Yong-gang Zhang

List of Publications by Year
in descending order

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95	919	471509	580821
papers	citations	17 h-index	25 g-index

95	95	95	592
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	320Ã—256 Extended Wavelength In_xGa_{1-x}As/InP Focal Plane Arrays: Dislocation Defect, Dark Signal and Noise. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-11.	2.9	6
2	2.45-Î¼m 1280 Ã— 1024 InGaAs Focal Plane Array With 15-Î¼m Pitch for Extended SWIR Imaging. IEEE Photonics Technology Letters, 2022, 34, 231-234.	2.5	5
3	Effect of Ridge Width on the Lasing Characteristics of Triangular and Rectangular InAs/In0.53Ga0.47As Quantum Well Lasers. Frontiers in Materials, 2022, 9, .	2.4	0
4	Corrections to â€œ2.45-Î¼m 1280 Ã— 1024 InGaAs Focal Plane Array With 15-Î¼m Pitch for Extended SWIR Imagingâ€• IEEE Photonics Technology Letters, 2022, 34, 305-305.	2.5	0
5	Effects of buffer doping on the strain relaxation of metamorphic InGaAs photodetector structures. Materials Science in Semiconductor Processing, 2020, 120, 105281.	4.0	0
6	Surface Leakage Behaviors of $2.6~mu$ m In_{0.83}Ga_{0.17}As Photodetectors as a Function of Mesa Etching Depth. IEEE Journal of Quantum Electronics, 2020, 56, 1-6.	1.9	9
7	Dilute Bismide Photodetectors. Springer Series in Materials Science, 2019, , 299-318.	0.6	1
8	Towards Surface Leakage Free High Fill-Factor Extended Wavelength InGaAs Focal-Plane Arrays. IEEE Journal of Quantum Electronics, 2019, 55, 1-8.	1.9	9
9	Monolithically grown 2.5 Î¼m InGaAs photodetector structures on GaP and GaP/Si (001) substrates. Materials Research Express, 2019, 6, 075908.	1.6	3
10	Growth mechanisms for InAs/GaAs QDs with and without Bi surfactants. Materials Research Express, 2019, 6, 015046.	1.6	5
11	Anomalous arsenic diffusion at InGaAs/InP interface. Materials Research Express, 2019, 6, 035908.	1.6	2
12	A versatile digitally-graded buffer structure for metamorphic device applications. Journal Physics D: Applied Physics, 2018, 51, 145106.	2.8	3
13	Improved performance of In0.83Ga0.17As/InP photodetectors through modifying the position of In0.66Ga0.34As/InAs superlattice electron barrier. Infrared Physics and Technology, 2018, 89, 72-76.	2.9	9
14	Epitaxy and Device Properties of InGaAs Photodetectors with Relatively High Lattice Mismatch. , 2018, , .		3
15	Mid-infrared emissions from In(Ga)As quantum wells grown on GaP/Si(001) substrates. AIP Advances, 2018, 8, 125318.	1.3	2
16	3 Î¼m InAs quantum well lasers at room temperature on InP. Applied Physics Letters, 2018, 113, 232103.	3.3	1
17	Short-wave infrared InGaAs photodetectors and focal plane arrays. Chinese Physics B, 2018, 27, 128102.	1.4	15
18	Frequency Response of Barrier Type 2.6â€‰Âµm In0.83 Ga0.17 As/In0.83 Al0.17 As Photodetectors on InP. Physica Status Solidi (A) Applications and Materials Science, 2018, 216, 1800514.	1.8	0

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19	Correction of FTIR acquired photodetector response spectra from mid-infrared to visible bands using onsite measured instrument function. Infrared Physics and Technology, 2018, 92, 78-83.	2.9	5
20	Electron-initiated low noise 1064 nm InGaAsP/InAlAs avalanche photodetectors. Optics Express, 2018, 26, 1028.	3.4	2
21	Wavelength Extended InGaAsBi Detectors with Temperature-Insensitive Cutoff Wavelength. Chinese Physics Letters, 2018, 35, 078501.	3.3	3
22	IGA-rule 17 for performance estimation of wavelength-extended InGaAs photodetectors: validity and limitations. Applied Optics, 2018, 57, D141.	1.8	6
23	An effective indicator for evaluation of wavelength extending InGaAs photodetector technologies. Infrared Physics and Technology, 2017, 83, 45-50.	2.9	8
24	Optical characterization of Siâ€doped metamorphic InGaAs with high indium content. Physica Status Solidi (B): Basic Research, 2017, 254, 1700094.	1.5	1
25	Enhanced Carrier Multiplication in InAs Quantum Dots for Bulk Avalanche Photodetector Applications. Advanced Optical Materials, 2017, 5, 1601023.	7.3	10
26	Anisotropic strain relaxation of Si-doped metamorphic InAlAs graded buffers on InP. Journal Physics D: Applied Physics, 2017, 50, 385105.	2.8	3
27	Behaviors of beryllium compensation doping in InGaAsP grown by gas source molecular beam epitaxy. AIP Advances, 2017, 7, 075117.	1.3	2
28	2.25- mu m Avalanche Photodiodes Using Metamorphic Absorber and Lattice-Matched Multiplier on InP. IEEE Photonics Technology Letters, 2017, 29, 55-58.	2.5	1
29	InP-based pseudomorphic InAs/InGaAs triangular quantum well lasers with bismuth surfactant. Applied Optics, 2017, 56, H10.	1.8	6
30	Extended wavelength InGaAs SWIR FPAs with high performance. , 2017, , .		1
31	Characteristics of InGaAsBi with various lattice mismatches on InP substrate. AIP Advances, 2016, 6, 075215.	1.3	5
32	Nearly lattice-matched short-wave infrared InGaAsBi detectors on InP. Applied Physics Letters, 2016, 108, .	3.3	25
33	Metamorphic InAs1-xBix/In0.83Al0.17As quantum well structures on InP for mid-infrared emission. Applied Physics Letters, 2016, 109, 122102.	3.3	4
34	The effect of boron on the doping efficiency of nitrogen in ZnO. Journal of Alloys and Compounds, 2016, 672, 260-264.	5.5	10
35	Impact of etching on the surface leakage generation in mesa-type InGaAs/InAlAs avalanche photodetectors. Optics Express, 2016, 24, 7823.	3.4	20
36	Bismuth for tailoring and modification of InP-based detector and laser structures in 2â€“3 Âµm band. , 2016, , .		0

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37	2.5â€“3.0 Âµm strain-compensated InAs/InxGa1-xAs multiple quantum well lasers grown on InAlAs metamorphic buffer layers. , 2016, , .		1
38	Effect of bismuth surfactant on InP-based highly strained InAs/InGaAs triangular quantum wells. Applied Physics Letters, 2015, 107, .	3.3	13
39	Dark current suppression in metamorphic In_{0.83}Ga_{0.17}As photodetectors with In_{0.66}Ga_{0.34}As/InAs superlattice electron barrier. Applied Physics Express, 2015, 8, 022202.	2.4	22
40	Low Operating Voltage and Small Gain Slope of InGaAs APDs With p-Type Multiplication Layer. IEEE Photonics Technology Letters, 2015, 27, 661-664.	2.5	11
41	Tailoring the performances of low operating voltage InAlAs/InGaAs avalanche photodetectors. Optics Express, 2015, 23, 19278.	3.4	23
42	InP-based type-I quantum well lasers up to 2.9â€‰Î¼m at 230â€‰K in pulsed mode on a metamorphic buffer. Applied Physics Letters, 2015, 106, .	3.3	15
43	Carrier scattering and relaxation dynamics in n-type In_{0.83}Ga_{0.17}As as a function of temperature and doping density. Journal of Materials Chemistry C, 2015, 3, 2872-2880.	5.5	14
44	Extended wavelength InGaAs infrared detector arrays based on three types of material structures grown by MBE. Proceedings of SPIE, 2014, , .	0.8	2
45	High-performance InP-based InAs triangular quantum well lasers operating beyond 2 Î¼m. Proceedings of SPIE, 2014, , .	0.8	0
46	Dark current characteristics of GaAs-based 2.6 Âµm InGaAs photodetectors on different types of InAlAs buffer layers. Journal Physics D: Applied Physics, 2014, 47, 085107.	2.8	19
47	Structural and optical characterizations of InPBi thin films grown by molecular beam epitaxy. Nanoscale Research Letters, 2014, 9, 24.	5.7	44
48	Improved Performance of 2.2-$mu{m m}$ InAs/InGaAs QW Lasers on InP by Using Triangular Wells. IEEE Photonics Technology Letters, 2014, 26, 571-574.	2.5	11
49	Evaluation of the performance correlated defects of metamorphic InGaAs photodetector structures through plane-view EBIC. Semiconductor Science and Technology, 2014, 29, 035018.	2.0	3
50	2.4 Âµm InP-based antimony-free triangular quantum well lasers in continuous-wave operation above room temperature. Applied Physics Express, 2014, 7, 032701.	2.4	24
51	Optical properties of InGaAsBi/GaAs strained quantum wells studied by temperature-dependent photoluminescence. Chinese Physics B, 2013, 22, 037802.	1.4	10
52	Analysis and evaluation of uniformity of SWIR InGaAs FPA â€“ Part II: Processing issues and overall effects. Infrared Physics and Technology, 2013, 58, 69-73.	2.9	6
53	2.7â€‰Î¼m InAs quantum well lasers on InP-based InAlAs metamorphic buffer layers. Applied Physics Letters, 2013, 102, .	3.3	16
54	Type-I mid-infrared InAs/InGaAs quantum well lasers on InP-based metamorphic InAlAs buffers. Journal Physics D: Applied Physics, 2013, 46, 505103.	2.8	3

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55	InP-based InxGa1â^'xAs metamorphic buffers with different mismatch grading rates. Journal of Semiconductors, 2013, 34, 073005.	3.7	1
56	The effective g-factor in In0.53Ga0.47As/In0.52Al0.48As quantum well investigated by magnetotransport measurement. Journal of Applied Physics, 2013, 113, 033704.	2.5	3
57	InAs/In0.83Al0.17As quantum wells on GaAs substrate with type-I emission at 2.9â€‰Î¼m. Applied Physics Letters, 2013, 102, .	3.3	6
58	Back illuminated InGaAs detector arrays with extended-wavelength to 2. 4 Î¼m. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2013, 32, 214.	0.2	1
59	Effects of compositional overshoot on InP-based InAlAs metamorphic graded buffer. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2013, 32, 481.	0.2	7
60	InAlAs Graded Metamorphic Buffer with Digital Alloy Intermediate Layers. Japanese Journal of Applied Physics, 2012, 51, 080205.	1.5	7
61	Fourier transform infrared spectroscopy approach for measurements of photoluminescence and electroluminescence in mid-infrared. Review of Scientific Instruments, 2012, 83, 053106.	1.3	25
62	An effective TDLS setup using homemade driving modules for evaluation of pulsed QCL. Applied Physics B: Lasers and Optics, 2012, 109, 541-548.	2.2	1
63	Al(Ga)InP-GaAs Photodiodes Tailored for Specific Wavelength Range. , 2012, , .		2
64	High indium content InGaAs photodetector: with InGaAs or InAlAs graded buffer layers. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2012, 30, 481-485.	0.2	8
65	Extended-wavelength 640Ã—1 linear InGaAs detector arrays using N-on-P configuration for back illumination. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2012, 31, 11-14.	0.2	5
66	Properties of lattice matched quaternary InAlGaAs on InP substrate grown by gas source MBE. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2012, 31, 385-388.	0.2	0
67	Gas Source MBE Grown Wavelength Extending InGaAs Photodetectors. , 2011, , .		9
68	Analysis and evaluation of uniformity of SWIR InGaAs FPAâ€”Part I: Material issues. Infrared Physics and Technology, 2011, 54, 497-502.	2.9	9
69	InP-based InAs/InGaAs quantum wells with type-I emission beyond 3 Î¼m. Applied Physics Letters, 2011, 99, .	3.3	24
70	High performance external cavity InAs/InP quantum dot lasers. Applied Physics Letters, 2011, 98, 121102.	3.3	13
71	Distinction investigation of InGaAs photodetectors cutoff at 2.9Î¼m. Infrared Physics and Technology, 2010, 53, 173-176.	2.9	34
72	Insulator-quantum Hall conductor transition in high electron density gated InGaAs/InAlAs quantum wells. Journal of Applied Physics, 2010, 108, 063701.	2.5	8

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73	GaInPâ€“AlInPâ€“GaAs Blue Photovoltaic Detectors With Narrow Response Wavelength Width. IEEE Photonics Technology Letters, 2010, 22, 944-946.	2.5	17
74	IMPROVING THE PERFORMANCE OF EXTENDED WAVELENGTH InGaAs PHOTODETECTORS BY USING DIGITAL GRADED HETEROINTERFACES SUPERLATTICE. Hongwai Yu Haomibo Xuebao/Journal of Infrared and Millimeter Waves, 2010, 28, 405-409.	0.2	5
75	Wavelength extended InGaAs/InAlAs/InP photodetectors using n-on-p configuration optimized for back illumination. Infrared Physics and Technology, 2009, 52, 52-56.	2.9	24
76	Experimental study of weak antilocalization effects in a two-dimensional system: Anomalous dephasing rate. Physical Review B, 2009, 79, .	3.2	12
77	Magnetoresistance in high-density two-dimensional electron gas confined in InAlAs/InGaAs quantum well. Applied Physics Letters, 2009, 94, 152107.	3.3	5
78	Two-color quantum dot laser with tunable wavelength gap. Applied Physics Letters, 2009, 95, .	3.3	25
79	Electrochemical capacitance-voltage characterization of plasma-doped ultra-shallow junctions. Frontiers of Electrical and Electronic Engineering in China: Selected Publications From Chinese Universities, 2008, 3, 116-119.	0.6	3
80	Wavelength extended 2.4Î¼m heterojunction InGaAs photodiodes with InAlAs cap and linearly graded buffer layers suitable for both front and back illuminations. Infrared Physics and Technology, 2008, 51, 316-321.	2.9	35
81	Properties of gas source molecular beam epitaxy grown wavelength extended InGaAs photodetector structures on a linear graded InAlAs buffer. Semiconductor Science and Technology, 2008, 23, 125029.	2.0	38
82	Room temperature continuous-wave operation of InAsâˆ•InP(100) quantum dot lasers grown by gas-source molecular-beam epitaxy. Applied Physics Letters, 2008, 93, .	3.3	43
83	256Ã—1 element linear InGaAs short wavelength near-infrared detector arrays. , 2007, , .		6
84	Performance analysis of 256 element linear 2.4Î¼m InGaAs photovoltaic detector arrays. Proceedings of SPIE, 2007, , .	0.8	1
85	Analysis of key parameters affecting the thermal behavior and performance of quantum cascade lasers. Journal of Applied Physics, 2006, 100, 053105.	2.5	33
86	Gas source MBE grown wavelength extended 2.2 and 2.5Î¼m InGaAs PIN photodetectors. Infrared Physics and Technology, 2006, 47, 257-262.	2.9	39
87	Low threshold current density distributed feedback quantum cascade lasers with deep top gratings. Applied Physics Letters, 2006, 89, 161102.	3.3	12
88	Room Temperature, Low Threshold Distributed Feedback Quantum Cascade Lasers at 7.7 μm. , 2006, , .		0
89	Mid-Infrared Tunable Diode Laser Absorption Spectroscopy for Gas Sensing. , 2006, , .		1
90	Comparison of thermal characteristics of antimonide and phosphide MQW lasers. Semiconductor Science and Technology, 2005, 20, 563-567.	2.0	18

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91	Thermal analysis of ridge waveguide InAsP/InGaAsP MQW lasers by using finite-element method. , 2002, 4913, 199.		0
92	Characterization of InAlAs/InGaAs/InP mid-infrared quantum cascade lasers. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2002, 58, 2323-2328.	3.9	12
93	Experimental Study of InP-Based InAlAs/InGaAs Quantum Well Infrared Photodetectors Operating at the 3-5 Î¼m Wavelength Region. Chinese Physics Letters, 1999, 16, 747-749.	3.3	5
94	InP-Based Antimony-Free MQW Lasers in 2-3 Î¼m Band. , 0, , .		0
95	Emission Spectroscopy in the Mid-infrared using FTIR Spectrometry. , 0, , .		0