

Eli Kapon

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/10275785/eli-kapon-publications-by-year.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

117
papers

2,171
citations

22
h-index

41
g-index

156
ext. papers

2,473
ext. citations

4.5
avg, IF

4.38
L-index

#	Paper	IF	Citations
117	Selective Effects of the Host Matrix in Hydrogenated InGaAsN Alloys: Toward an Integrated Matrix/Defect Engineering Paradigm. <i>Advanced Functional Materials</i> , 2022 , 32, 2108862	15.6	
116	High-Power 760 nm VECSEL Based on Quantum Dot Gain Mirror. <i>IEEE Journal of Quantum Electronics</i> , 2020 , 56, 1-4	2	4
115	Limiting the Spectral Diffusion of Nano-Scale Light Emitters using the Purcell effect in a Photonic-Confined Environment. <i>Scientific Reports</i> , 2019 , 9, 1195	4.9	2
114	Flip-Chip Wafer-Fused OP-VECSELS Emitting 3.65 W at the 1.55- μ m Waveband. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2019 , 25, 1-5	3.8	4
113	InAs/InP quantum dot VECSEL emitting at 1.5 μ m. <i>Applied Physics Letters</i> , 2019 , 115, 171105	3.4	9
112	Tilted-potential photonic crystal cavities for integrated quantum photonics. <i>Optics Express</i> , 2019 , 27, 21822-21833	3.3	2
111	Single photon extraction and propagation in photonic crystal waveguides incorporating site-controlled quantum dots. <i>Applied Physics Letters</i> , 2018 , 112, 051105	3.4	6
110	Probing disorder and mode localization in photonic crystal cavities using site-controlled quantum dots. <i>Journal of Applied Physics</i> , 2018 , 123, 043109	2.5	4
109	Emission wavelength control of ordered arrays of InGaAs/GaAs quantum dots. <i>Journal of Crystal Growth</i> , 2017 , 464, 69-74	1.6	5
108	Deterministic coupling of a system of multiple quantum dots to a single photonic cavity mode. <i>Applied Physics Letters</i> , 2017 , 111, 053103	3.4	2
107	Deterministic radiative coupling of two semiconductor quantum dots to the optical mode of a photonic crystal nanocavity. <i>Scientific Reports</i> , 2017 , 7, 4100	4.9	15
106	Self-formation of hexagonal nanotemplates for growth of pyramidal quantum dots by metalorganic vapor phase epitaxy on patterned substrates. <i>Nano Research</i> , 2016 , 9, 3279-3290	10	10
105	Effect of Pure Dephasing and Phonon Scattering on the Coupling of Semiconductor Quantum Dots to Optical Cavities. <i>Physical Review Letters</i> , 2016 , 117, 076801	7.4	18
104	Non-centrosymmetric plasmonic crystals for second-harmonic generation with controlled anisotropy and enhancement. <i>Laser and Photonics Reviews</i> , 2016 , 10, 287-298	8.3	16
103	Electrically Pumped Vertical-External-Cavity Surface-Emitting Lasers With Patterned Tunnel Junction for Single Transversal-Mode Emission. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015 , 21, 485-492	3.8	0
102	Optical Injection and Lasing Dynamics in Long-Wavelength VCSELS With Intracavity Patterning. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015 , 21, 659-667	3.8	
101	Effect of Cavity Lifetime Variation on the Static and Dynamic Properties of 1.3- μ m Wafer-Fused VCSELS. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2015 , 21, 414-422	3.8	14

100	Integration of multiple site-controlled pyramidal quantum dot systems with photonic-crystal membrane cavities. <i>Journal of Crystal Growth</i> , 2015 , 414, 192-195	1.6	12
99	Multiexciton dynamics in tailored band-gap quasi-one-dimensional systems. <i>Physical Review B</i> , 2015 , 91,	3.3	1
98	Exciton dynamics in a site-controlled quantum dot coupled to a photonic crystal cavity. <i>Applied Physics Letters</i> , 2015 , 107, 191101	3.4	14
97	Site-controlled quantum dots coupled to a photonic crystal molecule. <i>Applied Physics Letters</i> , 2015 , 107, 141103	3.4	16
96	VCSEL-based processing of microwave signals 2014 ,		1
95	Numerical Analysis of Mode Discrimination by Intracavity Patterning in Long-Wavelength Wafer-Fused Vertical-Cavity Surface-Emitting Lasers. <i>IEEE Journal of Quantum Electronics</i> , 2014 , 50, 1-9	2	8
94	Optical Injection Locking of Polarization Modes in VCSELs Emitting at 1.3 μm Wavelength. <i>IEEE Journal of Quantum Electronics</i> , 2013 , 49, 939-944	2	3
93	Spatial-Mode Discrimination in Guided and Antiguided Arrays of Long-Wavelength VCSELs. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2013 , 19, 1-10	3.8	5
92	Reliability of 1310 nm Wafer Fused VCSELs. <i>IEEE Photonics Technology Letters</i> , 2013 , 25, 1555-1558	2.2	19
91	Effects of hydrogen irradiation on the optical and electronic properties of site-controlled InGaAsN V-groove quantum wires 2013 ,		1
90	Effects of hydrogen irradiation on the optical and electronic properties of site-controlled InGaAsN V-groove quantum wires. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013 , 10, 556-560		
89	Low power consumption 1310 nm VCSELs for 4x10 Gbps CWDM links 2013 ,		1
88	Investigation of coherent acoustic phonons in terahertz quantum cascade laser structures using femtosecond pump-probe spectroscopy. <i>Journal of Applied Physics</i> , 2012 , 112, 033517	2.5	9
87	Experimental evidence for Luttinger liquid behavior in sufficiently long GaAs V-groove quantum wires. <i>Physical Review B</i> , 2012 , 85,	3.3	15
86	Magneto-optical properties of single site-controlled InGaAsN quantum wires grown on prepatterned GaAs substrates. <i>Physical Review B</i> , 2012 , 85,	3.3	6
85	Photocurrent spectroscopy of site-controlled pyramidal quantum dots. <i>Applied Physics Letters</i> , 2012 , 101, 031110	3.4	2
84	Bound and anti-bound biexciton in site-controlled pyramidal GaInAs/GaAs quantum dots. <i>Applied Physics Letters</i> , 2012 , 101, 191101	3.4	18
83	Reduced temperature sensitivity of the polarization properties of hydrogenated InGaAsN V-groove quantum wires. <i>Applied Physics Letters</i> , 2012 , 101, 151114	3.4	5

82	Exciton confinement and trapping dynamics in double-graded-bandgap quantum nanowires. <i>Applied Physics Letters</i> , 2012 , 100, 211907	3-4	8
81	Carrier capture into semiconductor quantum dots via quantum wire barriers: Localization and thermionic emission effects. <i>Applied Physics Letters</i> , 2011 , 99, 091910	3-4	4
80	Engineering conduction and valence band states in site-controlled pyramidal quantum dots. <i>Applied Physics Letters</i> , 2011 , 98, 253102	3-4	5
79	Wafer-Fused Optically Pumped VCSELs Emitting in the 1310-nm and 1550-nm Wavebands. <i>Advances in Optical Technologies</i> , 2011 , 2011, 1-8		14
78	Phonon-mediated coupling of InGaAs/GaAs quantum-dot excitons to photonic crystal cavities. <i>Physical Review Letters</i> , 2011 , 106, 227402	7-4	72
77	Performances of Microwave-Band Analog Signal Transmission Using Wafer-Fused Long Wavelength VCSELs. <i>IEEE Photonics Technology Letters</i> , 2011 , 23, 1463-1465	2-2	4
76	High-quality 1.3 μ m-wavelength GaInAsN/GaAs quantum wells grown by metalorganic vapor phase epitaxy on vicinal substrates. <i>Applied Physics Letters</i> , 2011 , 99, 072116	3-4	11
75	Dilute nitride InGaAsN/GaAs V-groove quantum wires emitting at 1.3 μ m wavelength at room temperature. <i>Applied Physics Letters</i> , 2011 , 99, 101107	3-4	17
74	High-Power 1.48- μ m Wafer-Fused Optically Pumped Semiconductor Disk Laser. <i>IEEE Photonics Technology Letters</i> , 2011 , 23, 917-919	2-2	18
73	Microwave-band optoelectronic frequency converters based on long wavelength VCSELs 2011 ,		1
72	Polarization-entangled photons produced with high-symmetry site-controlled quantum dots. <i>Nature Photonics</i> , 2010 , 4, 302-306	33-9	145
71	Turn-on delay and Auger recombination in long-wavelength vertical-cavity surface-emitting lasers. <i>Applied Physics Letters</i> , 2010 , 97, 131102	3-4	8
70	1.3- μ m Mode-Locked Disk Laser With Wafer Fused Gain and SESAM Structures. <i>IEEE Photonics Technology Letters</i> , 2010 , 22, 748-750	2-2	13
69	Fine structure of exciton complexes in high-symmetry quantum dots: Effects of symmetry breaking and symmetry elevation. <i>Physical Review B</i> , 2010 , 81,	3-3	81
68	Pyramidal GaAs/Al _z Ga _{1-z} As quantum wire/dot systems with controlled heterostructure potential. <i>Physical Review B</i> , 2010 , 82,	3-3	14
67	Electrical Modeling of Long-Wavelength VCSELs for Intrinsic Parameters Extraction. <i>IEEE Journal of Quantum Electronics</i> , 2010 , 46, 313-322	2	16
66	Broadband MEMS-Tunable High-Index-Contrast Subwavelength Grating Long-Wavelength VCSEL. <i>IEEE Journal of Quantum Electronics</i> , 2010 , 46, 1245-1253	2	33
65	Record-low inhomogeneous broadening of site-controlled quantum dots for nanophotonics. <i>Small</i> , 2010 , 6, 1268-72	11	67

64	Long Wavelength VCSEL-by-VCSEL Optical Injection Locking. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2009 , 57, 1850-1858	4.1	15
63	Semiconductor quantum-wires and nano-wires for optoelectronic applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2009 , 20, 94-101	2.1	5
62	Site-controlled InGaAs quantum dots with tunable emission energy. <i>Small</i> , 2009 , 5, 938-43	11	59
61	Effect of sidewall passivation in BCl_3/N_2 inductively coupled plasma etching of two-dimensional GaAs photonic crystals. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, L21		21
60	High power vertical external cavity surface-emitting lasers (VECSELs) emitting in 1310 nm and 1550 nm bands 2009 ,		2
59	In(Al)GaAs/AlGaAs Wafer Fused VCSELs Emitting at 2- μm Wavelength. <i>IEEE Photonics Technology Letters</i> , 2008 , 20, 24-26	2.2	8
58	Extension of Coupled Mode Analysis to Infinite Photonic Superlattices. <i>IEEE Journal of Quantum Electronics</i> , 2008 , 44, 826-833	2	6
57	10 Gbps VCSELs with High Single Mode Output in 1310nm and 1550 nm Wavelength Bands 2008 ,		12
56	A terahertz quantum cascade laser grown by low-pressure metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , 2008 , 92, 181111	3.4	15
55	Wafer-fused 1550-nm band VCSELs with fundamental mode output exceeding 6 mW 2008 ,		3
54	Very low transparency currents in double quantum well InGaAs semiconductor lasers with doped resonant tunneling. <i>Applied Physics Letters</i> , 2008 , 92, 021109	3.4	5
53	Integration of site-controlled pyramidal quantum dots and photonic crystal membrane cavities. <i>Applied Physics Letters</i> , 2008 , 92, 263101	3.4	79
52	Theory and experiment of step bunching on misoriented GaAs(001) during metalorganic vapor-phase epitaxy. <i>Applied Physics Letters</i> , 2008 , 92, 013117	3.4	27
51	Cavity Mode Gain Peak Tradeoff for 1320-nm Wafer-Fused VCSELs With 3-mW Single-Mode Emission Power and 10-Gb/s Modulation Speed Up to 70 dB . <i>IEEE Photonics Technology Letters</i> , 2007 , 19, 121-123	2.2	32
50	Spatial coherence measurements in arrays of coupled vertical cavity surface emitting lasers. <i>Applied Physics Letters</i> , 2007 , 90, 021103	3.4	17
49	Control of valence band states in pyramidal quantum dot-in-dot semiconductor heterostructures. <i>Applied Physics Letters</i> , 2007 , 91, 241909	3.4	13
48	Nonorthogonal theory of polarons and application to pyramidal quantum dots. <i>Physical Review B</i> , 2007 , 76,	3.3	11
47	Site-controlled single quantum wire integrated into a photonic-crystal membrane microcavity. <i>Applied Physics Letters</i> , 2007 , 90, 153107	3.4	19

46	Excited excitonic states observed in semiconductor quantum dots using polarization resolved optical spectroscopy). <i>Journal of Applied Physics</i> , 2007 , 101, 081703	2.5	19
45	Mode switching and beam steering in photonic crystal heterostructures implemented with vertical-cavity surface-emitting lasers. <i>Applied Physics Letters</i> , 2007 , 90, 241115	3.4	7
44	Extension of Coupled Mode Analysis to Periodic Large Arrays of Identical Waveguides for Photonic Crystals Applications. <i>IEEE Journal of Quantum Electronics</i> , 2007 , 43, 215-224	2	9
43	Narrow (\approx meV) inhomogeneous broadening and its correlation with confinement potential of pyramidal quantum dot arrays. <i>Applied Physics Letters</i> , 2007 , 91, 081106	3.4	22
42	Optical polarization anisotropy and hole states in pyramidal quantum dots. <i>Applied Physics Letters</i> , 2006 , 89, 251113	3.4	41
41	Polarization-resolved optical absorption in single V-groove quantum wires. <i>Applied Physics Letters</i> , 2006 , 89, 191111	3.4	7
40	Optimization of the efficiency of single-photon sources based on quantum dots under optical excitation. <i>Applied Physics Letters</i> , 2006 , 88, 081905	3.4	13
39	Influence of long-range substrate roughness on disorder in V-groove quantum wire structures. <i>Journal of Applied Physics</i> , 2006 , 100, 123509	2.5	2
38	Correlation between optical properties and interface morphology of GaAs/AlGaAs quantum wells. <i>Applied Physics Letters</i> , 2006 , 88, 141917	3.4	15
37	Threshold analysis of vertical-cavity surface-emitting lasers with intracavity contacts. <i>IEEE Journal of Quantum Electronics</i> , 2006 , 42, 889-895	2	4
36	Thermoelectrical model for vertical cavity surface emitting lasers and arrays. <i>Journal of Applied Physics</i> , 2006 , 100, 103102	2.5	14
35	Comparative Study of Atomic Force Imaging of DNA on Graphite and Mica Surfaces. <i>AIP Conference Proceedings</i> , 2006 ,	0	4
34	Patterning of confined-state energies in site-controlled semiconductor quantum dots. <i>Applied Physics Letters</i> , 2005 , 86, 243105	3.4	10
33	Coupled islands of photonic crystal heterostructures implemented with vertical-cavity surface-emitting lasers. <i>Applied Physics Letters</i> , 2005 , 87, 241120	3.4	20
32	Effects of the one-dimensional quantum barriers in pyramidal quantum dots. <i>Applied Physics Letters</i> , 2004 , 84, 4086-4088	3.4	17
31	Dynamics of polarization modes in photonic crystals based on arrays of vertical-cavity surface-emitting lasers. <i>Applied Physics Letters</i> , 2004 , 84, 3777-3779	3.4	3
30	Localization of excitons in disordered quantum wires probed by single-photon correlation spectroscopy. <i>Applied Physics Letters</i> , 2004 , 85, 5715-5717	3.4	8
29	Electroluminescence from a single pyramidal quantum dot in a light-emitting diode. <i>Applied Physics Letters</i> , 2004 , 84, 1967-1969	3.4	27

28	Inverse ray-tracing method for nondestructive mapping of three-dimensional surfaces. <i>Journal of Applied Physics</i> , 2004 , 95, 7888-7891	2.5	
27	Dense uniform arrays of site-controlled quantum dots grown in inverted pyramids. <i>Applied Physics Letters</i> , 2004 , 84, 2907-2909	3-4	47
26	Observation of charged excitons in V-groove quantum wires. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004 , 1, 526-530		1
25	High uniformity of site-controlled pyramidal quantum dots grown on prepatterned substrates. <i>Applied Physics Letters</i> , 2004 , 84, 1943-1945	3-4	73
24	High-quality In _x Ga _{1-x} As/Al _{0.30} Ga _{0.70} As quantum dots grown in inverted pyramids. <i>Physica Status Solidi (B): Basic Research</i> , 2003 , 238, 233-236	1-3	26
23	Wide-range tuning of the two-dimensional confinement in V-groove quantum wires. <i>Applied Physics Letters</i> , 2002 , 81, 274-276	3-4	5
22	High internal quantum efficiency, narrow linewidth InGaAs/GaAs/AlGaAs quantum wire light-emitting diodes. <i>Applied Physics Letters</i> , 2002 , 81, 2839-2841	3-4	21
21	Observation of Charged Few-Particle States in the Optical Spectra of Single Semiconductor Quantum Dots. <i>Physica Status Solidi (B): Basic Research</i> , 2001 , 224, 325-330	1-3	5
20	Carrier Capture and Recombination Dynamics in a Single Pyramidal Quantum Dot. <i>Physica Status Solidi (B): Basic Research</i> , 2001 , 224, 431-436	1-3	4
19	Efficient, narrow linewidth excitonic emission at room temperature from GaAs/AlGaAs V-groove quantum wire light-emitting diodes. <i>Applied Physics Letters</i> , 2001 , 79, 4-6	3-4	12
18	Use of an Optical Microcavity to Probe Exciton Relaxation in Strained V-Groove Quantum Wires. <i>Physica Status Solidi A</i> , 2000 , 178, 161-165		1
17	Photoluminescence Study of V-Groove Quantum Wires: The Influence of Disorder on the Optical Spectra and the Carrier Thermalization. <i>Physica Status Solidi A</i> , 2000 , 178, 211-220		9
16	Direct Observation of New Transitions in the Absorption Spectra of a V-Groove Quantum Wire Waveguide. <i>Physica Status Solidi A</i> , 2000 , 178, 233-237		8
15	Carrier-Induced Effects on Absorption and Emission in V-Groove Quantum Wire Diodes. <i>Physica Status Solidi A</i> , 2000 , 178, 249-253		
14	Optical Spectra of Single Quantum Dots: Influence of Impurities and Few-Particle Effects. <i>Physica Status Solidi A</i> , 2000 , 178, 283-290		9
13	Strain effects and phase transitions in photonic resonator crystals. <i>Nature</i> , 2000 , 407, 880-3	50.4	29
12	Continuous-wave operation of phase-coupled vertical-cavity surface-emitting laser arrays. <i>Applied Physics Letters</i> , 2000 , 77, 2283-2285	3-4	31
11	Influence of strain and quantum confinement on the optical properties of InGaAs/GaAs V-groove quantum wires. <i>Journal of Applied Physics</i> , 2000 , 88, 141-147	2.5	16

10	Carrier transport and luminescence in inverted-pyramid quantum structures. <i>Applied Physics Letters</i> , 2000 , 77, 3923-3925	3-4	20
9	Mode switching in shear-strained and modulated photonic lattices by vertical-cavity surface-emitting laser arrays by means of injection locking. <i>Applied Physics Letters</i> , 2000 , 76, 816-818	3-4	3
8	Few-particle effects in semiconductor quantum dots: observation of multicharged excitons. <i>Physical Review Letters</i> , 2000 , 84, 5648-51	7-4	214
7	Two-dimensional quantum-confined Stark effect in V-groove quantum wires: Excited state spectroscopy and theory. <i>Applied Physics Letters</i> , 1999 , 74, 2334-2336	3-4	17
6	Effect of indium segregation on optical properties of V-groove InGaAs/GaAs strained quantum wires. <i>Applied Physics Letters</i> , 1999 , 75, 3300-3302	3-4	13
5	Strain relaxation at cleaved surfaces studied by atomic force microscopy. <i>Applied Physics A: Materials Science and Processing</i> , 1999 , 69, 347-351	2-6	12
4	Vectorial electromagnetic modes in V-shaped dielectric waveguides with application to quantum wire devices. <i>Optical and Quantum Electronics</i> , 1999 , 31, 797-812	2-4	8
3	Self-ordering and confinement in strained InGaAs/AlGaAs V-groove quantum wires grown by low-pressure organometallic chemical vapor deposition. <i>Applied Physics Letters</i> , 1998 , 72, 701-703	3-4	27
2	Structure and photoluminescence of single AlGaAs/GaAs quantum dots grown in inverted tetrahedral pyramids. <i>Applied Physics Letters</i> , 1998 , 73, 2322-2324	3-4	39
1	ELECTRONIC AND OPTICAL PROPERTIES OF QUASI-ONE-DIMENSIONAL CARRIERS IN QUANTUM WIRES. <i>Journal of Nonlinear Optical Physics and Materials</i> , 1995 , 04, 99-140	0-8	30