Jin Dong Song

List of Publications by Year
in descending order

71 papers	1,513 citations	361413 20 h-index	315739 38 g-index
73 all docs	73 docs citations	73 times ranked	2738 citing authors

#	Article	IF	Citations
1	Alternative Patterning Process for Realization of Large-Area, Full-Color, Active Quantum Dot Display. Nano Letters, 2016, 16, 6946-6953.	9.1	171
2	Hot Carrier Trapping Induced Negative Photoconductance in InAs Nanowires toward Novel Nonvolatile Memory. Nano Letters, 2015, 15, 5875-5882.	9.1	139
3	Ultrasensitive PbS quantum-dot-sensitized InGaZnO hybrid photoinverter for near-infrared detection and imaging with high photogain. NPG Asia Materials, 2016, 8, e233-e233.	7.9	129
4	Mixedâ€Dimensional 1D ZnOâ€“2D WSe₂ van der Waals Heterojunction Device for Photosensors. Advanced Functional Materials, 2017, 27, 1703822.	14.9	98
5	Magnetic-field-controlled reconfigurable semiconductor logic. Nature, 2013, 494, 72-76.	27.8	92
6	Single Self-Assembled <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>InAs</mml:mi><mml:mo>/</mml:mo><mml:mi>GaAs</mml:mi></mml:mrow></mml:math> Quantum Dots in Photonic Nanostructures: The Role of Nanofabrication. Physical Review Applied, 2018, 9, .	3.8	73
7	Ultra-high-throughput Production of III-V/Si Wafer for Electronic and Photonic Applications. Scientific Reports, 2016, 6, 20610.	3.3	72
8	Multicolor Tunable Upconversion Luminescence from Sensitized Seed-Mediated Grown LiGdF₄:Yb,Tm-Based Core/Triple-Shell Nanophosphors for Transparent Displays. Chemistry of Materials, 2018, 30, 8457-8464.	6.7	66
9	On-demand spin-state manipulation of single-photon emission from quantum dot integrated with metasurface. Science Advances, 2020, 6, eaba8761.	10.3	52
10	Self-Powered Visibleâ€“Invisible Multiband Detection and Imaging Achieved Using High-Performance 2D MoTe₂/MoS₂ Semivertical Heterojunction Photodiodes. ACS Applied Materials & Interfaces, 2020, 12, 10858-10866.	8.0	49
11	Cryogenic photoluminescence imaging system for nanoscale positioning of single quantum emitters. Review of Scientific Instruments, 2017, 88, 023116.	1.3	48
12	Comparison of structural and optical properties of InAs quantum dots grown by migration-enhanced molecular-beam epitaxy and conventional molecular-beam epitaxy. Applied Physics Letters, 2006, 88, 133104.	3.3	40
13	Fabrication of high-quality GaAs-based photodetector arrays on Si. Applied Physics Letters, 2017, 110, .	3.3	38
14	Decay dynamics and exciton localization in large GaAs quantum dots grown by droplet epitaxy. Physical Review B, 2013, 88, .	3.2	29
15	Monolithic integration of visible GaAs and near-infrared InGaAs for multicolor photodetectors by using high-throughput epitaxial lift-off toward high-resolution imaging systems. Scientific Reports, 2019, 9, 18661.	3.3	26
16	Zero-Dimensional PbS Quantum Dotâ€“InGaZnO Film Heterostructure for Short-Wave Infrared Flat-Panel Imager. ACS Photonics, 2020, 7, 1932-1941.	6.6	26
17	Intrinsically p-type cuprous iodide semiconductor for hybrid light-emitting diodes. Scientific Reports, 2020, 10, 3995.	3.3	26
18	Coherent Dynamics in Quantum Emitters under Dichromatic Excitation. Physical Review Letters, 2021, 126, 047403.	7.8	25

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19	Temperature-dependent energy band gap variation in self-organized InAs quantum dots. Applied Physics Letters, 2011, 99, .	3.3	23
20	Screening Nuclear Field Fluctuations in Quantum Dots for Indistinguishable Photon Generation. Physical Review Letters, 2016, 116, 257401.	7.8	20
21	Molecular Beam Epitaxial Growth of High-Quality InP/InGaAs/InP Heterostructure with Polycrystalline GaAs and GaP Decomposition Sources. Japanese Journal of Applied Physics, 2000, 39, L347-L350.	1.5	16
22	10-nm Fin-width InGaSb p-channel self-aligned FinFETs using antimonide-compatible digital etch. , 2017, , .		15
23	Fundamental Limits to Coherent Photon Generation with Solid-State Atomlike Transitions. Physical Review Letters, 2019, 123, 167402.	7.8	15
24	Room temperature operation of mid-infrared InAs₀₈₁Sb₀₁₉ based photovoltaic detectors with an In₀₂Al₀₈Sb barrier layer grown on GaAs substrates. Optics Express, 2018, 26, 6249.	3.4	13
25	Cavity quantum electro-dynamics with solid-state emitters in aperiodic nano-photonic spiral devices. Applied Physics Letters, 2020, 117, .	3.3	13
26	Coherence in cooperative photon emission from indistinguishable quantum emitters. Science Advances, 2022, 8, eabm8171.	10.3	13
27	Growth of pure wurtzite InGaAs nanowires for photovoltaic and energy harvesting applications. Nano Energy, 2018, 53, 57-65.	16.0	11
28	InAs on GaAs Photodetectors Using Thin InAlAs Graded Buffers and Their Application to Exceeding Short-Wave Infrared Imaging at 300â€‰K. Scientific Reports, 2019, 9, 12875.	3.3	10
29	Parametric study on optical properties of digital-alloy In(Ga1â^'zAlz)As/InP grown by molecular-beam epitaxy. Applied Physics Letters, 2004, 84, 873-875.	3.3	9
30	Effect of deposition period on structural and optical properties of InGaAs/GaAs quantum dots formed by InAs/GaAs short-period superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 26, 86-90.	2.7	9
31	Effect of thin intermediate-layer of InAs quantum dots on the physical properties of InSb films grown on (001) GaAs. Thin Solid Films, 2012, 520, 6589-6594.	1.8	9
32	Gate voltage control of the Rashba effect in a p-type GaSb quantum well and application in a complementary device. Solid-State Electronics, 2013, 82, 34-37.	1.4	9
33	Droplet Epitaxy for III-V Compound Semiconductor Quantum Nanostructures on Lattice Matched Systems. Journal of the Korean Physical Society, 2018, 73, 190-202.	0.7	9
34	Optical characterization of digital alloy In0.49Ga0.51Pâ^•In0.49(Ga0.6Al0.4)0.51P multi-quantum-wells grown by molecular beam epitaxy. Journal of Applied Physics, 2006, 100, 093503.	2.5	8
35	The effect of postâ€growth thermal annealing on the emission spectra of GaAs/AlGaAs quantum dots grown by droplet epitaxy. Physica Status Solidi - Rapid Research Letters, 2012, 6, 445-447.	2.4	8
36	Structural and electrical properties of high-quality 0.41Î¼m-thick InSb films grown on GaAs (100) substrate with InxAl1â^'xSb continuously graded buffer. Materials Research Bulletin, 2012, 47, 2927-2930.	5.2	8

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37	The growth of GaSb/Al0.33Ga0.67Sb MQW on n-Silicon (100) with Al0.66Ga0.34Sb/AlSb SPS layers. Materials Research Bulletin, 2014, 57, 152-155.	5.2	6
38	MBE growth and optical properties of digital-alloy 1.55Î¼m multi-quantum wells. Journal of Crystal Growth, 2004, 270, 295-300.	1.5	5
39	Effect of growth parameters on the formation of threeâ€dimensional InAs islands on (001) silicon substrate. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 391-395.	1.8	5
40	Uniformly strained AlGaSb/InGaSb/AlGaSb quantum well on GaAs substrates for balanced complementary metal-oxide-semiconductors. Current Applied Physics, 2017, 17, 417-421.	2.4	5
41	Exciton-phonon coupling channels in a â€˜strain-freeâ€™ GaAs droplet epitaxy single quantum dot. Current Applied Physics, 2018, 18, 829-833.	2.4	5
42	High-Quality 100 nm Thick InSb Films Grown on GaAs(001) Substrates with an In_xAl_{1â€“x}Sb Continuously Graded Buffer Layer. ACS Omega, 2018, 3, 14562-14566.	3.5	5
43	High hole mobility and low leakage thin-body (In)GaSb p-MOSFETs grown on high-bandgap AlGaSb. IEEE Journal of the Electron Devices Society, 2020, , 1-1.	2.1	5
44	Thermal release tape-assisted semiconductor membrane transfer process for hybrid photonic devices embedding quantum emitters. Materials for Quantum Technology, 0, , .	3.1	5
45	Energy-Efficient IIIâ€“V Tunnel FET-Based Synaptic Device with Enhanced Charge Trapping Ability Utilizing Both Hot Hole and Hot Electron Injections for Analog Neuromorphic Computing. ACS Applied Materials & Interfaces, 2022, 14, 24592-24601.	8.0	5
46	Spatially-resolved and polarized Raman scattering from a single Si nanowire. Journal of Raman Spectroscopy, 2015, 46, 524-530.	2.5	4
47	Study on Charge-Enhanced Ferroelectric SIS Optical Phase Shifters Utilizing Negative Capacitance Effect. IEEE Journal of Quantum Electronics, 2020, 56, 1-10.	1.9	4
48	Uniform growth of high-quality 2-in diameter In0.53Ga0.47As/In0.52Al0.48As/InP and In0.2Ga0.8As/GaAs/AlGaAs multi-quantum well wafers by MBE with GaP and GaAs decomposition sources. Journal of Crystal Growth, 2002, 237-239, 1504-1509.	1.5	3
49	Growth of highâ€quality InSb layer on (001) Si substrate with an initial intermediateâ€layer of InAs quantum dots. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 2104-2107.	1.8	3
50	Temperature dependence of the excitonic energy band gap in In(Ga)As nanostructures. Journal of the Korean Physical Society, 2012, 60, 1828-1832.	0.7	3
51	Hybrid quantum optomechanics with a quantum-dot single photon source. Physical Review B, 2016, 94, .	3.2	3
52	High hole mobility in strained In0.25Ga0.75Sb quantum well with high quality Al0.95Ga0.05Sb buffer layer. Applied Physics Letters, 2018, 113, 093501.	3.3	3
53	Optical characteristics of type-II hexagonal-shaped GaSb quantum dots on GaAs synthesized using nanowire self-growth mechanism from Ga metal droplet. Scientific Reports, 2021, 11, 7699.	3.3	3
54	Atomic Force Microscopy and Polarized Raman Spectroscopy of (GaP)n/(InP)n Short-Period Superlattice Structures. Journal of the Korean Physical Society, 2008, 52, 1886-1890.	0.7	3

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55	Cavity-enhanced InGaAs photo-FET with a metal gate reflector fabricated by wafer bonding on Si. Optics Express, 2021, 29, 42630.	3.4	3
56	Optical Properties of Quantum-Wires Grown Using Lateral Composition Modulation Induced by (InP)1/(GaP)1 Short-Period Superlattices. Materials Research Society Symposia Proceedings, 2003, 794, 88.	0.1	2
57	Optical and structural properties of InGaAs/InP double quantum wells grown by molecular beam epitaxy with polycrystalline GaAs and GaP decomposition sources. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 32, 234-236.	2.7	2
58	Raman scattering studies of (GaP)_n/(InP)_n (n = 1, 1.7, 2) shortâ€period superlattice structures. Journal of Raman Spectroscopy, 2009, 40, 1178-1182.	2.5	2
59	GaSb/InGaAs 2-dimensional hole gas grown on InP substrate for III-V CMOS applications. Current Applied Physics, 2017, 17, 1005-1008.	2.4	2
60	Feasibility Study on Negative Capacitance SIS Phase Shifter for Low-Power Optical Phase Modulation. , 2018, , .		2
61	Parametrical Study on the Preparation of InAs/AlSb 2DEG Structure for Application to High-Mobility Inverted-Doping HEMT. Journal of the Korean Physical Society, 2009, 55, 1525-1529.	0.7	2
62	Effect of Annealing Temperature on the Luminescence Properties of Digital-Alloy InGaAlAs Multiple Quantum Wells. Applied Science and Convergence Technology, 2013, 22, 321-326.	0.9	2
63	rf-Signal-induced heating effects in single-electron pumps composed of gate-tunable quantum dots. Physical Review B, 2021, 103, .	3.2	1
64	Temperature-Dependent Exciton Dynamics in a Single GaAs Quantum Ring and a Quantum Dot. Nanomaterials, 2022, 12, 2331.	4.1	1
65	Effects of Growth Sequence on Optical and Structural Properties of InAs/GaAs Quantum Dots Grown by Atomic Layer Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 2003, 794, 94.	0.1	0
66	Investigation of in-situ doping profile for N+/P/N+ bidirectional switching device using Si_{1â^'x}Ge_x/Si/Si_{1â^'x}Ge_x> structure. IEICE Electronics Express, 2015, 12, 20150098-20150098.		0
67	Design of Efficient Phase Shifter using InGaAs-InAs/Ge SIS Capacitor for Mid-IR Photonics Application. , 2018, , .		0
68	SWIR-LWIR Photoluminescence from Sb-based Epilayers Grown on GaAs Substrates by using MBE. Journal of the Korean Physical Society, 2018, 73, 1604-1611.	0.7	0
69	Nanomechanical Microwave Bolometry with Semiconducting Nanowires. Physical Review Applied, 2021, 15, .	3.8	0
70	Formation of Al_{0.3}Ga_{0.7}As/GaAs Multiple Quantum Wells on Silicon Substrate with AlAs_xSb_{1-x}Step-graded Buffer. Applied Science and Convergence Technology, 2013, 22, 313-320.	0.9	0
71	SWIR imaging using PbS QD photodiode array sensors. Optics Express, 2022, 30, 20659.	3.4	0