Shiro Tsukamoto

List of Publications by Year
in descending order

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74 papers	1,943 citations	257101 24 h-index	264894 42 g-index
74 all docs	74 docs citations	74 times ranked	918 citing authors

#	Article	IF	Citations
1	Fabrication of GaAs quantum wires on epitaxially grown V grooves by metalâ€organic chemicalâ€vapor deposition. Journal of Applied Physics, 1992, 71, 533-535.	1.1	173
2	Photoluminescence spectra and anisotropic energy shift of GaAs quantum wires in high magnetic fields. Physical Review Letters, 1992, 69, 2963-2966.	2.9	147
3	New Structure Model for theGaAs(001)â^'c(4Ã—4)Surface. Physical Review Letters, 2002, 89, 206102.	2.9	110
4	Fabrication of GaAs quantum wires (â^¼10 nm) by metalorganic chemical vapor selective deposition growth. Applied Physics Letters, 1993, 63, 355-357.	1.5	94
5	Fabrication of GaAs arrowheadâ€shaped quantum wires by metalorganic chemical vapor deposition selective growth. Applied Physics Letters, 1993, 62, 49-51.	1.5	68
6	Fabrication of InGaAs quantum dots on GaAs(001) by droplet epitaxy. Journal of Crystal Growth, 2000, 209, 504-508.	0.7	67
7	New Self-Organized Growth Method for InGaAs Quantum Dots on GaAs(001) Using Droplet Epitaxy. Japanese Journal of Applied Physics, 1999, 38, L1009-L1011.	0.8	66
8	Nanoscale InGaAs concave disks fabricated by heterogeneous droplet epitaxy. Applied Physics Letters, 2000, 76, 3543-3545.	1.5	64
9	GaAs quantum dots with lateral dimension of 25 nm fabricated by selective metalorganic chemical vapor deposition growth. Applied Physics Letters, 1994, 64, 2495-2497.	1.5	63
10	Narrow photoluminescence linewidth (<17â€‚meV) from highly uniform self-assembled InAs/GaAs quantum dots grown by low-pressure metalorganic chemical vapor deposition. Applied Physics Letters, 2004, 84, 2817-2819.	1.5	60
11	Molecularâ€beam epitaxial growth of highâ€quality InSb on InP and GaAs substrates. Journal of Applied Physics, 1989, 66, 3618-3621.	1.1	50
12	High density InAsâ^•GaAs quantum dots with enhanced photoluminescence intensity using antimony surfactant-mediated metal organic chemical vapor deposition. Applied Physics Letters, 2006, 89, 183124.	1.5	50
13	Growth process and mechanism of nanometer-scale GaAs dot-structures using MOCVD selective growth. Journal of Crystal Growth, 1993, 126, 707-717.	0.7	49
14	Atomic-level in situ real-space observation of Ga adatoms on GaAs(001)(2Ã—4)-As surface during molecular beam epitaxy growth. Journal of Crystal Growth, 1999, 201-202, 118-123.	0.7	45
15	Atomistic Insights for InAs Quantum Dot Formation on GaAs(001) using STM within a MBE Growth Chamber. Small, 2006, 2, 386-389.	5.2	45
16	Observation of sulfurâ€terminated GaAs(001)â€(2Ã—6) reconstruction by scanning tunneling microscopy. Applied Physics Letters, 1994, 65, 2199-2201.	1.5	40
17	Ground state lasing at 1.34Î¼m from InAsâ^•GaAs quantum dots grown by antimony-mediated metal organic chemical vapor deposition. Applied Physics Letters, 2007, 90, 241110.	1.5	39
18	Effect of antimony on the density of InAs/Sb:GaAs(100) quantum dots grown by metalorganic chemical-vapor deposition. Journal of Crystal Growth, 2007, 298, 548-552.	0.7	32

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19	Fabrication of InGaAs Strained Quantum Wire Structures Using Selective-Area Metal-Organic Chemical Vapor Deposition Growth. Japanese Journal of Applied Physics, 1993, 32, L1377-L1379.	0.8	30
20	Conformation and Local Environment Dependent Conductance of DNA Molecules. Small, 2005, 1, 1168-1172.	5.2	29
21	Passivation and reconstruction-dependent electron accumulation at sulphur treated InAs() surfaces. Surface Science, 2003, 523, 179-188.	0.8	28
22	Gallium-rich reconstructions on GaAs(001). Physica Status Solidi (B): Basic Research, 2003, 240, 91-98.	0.7	27
23	Fabrication and optical properties of GaAs quantum wires and dots by MOCVD selective growth. Semiconductor Science and Technology, 1993, 8, 1082-1088.	1.0	26
24	Transport properties of InAsxSb1â[^]'x(0â‰xâ‰0.55) on InP grown by molecularâ€beam epitaxy. Journal of Applied Physics, 1990, 67, 6819-6822.	1.1	25
25	$f 2imes 6$ Surface Reconstruction of in situ Sulfur-Terminated GaAs(001) Observed by Scanning Tunneling Microscopy. Japanese Journal of Applied Physics, 1994, 33, L1185-L1188.	0.8	25
26	Development of a Method for Preparing a Highly Reactive and Stable, Recyclable and Environmentally Benign Organopalladium Catalyst Supported on Sulfur-Terminated Gallium Arsenide(001): A Three-Component Catalyst, {Pd}-S-GaAs(001), and its Properties. Advanced Synthesis and Catalysis, 2006, 348, 1063-1070.	2.1	25
27	In SituScanning Tunneling Microscope Observation of InAs Wetting Layer Formation on GaAs(001) during Molecular Beam Epitaxy Growth at 500 Â°C. Japanese Journal of Applied Physics, 2006, 45, L777-L779.	0.8	25
28	Magic numbers in Ga clusters on GaAs (001) surface. Journal of Crystal Growth, 2000, 209, 258-262.	0.7	24
29	Development of a Recyclable and Lowâ€Leaching Palladium Catalyst Supported on Sulfurâ€Modified Gallium Arsenideâ€...(001) for Use in Suzukiâ€"Miyaura Coupling. ChemCatChem, 2009, 1, 279-285.	1.8	24
30	InAs Quantum Dots Growth by Modified Droplet Epitaxy Using Sulfur Termination. Japanese Journal of Applied Physics, 2000, 39, 4580-4583.	0.8	23
31	Improvement of the uniformity of self-assembled InAs quantum dots grown on InGaAsâˆ•GaAs by low-pressure metalorganic chemical vapor deposition. Applied Physics Letters, 2004, 85, 2753-2755.	1.5	23
32	Heteroepitaxial growth of InAs on GaAs(001) by in situ STM located inside MBE growth chamber. Microelectronics Journal, 2006, 37, 1498-1504.	1.1	22
33	Fabrication of InGaAs strained quantum wires using selective MOCVD growth on SiO2-patterned GaAs substrate. Journal of Crystal Growth, 1992, 124, 502-506.	0.7	21
34	In-situ Determination of the Carrier Concentration of (001) GaAs by Reflectance Anisotropy Spectroscopy. Physica Status Solidi A, 2001, 188, 1423-1429.	1.7	21
35	Novel Palladium Catalyst Supported on GaAs(001) Passivated by Ammonium Sulfide. Chemistry Letters, 2004, 33, 1208-1209.	0.7	20
36	Novel Organopalladium Material Formed on a Sulfur-Terminated GaAs(001) Surface. Japanese Journal of Applied Physics, 2002, 41, L1197-L1199.	0.8	17

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37	Ga-rich GaAs(001) surfaces observed by STM during high-temperature annealing in MBE. Journal of Crystal Growth, 2003, 251, 46-50.	0.7	17
38	Observation of enhanced lateral confinement of excitons in GaAs quantum wires with various sizes (7â€“30 nm) by magnetophotoluminescence measurements. Applied Physics Letters, 1995, 66, 2502-2504.	1.5	16
39	Exciton radiative lifetime in GaAs quantum wires grown by metalorganic chemicalâ€vapor selective growth. Applied Physics Letters, 1994, 64, 1564-1566.	1.5	14
40	In situ scanning tunneling microscopy of InAs quantum dots on GaAs() during molecular beam epitaxial growth. Surface Science, 2003, 544, 234-240.	0.8	14
41	Spatial point analysis of quantum dot nucleation sites on InAs wetting layer. Surface Science, 2011, 605, L1-L5.	0.8	13
42	Influence of the reconstruction of GaAs (001) on the electro-optical bulk properties. Journal of Crystal Growth, 2003, 248, 254-258.	0.7	12
43	Statistical Analysis of Surface Reconstruction Domains on InAs Wetting Layer Preceding Quantum Dot Formation. Nanoscale Research Letters, 2010, 5, 1901-1904.	3.1	12
44	Telecom-wavelength InAs QDs with low fine structure splitting grown by droplet epitaxy on GaAs(111)A vicinal substrates. Applied Physics Letters, 2021, 118, .	1.5	12
45	Temperature Activated Dimensionality Crossover in the Nucleation of Quantum Dots by Droplet Epitaxy on GaAs(111)A Vicinal Substrates. Scientific Reports, 2019, 9, 14520.	1.6	11
46	Photoelectron and Auger electron diffraction studies of a sulfur-terminated GaAs(001)-(2Ã—6) surface. Surface Science, 1998, 395, 75-81.	0.8	10
47	Highly Reactive Organopalladium Catalyst Formed on Sulfur-Terminated GaAs(001)-(2 Ã— 6) Surface. Japanese Journal of Applied Physics, 2006, 45, L475-L477.	0.8	10
48	Hopkins-Skellam index and origin of spatial regularity in InAs quantum dot formation on GaAs(001). Journal of Applied Physics, 2015, 117, .	1.1	10
49	Droplet epitaxy quantum dot based infrared photodetectors. Nanotechnology, 2020, 31, 245203.	1.3	10
50	Surface reconstruction of sulfur-terminated GaAs(001) observed during annealing process by scanning tunneling microscopy. Journal of Crystal Growth, 1995, 150, 33-37.	0.7	9
51	Surface reconstructions on Sb-irradiated GaAs(001) formed by molecular beam epitaxy. Microelectronics Journal, 2007, 38, 620-624.	1.1	9
52	Optical properties of GaAs quantum dots fabricated by MOCVD selective growth. Solid-State Electronics, 1994, 37, 579-581.	0.8	6
53	Magneto-photoluminescence study of InGaAs quantum dots fabricated by droplet epitaxy. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 448-451.	1.3	5
54	Stoichiometry Study of S-Terminated GaAs(001)-(2 Ã—6) Surface with Synchrotron Radiation Photoelectron Spectroscopy. Japanese Journal of Applied Physics, 2000, 39, 3943-3946.	0.8	5

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55	Preparation of Tethered Palladium Catalysis Supported on Gold(111) and Its Surface Characterization by X-ray Photoelectron Spectroscopy (XPS). Bulletin of the Chemical Society of Japan, 2008, 81, 1012-1018.	2.0	5
56	Temperature-Dependent Site Control of InAs/GaAs (001) Quantum Dots Using a Scanning Tunneling Microscopy Tip During Growth. Nanoscale Research Letters, 2010, 5, 1930-1934.	3.1	5
57	Atomistic behaviour of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mi>n</mml:mi><mml:mo>Ã—</mml:mo><mml:mn>3</mml:mn><mml:mo) Tj ETQq1 1 0.784314 rg surface at the growth condition. Journal of Crystal Growth, 2017, 477, 104-109.	0.7	5
58	Structural analysis by reflectance anisotropy spectroscopy: As and Sb on GaAs(110). Journal of Physics Condensed Matter, 2004, 16, S4367-S4374.	0.7	4
59	Nano-clustered Pd catalysts formed on GaN surface for green chemistry. Journal of Crystal Growth, 2011, 323, 150-153.	0.7	4
60	In situ STM observation during InAs growth in nano holes at 300Â°C. Surface Science, 2011, 605, 1320-1323.	0.8	4
61	Proposal of Selective Growth Technique Using Periodic Strain Field Caused by Misfit Dislocations. Japanese Journal of Applied Physics, 2004, 43, L1422-L1424.	0.8	3
62	S-termination effects for the catalytic activities of Pd on GaN(0001) surfaces. Applied Surface Science, 2012, 258, 8334-8337.	3.1	3
63	In situ study of low-temperature growth and Mn, Si, Sn doping of GaAs () in molecular beam epitaxy. Journal of Crystal Growth, 2004, 265, 425-433.	0.7	2
64	Highly uniform self-assembled InAs/GaAs quantum dots emitting at 1.3Î¼m by metalorganic chemical vapor deposition. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 26, 77-80.	1.3	2
65	Incorporation of Mn atoms into the GaAs(110) surface. Journal of Crystal Growth, 2013, 378, 50-52.	0.7	2
66	In situ STM observations of step structures in a trench around an InAs QD at 300Â°C. Journal of Crystal Growth, 2013, 378, 44-46.	0.7	2
67	Raman spectroscopy of epitaxial InGaN/Si in the central composition range. Japanese Journal of Applied Physics, 2019, 58, SC1020.	0.8	2
68	Reentrant Behavior of the Density vs. Temperature of Indium Islands on GaAs(111)A. Nanomaterials, 2020, 10, 1512.	1.9	2
69	Intermittent growth for InAs quantum dot on GaAs(001). Journal of Crystal Growth, 2020, 551, 125891.	0.7	2
70	DFT Calculation for Palladium Supported on S-terminated GaN as Green Chemical Catalyst. E-Journal of Surface Science and Nanotechnology, 2010, 8, 377-380.	0.1	2
71	Sulfur-Terminated GaAs-Supported Pd Catalyst for the Heck Reaction. Synfacts, 2006, 2006, 1070-1070.	0.0	1
72	Reusability, Durability and Treatability of Palladium Catalyst on a Semiconductor Plate: Comparison with Commercially Available Solid-Supported Palladium Catalysts. Journal of Inorganic and Organometallic Polymers and Materials, 2010, 20, 873-876.	1.9	1

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73	Enhancement of Room Temperature Photoluminescence from InAs Quantum Dots by Irradiating Mn. Japanese Journal of Applied Physics, 2007, 46, L801-L803.	0.8	0
74	In-situ STM Studies on III-V Compound Semiconductor Surfaces during MBE Growth. Hyomen Kagaku, 2008, 29, 758-764.	0.0	0