

Kerry J Vahala

List of Publications by Year in Descending Order

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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.

180
papers

17,723
citations

62
h-index

132
g-index

234
ext. papers

22,304
ext. citations

9.8
avg, IF

7.25
L-index

#	Paper	IF	Citations
180	Architecture for microcomb-based GHz-mid-infrared dual-comb spectroscopy. <i>Nature Communications</i> , 2021 , 12, 6573	17.4	7
179	High-performance lasers for fully integrated silicon nitride photonics. <i>Nature Communications</i> , 2021 , 12, 6650	17.4	11
178	Dispersive-wave induced noise limits in miniature soliton microwave sources. <i>Nature Communications</i> , 2021 , 12, 1442	17.4	10
177	Towards milli-Hertz laser frequency noise on a chip 2021 ,		2
176	Oscillatory motion of a counterpropagating Kerr soliton dimer. <i>Physical Review A</i> , 2021 , 103,	2.6	3
175	Quantum diffusion of microcavity solitons. <i>Nature Physics</i> , 2021 , 17, 462-466	16.2	9
174	Hertz-linewidth semiconductor lasers using CMOS-ready ultra-high-Q microresonators. <i>Nature Photonics</i> , 2021 , 15, 346-353	33.9	69
173	Reaching fiber-laser coherence in integrated photonics. <i>Optics Letters</i> , 2021 , 46, 5201-5204	3	10
172	Integrated turnkey soliton microcombs. <i>Nature</i> , 2020 , 582, 365-369	50.4	111
171	Direct Kerr frequency comb atomic spectroscopy and stabilization. <i>Science Advances</i> , 2020 , 6, eaax6230	14.3	23
170	Petermann-factor sensitivity limit near an exceptional point in a Brillouin ring laser gyroscope. <i>Nature Communications</i> , 2020 , 11, 1610	17.4	37
169	Ultra-efficient frequency comb generation in AlGaAs-on-insulator microresonators. <i>Nature Communications</i> , 2020 , 11, 1331	17.4	77
168	Earth rotation measured by a chip-scale ring laser gyroscope. <i>Nature Photonics</i> , 2020 , 14, 345-349	33.9	56
167	Dissipated Kerr Solitons in Optical Microresonators 2020 , 79-123		
166	Greater than one billion Q factor for on-chip microresonators. <i>Optics Letters</i> , 2020 , 45, 5129-5131	3	32
165	Interleaved difference-frequency generation for microcomb spectral densification in the mid-infrared. <i>Optica</i> , 2020 , 7, 309	8.6	12
164	Linewidth enhancement factor in a microcavity Brillouin laser. <i>Optica</i> , 2020 , 7, 1150	8.6	9

163	Dirac solitons in optical microresonators. <i>Light: Science and Applications</i> , 2020 , 9, 205	16.7	2
162	Optical frequency combs: Coherently uniting the electromagnetic spectrum. <i>Science</i> , 2020 , 369,	33.3	93
161	Microresonator soliton dual-comb imaging. <i>Optica</i> , 2019 , 6, 1110	8.6	19
160	Directly pumped 10 GHz microcomb modules from low-power diode lasers. <i>Optics Letters</i> , 2019 , 44, 1841-1843	3	11
159	Architecture for the photonic integration of an optical atomic clock. <i>Optica</i> , 2019 , 6, 680	8.6	153
158	Towards Integrated Microcomb Systems for Hertz-Scale Accuracy Optical Signal Generation 2019 ,		2
157	Vernier spectrometer using counterpropagating soliton microcombs. <i>Science</i> , 2019 , 363, 965-968	33.3	39
156	Self-starting bi-chromatic LiNbO3 soliton microcomb. <i>Optica</i> , 2019 , 6, 1138	8.6	121
155	Observation of the exceptional-point-enhanced Sagnac effect. <i>Nature</i> , 2019 , 576, 65-69	50.4	97
154	Searching for Exoplanets Using a Microresonator Astrocomb. <i>Nature Photonics</i> , 2019 , 13, 25-30	33.9	107
153	Soliton microcomb range measurement. <i>Science</i> , 2018 , 359, 884-887	33.3	219
152	An optical-frequency synthesizer using integrated photonics. <i>Nature</i> , 2018 , 557, 81-85	50.4	297
151	Micro-Resonator Soliton Generated Directly with a Diode Laser. <i>Laser and Photonics Reviews</i> , 2018 , 12, 1700307	8.3	17
150	Bridging ultrahigh-Q devices and photonic circuits. <i>Nature Photonics</i> , 2018 , 12, 297-302	33.9	94
149	Universal isocontours for dissipative Kerr solitons. <i>Optics Letters</i> , 2018 , 43, 2567-2570	3	3
148	Gigahertz-repetition-rate soliton microcombs. <i>Optica</i> , 2018 , 5, 65	8.6	57
147	Kerr-microresonator solitons from a chirped background. <i>Optica</i> , 2018 , 5, 1304	8.6	30
146	Imaging soliton dynamics in optical microcavities. <i>Nature Communications</i> , 2018 , 9, 3565	17.4	36

145	The planet formation imager. <i>Experimental Astronomy</i> , 2018 , 46, 517-529	1.3	9
144	Coherent ultra-violet to near-infrared generation in silica ridge waveguides. <i>Nature Communications</i> , 2017 , 8, 13922	17.4	50
143	Single-mode dispersive waves and soliton microcomb dynamics. <i>Nature Communications</i> , 2017 , 8, 14869	17.4	75
142	Phonon-Limited-Linewidth of Brillouin Lasers at Cryogenic Temperatures. <i>Physical Review Letters</i> , 2017 , 119, 143901	7.4	17
141	Counter-propagating solitons in microresonators. <i>Nature Photonics</i> , 2017 , 11, 560-564	33.9	77
140	Towards visible soliton microcomb generation. <i>Nature Communications</i> , 2017 , 8, 1295	17.4	53
139	Stokes solitons in optical microcavities. <i>Nature Physics</i> , 2017 , 13, 53-57	16.2	95
138	Ultra-low phase-noise microwave oscillator based on electro-optical frequency division 2017 ,		3
137	Fiber taper characterization by optical backscattering reflectometry. <i>Optics Express</i> , 2017 , 25, 22312-22327	33.9	10
136	Microresonator Brillouin gyroscope. <i>Optica</i> , 2017 , 4, 346	8.6	120
135	Towards an Integrated-Photonics Optical-Frequency Synthesizer With 2017 ,		5
134	Theory and measurement of the soliton self-frequency shift and efficiency in optical microcavities. <i>Optics Letters</i> , 2016 , 41, 3419-22	3	58
133	Phase-coherent microwave-to-optical link with a self-referenced microcomb. <i>Nature Photonics</i> , 2016 , 10, 516-520	33.9	97
132	Broadband dispersion-engineered microresonator on a chip. <i>Nature Photonics</i> , 2016 , 10, 316-320	33.9	64
131	Microresonator Soliton Dual-Comb Spectroscopy 2016 ,		2
130	Spatial-mode-interaction-induced dispersive waves and their active tuning in microresonators. <i>Optica</i> , 2016 , 3, 1132	8.6	41
129	Ultra-High-Q Silica-on-Silicon Ridge-Ring-Resonator with an Integrated Silicon Nitride Waveguide 2016 ,		1
128	Active capture and stabilization of temporal solitons in microresonators. <i>Optics Letters</i> , 2016 , 41, 2037-40		86

127	Microresonator soliton dual-comb spectroscopy. <i>Science</i> , 2016 , 354, 600-603	33.3	342
126	Dual-microcavity narrow-linewidth Brillouin laser. <i>Optica</i> , 2015 , 2, 225	8.6	67
125	Soliton frequency comb at microwave rates in a high-Q silica microresonator. <i>Optica</i> , 2015 , 2, 1078	8.6	271
124	Electro-optical frequency division and stable microwave synthesis. <i>Science</i> , 2014 , 345, 309-13	33.3	77
123	Low-noise Brillouin laser on a chip at 1064 nm. <i>Optics Letters</i> , 2014 , 39, 287-90	3	44
122	Supercontinuum generation in an on-chip silica waveguide. <i>Optics Letters</i> , 2014 , 39, 1046-8	3	50
121	Microresonator frequency comb optical clock. <i>Optica</i> , 2014 , 1, 10	8.6	229
120	Design and characterization of whispering-gallery spiral waveguides. <i>Optics Express</i> , 2014 , 22, 5196-208	3.3	14
119	Pump frequency noise coupling into a microcavity by thermo-optic locking. <i>Optics Express</i> , 2014 , 22, 14559-67	3.3	10
118	Microwave synthesizer using an on-chip Brillouin oscillator. <i>Nature Communications</i> , 2013 , 4, 2097	17.4	175
117	Spiral resonators for on-chip laser frequency stabilization. <i>Nature Communications</i> , 2013 , 4, 2468	17.4	61
116	Thermal stress in silica-on-silicon disk resonators. <i>Applied Physics Letters</i> , 2013 , 102, 031113	3.4	12
115	Ultra-low-loss delay lines and resonators on a silicon chip 2012 ,		1
114	Low-pump-power, low-phase-noise, and microwave to millimeter-wave repetition rate operation in microcombs. <i>Physical Review Letters</i> , 2012 , 109, 233901	7.4	116
113	Ultra-low-loss optical delay line on a silicon chip. <i>Nature Communications</i> , 2012 , 3, 867	17.4	128
112	Chemically etched ultrahigh-Q wedge-resonator on a silicon chip. <i>Nature Photonics</i> , 2012 , 6, 369-373	33.9	386
111	Characterization of a high coherence, Brillouin microcavity laser on silicon. <i>Optics Express</i> , 2012 , 20, 20170-80	3.3	94
110	Sideband spectroscopy and dispersion measurement in microcavities. <i>Optics Express</i> , 2012 , 20, 26337-44	3.3	46

109	A general design algorithm for low optical loss adiabatic connections in waveguides. <i>Optics Express</i> , 2012 , 20, 22819-29	3.3	26
108	Compensation of thermal nonlinearity effect in optical resonators. <i>Optics Express</i> , 2011 , 19, 7365-72	3.3	25
107	High sensitivity nanoparticle detection using optical microcavities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 5976-9	11.5	221
106	Coherent mixing of mechanical excitations in nano-optomechanical structures. <i>Nature Photonics</i> , 2010 , 4, 236-242	33.9	193
105	Phonon laser action in a tunable two-level system. <i>Physical Review Letters</i> , 2010 , 104, 083901	7.4	318
104	An Optomechanical Oscillator on a Silicon Chip. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010 , 16, 276-287	3.8	60
103	High-Q surface-plasmon-polariton whispering-gallery microcavity. <i>Nature</i> , 2009 , 457, 455-8	50.4	365
102	A picogram- and nanometre-scale photonic-crystal optomechanical cavity. <i>Nature</i> , 2009 , 459, 550-5	50.4	478
101	Optomechanical crystals. <i>Nature</i> , 2009 , 462, 78-82	50.4	725
100	On-chip green silica upconversion microlaser. <i>Optics Letters</i> , 2009 , 34, 482-4	3	38
99	Yb-doped glass microcavity laser operation in water. <i>Optics Letters</i> , 2009 , 34, 1153-5	3	23
98	Thermal instability of a compound resonator. <i>Optics Express</i> , 2009 , 17, 14088-97	3.3	22
97	Direct imaging of tunneling from a potential well. <i>Optics Express</i> , 2009 , 17, 19160-5	3.3	16
96	Modeling dispersive coupling and losses of localized optical and mechanical modes in optomechanical crystals. <i>Optics Express</i> , 2009 , 17, 20078-98	3.3	63
95	High-Q double-disk microcavities for cavity optomechanics. <i>Optics Express</i> , 2009 , 17, 20911-9	3.3	62
94	Mechanical oscillation and cooling actuated by the optical gradient force. <i>Physical Review Letters</i> , 2009 , 103, 103601	7.4	129
93	Photonic RF Down-Converter Based on Optomechanical Oscillation. <i>IEEE Photonics Technology Letters</i> , 2008 , 20, 234-236	2.2	30
92	Observation of injection locking in an optomechanical rf oscillator. <i>Applied Physics Letters</i> , 2008 , 93, 1911-15	3.3	33

91	Back-action limit of linewidth in an optomechanical oscillator. <i>Physical Review A</i> , 2008 , 78,	2.6	42
90	Static envelope patterns in composite resonances generated by level crossing in optical toroidal microcavities. <i>Physical Review Letters</i> , 2008 , 100, 103905	7.4	59
89	Soft lithographic fabrication of high Q polymer microcavity arrays. <i>Nano Letters</i> , 2007 , 7, 1823-6	11.5	52
88	Importance of Intrinsic- \mathcal{Q} in Microring-Based Optical Filters and Dispersion-Compensation Devices. <i>IEEE Photonics Technology Letters</i> , 2007 , 19, 1045-1047	2.2	10
87	Label-free, single-molecule detection with optical microcavities. <i>Science</i> , 2007 , 317, 783-7	33.3	847
86	Visible continuous emission from a silica microphotonic device by third-harmonic generation. <i>Nature Physics</i> , 2007 , 3, 430-435	16.2	168
85	Modal spectroscopy of optoexcited vibrations of a micron-scale on-chip resonator at greater than 1 GHz frequency. <i>Physical Review Letters</i> , 2007 , 98, 123901	7.4	71
84	Chaotic quivering of micron-scaled on-chip resonators excited by centrifugal optical pressure. <i>Physical Review Letters</i> , 2007 , 98, 167203	7.4	113
83	Visible submicron microdisk lasers. <i>Applied Physics Letters</i> , 2007 , 90, 111119	3.4	68
82	Observation of optical spring effect in a microtoroidal optomechanical resonator. <i>Optics Letters</i> , 2007 , 32, 1611-3	3	41
81	Ultralow-threshold Yb(3+):SiO(2) glass laser fabricated by the solgel process. <i>Optics Letters</i> , 2007 , 32, 2650-2	3	28
80	Free ultra-high-Q microtoroid: a tool for designing photonic devices. <i>Optics Express</i> , 2007 , 15, 166-75	3.3	47
79	Wavelength-independent coupler from fiber to an on-chip cavity, demonstrated over an 850nm span. <i>Optics Express</i> , 2007 , 15, 7677-81	3.3	16
78	Cavity opto-mechanics. <i>Optics Express</i> , 2007 , 15, 17172-205	3.3	543
77	Ultralow threshold on-chip microcavity nanocrystal quantum dot lasers. <i>Applied Physics Letters</i> , 2006 , 89, 191124	3.4	70
76	Brownian noise in radiation-pressure-driven micromechanical oscillators. <i>Applied Physics Letters</i> , 2006 , 89, 261109	3.4	21
75	Characterization of a radiation-pressure-driven micromechanical oscillator. <i>Physical Review A</i> , 2006 , 74,	2.6	67
74	Transmission characteristics of a Fabry-Perot etalon-microtoroid resonator coupled system. <i>Optics Letters</i> , 2006 , 31, 510-2	3	43

73	Heavy water detection using ultra-high-Q microcavities. <i>Optics Letters</i> , 2006 , 31, 1896-8	3	195
72	Fiber-taper coupling to Whispering-Gallery modes of fluidic resonators embedded in a liquid medium. <i>Optics Express</i> , 2006 , 14, 10800-10	3-3	52
71	Controlled transition between parametric and Raman oscillations in ultrahigh-Q silica toroidal microcavities. <i>Applied Physics Letters</i> , 2005 , 87, 181109	3-4	28
70	Feedback control of ultra-high-Q microcavities: application to micro-Raman lasers and microparametric oscillators. <i>Optics Express</i> , 2005 , 13, 3558-66	3-3	42
69	Observation of Kerr nonlinearity in microcavities at room temperature. <i>Optics Letters</i> , 2005 , 30, 427-9	3	53
68	Micro-Molded High Q Polymer Resonators for Optical Loss Determination. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 872, 1		1
67	Temporal behavior of radiation-pressure-induced vibrations of an optical microcavity phonon mode. <i>Physical Review Letters</i> , 2005 , 94, 223902	7-4	359
66	Electrical thermo-optic tuning of ultrahigh-Q microtoroid resonators. <i>Applied Physics Letters</i> , 2004 , 85, 5439-5441	3-4	88
65	FABRICATION, COUPLING AND NONLINEAR OPTICS OF ULTRA-HIGH-Q MICRO-SPHERE AND CHIP-BASED TOROID MICROCAVITIES. <i>Advanced Series in Applied Physics</i> , 2004 , 177-238		
64	Dynamical thermal behavior and thermal self-stability of microcavities. <i>Optics Express</i> , 2004 , 12, 4742-503,3		530
63	Replica-molded high-Q polymer microresonators. <i>Optics Letters</i> , 2004 , 29, 533-5	3	40
62	Optical microcavities. <i>Nature</i> , 2003 , 424, 839-46	50-4	3373
61	Compact, fiber-compatible, cascaded Raman laser. <i>Optics Letters</i> , 2003 , 28, 1507-9	3	70
60	Highly efficient hybrid fiber taper coupled microsphere laser. <i>Optics Letters</i> , 2001 , 26, 884-6	3	56
59	Highly efficient optical power transfer to whispering-gallery modes by use of a symmetrical dual-coupling configuration. <i>Optics Letters</i> , 2000 , 25, 260-2	3	64
58	Observation of critical coupling in a fiber taper to a silica-microsphere whispering-gallery mode system. <i>Physical Review Letters</i> , 2000 , 85, 74-7	7-4	623
57	Four-wave mixing mediated by the capture of electrons and holes in semiconductor quantum-well laser amplifiers. <i>Applied Physics Letters</i> , 1997 , 71, 3601-3603	3-4	1
56	Measurement of the interwell carrier transport lifetime in multiquantum-well optical amplifiers by polarization-resolved four-wave mixing. <i>Applied Physics Letters</i> , 1996 , 69, 4142-4144	3-4	9

55	Size classification of silicon nanocrystals. <i>Applied Physics Letters</i> , 1996 , 68, 3162-3164	3-4	55
54	Highly nondegenerate four-wave mixing efficiency of an asymmetric coupled quantum well structure. <i>Applied Physics Letters</i> , 1995 , 66, 2619-2621	3-4	6
53	Synthesis of Size-Classified Silicon Nanocrystals. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 405, 259		0
52	Study of interwell carrier transport by terahertz four-wave mixing in an optical amplifier with tensile and compressively strained quantum wells. <i>Applied Physics Letters</i> , 1994 , 65, 1897-1899	3-4	11
51	Formation of Highly-Uniform and Densely-Packed Arrays of GaAs Dots by Selective Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 358, 969		1
50	Quantum Technology: Quantum Well Lasers . Peter S. Zory, Jr., Ed. Academic Press, San Diego, CA, 1993. xvi, 504 pp., illus. \$75 or £57. Quantum Electronics.. <i>Science</i> , 1994 , 263, 699-699	33-3	
49	Terahertz four-wave mixing spectroscopy for study of ultrafast dynamics in a semiconductor optical amplifier. <i>Applied Physics Letters</i> , 1993 , 63, 1179-1181	3-4	70
48	Synthesis of luminescent silicon clusters by spark ablation. <i>Applied Physics Letters</i> , 1993 , 63, 1549-1551	3-4	31
47	Direct determination of the ambipolar diffusion length in strained In _x Ga _{1-x} As/InP quantum wells by cathodoluminescence. <i>Applied Physics Letters</i> , 1993 , 62, 2411-2412	3-4	8
46	Highly nondegenerate four-wave mixing and gain nonlinearity in a strained multiple-quantum-well optical amplifier. <i>Applied Physics Letters</i> , 1993 , 62, 2301-2303	3-4	26
45	Frequency locking of an erbium-doped fiber ring laser to an external fiber Fabry - Perot resonator. <i>Optics Letters</i> , 1993 , 18, 879	3	22
44	Reduction of the intensity noise from an erbium-doped fiber laser to the standard quantum limit by intracavity spectral filtering. <i>Applied Physics Letters</i> , 1992 , 61, 1889-1891	3-4	21
43	Co-lasing in an electrically tunable erbium-doped fiber laser. <i>Applied Physics Letters</i> , 1992 , 60, 3090-3092	3-4	10
42	Measurements of the intensity noise of a broadly tunable, erbium-doped fiber ring laser, relative to the standard quantum limit. <i>Applied Physics Letters</i> , 1992 , 60, 2583-2585	3-4	7
41	Facet modulation selective epitaxy technique for quantum-well wire doublet fabrication. <i>Applied Physics Letters</i> , 1992 , 60, 240-242	3-4	24
40	Large (14.5 dB) reduction of intensity noise from a semiconductor laser by amplitude-phase decorrelation. <i>Applied Physics Letters</i> , 1992 , 60, 1289-1291	3-4	2
39	Resonance-enhanced spontaneous emission from quantum dots. <i>Journal of Applied Physics</i> , 1992 , 72, 806-808	2.5	10
38	Vapor phase synthesis of crystalline nanometer-scale GaAs clusters. <i>Applied Physics Letters</i> , 1992 , 60, 950-952	3-4	36

37	Semiconductor lasers and fiber lasers for fiber-optic telecommunications. <i>Fiber and Integrated Optics</i> , 1992 , 11, 221-234	0.8	1
36	Nanometer-scale GaAs clusters from organometallic precursors. <i>Applied Physics Letters</i> , 1992 , 61, 696-698	3.4	44
35	Linewidth and frequency jitter measurement of an erbium-doped fiber ring laser by using a loss-compensated, delayed self-heterodyne interferometer. <i>Optics Letters</i> , 1992 , 17, 1274-6	3	21
34	Approximate expressions for modulation speed and threshold for performance optimization of biaxially compressive strain quantum-well lasers. <i>Applied Physics Letters</i> , 1991 , 59, 3230-3232	3.4	5
33	Polarization dependence of optical absorption and emission in quantum wires. <i>Physical Review B</i> , 1991 , 44, 5681-5691	3.3	92
32	Fabrication of semiconductor quantum dots. <i>Journal of Aerosol Science</i> , 1991 , 22, S31-S33	4.3	11
31	All fiber, low threshold, widely tunable single-frequency, erbium-doped fiber ring laser with a tandem fiber Fabry-Perot filter. <i>Applied Physics Letters</i> , 1991 , 59, 2369-2371	3.4	100
30	Application of a total-angular-momentum basis to quantum-dot band structure. <i>Physical Review Letters</i> , 1990 , 65, 239-242	7.4	54
29	Application of selective epitaxy to fabrication of nanometer scale wire and dot structures. <i>Applied Physics Letters</i> , 1990 , 56, 2642-2644	3.4	114
28	Intensity noise reduction in semiconductor lasers by amplitude-phase decorrelation. <i>Applied Physics Letters</i> , 1990 , 57, 974-976	3.4	14
27	Type II broken-gap quantum wires and quantum dot arrays: A novel concept for self-doping semiconductor nanostructures. <i>Applied Physics Letters</i> , 1990 , 57, 1569-1571	3.4	4
26	Analytical technique for determining the polarization dependence of optical matrix elements in quantum wires with band-coupling effects. <i>Applied Physics Letters</i> , 1990 , 57, 545-547	3.4	81
25	Self-quenching of fundamental phase and amplitude noise in semiconductor lasers with dispersive loss. <i>Optics Letters</i> , 1990 , 15, 1359-61	3	13
24	Analytical formalism for determining quantum-wire and quantum-dot band structure in the multiband envelope-function approximation. <i>Physical Review B</i> , 1990 , 42, 3690-3710	3.3	280
23	Cathodoluminescence system for a scanning electron microscope using an optical fiber for light collection. <i>Review of Scientific Instruments</i> , 1989 , 60, 226-230	1.7	19
22	Low-temperature measurement of the fundamental frequency response of a semiconductor laser by active-layer photomixing. <i>Applied Physics Letters</i> , 1989 , 54, 600-602	3.4	8
21	Quantitative measurement of the composition of Al _x Ga _{1-x} As heterostructures using a simple backscattered electron detector. <i>Review of Scientific Instruments</i> , 1989 , 60, 3775-3778	1.7	1
20	Cathodoluminescence measurement of an orientation dependent aluminum concentration in Al _x Ga _{1-x} As epilayers grown by molecular beam epitaxy on a nonplanar substrate. <i>Applied Physics Letters</i> , 1989 , 54, 1347-1349	3.4	31

19	The optical gain lever: A novel gain mechanism in the direct modulation of quantum well semiconductor lasers. <i>Applied Physics Letters</i> , 1989 , 54, 2506-2508	3.4	57
18	Compositional modulation in Al _x Ga _{1-x} As epilayers grown by molecular beam epitaxy on the (111) facets of grooves in a nonplanar substrate. <i>Applied Physics Letters</i> , 1989 , 55, 53-55	3.4	31
17	Nanometer scale wire structures fabricated by diffusion-induced selective disordering of a GaAs(AlGaAs) quantum well. <i>Applied Physics Letters</i> , 1989 , 54, 2692-2694	3.4	10
16	Measurement of the fundamental modulation response of a semiconductor laser to millimeter wave frequencies by active-layer photomixing. <i>Applied Physics Letters</i> , 1989 , 55, 939-941	3.4	4
15	Field spectrum anisotropy in multiple quantum-well semiconductor lasers subjected to high magnetic fields. <i>Superlattices and Microstructures</i> , 1988 , 4, 507-510	2.8	
14	Equivalent circuit model for active-layer photomixing: Parasitic-free modulation of semiconductor lasers. <i>Applied Physics Letters</i> , 1988 , 53, 1141-1143	3.4	5
13	Effect of doping on the optical gain and the spontaneous noise enhancement factor in quantum well amplifiers and lasers studied by simple analytical expressions. <i>Applied Physics Letters</i> , 1988 , 52, 1943-1947 ¹⁰²	3.4	102
12	Parasitic-free measurement of the fundamental frequency response of a semiconductor laser by active-layer photomixing. <i>Applied Physics Letters</i> , 1988 , 52, 770-772	3.4	30
11	Cathodoluminescence of oval defects in GaAs/Al _x Ga _{1-x} As epilayers using an optical fiber light collection system. <i>Applied Physics Letters</i> , 1988 , 53, 2062-2064	3.4	7
10	Reduction of the field spectrum linewidth of a multiple quantum well laser in a high magnetic field. Spectral properties of quantum dot lasers. <i>Applied Physics Letters</i> , 1987 , 50, 365-367	3.4	19
9	Narrow linewidth, single frequency semiconductor laser with a phase conjugate external cavity mirror. <i>Applied Physics Letters</i> , 1986 , 49, 1563-1565	3.4	60
8	Corrections to the rate equation approximation for dynamic considerations in a semiconductor laser. <i>Applied Physics Letters</i> , 1986 , 48, 1340-1341	3.4	8
7	Observation of modulation speed enhancement, frequency modulation suppression, and phase noise reduction by detuned loading in a coupled-cavity semiconductor laser. <i>Applied Physics Letters</i> , 1985 , 46, 1025-1027	3.4	36
6	Application of an electronic wave-packet formalism to local-operator equations of motion for semiconductor lasers. <i>Physical Review A</i> , 1985 , 32, 345-356	2.6	7
5	Quantum noise and dynamics in quantum well and quantum wire lasers. <i>Applied Physics Letters</i> , 1984 , 45, 950-952	3.4	199
4	Detuned loading in coupled cavity semiconductor lasers—effect on quantum noise and dynamics. <i>Applied Physics Letters</i> , 1984 , 45, 501-503	3.4	87
3	Measurement of the linewidth enhancement factor of semiconductor lasers. <i>Applied Physics Letters</i> , 1983 , 42, 328-330	3.4	198
2	Occupation fluctuation noise: A fundamental source of linewidth broadening in semiconductor lasers. <i>Applied Physics Letters</i> , 1983 , 43, 140-142	3.4	46

- 1 Image-plane holograms for introductory physics students. *American Journal of Physics*, **1978**, 46, 861-867.