-397	2.2	18
165	VCSEL Optoelectronic Biosensor for Detection of Infectious Diseases. *IEEE Photonics Technology Letters*, **2008**, 20, 443-445	2.2	17
164	Large Fabrication Tolerance for VCSELs Using High-Contrast Grating. *IEEE Photonics Technology Letters*, **2008**, 20, 434-436	2.2	38
163	Tunable Optical Equalizer Using Diffraction Grating Filters. *IEEE Photonics Technology Letters*, **2008**, 20, 1590-1592	2.2	6
162	Atomically sharp catalyst-free wurtzite GaAs/AlGaAs nanoneedles grown on silicon. *Applied Physics Letters*, **2008**, 93, 023116	3.4	89
161	Celebrating 25 Years of the IEEE/OSA Journal of Lightwave Technology. *Journal of Lightwave Technology*, **2008**, 26, 990-993	4	2
160	Bandwidth Enhancement by Master Modulation of Optical Injection-Locked Lasers. *Journal of Lightwave Technology*, **2008**, 26, 2584-2593	4	31
159	Ultrahigh-bandwidth electrically tunable fast and slow light in semiconductor optical amplifiers [Invited]. *Journal of the Optical Society of America B: Optical Physics*, **2008**, 25, C46	1.7	8
158	Strong optical injection-locked semiconductor lasers demonstrating > 100-GHz resonance frequencies and 80-GHz intrinsic bandwidths. *Optics Express*, **2008**, 16, 6609-18	3.3	123
157	Tunable VCSEL with ultra-thin high contrast grating for high-speed tuning. *Optics Express*, **2008**, 16, 14223136	3.3	36
156	Surface-normal emission of a high-Q resonator using a subwavelength high-contrast grating. *Optics Express*, **2008**, 16, 17282-7	3.3	98
155	Greatly enhanced modulation response of injection-locked multimode VCSELs. *Optics Express*, **2008**, 16, 21582-6	3.3	21
154	Adjustable Chirp Injection-Locked 1.55-μm VCSELs for Enhanced Chromatic Dispersion Compensation at 10-Gbit/s **2008**,		3
153	High-Speed Modulation of Optical Injection-Locked Semiconductor Lasers **2008**,		1
152	80-GHz intrinsic 3-dB bandwidth of directly modulated semiconductor lasers under optical injection locking **2008**,		2
151	Optical properties of InP nanowires on Si substrates with varied synthesis parameters. *Applied Physics Letters*, **2008**, 92, 013121	3.4	35
150	NEMO tunable VCSEL using ultra compact high contrast grating for high speed tuning **2008**,		4

149	Tunable optical equalizer based on 1.55 Îm VCSEL for modulation bandwidth enhancement **2008**,		1
148	Growth mechanisms and crystallographic structure of InP nanowires on lattice-mismatched substrates. *Journal of Applied Physics*, **2008**, 104, 044313	2.5	53
147	Single mode high-contrast subwavelength grating vertical cavity surface emitting lasers. *Applied Physics Letters*, **2008**, 92, 171108	3.4	35
146	Systematic study on locking stability and frequency response of injection-locked multimode VCSELs **2008**,		1
145	107-GHz Resonance Frequency of 1.55-Îm VCSELs under ultra-high optical injection locking **2008**,		1
144	A novel high-Q resonator using high contrast subwavelength grating **2008**,		1
143	Analytical solution and design guideline for highly reflective subwavelength gratings **2008**,		2
142	Ultrahigh-speed laser modulation by injection locking **2008**, 145-182		4
141	Upstream vertical cavity surface-emitting lasers for fault monitoring and localization in WDM passive optical networks. *Optics Communications*, **2008**, 281, 2218-2226	2	6
140	Hybrid microdisk laser on a silicon platform using lateral-field optoelectronic tweezers assembly **2008**,		1
139	A surface-emitting laser incorporating a high-index-contrast subwavelength grating. *Nature Photonics*, **2007**, 1, 119-122	33.9	387
138	Monolithic Integrated Piezoelectric MEMS-Tunable VCSEL. *IEEE Journal of Selected Topics in Quantum Electronics*, **2007**, 13, 374-380	3.8	19
137	Optically Injection-Locked Optoelectronic Oscillators with Low RF Threshold Gain **2007**,		6
136	Rayleigh backscattering and extinction ratio study of optically injection-locked 1.55 [micro sign]m VCSELs. *Electronics Letters*, **2007**, 43, 182	1.1	7
135	Transverse Mode Control in High-Contrast Subwavelength Grating VCSEL **2007**,		1
134	Critical diameter for III-V nanowires grown on lattice-mismatched substrates. *Applied Physics Letters*, **2007**, 90, 043115	3.4	186
133	Novel Fault Monitoring and Localization Scheme in WDM-PONs with Upstream VCSEL Transmitters **2007**,		3
132	Slow light using spin coherence and V-type electromagnetically induced transparency in [110] strained quantum wells. *Journal of the Optical Society of America B: Optical Physics*, **2007**, 24, 849	1.7	8

131	THz-bandwidth tunable slow light in semiconductor optical amplifiers. *Optics Express*, **2007**, 15, 747-53	3.3	24
130	Nano electro-mechanical optoelectronic tunable VCSEL. *Optics Express*, **2007**, 15, 1222-7	3.3	38
129	Novel cascaded injection-locked 1.55-mum VCSELs with 66 GHz modulation bandwidth. *Optics Express*, **2007**, 15, 14810-6	3.3	45
128	Electrically tunable fast light at THz bandwidth using cascaded semiconductor optical amplifiers. *Optics Express*, **2007**, 15, 15863-7	3.3	8
127	Chirp-enhanced fast light in semiconductor optical amplifiers. *Optics Express*, **2007**, 15, 17631-8	3.3	10
126	Optoelectronic Oscillator Using Injection-Locked VCSELs. *Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS*, **2007**,		4
125	Bandwidth Enhancement by Optical Amplitude and Phase Modulation of Injection-Locked Semiconductor Lasers **2007**,		4
124	Slow light in semiconductor heterostructures. *Journal Physics D: Applied Physics*, **2007**, 40, R93-R107	3	40
123	Fabrication and design of an integrable subwavelength ultrabroadband dielectric mirror. *Applied Physics Letters*, **2006**, 88, 031102	3.4	33
122	Improved semiconductor-laser dynamics from induced population pulsation. *IEEE Journal of Quantum Electronics*, **2006**, 42, 552-562	2	37
121	Microwave performance of optically injection-locked VCSELs. *IEEE Transactions on Microwave Theory and Techniques*, **2006**, 54, 788-796	4.1	71
120	Demonstration of piezoelectric actuated GaAs-based MEMS tunable VCSEL. *IEEE Photonics Technology Letters*, **2006**, 18, 1197-1199	2.2	20
119	50-GHz optically injection-locked 1.55-/spl mu/m VCSELs. *IEEE Photonics Technology Letters*, **2006**, 18, 367-369	2.2	40
118	Correction to "Demonstration of Piezoelectric Actuated GaAs-Based MEMS Tunable VCSEL". *IEEE Photonics Technology Letters*, **2006**, 18, 1475-1475	2.2	
117	Optically Injection-Locked 1.55-mu m VCSELs as Upstream Transmitters in WDM-PONs. *IEEE Photonics Technology Letters*, **2006**, 18, 2371-2373	2.2	20
116	Novel modulated-master injection-locked 1.55-microm VCSELs. *Optics Express*, **2006**, 14, 10500-7	3.3	15
115	Experimental demonstration of slow and superluminal light in semiconductor optical amplifiers. *Optics Express*, **2006**, 14, 12968-75	3.3	23
114	Slow and Fast Light in Semiconductor Quantum-Well and Quantum-Dot Devices. *Journal of Lightwave Technology*, **2006**, 24, 4642-4654	4	77

113	Inducing electron spin coherence in GaAs quantum well waveguides: Spin coherence without spin precession. *Physical Review B*, **2005**, 72,	3.3	13
112	Ultraslow light (. *Applied Physics Letters*, **2005**, 87, 171102	3.4	38
111	Slow-light optical buffers: capabilities and fundamental limitations. *Journal of Lightwave Technology*, **2005**, 23, 4046-4066	4	312
110	Tunable ultraslow light in vertical-cavity surface-emitting laser amplifier. *Optics Express*, **2005**, 13, 7899-904	3.3	50
109	Room temperature slow light in a quantum-well waveguide via coherent population oscillation. *Optics Express*, **2005**, 13, 9909-15	3.3	71
108	Design of a monolithic piezoelectrically actuated microelectromechanical tunable vertical-cavity surface-emitting laser. *Optics Letters*, **2005**, 30, 896-8	3	7
107	Micromechanical tunable optical filters: general design rules for wavelengths from near-IR up to 10Ħh. *Sensors and Actuators A: Physical*, **2005**, 119, 57-62	3.9	8
106	Slow and superluminal light in semiconductor optical amplifiers. *Electronics Letters*, **2005**, 41, 922	1.1	20
105	Ultra-sensitive immunoassay using VCSEL detection system. *Electronics Letters*, **2004**, 40, 649	1.1	19
104	Variable optical buffer using slow light in semiconductor nanostructures **2004**,		1
103	Ultrabroadband mirror using low-index cladded subwavelength grating. *IEEE Photonics Technology Letters*, **2004**, 16, 518-520	2.2	286
102	Injection-locked 1.55-/spl mu/m tunable VCSEL for uncooled WDM transmitter applications. *IEEE Photonics Technology Letters*, **2004**, 16, 888-890	2.2	13
101	Broad-band mirror (1.12-1.62 Ħh) using a subwavelength grating. *IEEE Photonics Technology Letters* , **2004**, 16, 1676-1678	2.2	205
100	Compact label-free biosensor using VCSEL-based measurement system. *IEEE Photonics Technology Letters*, **2004**, 16, 1712-1714	2.2	18
99	Slow light using semiconductor quantum dots. *Journal of Physics Condensed Matter*, **2004**, 16, S3727-S3735	1.8	72
98	Slow light in semiconductor quantum wells. *Optics Letters*, **2004**, 29, 2291-3	3	232
97	Ultracompact high-sensitivity label-free biosensor using VCSEL **2004**, 5328, 140		4
96	Injection locking of VCSELs. *IEEE Journal of Selected Topics in Quantum Electronics*, **2003**, 9, 1386-1393	3.8	92

95	Buried selectively oxidized AlGaAs structures grown on nonplanar substrates. *IEEE Photonics Technology Letters*, **2003**, 15, 75-77	2.2	5
94	Enhancement of dynamic range in 1.55-μm VCSELs using injection locking. *IEEE Photonics Technology Letters*, **2003**, 15, 498-500	2.2	21
93	Transmission performance of a 1.5-μm 2.5-Gb/s directly modulated tunable VCSEL. *IEEE Photonics Technology Letters*, **2003**, 15, 599-601	2.2	10
92	Thermal oxidation of AlGaAs: modeling and process control. *IEEE Journal of Quantum Electronics*, **2003**, 39, 577-585	2	13
91	VCSEL for Metro Communications **2002**, 666-698		5
90	Electrically pumped directly modulated 1550-nm tunable VCSELs **2002**, 4905, 198		1
89	Buried selectively-oxidized AlGaAs structures grown on nonplanar substrates. *Optics Express*, **2002**, 10, 1003-8	3.3	9
88	Widely tunable torsional optical filter. *IEEE Photonics Technology Letters*, **2002**, 14, 819-821	2.2	30
87	Demonstration of long-wavelength directly modulated VCSEL transmission using SOAs. *IEEE Photonics Technology Letters*, **2002**, 14, 1369-1371	2.2	1
86	Study of long-wavelength VCSEL-VCSEL injection locking for 2.5-Gb/s transmission. *IEEE Photonics Technology Letters*, **2002**, 14, 1635-1637	2.2	36
85	Nonequilibrium model for semiconductor laser modulation response. *IEEE Journal of Quantum Electronics*, **2002**, 38, 402-409	2	32
84	1.55-μm tunable VCSEL for metro-WDM applications **2001**,		1
83	Parasitics and design considerations on oxide-implant VCSELs. *IEEE Photonics Technology Letters*, **2001**, 13, 1274-1276	2.2	8
82	50 km error-free 10 Gbit/s WDM transmission using directly modulated long-wavelength VCSELs. *Electronics Letters*, **2000**, 36, 1793	1.1	10
81	Polarization control of vertical-cavity surface-emitting lasers by electro-optic birefringence. *Applied Physics Letters*, **2000**, 76, 813-815	3.4	21
80	Comparative study of the analog performance of a vertical-cavity surface-emitting laser under gain and cavity loss modulation. *Applied Physics Letters*, **2000**, 77, 2092-2094	3.4	4
79	Tunable VCSEL. *IEEE Journal of Selected Topics in Quantum Electronics*, **2000**, 6, 978-987	3.8	247
78	Dynamic behavior and applications of a three-contact vertical-cavity surface-emitting laser. *IEEE Journal of Selected Topics in Quantum Electronics*, **1999**, 5, 512-519	3.8	8

77	Introduction to the issue on semiconductor lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **1999**, 5, 399-400	3.8	
76	Compact, integrated optical disk readout head using a novel bistable vertical-cavity surface-emitting laser. *IEEE Photonics Technology Letters*, **1999**, 11, 245-247	2.2	14
75	Independent phase and magnitude control of an optically carried microwave signal with a three-terminal vertical-cavity surface-emitting laser. *IEEE Photonics Technology Letters*, **1999**, 11, 463-465	2.2	1
74	Collimating diode laser beams from a large-area VCSEL-array using microlens array. *IEEE Photonics Technology Letters*, **1999**, 11, 506-508	2.2	13
73	Top-emitting micromechanical VCSEL with a 31.6-nm tuning range. *IEEE Photonics Technology Letters*, **1998**, 10, 18-20	2.2	64
72	Modulation of a vertical-cavity surface-emitting laser using an intracavity quantum-well absorber. *IEEE Photonics Technology Letters*, **1998**, 10, 319-321	2.2	18
71	Monolithic 2D-VCSEL array with >2 W CW and >5 W pulsed output power. *Electronics Letters*, **1998**, 34, 2132	1.1	27
70	The physics of negative differential resistance of an intracavity voltage-controlled absorber in a vertical-cavity surface-emitting laser. *Applied Physics Letters*, **1998**, 73, 1796-1798	3.4	15
69	Yield theory for diode laser fabrication. *Electronics Letters*, **1997**, 33, 496	1.1	
68	Widely tunable 1.5 [micro sign]m micromechanical optical filter using AlOx/AlGaAs DBR. *Electronics Letters*, **1997**, 33, 1702	1.1	22
67	Intracavity resonant quantum-well photodetection of a vertical-cavity surface-emitting laser. *Electronics Letters*, **1997**, 33, 597	1.1	5
66	High performance continuously tunable top-emitting vertical cavity laser with 20 nm wavelength range. *Electronics Letters*, **1997**, 33, 1051	1.1	9
65	Al-based thermal oxides in vertical cavity surface emitting lasers **1997**,		3
64	Self-pulsations, bistability, and intracavity quantum well absorber modulation of VCSELs **1997**,		3
63	A novel 4 x 8 single-mode independently addressable oxide-isolated VCSEL array. *IEEE Photonics Technology Letters*, **1997**, 9, 1196-1198	2.2	8
62	Experimental demonstration of a four-plane 2-D multiple-wavelength optical interconnection using integrated VCSEL arrays and MQW/DBR detectors. *IEEE Photonics Technology Letters*, **1997**, 9, 1646-1648	2.2	6
61	Vertical-cavity lasers with an intracavity resonant detector. *IEEE Journal of Selected Topics in Quantum Electronics*, **1997**, 3, 416-421	3.8	6
60	Multiple-wavelength vertical-cavity surface-emitting laser arrays. *IEEE Journal of Selected Topics in Quantum Electronics*, **1997**, 3, 422-428	3.8	9

59	High-yield processing and single-mode operation of passive antiguide region vertical-cavity lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **1997**, 3, 429-434	3.8	10
58	Angle-etched facet laser arrays (fan laser arrays). *IEEE Journal of Selected Topics in Quantum Electronics*, **1997**, 3, 684-690	3.8	1
57	High performance and novel effects of micromechanical tunable vertical-cavity lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **1997**, 3, 691-697	3.8	17
56	Compact 2D laser beam scanner with fan laser array and Si micromachined microscanner. *Electronics Letters*, **1997**, 33, 1143	1.1	6
55	Self-pulsating and bistable VCSEL with controllable intracavity quantum-well saturable absorber. *Electronics Letters*, **1997**, 33, 1708	1.1	19
54	Multiple-wavelength vertical-cavity surface-emitting laser arrays with a record wavelength span. *IEEE Photonics Technology Letters*, **1996**, 8, 4-6	2.2	26
53	Widely and continuously tunable micromachined resonant cavity detector with wavelength tracking. *IEEE Photonics Technology Letters*, **1996**, 8, 98-100	2.2	44
52	Experimental demonstration of reconfigurable and simultaneous wavelength-division-multiplexed multiple-plane optical interconnections. *IEEE Photonics Technology Letters*, **1996**, 8, 302-304	2.2	5
51	Multiple-wavelength Vertical Cavity Laser Arrays with Wide Wavelength Span and High Uniformity. *Optics and Photonics News*, **1996**, 7, 40	1.9	
50	High performance micromechanical tunable vertical cavity surface emitting lasers. *Electronics Letters*, **1996**, 32, 1888	1.1	31
49	Effect of facet roughness on etched-facet semiconductor laser diodes. *Applied Physics Letters*, **1996** , 68, 1598-1600	3.4	16
48	GaAs micromachined widely tunable Fabry-Perot filters. *Electronics Letters*, **1995**, 31, 228-229	1.1	85
47	Polarisation and modal behaviour of low threshold oxide and airgap confined vertical cavity lasers. *Electronics Letters*, **1995**, 31, 2014-2015	1.1	12
46	. *IEEE Photonics Technology Letters*, **1995**, 7, 235-237	2.2	1
45	. *IEEE Photonics Technology Letters*, **1995**, 7, 971-973	2.2	8
44	. *IEEE Photonics Technology Letters*, **1995**, 7, 1066-1068	2.2	12
43	. *IEEE Photonics Technology Letters*, **1995**, 7, 1240-1242	2.2	12
42	. *IEEE Journal of Selected Topics in Quantum Electronics*, **1995**, 1, 624-628	3.8	14

41	. *IEEE Journal of Selected Topics in Quantum Electronics*, **1995**, 1, 629-637	3.8	39
40	SWANET: an all-optical self-routed wavelength-addressable network **1995**, 2524, 73		
39	Temperature-dependent behavior of 980-nm strained quantum well lasers **1995**,		1
38	Tunable micromachined vertical cavity surface emitting laser. *Electronics Letters*, **1995**, 31, 1671-1672	1.1	78
37	Location-resolvable optical monitored growth of multiple-wavelength vertical-cavity laser arrays. *Electronics Letters*, **1995**, 31, 1840-1842	1.1	2
36	Beam steerable semiconductor lasers with large steering range and resolvable spots. *Electronics Letters*, **1994**, 30, 2034-2035	1.1	9
35	. *IEEE Photonics Technology Letters*, **1994**, 6, 924-926	2.2	13
34	Temperature dependence of light-current characteristics of 0.98-μm Al-free strained-quantum-well lasers. *IEEE Photonics Technology Letters*, **1994**, 6, 1303-1305	2.2	14
33	. *IEEE Photonics Technology Letters*, **1993**, 5, 838-841	2.2	27
32	. *IEEE Photonics Technology Letters*, **1993**, 5, 975-978	2.2	4
31	Buried heterostructure 0.98 μm InGaAs/InGaAsP/InGaP lasers. *Applied Physics Letters*, **1993**, 63, 2183-2185	3.4	10
30	Low threshold buried heterostructure vertical cavity surface emitting laser. *Applied Physics Letters*, **1993**, 63, 1307-1309	3.4	40
29	Low threshold 0.98 μm aluminium-free strained-quantum-well InGaAs/InGaAsP/InGaP lasers. *Electronics Letters*, **1993**, 29, 1-2	1.1	12
28	Single-transverse mode, low threshold current vertical-cavity surface-emitting laser. *IEEE Transactions on Electron Devices*, **1993**, 40, 2116-2117	2.9	2
27	Wavelength-selectable laser emission from a multistripe array grating integrated cavity laser. *Applied Physics Letters*, **1992**, 61, 2750-2752	3.4	38
26	Electronically and optically controllable vertical-cavity surface-emitting laser arrays for optical interconnect and signal processing applications (Invited Paper) **1992**,		2
25	A MAGIC laser for WDM applications. *IEEE Transactions on Electron Devices*, **1992**, 39, 2653-2654	2.9	1
24	Multistripe array grating integrated cavity (MAGIC) laser: a new semiconductor laser for WDM applications. *Electronics Letters*, **1992**, 28, 1805	1.1	36

23	Matrix addressable vertical cavity surface emitting laser array. *Electronics Letters*, **1991**, 27, 437	1.1	44
22	Improved threshold characteristics of air-post vertical-cavity surface-emitting lasers using unique etching process. *Electronics Letters*, **1991**, 27, 2243	1.1	4
21	High speed operation of hybrid CMOS vertical cavity surface emitting laser array. *Electronics Letters* , **1991**, 27, 1189	1.1	4
20	Rastered, uniformly separated wavelengths emitted from a two-dimensional vertical-cavity surface-emitting laser array. *Applied Physics Letters*, **1991**, 58, 31-33	3.4	25
19	Effect of operating electric power on the dynamic behavior of quantum well vertical-cavity surface-emitting lasers. *Applied Physics Letters*, **1991**, 58, 1247-1249	3.4	11
18	. *IEEE Journal of Quantum Electronics*, **1991**, 27, 1368-1376	2	122
17	. *IEEE Journal of Quantum Electronics*, **1991**, 27, 1402-1409	2	311
16	. *Journal of Lightwave Technology*, **1991**, 9, 1665-1673	4	17
15	. *IEEE Photonics Technology Letters*, **1991**, 3, 268-269	2.2	9
14	. *IEEE Photonics Technology Letters*, **1991**, 3, 863-865	2.2	18
13	Vertical-cavity surface-emitting InGaAs/GaAs lasers with planar lateral definition. *Applied Physics Letters*, **1990**, 56, 2384-2386	3.4	53
12	Novel AlGaInAs/AlInAs lasers emitting at 1 □m. *Applied Physics Letters*, **1990**, 57, 2638-2640	3.4	1
11	Integrated external cavity quantum well laser array using single epitaxial growth on a patterned substrate. *Applied Physics Letters*, **1990**, 56, 429-431	3.4	12
10	Transverse mode characteristics of vertical cavity surface-emitting lasers. *Applied Physics Letters*, **1990**, 57, 218-220	3.4	108
9	. *IEEE Journal of Quantum Electronics*, **1990**, 26, 1713-1716	2	6
8	Characteristics of the off-centered apertured mirror external cavity laser array. *Applied Physics Letters*, **1989**, 54, 484-486	3.4	20
7	Spatial mode structure of broad-area semiconductor quantum well lasers. *Applied Physics Letters*, **1989**, 54, 205-207	3.4	25
6	High quality GaAs quantum well lasers grown on InP substrates by organometallic chemical vapor deposition. *Applied Physics Letters*, **1989**, 54, 156-158	3.4	6

5	Characteristics of a monolithically integrated doping superlattice optical circuit. *Applied Physics Letters*, **1988**, 52, 1765-1767	3.4	4
4	Tunable electroabsorption in gallium arsenide doping superlattices. *Applied Physics Letters*, **1987**, 50, 915-917	3.4	20
3	Tunable absorption and electroluminescence in GaAs doping superlattices. *Superlattices and Microstructures*, **1987**, 3, 277-282	2.8	3
2	High power with high efficiency in a narrow single-lobed beam from a diode laser array in an external cavity. *Applied Physics Letters*, **1987**, 50, 1465-1467	3.4	57
1	Diffraction-limited emission from a diode laser array in an apertured graded-index lens external cavity. *Applied Physics Letters*, **1986**, 49, 614-616	3.4	31