Ryoichi Akimoto

List of Publications by Year
in descending order

129	1,119	471477	501174
papers	citations	17 h-index	28 g-index

129	129	129	532
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A comparative study of the operational characteristics of CdSe quantum dots and BeZnCdSe quantum well laser diodes. Journal of Applied Physics, 2020, 127, 013101.	2.5	2
2	Double-Layer Cross-Coupled Silicon Nitride Multi-Ring Resonator Systems. IEEE Photonics Technology Letters, 2020, 32, 227-230.	2.5	6
3	Silicon nitride based polarization-independent 4â€Ã—â€4 optical matrix switch. Optics and Laser Technology, 2019, 119, 105641.	4.6	7
4	Dual-Layer Cross-Coupled Tunable Resonator System in a Three-Dimensional Si₃N₄ Photonic Integration Platform. Journal of Lightwave Technology, 2019, 37, 3298-3304.	4.6	8
5	Recombination-Enhanced Effect in Green/Yellow Luminescence from BeZnCdSe Quantum Wells Grown by Molecular Beam Epitaxy. Journal of Electronic Materials, 2018, 47, 4226-4233.	2.2	3
6	Vertically integrated waveguide self-coupled resonator based tunable optical filter. Optics Letters, 2018, 43, 3766.	3.3	9
7	Vertically Coupled Suspended Silicon Nitride Microdisk-Based Optical Sensor. IEEE Photonics Technology Letters, 2018, 30, 1507-1510.	2.5	5
8	Three-Dimensional Cross-Coupled Silicon Nitride Racetrack Resonator-Based Tunable Optical Filter. IEEE Photonics Technology Letters, 2017, 29, 771-774.	2.5	12
9	Three-Dimensional Silicon Nitride Platform for Resonant Filters. , 2016, , .		0
10	Asymmetric Silicon Slot-Waveguide-Assisted Polarizing Beam Splitter. IEEE Photonics Technology Letters, 2016, 28, 1294-1297.	2.5	37
11	Low insertion loss polarizing beam splitter with asymmetric silicon slot waveguide. , 2016, , .		0
12	Low-threshold-current yellow BeZnCdSe quantum-well ridge-waveguide laser diodes under continuous-wave room-temperature operation. Applied Physics Express, 2016, 9, 012101.	2.4	11
13	Silicon nitride grating waveguide based directional coupler. Proceedings of SPIE, 2016, , .	0.8	0
14	Room-temperature continuous-wave operation of BeZnCdSe quantum-well green-to-yellow laser diodes with sub-10 mA threshold current. Proceedings of SPIE, 2016, , .	0.8	0
15	BeZnCdSe quantum-well ridge-waveguide laser diodes under low threshold room-temperature continuous-wave operation. Applied Physics Letters, 2015, 107, 161101.	3.3	6
16	T-Shape Suspended Silicon Nitride Ring Resonator for Optical Sensing Applications. IEEE Photonics Technology Letters, 2015, 27, 1601-1604.	2.5	15
17	A ZnSe/BeTe p-grading superlattice with a low voltage drop for efficient hole injection in green-yellow BeZnCdSe quantum well laser. Proceedings of SPIE, 2015, , .	0.8	4
18	Silicon nitride polarizing beam splitter with potential application for intersubband-transition-based all-optical gate device. Japanese Journal of Applied Physics, 2015, 54, 04DG08.	1.5	20

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19	Vertically Coupled Silicon Nitride Microdisk Resonant Filters. IEEE Photonics Technology Letters, 2014, 26, 2391-2394.	2.5	17
20	All-optical XOR logic gate using intersubband transition in III-V quantum well materials. Optics Express, 2014, 22, 12861.	3.4	3
21	A Three-Dimensional Silicon Nitride Polarizing Beam Splitter. IEEE Photonics Technology Letters, 2014, 26, 706-709.	2.5	39
22	Thermal annealing effects on the properties of intersubband absorption in CdS/ZnSe and (CdS/ZnSe)/BeTe II-VI quantum wells. , 2013, , .		0
23	Bandgap Control for Intersubband Transition in InGaAs/AlAsSb Coupled Double Quantum Wells. IEEE Photonics Technology Letters, 2013, 25, 1474-1477.	2.5	1
24	Dynamic Optical Path Switching in 172-Gb/s OTDM Transmissions of Ultra-High Definition Video Signals Using Fast Channel-Identifiable Clock Recovery and Integratable Devices. Journal of Lightwave Technology, 2013, 31, 594-601.	4.6	8
25	Progress of Be-based II-VI green to yellow laser diodes. , 2013, , .		0
26	Band edge tailoring of InGaAs/AlAsSb coupled double quantum wells for a monolithically integrated all-optical switch. Optics Express, 2013, 21, 15840.	3.4	14
27	Continuous-wave operation of green/yellow laser diodes based on BeZnCdSe quantum wells. Proceedings of SPIE, 2013, , .	0.8	1
28	Intersubband All-Optical Switch with Bandgap Control of InGaAs/AlAsSb Quantum Wells. , 2013, , .		0
29	High-Power Continuous-Wave Operation of BeZnCdSe Single-Quantum-Well Green Laser Diodes. Applied Physics Express, 2012, 5, 062101.	2.4	11
30	Ultrafast all-optical switch with cross-phase modulation by area-selective ion implantation in InGaAs/AlAsSb coupled double quantum wells. Optics Express, 2012, 20, B279.	3.4	8
31	Dynamic Optical Path Switching of 172-Gbit/s OTDM Ultra-High Definition Video Signals Using Fast Channel-Identifiable Clock Recovery and Integratable Devices. , 2012, , .		2
32	All-optical Wavelength Conversion of 21.4-Gb/s QPSK Signals using Intersubband Transition in InGaAs/AlAsSb Coupled Double Quantum Wells. , 2012, , .		0
33	Green/yellow luminescence from highly strained BeZnCdSe quantum wells grown by molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 255-258.	0.8	4
34	Monolithically Integrated Intersubband All-Optical Switch using Area-Selective Activation of Cross-Phase Modulation in InGaAs/AlAsSb Quantum Wells. , 2012, , .		0
35	Dynamic Optical Path Switching of 172-Gbit/s OTDM Ultra-High Definition Video Signals Using Fast Channel- Identifiable Clock Recovery and Integratable Devices. , 2012, , .		0
36	Ultrafast All-Optical Gating Operation Using Michelson Interferometer for Hybrid Integration of Intersubband Transition Switch on Si Platform. IEEE Photonics Technology Letters, 2011, 23, 1884-1886.	2.5	4

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37	Study of the shrinkage caused by holographic grating formation in acrylamide based photopolymer film. Optics Express, 2011, 19, 13386.	3.4	16
38	Photoluminescence anomalies of indirect excitons localized at interfaces in CdS/ZnSe MQWs in very high magnetic fields. Journal of Physics: Conference Series, 2011, 334, 012053.	0.4	0
39	Photo induced cyclotron resonance in ZnSe/BeTe type-II quantum wells. Journal of Physics: Conference Series, 2011, 334, 012054.	0.4	0
40	Green-to-Yellow Continuous-Wave Operation of BeZnCdSe Quantum-Well Laser Diodes at Room Temperature. Applied Physics Express, 2011, 4, 082102.	2.4	39
41	Observation of interface carrier states in no-common-atom heterostructures ZnSe/BeTe. Nanotechnology, 2011, 22, 365707.	2.6	3
42	Ultrafast electron dynamics of intersubband excitation concerning cross-phase modulation in an InGaAs/AlAs/AlAsSb coupled double quantum well. Applied Physics Letters, 2011, 98, 251104.	3.3	6
43	Monolithically Integrated Ultrafast All-Optical Switch consisting of Intersubband Optical Nonlinear Waveguide and Michelson Interferometer. , 2011, , .		1
44	Dresselhaus field-induced anisotropic spin propagation in ZnSe/BeTe type-II quantum wells. Applied Physics Letters, 2011, 99, 161901.	3.3	5
45	Propagation of FWM interacting waves in InGaAs/AlAsSb ISBT optical waveguide for wavelength convertor. , 2011, , .		0
46	Four-wave mixing in InGaAs/AlAsSb intersubband transition optical waveguides. Journal of Applied Physics, 2011, 110, .	2.5	2
47	Theoretical analysis of FWM by ISBT in InGaAs/AlAsSb QWs for wavelength conversion. , 2011, , .		0
48	545 nm Room-Temperature Continuous-Wave Operation of BeZnCdSe Quantum-Well Green Laser Diodes with Low Threshold Current Density. Applied Physics Express, 2010, 3, 091201.	2.4	15
49	172-Gbps cascaded OTDM MUX and DEMUX operations of 43G VSR transceivers using integratable semiconductor devices. , 2010, , .		2
50	Anisotropic exciton and charged exciton dichroic photoluminescence in undoped ZnSe/BeTe type-II quantum wells in magnetic fields. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1172-1175.	2.7	0
51	Simultaneous generation of intersubband absorption and quantum well intermixing through silicon ion implantation in undoped InGaAs/AlAsSb coupled double quantum wells. Applied Physics Letters, 2010, 96, 101901.	3.3	8
52	All-optical wavelength conversion at 40Gb/s with enhanced XPM by facet reflection using intersubband transition in InGaAs/AlAsSb quantum well waveguide. , 2010, , .		1
53	Intersubband absorption generation through silicon ion implantation in undoped InGaAs/AlAsSb coupled double quantum wells towards monolithic integration of intersubband-transition-based all-optical switches. , 2010, , .		0
54	540-nm green room-temperature CW operation of BeZnCdSe single quantum well laser diode. , 2010, , .		0

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55	Demonstration of 172-Gb/s Optical Time Domain Multiplexing and Demultiplexing Using Integratable Semiconductor Devices. IEEE Photonics Technology Letters, 2010, 22, 1416-1418.	2.5	11
56	All-Optical Cross-Phase Modulation Generation by Ion Implantation in IIIâ€“V Quantum Wells. IEEE Photonics Technology Letters, 2010, 22, 1820-1822.	2.5	5
57	An 88 fs Fiber Soliton Laser at 1.56 Î¼m using a Quantum Well Saturable Absorber with an Ultrafast Intersubband Transition. , 2010, , .		0
58	High-Index-Contrast Buried-Waveguide for Intersubband Ultrafast All-Optical Switches Fabricated by Wafer Bonding Technology. , 2009, , .		0
59	1.3 Âµm Distributed Feedback Laser with Half-Etching Mesa and High-Density Quantum Dots. Japanese Journal of Applied Physics, 2009, 48, 050203.	1.5	3
60	Spatially separated indirect photoemission in undoped ZnSe/BeTe type-II quantum wells studied in pulse magnetic fields. Semiconductor Science and Technology, 2009, 24, 115011.	2.0	3
61	Extremely long electron spin coherence induced by a trion transition in ZnSe/BeTe typeâ€II quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 272-275.	0.8	0
62	Spatially indirect photoluminescence of ZnSe/BeTe type II quantum wells in pulsed high magnetic fields. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 38-41.	0.8	4
63	Experimental and theoretical study of cross-phase modulation in InGaAs/AlAsSb coupled double quantum wells with a AlGaAs coupling barrier. Physical Review B, 2009, 80, .	3.2	12
64	An 88 fs fiber soliton laser using a quantum well saturable absorber with an ultrafast intersubband transition. Optics Express, 2009, 17, 22499.	3.4	3
65	Type-I interband transition in undoped ZnSe/BeTe type-II quantum wells under high excitation density. Semiconductor Science and Technology, 2009, 24, 095016.	2.0	2
66	Observation of four-wave mixing signals from an AlAsSb/InGaAs ISBT (Inter Sub-Band Transition) optical waveguide. , 2009, , .		1
67	All-optical switch based on intersubband transition in quantum wells. , 2009, , .		0
68	All-Optical Demultiplexing from 160 to 40/80 Gb/s Using Mach-Zehnder Switches Based on Intersubband Transition of InGaAs/AlAsSb Coupled Double Quantum Wells. IEICE Transactions on Electronics, 2009, E92-C, 187-193.	0.6	11
69	XPM-based Wavelength Conversion at 80 Gb/s using Intersubband Transition in InGaAs/AlGaAs/AlAsSb Coupled Double Quantum Wells. , 2009, , .		0
70	Enhancement of All-Optical Cross Phase Modulation in InGaAs/AlAsSb Coupled Quantum Wells Using InAlAs Coupling Barriers. IEEE Photonics Technology Letters, 2008, 20, 2183-2185.	2.5	11
71	High-speed all-optical modulation using an InGaAs/AlAsSb quantum well waveguide. Optics Express, 2008, 16, 9684.	3.4	12
72	Broadband and enhanced picosecond cross-phase modulation in InGaAs /AlAsSb quantum well waveguides. , 2008, , .		0

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73	Fabrication of all-optical switch based on intersubband transition in InGaAs/AlAsSb quantum wells with DFB structure. , 2008, , .		0
74	Simulation of Cross Phase Modulation in Intersubband Transition of InGaAs/AlAs/AlAsSb Coupled Quantum Wells Based on Vector Signal Analysis of Electrical Signals. Japanese Journal of Applied Physics, 2008, 47, 8434-8439.	1.5	1
75	All optical demultiplexing from 160 to 40-Gb/s utilizing InGaAs/AlAsSb quantum well intersubband transition switch. , 2008, , .		0
76	Saturation Characteristics Simulation of Intersubband Absorption for [(CdS/ZnSe/BeTe)/(ZnSe/BeTe)] Coupled Quantum Wells. Japanese Journal of Applied Physics, 2008, 47, 2932-2935.	1.5	0
77	Improvement of XPM efficiency in InGaAs/AlAsSb coupled quantum wells using InAlAs coupling barrier for intersubband transition optical switch. , 2008, , .		1
78	Optically induced long-lived electron spin coherence in ZnSeâˆ•BeTe type-II quantum wells. Applied Physics Letters, 2008, 92, 153101.	3.3	18
79	Spatially direct charged exciton photoluminescence in undoped ZnSeâˆ•BeTe type-II quantum wells. Applied Physics Letters, 2008, 92, 093107.	3.3	7
80	Thermal annealing effects on intersubband transitions in (CdSâˆ•ZnSe)âˆ•BeTe quantum wells. Applied Physics Letters, 2008, 92, 021123.	3.3	6
81	Mechanism of ultrafast modulation of the refraction index in photoexcited<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>In</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msub> Physical Review B, 2008, 78, .	3.2	25
82	Fabrication of High-Mesa Waveguides Based on Wide-Band-Gap IIâ€“VI Semiconductors for Telecom Wavelength Applications. Japanese Journal of Applied Physics, 2007, 46, 200-204.	1.5	1
83	Intersubband absorption with different sublevel couplings in [(CdSâˆ•ZnSeâˆ•BeTe)âˆ•(ZnSeâˆ•BeTe)] double quantum wells. Applied Physics Letters, 2007, 90, 181919.	3.3	11
84	All-optical demultiplexing of 160â€“10Gbitâˆ•s signals with Mach-Zehnder interferometric switch utilizing intersubband transition in InGaAsâˆ•AlAsâˆ•AlAsSb quantum well. Applied Physics Letters, 2007, 91, 221115.	3.3	62
85	Ultrafast All-Optical Refractive Index Modulation in Intersubband Transition Switch Using InGaAs/AlAs/AlAsSb Quantum Well. Japanese Journal of Applied Physics, 2007, 46, L157-L160.	1.5	24
86	Low-saturation-energy-driven ultrafast all-optical switching operation in (CdS/ZnSe)/BeTe intersubband transition. Optics Express, 2007, 15, 12123.	3.4	37
87	Bright photoemission from interacting excitons at the interface localized sites in CdS/ZnSe type-II quantum structures. AIP Conference Proceedings, 2007, , .	0.4	2
88	Ultrafast Intersubband Transition All-optical Switch with Improved Performance in Wide-Gap II-VI Quantum Wells. , 2006, , .		0
89	Electric- and magnetic-field effects on radiative recombination in modulation n-doped ZnSe/BeTe type-II quantum wells. Semiconductor Science and Technology, 2006, 21, 87-90.	2.0	9
90	Optically injected electron gas and formation of charged excitons in type-II ZnSe/BeTe quantum wells. Journal of Physics: Conference Series, 2006, 51, 399-402.	0.4	6

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91	Optical de Haas oscillations of charged excitons in type-II ZnSe/BeTe quantum wells. Journal of Physics: Conference Series, 2006, 51, 427-430.	0.4	3
92	Shorter wavelength intersubband absorption down to Î» = 1.55 Âµm in (CdS/ZnSe)/BeTe type-II superlattices. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1147-1151.	0.8	1
93	Ultrafast intersubband optical switching in IIâ€“VI-based quantum well for optical fiber communications. Physica Status Solidi (B): Basic Research, 2006, 243, 805-812.	1.5	7
94	Near-infrared intersubband absorption in (CdS/ZnSe)/BeTe type-II super-lattices grown on GaAs substrate by MBE. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 276-279.	2.7	2
95	Intersubband all-optical switching in submicron high-mesa SCH waveguide structure with wide-gap II-VI-based quantum wells. Electronics Letters, 2006, 42, 1352.	1.0	9
96	Ultrafast intersubband optical switches in II–VI-based quantum-well waveguide with separate confinement heterostructure. , 2006, , .		0
97	ZnSe interlayer effects on properties of (CdSâˆ•ZnSe)âˆ•BeTe superlattices grown by molecular beam epitaxy. Journal of Applied Physics, 2006, 99, 044912.	2.5	9
98	Î»â¼1.49â€“3.4Î¼m intersubband absorptions in (CdSâˆ•ZnSe)âˆ•BeTe quantum wells grown by molecular beam epitaxy. Applied Physics Letters, 2006, 88, 221915.	3.3	11
99	Effects of ZnSe Interlayer on Properties of (CdS/ZnSe)/BeTe Type-II Super-lattices Grown by Molecular Beam Epitaxy. AIP Conference Proceedings, 2005, , .	0.4	0
100	Composition Profile of ZnSe/BeTe Multiple Quantum Well Structures Studied by Cross-Sectional Scanning Tunneling Microscopy. Japanese Journal of Applied Physics, 2005, 44, L1337-L1340.	1.5	3
101	Scanning-tunneling-microscopy observation of heterojunctions with a type-II band alignment in ZnSeâˆ•BeTe multiple quantum wells. Applied Physics Letters, 2005, 86, 153112.	3.3	8
102	Subpicosecond saturation of intersubband absorption in (CdSâˆ•ZnSe)âˆ•BeTe quantum-well waveguides at telecommunication wavelength. Applied Physics Letters, 2005, 87, 181104.	3.3	48
103	Exciton complexes in ZnSe/BeTe type-II single quantum wells. AIP Conference Proceedings, 2005, , .	0.4	0
104	Intersubband Transition Based on a Novel II-VI Quantum Well Structure for Ultrafast All-Optical Switching. Japanese Journal of Applied Physics, 2004, 43, 1973-1977.	1.5	12
105	EFFECT OF THE VOIGT MAGNETIC FIELD ON THE EXCITON COMPLEXES IN ZnSe/BeTe TYPE-II SINGLE QUANTUM WELLS. International Journal of Modern Physics B, 2004, 18, 3749-3752.	2.0	0
106	Magnetic field enhanced luminescence in ZnSe/BeMnTe multiple quantum wells with a type II band alignment. Journal of Luminescence, 2004, 108, 65-68.	3.1	1
107	Spin dependent transitions of charged excitons in type-II quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 632-635.	2.7	10
108	What is the origin of very strong photoluminescence in ZnSe/BeTe superlattices at liquid helium temperature?. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 640-643.	2.7	8

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109	Structural study of (CdS/ZnSe)/BeTe superlattices for Î»=1.55 Î¼m intersubband transition. Journal of Applied Physics, 2004, 95, 5352-5359.	2.5	18
110	Femtosecond Pumpâ€“Probe Spectroscopy of GaAs Crescent Quantum Wires. Japanese Journal of Applied Physics, 2003, 42, 4919-4923.	1.5	0
111	Sub-picosecond electron relaxation of near-infrared intersubband transitions in n-doped (CdS/ZnSe)/BeTe quantum wells. Applied Physics Letters, 2002, 81, 2998-3000.	3.3	51
112	Short-wavelength (Î»<2 Î¼m) intersubband absorption dynamics in ZnSe/BeTe quantum wells. Applied Physics Letters, 2002, 80, 2433-2435.	3.3	18
113	Exciton formation dynamics in crescent-shaped Quantum Wires. Applied Physics Letters, 2002, 81, 3642-3644.	3.3	4
114	Magnetic and transport properties of IIIâ€“V diluted magnetic semiconductor Ga1â^'xCrxAs. Journal of Applied Physics, 2001, 89, 7392-7394.	2.5	41
115	Short-wavelength intersubband transitions down to 1.6 Î¼m in ZnSe/BeTe type-II superlattices. Applied Physics Letters, 2001, 78, 580-582.	3.3	58
116	Large quantum confinement effect of conduction electrons in ZnSe/BeTe type II heterostructures. Springer Proceedings in Physics, 2001, , 471-472.	0.2	1
117	Excitonic coherent gain induced by giant Zeeman splitting in Cd1â^'xMnxTe quantum wells. Journal of Crystal Growth, 2000, 214-215, 415-419.	1.5	1
118	Ultrafast excitonic optical gain induced by giant-Zeeman splitting in Cd1â^'xMnxTe quantum wells. Journal of Luminescence, 2000, 87-89, 868-870.	3.1	0
119	Ultrafast Functional Materials for Femtosecond Optoelectronics. Springer Series in Photonics, 1999, , 328-349.	0.8	0
120	Optical control of Larmor precession of Mn2+ moments in CdTe/Cd1â^'xMnxTe quantum wells. Journal of Applied Physics, 1998, 84, 6318-6320.	2.5	31
121	Larmor precession ofMn2+moments initiated by the exchange field of photoinjected carriers inCdTe/Cd1â^'xMnxTequantum wells. Physical Review B, 1998, 57, 7208-7213.	3.2	54
122	Ultrafast spin dynamics in diluted magnetic semiconductor quantum wells. Journal of Crystal Growth, 1998, 184-185, 931-935.	1.5	1
123	Optical Control of Precession of Mn2+ Moment in CdTe/Cd1-xMnxTe Quantum Wells. Springer Series in Chemical Physics, 1998, , 218-220.	0.2	0
124	Carrier spin dynamics inCdTe/Cd1â^'xMnxTequantum wells. Physical Review B, 1997, 56, 9726-9733.	3.2	36
125	Coherent spin transient of exciton in quantum wells. Journal of Luminescence, 1997, 72-74, 309-311.	3.1	5
126	Fabrication and characterization of waveguide for all optical switching device based on intersubband transition in JI-VI based quantum well. , 0, , .		0

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127	Ultrafast All-Optical Switches using Intersubband Transition in Quantum Wells. , 0, , .		0
128	Intersub-Band Transition All-Optical Gate Switches. , 0, , 155-200.		2
129	Cross Phase Modulation Efficiency Enhancement in In_{0.8}Ga_{0.2}As/Al_{0.5}Ga_{0.5}As/AlAs_{0.56}Sb_{0.44}Coupled Double Quantum Wells by Tailoring Interband Transition Wavelength. Applied Physics Express, 0, 2, 042201.	2.4	23