

# Yuxin Song

## List of Publications by Year in descending order

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74  
papers

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citations

430874

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501196

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77  
docs citations

77  
times ranked

1556  
citing authors

#	ARTICLE	IF	CITATIONS
1	Critical Thickness and Radius for Axial Heterostructure Nanowires Using Finite-Element Method. Nano Letters, 2009, 9, 1921-1925.	9.1	68
2	Thermoelectric properties of SnSe compound. Journal of Alloys and Compounds, 2015, 643, 116-120.	5.5	55
3	Structural Properties and Phase Transition of Na Adsorption on Monolayer MoS <sub>2</sub> . Nanoscale Research Letters, 2016, 11, 330.	5.7	45
4	Structural and electronic properties of two-dimensional stanene and graphene heterostructure. Nanoscale Research Letters, 2016, 11, 525.	5.7	43
5	Growth of GaSb <sub>1-x</sub> Bi <sub>x</sub> by molecular beam epitaxy. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, 02B114.	1.2	42
6	Bi <sub>2</sub> Te <sub>3</sub> photoconductive detectors on Si. Applied Physics Letters, 2017, 110, .	3.3	40
7	Induced unconventional superconductivity on the surface states of Bi <sub>2</sub> Te <sub>3</sub> topological insulator. Nature Communications, 2017, 8, 2019.	12.8	40
8	Templated Growth of Covalently Bonded Three-Dimensional Carbon Nanotube Networks Originated from Graphene. Advanced Materials, 2012, 24, 1576-1581.	21.0	37
9	1.142 $\mu$ m GaAsBi/GaAs Quantum Well Lasers Grown by Molecular Beam Epitaxy. ACS Photonics, 2017, 4, 1322-1326.	6.6	37
10	Spin injection and helicity control of surface spin photocurrent in a three dimensional topological insulator. Nature Communications, 2017, 8, 15401.	12.8	36
11	Ferroelectric Enhanced Performance of a GeSn/Ge Dual-Nanowire Photodetector. Nano Letters, 2020, 20, 3872-3879.	9.1	33
12	Shallow-terrace-like interface in dilute-bismuth GaSb/AlGaSb single quantum wells evidenced by photoluminescence. Journal of Applied Physics, 2013, 113, 153505.	2.5	29
13	Effects of doping and grading slope on surface and structure of metamorphic InGaAs buffers on GaAs substrates. Journal of Applied Physics, 2009, 106, .	2.5	25
14	Phase transition of bismuth telluride thin films grown by MBE. Applied Physics Express, 2014, 7, 045503.	2.4	22
15	A study of the doping influence on strain relaxation of graded composition InGaAs layers grown by molecular beam epitaxy. Journal of Crystal Growth, 2009, 311, 1684-1687.	1.5	20
16	Vibrational properties of epitaxial Bi <sub>4</sub> Te <sub>3</sub> films as studied by Raman spectroscopy. AIP Advances, 2015, 5, .	1.3	20
17	Tension-induced mechanical properties of stanene. Modern Physics Letters B, 2016, 30, 1650146.	1.9	19
18	Molecular beam epitaxy growth of InSb <sub>1-x</sub> Bi <sub>x</sub> thin films. Journal of Crystal Growth, 2013, 378, 323-328.	1.5	18

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19	Raman spectroscopy of epitaxial topological insulator Bi <sub>2</sub> Te <sub>3</sub> thin films on GaN substrates. <i>Modern Physics Letters B</i> , 2015, 29, 1550075.	1.9	18
20	Effect of thermal annealing on structural properties of GeSn thin films grown by molecular beam epitaxy. <i>AIP Advances</i> , 2017, 7, .	1.3	17
21	A new route toward light emission from Ge: tensile-strained quantum dots. <i>Nanoscale</i> , 2015, 7, 8725-8730.	5.6	16
22	Light emission from InGaAs:Bi/GaAs quantum wells at 1.3 $\mu$ m. <i>AIP Advances</i> , 2012, 2, .	1.3	15
23	Raman scattering studies of dilute InP <sub>x</sub> Bi <sub>1-x</sub> alloys reveal unusually strong oscillator strength for Bi-induced modes. <i>Semiconductor Science and Technology</i> , 2015, 30, 094003.	2.0	15
24	Novel type II InGaAs/GaAsBi quantum well for longer wavelength emission. <i>Journal of Alloys and Compounds</i> , 2017, 695, 753-759.	5.5	15
25	Structural properties of GeSn thin films grown by molecular beam epitaxy. <i>AIP Advances</i> , 2017, 7, .	1.3	14
26	Analysis of Raman scattering from inclined GeSn/Ge dual-nanowire heterostructure on Ge(1 $\times$ 1 $\times$ 1) substrate. <i>Applied Surface Science</i> , 2019, 463, 581-586.	6.1	14
27	Effect of rapid thermal annealing on InP <sub>x</sub> Bi <sub>1-x</sub> grown by molecular beam epitaxy. <i>Semiconductor Science and Technology</i> , 2015, 30, 094014.	2.0	13
28	Enhancement of optical quality in metamorphic quantum wells using dilute nitride buffers. <i>Applied Physics Letters</i> , 2010, 97, 091903.	3.3	12
29	Photoluminescence probing of interface evolution with annealing in InGa(N)As/GaAs single quantum wells. <i>Journal of Applied Physics</i> , 2015, 118, .	2.5	12
30	Electronic and Optical Properties of Arsenene Under Uniaxial Strain. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 214-218.	2.9	12
31	Highly Tensile-Strained Self-Assembled Ge Quantum Dots on InP Substrates for Integrated Light Sources. <i>ACS Applied Nano Materials</i> , 2021, 4, 897-906.	5.0	12
32	Optical properties of InGaAsBi/GaAs strained quantum wells studied by temperature-dependent photoluminescence. <i>Chinese Physics B</i> , 2013, 22, 037802.	1.4	10
33	Point defect balance in epitaxial GaSb. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	10
34	High-Transparency Al/Bi <sub>2</sub> Te <sub>3</sub> Double-Barrier Heterostructures. <i>IEEE Transactions on Applied Superconductivity</i> , 2017, 27, 1-4.	1.7	9
35	Structural Property Study for GeSn Thin Films. <i>Materials</i> , 2020, 13, 3645.	2.9	9
36	Vapor-solid-solid grown Ge nanowires at integrated circuit compatible temperature by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	8

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37	The effect of substrate and surface plasmons on symmetry breaking at the substrate interface of the topological insulator Bi <sub>2</sub> Te <sub>3</sub> . Scientific Reports, 2019, 9, 6147.	3.3	8
38	Growth of dilute nitrides and 1.3-μm edge emitting lasers on GaAs by MBE. Physica Status Solidi (B): Basic Research, 2011, 248, 1207-1211.	1.5	7
39	Novel InGaPBi single crystal grown by molecular beam epitaxy. Applied Physics Express, 2015, 8, 041201.	2.4	7
40	Nanoscale distribution of Bi atoms in In <sub>1-x</sub> P <sub>x</sub> Bi. Scientific Reports, 2017, 7, 12278.	3.3	7
41	Metamorphic InGaAs quantum wells for light emission at 1.3-1.6 μm. Thin Solid Films, 2007, 515, 4348-4351.	1.8	6
42	Bismuth incorporation and lattice contraction in GaSbBi and InSbBi. , 2011, , .		6
43	Bismuth Effects on Electronic Levels in GaSb(Bi)/AlGaSb Quantum Wells Probed by Infrared Photoreflectance. Chinese Physics Letters, 2015, 32, 067301.	3.3	6
44	Growth mode of tensile-strained Ge quantum dots grown by molecular beam epitaxy. Journal Physics D: Applied Physics, 2017, 50, 465301.	2.8	6
45	Spectral and spatial resolving of photoelectric property of femtosecond laser drilled holes of GaSb <sub>1-x</sub> Bi <sub>x</sub> . Optics Letters, 2015, 40, 3392.	3.3	5
46	Photoluminescence of InGaAs/GaAsBi/InGaAs type-II quantum wells grown by gas source molecular beam epitaxy. Semiconductor Science and Technology, 2017, 32, 015007.	2.0	5
47	Electrically injected GaAsBi/GaAs single quantum well laser diodes. AIP Advances, 2017, 7, 115006.	1.3	5
48	Abnormal strain in suspended GeSn microstructures. Materials Research Express, 2018, 5, 035901.	1.6	5
49	Growth Optimization, Strain Compensation and Structure Design of InAs/GaSb Type-II Superlattices for Mid-Infrared Imaging. Crystal Structure Theory and Applications, 2013, 02, 46-56.	0.1	5
50	Dilute Bismides for Mid-IR Applications. Springer Series in Materials Science, 2013, , 1-27.	0.6	4
51	A comparative study of selective dry and wet etching of germanium-tin (Ge <sub>1-x</sub> Sn <sub>x</sub> ) on germanium. Semiconductor Science and Technology, 2018, 33, 085011.	2.0	4
52	Investigation of metamorphic InGaAs quantum wells using N-incorporated buffer on GaAs grown by MBE. Journal of Crystal Growth, 2011, 323, 21-25.	1.5	3
53	Natural patterning of templates on GaAs by formation of cracks. AIP Advances, 2015, 5, .	1.3	2
54	InPBi Quantum Dots for Super-Luminescence Diodes. Nanomaterials, 2018, 8, 705.	4.1	2

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55	Metamorphic InGaAs telecom lasers on GaAs. , 2009, , .		1
56	Dilute bismides for near and mid-infrared applications. , 2013, , .		1
57	Auger recombination at low temperatures in InGaAs/InAlAs quantum well probed by photoluminescence. Journal of Luminescence, 2016, 169, 132-136.	3.1	1
58	Highly tensile-strained sub-monolayer Ge nanostructure on GaSb studied by scanning tunneling microscopy. Materials Research Express, 2017, 4, 045907.	1.6	1
59	GeSn/Ge dual-nanowire heterostructure. , 2017, , .		1
60	Theoretical Investigation of Biaxially Tensile-Strained Germanium Nanowires. Nanoscale Research Letters, 2017, 12, 472.	5.7	1
61	GaAs-Based InPBi Quantum Dots for High Efficiency Super-Luminescence Diodes. International Journal of Molecular Sciences, 2019, 20, 6001.	4.1	1
62	Influence of flux on the growth of InAs quantum dots on GaAs patterned substrate. Proceedings of SPIE, 2007, , .	0.8	0
63	High quality strain-compensated multiple InAs/AlGaInAs quantum dot layers grown by MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 765-768.	0.8	0
64	Defect studies in MBE grown GaSb $\delta$ xBi layers. , 2014, , .		0
65	Photoluminescence from tensile-strained Ge quantum dots. , 2016, , .		0
66	Highly tensile-strained Ge quantum dots on GaSb by MBE for light sources on Si. , 2016, , .		0
67	Suspended GeSn microstructure for light source on Si. , 2017, , .		0
68	Electrically pumped GaAsBi laser diodes. , 2017, , .		0
69	Novel group IV nano- and micro-structures for light sources on silicon. , 2017, , .		0
70	Metamorphic QuantumWell Lasers. , 2012, , 283-317.		0
71	Novel Dilute Bismides for IR Optoelectronics Applications. , 2013, , .		0
72	MBE growth of Bi <sub>2</sub> Te <sub>3</sub> for thermoelectrics. , 2013, , .		0

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73	Noval dilute bismides for IR optoelectronics applications. , 2013, , .		0
74	Photoluminescence Evolution with Deposition Thickness of Ge Nanostructures Embedded in GaSb. Physica Status Solidi (B): Basic Research, 0, , 2100418.	1.5	0