

# Hidekazu Kumano

## List of Publications by Year in descending order

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102  
papers

1,628  
citations

304743

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102  
all docs

102  
docs citations

102  
times ranked

1466  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fiber-coupled pillar array as a highly pure and stable single-photon source. Journal of Applied Physics, 2017, 122, .	2.5	4
2	Optical control of spectral diffusion with single InAs quantum dots in a silver-embedded nanocone. Optics Express, 2017, 25, 8073.	3.4	5
3	Stable and efficient collection of single photons emitted from a semiconductor quantum dot into a single-mode optical fiber. Applied Physics Express, 2016, 9, 032801.	2.4	19
4	Nonlocal biphoton generation in a Werner state from a single semiconductor quantum dot. Physical Review B, 2015, 91, .	3.2	3
5	Optical observation of superconducting density of states in luminescence spectra of InAs quantum dots. Physical Review B, 2015, 92, .	3.2	7
6	Time-resolved measurements of Cooper-pair radiative recombination in InAs quantum dots. Journal of Applied Physics, 2015, 118, 073102.	2.5	1
7	Single photon interference between bidirectionally extracted photons originating from semiconductor quantum dots. Applied Physics Express, 2015, 8, 112002.	2.4	6
8	Ultra-high quality factor in a metal-embedded semiconductor microdisk cavity. Optics Letters, 2015, 40, 5766.	3.3	2
9	Subwavelength metallic cavities with high-Q-resonance modes. Nanotechnology, 2015, 26, 085201.	2.6	2
10	Superconducting Light-Emitting Diodes. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 1-11.	2.9	9
11	Vanishing fine-structure splittings in telecommunication-wavelength quantum dots grown on (111)A surfaces by droplet epitaxy. Physical Review B, 2014, 90, .	3.2	41
12	Two-photon interference and coherent control of single InAs quantum dot emissions in an Ag-embedded structure. Journal of Applied Physics, 2014, 116, .	2.5	4
13	Symmetric quantum dots as efficient sources of highly entangled photons: Violation of Bell's inequality without spectral and temporal filtering. Physical Review B, 2013, 88, .	3.2	116
14	Temperature dependent carrier dynamics in telecommunication band InAs quantum dots and dashes grown on InP substrates. Journal of Applied Physics, 2013, 113, .	2.5	37
15	Single-photon emission in telecommunication band from an InAs quantum dot grown on InP with molecular-beam epitaxy. Applied Physics Letters, 2013, 103, .	3.3	29
16	Metal-coated semiconductor nanostructures and simulation of photon extraction and coupling to optical fibers for a solid-state single-photon source. Nanotechnology, 2013, 24, 455205.	2.6	15
17	Carrier dynamics and photoluminescence quenching mechanism of strained InGaSb/AlGaSb quantum wells. Journal of Applied Physics, 2013, 113, 053505.	2.5	5
18	Enhanced Photon Extraction from a Quantum Dot Induced by a Silver Microcolumnar Photon Reflector. Applied Physics Express, 2013, 6, 062801.	2.4	15

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19	Fiber-Based Bidirectional Solid-State Single-Photon Emitter Based on Semiconductor Quantum Dot. Applied Physics Express, 2013, 6, 065203.	2.4	15
20	Carrier-transfer dynamics between neutral and charged excitonic states in a single quantum dot probed with second-order photon correlation measurements. Physical Review B, 2013, 88, .	3.2	8
21	Bright single-photon source based on an InAs quantum dot in a silver-embedded nanocone structure. Applied Physics Letters, 2013, 102, 131114.	3.3	20
22	High-Q resonance modes observed in a metallic nanocavity. Applied Physics Letters, 2013, 103, .	3.3	5
23	Spectral and Transient Luminescence Measurements on GaSb/AlGaSb Quantum Wells Grown on GaSb/GaAs Heterojunctions with and without Interfacial Misfit Arrays. Japanese Journal of Applied Physics, 2013, 52, 022101.	1.5	0
24	Longitudinal and transverse exciton-spin relaxation in a single InAsP quantum dot embedded inside a standing InP nanowire using photoluminescence spectroscopy. Physical Review B, 2012, 85, .	3.2	7
25	Anomalous dip observed in intensity autocorrelation function as an inherent nature of single-photon emitters. Applied Physics Letters, 2012, 101, .	3.3	19
26	Photon-pair generation based on superconductivity. IEICE Electronics Express, 2012, 9, 1184-1200.	0.8	4
27	Cooper-Pair Radiative Recombination in Semiconductor Heterostructures: Impact on Quantum Optics and Optoelectronics. Japanese Journal of Applied Physics, 2012, 51, 010114.	1.5	3
28	Cooper-Pair Radiative Recombination in Semiconductor Heterostructures: Impact on Quantum Optics and Optoelectronics. Japanese Journal of Applied Physics, 2012, 51, 010114.	1.5	3
29	Characterization of two-photon polarization mixed states generated from entangled-classical hybrid photon source. Optics Express, 2011, 19, 14249.	3.4	5
30	Exploring Spontaneous Simultaneous Photon-pair Generation in Semiconductors. AIP Conference Proceedings, 2011, , .	0.4	0
31	Strongly suppressed multi-photon generation from a single quantum dot in a metal-embedded structure. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 337-339.	0.8	10
32	Enhanced Photon Generation in a $NbN$ Light Emitting Device. Physical Review Letters, 2011, 107, 157403.	1.5	25
33	First-order photon interference of a single photon from a single quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 2536-2539.	2.7	0
34	Quantum-Dot-Based Photon Emission and Media Conversion for Quantum Information Applications. Advances in Mathematical Physics, 2010, 2010, 1-13.	0.8	7
35	Position controlled nanowires for infrared single photon emission. Applied Physics Letters, 2010, 97, .	3.3	55
36	A Cooper-Pair Light-Emitting Diode: Temperature Dependence of Both Quantum Efficiency and Radiative Recombination Lifetime. Applied Physics Express, 2010, 3, 054001.	2.4	21

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37	Spin-flip quenching in trion state mediated by optical phonons in a single quantum dot. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 775-778.	1.5	1
38	Exciton coherence in clean single InP/InAsP/InP nanowire quantum dots emitting in infra-red measured by Fourier spectroscopy. <i>Journal of Physics: Conference Series</i> , 2009, 193, 012132.	0.4	11
39	Fourier spectroscopy of decoherence of exciton and their complexes in single InAlAs quantum dots. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 351-355.	0.8	1
40	Luminescence observed from a junction field-effect transistor with Nb/n-GaAs/Nb junction. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 2816-2818.	0.8	6
41	Single photon emission with high degree of circular polarization from a single quantum dot under zero magnetic field. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1824-1827.	2.7	2
42	Highly circular-polarized single photon generation from a single quantum dot at zero magnetic field. <i>Microelectronics Journal</i> , 2008, 39, 327-330.	2.0	1
43	Role of Cooper pairs for the generation of entangled photon pairs from single quantum dots. <i>Microelectronics Journal</i> , 2008, 39, 344-347.	2.0	5
44	Superconductor-based Light Emitting Diode: Demonstration of Role of Cooper Pairs in Radiative Recombination Processes. <i>Applied Physics Express</i> , 2008, 1, 011701.	2.4	29
45	Exciton-phonon interactions observed in blue emission band in Te-delta-doped ZnSe. <i>Journal of Applied Physics</i> , 2008, 104, 033531.	2.5	2
46	Superconducting Effect on Radiative Recombinations in Long-wavelength Light Emitting Diode. , 2008, , .		0
47	Superconducting photonics and development of light emitting diodes based on new concept. , 2008, , .		0
48	Excitonic spin-state preservation mediated by optical-phonon resonant excitation in a single quantum dot. <i>Physical Review B</i> , 2008, 78, .	3.2	4
49	Novel Nano-Heterostructure Materials and Related Devices. , 2007, , 281-327.		0
50	Room temperature ultraviolet lasing action in high-quality ZnO thin films. <i>Journal of Luminescence</i> , 2007, 122-123, 828-830.	3.1	14
51	Luminescence study on evolution from Te isoelectronic centers to type-II ZnTe quantum dots grown by metalorganic molecular-beam epitaxy. <i>Journal of Crystal Growth</i> , 2007, 301-302, 277-280.	1.5	13
52	Detailed Measurements of Nuclear Spin Polarizations in a Single InAlAs Quantum Dot Through Overhauser Shift of Photoluminescence. <i>Journal of Superconductivity and Novel Magnetism</i> , 2007, 20, 447-451.	1.8	1
53	Intrinsic exciton transitions in high-quality ZnO thin films grown by plasma-enhanced molecular-beam epitaxy on sapphire substrates. <i>Journal of Applied Physics</i> , 2006, 99, 063709.	2.5	9
54	Formation of CdO dots on atomically flat ZnO surfaces. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 933-937.	0.8	7

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55	Origin of asymmetric splitting of a neutral exciton in a single semiconductor quantum dot. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 3908-3911.	0.8	0
56	Overhauser shift in photoluminescence of excitons with fine structure from a single self-assembled InAlAs quantum dot. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 4372-4375.	0.8	3
57	Triggered single-photon emission and cross-correlation properties in InAlAs quantum dot. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 32, 144-147.	2.7	9
58	Role of Nitrogen Precursor Supplies on InAs Quantum Dot Surfaces in Their Emission Wavelengths. <i>Japanese Journal of Applied Physics</i> , 2006, 45, L529-L532.	1.5	3
59	Superconductor-Based Quantum-Dot Light-Emitting Diodes: Role of Cooper Pairs in Generating Entangled Photon Pairs. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 9264-9271.	1.5	38
60	Deterministic Single-Photon and Polarization-Correlated Photon Pair Generations From a Single InAlAs Quantum Dot. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2006, 1, 39-51.	0.5	35
61	Single-photon generation from InAlAs single quantum dot. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 3833-3837.	0.8	6
62	Photon Antibunching Observed from an InAlAs Single Quantum Dot. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L793-L796.	1.5	24
63	Structural and Luminescence Properties of InAs Quantum Dots: Effect of Nitrogen Exposure on Dot Surfaces. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L1512-L1515.	1.5	6
64	Surface-emitting stimulated emission in high-quality ZnO thin films. <i>Journal of Applied Physics</i> , 2004, 96, 3733-3736.	2.5	32
65	Dynamical properties of atom-like emissions from single localized states in ZnCdS ternary mesa-shaped structures. <i>Physica Status Solidi (B): Basic Research</i> , 2004, 241, 503-506.	1.5	0
66	Formation of ohmic contacts top-type ZnO. <i>Physica Status Solidi (B): Basic Research</i> , 2004, 241, 635-639.	1.5	10
67	Epitaxial ZnO growth and p-type doping with MOMBE. <i>Physica Status Solidi (B): Basic Research</i> , 2004, 241, 640-647.	1.5	24
68	Study of optimal coupling of ZnS pyramidal microcavities with distributed Bragg reflectors. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 1034-1037.	0.8	0
69	II-VI quantum dots grown by MOVPE. <i>Journal of Crystal Growth</i> , 2003, 248, 301-309.	1.5	9
70	Structural properties of CdO layers grown on GaAs (001) substrates by metalorganic molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2003, 252, 219-225.	1.5	4
71	Emissions from single localized states observed in ZnCdS ternary alloy mesa structures. <i>Applied Physics Letters</i> , 2003, 82, 4277-4279.	3.3	4
72	Improvement of InAs quantum-dot optical properties by strain compensation with GaNAs capping layers. <i>Applied Physics Letters</i> , 2003, 83, 4524-4526.	3.3	28

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73	GaNAs as Strain Compensating Layer for 1.55 $\mu\text{m}$ Light Emission from InAs Quantum Dots. Japanese Journal of Applied Physics, 2003, 42, 5598-5601.	1.5	24
74	Longitudinal-optical-phonon-assisted energy relaxation in self-assembled CdS quantum dots embedded in ZnSe. Journal of Applied Physics, 2002, 92, 3573-3578.	2.5	4
75	Photoluminescence study of InAs quantum dots embedded in GaNAs strain compensating layer grown by metalorganic-molecular-beam epitaxy. Journal of Applied Physics, 2002, 92, 6813-6818.	2.5	36
76	Metalorganic Molecular-Beam Epitaxial Growth and Optical Properties of Er-Doped GaNP. Japanese Journal of Applied Physics, 2002, 41, 1030-1033.	1.5	1
77	H <sub>2</sub> O-Vapor-Activated ZnO Growth on a-Face Sapphire Substrates by Metalorganic Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2002, 41, 2851-2854.	1.5	23
78	Nitrogen-Doped p-Type ZnO Layers Prepared with H <sub>2</sub> O Vapor-Assisted Metalorganic Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2002, 41, L1281-L1284.	1.5	118
79	Longitudinal-Optical-Phonon-Assisted Resonant Excitations of CdS Quantum Dots Embedded in ZnSe/(ZnSe-MgS Superlattice) Microcavities. Physica Status Solidi (B): Basic Research, 2002, 229, 961-969.	1.5	3
80	Study of Resonance Wavelengths in II-VI Semiconductor Photonic Dots: Pyramidal Size Dependences and Luminescence Properties. Physica Status Solidi (B): Basic Research, 2002, 229, 971-976.	1.5	8
81	Growth Activation of ZnO Layers with H <sub>2</sub> O Vapor on a-Face of Sapphire Substrate by Metalorganic Molecular-Beam Epitaxy. Physica Status Solidi A, 2002, 192, 224-229.	1.7	6
82	Strong coupling of CdS quantum dots to confined photonic modes in ZnSe-based microcavities. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 403-407.	2.7	2
83	Modified spontaneous emission properties of CdS quantum dots embedded in novel three-dimensional microcavities. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 441-445.	2.7	6
84	CdO epitaxial layers grown on (001) GaAs surfaces by metalorganic molecular-beam epitaxy. Journal of Crystal Growth, 2002, 237-239, 518-522.	1.5	15
85	Erbium-doped GaP grown by MOMBE and their optical properties. Journal of Crystal Growth, 2002, 237-239, 1423-1427.	1.5	0
86	Single-crystalline rocksalt CdO layers grown on GaAs (001) substrates by metalorganic molecular-beam epitaxy. Applied Physics Letters, 2001, 79, 470-472.	3.3	27
87	RADIATIVE EFFICIENCY OF LOCALIZED EXCITONS IN ZnCdS TERNARY ALLOYS. International Journal of Modern Physics B, 2001, 15, 3718-3721.	2.0	3
88	Luminescence properties of CdS quantum dots embedded in monolithic II-VI microcavity. Springer Proceedings in Physics, 2001, , 675-676.	0.2	0
89	Luminescence properties of ZnO films grown on GaAs substrates by molecular-beam epitaxy excited by electron-cyclotron resonance oxygen plasma. Journal of Crystal Growth, 2000, 214-215, 280-283.	1.5	44
90	Role of ZnS buffer layers in growth of zincblende ZnO on GaAs substrates by metalorganic molecular-beam epitaxy. Journal of Crystal Growth, 2000, 221, 435-439.	1.5	42

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91	Origin of size distributions in ZnSe self-organized quantum dots grown on ZnS layers. Journal of Electronic Materials, 2000, 29, 515-519.	2.2	0
92	Intrinsic and Extrinsic Excitonic Features in MgS/ZnSe Superlattices Revealed by Microspectroscopy. Japanese Journal of Applied Physics, 2000, 39, 501-504.	1.5	2
93	Growth and characterization of hypothetical zinc-blende ZnO films on GaAs(001) substrates with ZnS buffer layers. Applied Physics Letters, 2000, 76, 550-552.	3.3	188
94	Semiconductor photonic dots: Visible wavelength-sized optical resonators. Applied Physics Letters, 1999, 74, 1963-1965.	3.3	22
95	Growth and luminescence properties of self-organized ZnSe quantum dots. Applied Physics Letters, 1999, 75, 235-237.	3.3	44
96	Effect of indium doping on the transient optical properties of GaN films. Applied Physics Letters, 1999, 75, 2879-2881.	3.3	40
97	Excitonic properties of zinc-blende ZnSe/MgS superlattices studied by reflection spectroscopy. Physical Review B, 1997, 55, 4449-4455.	3.2	18
98	Excitonic luminescence up to room temperature in a ZnSe/MgS superlattice. Applied Physics Letters, 1997, 70, 2350-2352.	3.3	17
99	Growth of zincblende superlattices and their heterointerface properties. Journal of Crystal Growth, 1997, 170, 480-484.	1.5	7
100	Atomic force microscopy study of heteroepitaxy processes by metalorganic vapour phase epitaxy. Applied Surface Science, 1997, 113-114, 371-376.	6.1	4
101	Epitaxial growth of zinc-blende ZnSe/MgS superlattices on (001) GaAs. Applied Physics Letters, 1996, 68, 844-846.	3.3	44
102	Initial Growth Processes of ZnSe on Cleaned GaAs(001) Surfaces by Metalorganic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1996, 35, L1006-L1008.	1.5	5