Qimiao Chen

List of Publications by Year in descending order

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35 papers	359 citations	933264 10 h-index	794469 19 g-index
35 all docs	35 docs citations	35 times ranked	437 citing authors

#	Article	IF	Citations
1	High-efficiency GeSn/Ge multiple-quantum-well photodetectors with photon-trapping microstructures operating at 2 Âµm. Optics Express, 2020, 28, 10280.	1.7	67
2	Bi2Te3 photoconductive detectors on Si. Applied Physics Letters, 2017, 110, .	1.5	40
3	Dark current analysis of germanium-on-insulator vertical p-i-n photodetectors with varying threading dislocation density. Journal of Applied Physics, 2020, 127, .	1.1	35
4	Metal-Semiconductor-Metal GeSn Photodetectors on Silicon for Short-Wave Infrared Applications. Micromachines, 2020, 11, 795.	1.4	24
5	Resonant-cavity-enhanced responsivity in germanium-on-insulator photodetectors. Optics Express, 2020, 28, 23739.	1.7	22
6	Vibrational properties of epitaxial Bi4Te3 films as studied by Raman spectroscopy. AIP Advances, 2015, 5, .	0.6	20
7	A new route toward light emission from Ge: tensile-strained quantum dots. Nanoscale, 2015, 7, 8725-8730.	2.8	16
8	Detailed Study of the Influence of InGaAs Matrix on the Strain Reduction in the InAs Dot-In-Well Structure. Nanoscale Research Letters, 2016, 11, 119.	3.1	15
9	Novel type II InGaAs/GaAsBi quantum well for longer wavelength emission. Journal of Alloys and Compounds, 2017, 695, 753-759.	2.8	15
10	High-Performance Back-Illuminated Ge_{0.92}Sn_{0.08}/Ge Multiple-Quantum-Well Photodetector on Si Platform For SWIR Detection. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-9.	1.9	14
11	Highly Tensile-Strained Self-Assembled Ge Quantum Dots on InP Substrates for Integrated Light Sources. ACS Applied Nano Materials, 2021, 4, 897-906.	2.4	12
12	Simulation of high-efficiency resonant-cavity-enhanced GeSn single-photon avalanche photodiodes for sensing and optical quantum applications. IEEE Sensors Journal, 2021, , 1-1.	2.4	11
13	Surface plasmon enhanced GeSn photodetectors operating at 2 Âµm. Optics Express, 2021, 29, 8498.	1.7	10
14	Insights into the Origins of Guided Microtrenches and Microholes/rings from Sn Segregation in Germaniumâ€“Tin Epilayers. Journal of Physical Chemistry C, 2020, 124, 20035-20045.	1.5	9
15	GeSn-on-insulator dual-waveband resonant-cavity-enhanced photodetectors at the 2â€‰â€‰Âµm and 1.55â€‰â€‰Âµm optical communication bands. Optics Letters, 2021, 46, 3809.	1.7	8
16	Transferable single-layer GeSn nanomembrane resonant-cavity-enhanced photodetectors for 2 Î¼m band optical communication and multi-spectral short-wave infrared sensing. Nanoscale, 2022, 14, 7341-7349.	2.8	7
17	Growth mode of tensile-strained Ge quantum dots grown by molecular beam epitaxy. Journal Physics D: Applied Physics, 2017, 50, 465301.	1.3	6
18	Growth and Characterizations of GeSn Films with High Sn Composition by Chemical Vapor Deposition (CVD) Using Ge2H6 and SnCl4 for Mid-IR Applications. ECS Transactions, 2020, 98, 91-98.	0.3	6

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19	Suspended germanium membranes photodetector with tunable biaxial tensile strain and location-determined wavelength-selective photoresponsivity. Applied Physics Letters, 2021, 119, .	1.5	6
20	Effects of high-temperature thermal annealing on GeSn thin-film material and photodetector operating at 2â€Âµm. Journal of Alloys and Compounds, 2021, 872, 159696.	2.8	4
21	The effects of strain and composition on the conduction-band offset of direct band gap type-I GeSn/GeSnSi quantum dots for CMOS compatible mid-IR light source. Semiconductor Science and Technology, 2020, 35, 025008.	1.0	3
22	Grating and hole-array enhanced germanium lateral p-i-n photodetectors on an insulator platform. Optics Express, 2022, 30, 4706.	1.7	3
23	InPBi Quantum Dots for Super-Luminescence Diodes. Nanomaterials, 2018, 8, 705.	1.9	2
24	Highly tensile-strained sub-monolayer Ge nanostructure on GaSb studied by scanning tunneling microscopy. Materials Research Express, 2017, 4, 045907.	0.8	1
25	Theoretical Investigation of Biaxially Tensile-Strained Germanium Nanowires. Nanoscale Research Letters, 2017, 12, 472.	3.1	1
26	Enhanced photon absorption of Ge-on-Si avalanche photodiode with photon-trapping microstructure. , 2021, , .		1
27	Monolithic Germanium-Tin Pedestal WaveguideÂfor Mid-Infrared Applications. IEEE Photonics Journal, 2021, 13, 1-11.	1.0	1
28	Photoluminescence from tensile-strained Ge quantum dots. , 2016, , .		0
29	Highly tensile-strained Ge quantum dots on GaSb by MBE for light sources on Si. , 2016, , .		0
30	Investigation of Resonant-Cavity-Enhanced GeSn Photodetectors in Short-Wavelength Infrared Regime. , 2019, , .		0
31	Investigation of Resonant-Cavity-Enhanced GeSn Photodetectors in Short-Wavelength Infrared Regime. , 2019, , .		0
32	High-efficiency plasmon-enhanced GeSn photodetectors operating at 2 Âµm. , 2021, , .		0
33	Plasmonic GeSn photodetectors for enhanced photo detection at 2 Âµm. , 2021, , .		0
34	Photoluminescence Evolution with Deposition Thickness of Ge Nanostructures Embedded in GaSb. Physica Status Solidi (B): Basic Research, 0, , 2100418.	0.7	0
35	Unusually-high growth rate (â^¼2.8â€Î¼m/s) of germania nanowires and its hierarchical structures by an in-situ continuous precursor supply. Ceramics International, 2021, , .	2.3	0