Shinjiro Hara

List of Publications by Year
in descending order

92 papers	3,239 citations	236925 25 h-index	161849 54 g-index
95 all docs	95 docs citations	95 times ranked	2375 citing authors

#	Article	IF	Citations
1	Control of InAs Nanowire Growth Directions on Si. Nano Letters, 2008, 8, 3475-3480.	9.1	320
2	GaAs/AlGaAs Core Multishell Nanowire-Based Light-Emitting Diodes on Si. Nano Letters, 2010, 10, 1639-1644.	9.1	305
3	Single GaAs/GaAsP Coaxial Coreâˆ'Shell Nanowire Lasers. Nano Letters, 2009, 9, 112-116.	9.1	254
4	Growth of Coreâ€"Shell InP Nanowires for Photovoltaic Application by Selective-Area Metal Organic Vapor Phase Epitaxy. Applied Physics Express, 0, 2, 035004.	2.4	185
5	Fabrication and characterization of freestanding GaAsâˆ•AlGaAs core-shell nanowires and AlGaAs nanotubes by using selective-area metalorganic vapor phase epitaxy. Applied Physics Letters, 2005, 87, 093109.	3.3	168
6	Selective-area growth of vertically aligned GaAs and GaAs/AlGaAs coreâ€"shell nanowires on Si(111) substrate. Nanotechnology, 2009, 20, 145302.	2.6	145
7	IIIâ€"V Nanowires on Si Substrate: Selective-Area Growth and Device Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 1112-1129.	2.9	145
8	Mechanism of catalyst-free growth of GaAs nanowires by selective area MOVPE. Journal of Crystal Growth, 2007, 298, 616-619.	1.5	135
9	Growth of highly uniform InAs nanowire arrays by selective-area MOVPE. Journal of Crystal Growth, 2007, 298, 644-647.	1.5	123
10	Selective-area growth of III-V nanowires and their applications. Journal of Materials Research, 2011, 26, 2127-2141.	2.6	109
11	Structural Transition in Indium Phosphide Nanowires. Nano Letters, 2010, 10, 1699-1703.	9.1	108
12	Growth characteristics of GaAs nanowires obtained by selective area metalâ€"organic vapour-phase epitaxy. Nanotechnology, 2008, 19, 265604.	2.6	94
13	Vertical Surrounding Gate Transistors Using Single InAs Nanowires Grown on Si Substrates. Applied Physics Express, 2010, 3, 025003.	2.4	80
14	Observation of Microcavity Modes and Waveguides in InP Nanowires Fabricated by Selective-Area Metalorganic Vapor-Phase Epitaxy. Nano Letters, 2007, 7, 3598-3602.	9.1	62
15	Characterization of Fabry-PÃ©rot microcavity modes in GaAs nanowires fabricated by selective-area metal organic vapor phase epitaxy. Applied Physics Letters, 2007, 91, 131112.	3.3	59
16	Crystallographic Structure of InAs Nanowires Studied by Transmission Electron Microscopy. Japanese Journal of Applied Physics, 2007, 46, L1102-L1104.	1.5	53
17	Growth of InGaAs nanowires by selective-area metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2008, 310, 2359-2364.	1.5	49
18	Electrical Characterizations of InGaAs Nanowire-Top-Gate Field-Effect Transistors by Selective-Area Metal Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2007, 46, 7562.	1.5	45

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19	Analysis of twin defects in GaAs nanowires and tetrahedra and their correlation to GaAs(111)B surface reconstructions in selective-area metal organic vapour-phase epitaxy. Journal of Crystal Growth, 2009, 312, 52-57.	1.5	41
20	Formation and photoluminescence characterization of quantum well wires using multiatomic steps grown by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 1994, 145, 692-697.	1.5	36
21	Quantum Well Wire Fabrication Method Using Self-Organized Multiatomic Steps on Vicinal (001) GaAs Surfaces by Metalorganic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1995, 34, 4401-4404.	1.5	36
22	Self-assembly and selective-area formation of ferromagnetic MnAs nanoclusters on lattice-mismatched semiconductor surfaces by MOVPE. Journal of Crystal Growth, 2008, 310, 2390-2394.	1.5	29
23	Growth and Characterization of InGaAs Nanowires Formed on GaAs(111)B by Selective-Area Metal Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2010, 49, 04DH08.	1.5	29
24	Self-organised InGaAs quantum wire lasers on GaAs multi-atomic steps. Electronics Letters, 1998, 34, 894.	1.0	28
25	Multiatomic step formation mechanism of metalorganic vapor phase epitaxial grown GaAs vicinal surfaces and its application to quantum well wires. Journal of Crystal Growth, 1995, 146, 183-187.	1.5	27
26	Hexagonal ferromagnetic MnAs nanocluster formation on GaInAsâˆ•InP (111)B layers by metal-organic vapor phase epitaxy. Applied Physics Letters, 2006, 89, 113111.	3.3	27
27	Transport Properties of Hybrids with Ferromagnetic MnAs Nanoclusters and Their Potential for New Magnetoelectronic Devices. Advanced Materials, 2014, 26, 8079-8095.	21.0	26
28	SA-MOVPE of InGaAs nanowires and their compositions studied by micro-PL measurement. Journal of Crystal Growth, 2008, 310, 5111-5113.	1.5	24
29	Comparison of the magnetic properties of GaInAs/MnAs and GaAs/MnAs hybrids with random and ordered arrangements of MnAs nanoclusters. Journal of Applied Physics, 2010, 107, 013701.	2.5	22
30	Influence of growth temperature on growth of InGaAs nanowires in selective-area metalâ€“organic vapor-phase epitaxy. Journal of Crystal Growth, 2012, 338, 47-51.	1.5	22
31	Formation and characterization of InGaAs strained quantum wires on GaAs multiatomic steps grown by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 1997, 170, 579-584.	1.5	21
32	Fabrication of Axial and Radial Heterostructures for Semiconductor Nanowires by Using Selective-Area Metal-Organic Vapor-Phase Epitaxy. Journal of Nanotechnology, 2012, 2012, 1-29.	3.4	19
33	Multiatomic step formation on GaAs(001) vicinal surfaces during thermal treatment. Journal of Crystal Growth, 1996, 160, 235-240.	1.5	18
34	Magnetic domain characterizations of anisotropic-shaped MnAs nanoclusters position-controlled by selective-area metal-organic vapor phase epitaxy. Applied Physics Letters, 2009, 94, 243117.	3.3	18
35	Influence of ordered arrangements of cluster chains on the hopping transport in GaAs:Mn/MnAs hybrids at low temperatures. Physical Review B, 2011, 83, .	3.2	18
36	Ferromagnetic nanoclusters hybridized in Mn-incorporated GaInAs layers during metalâ€“organic vapour phase epitaxial growth on InP layers under low growth temperature conditions. Nanotechnology, 2005, 16, 957-965.	2.6	17

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37	Effect of the cluster magnetization on the magnetotransport at low temperatures in ordered arrays of MnAs nanoclusters on (111)<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>B</mml:mi></mml:math>GaAs. Physical Review B, 2011, 84, .	3.2	16
38	Growth Direction Control of Ferromagnetic MnAs Grown by Selective-Area Metalâ€“Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2009, 48, 04C137.	1.5	15
39	Fabrication and characterization of GaAs quantum well buried in AlGaAs/GaAs heterostructure nanowires. Journal of Crystal Growth, 2010, 312, 3592-3598.	1.5	15
40	Pitch-Independent Realization of 30-nm-Diameter InGaAs Nanowire Arrays by Two-Step Growth Method in Selective-Area Metalorganic Vapor-Phase Epitaxy. Applied Physics Express, 2013, 6, 025502.	2.4	15
41	Cluster formation and magnetic properties of Mn-incorporated (GaIn)As/InP layers grown by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2004, 261, 330-335.	1.5	14
42	Single-photon emission from InAsP quantum dots embedded in density-controlled InP nanowires. Japanese Journal of Applied Physics, 2017, 56, 04CP04.	1.5	14
43	Self-assembled formation of ferromagnetic MnAs nanoclusters on GaInAs/InP (111) B layers by metal-organic vapor phase epitaxy. Journal of Crystal Growth, 2007, 298, 612-615.	1.5	13
44	Magnetic Sensor Devices Based on Ordered Planar Arrangements of MnAs Nanocluster. IEEE Transactions on Magnetics, 2010, 46, 1702-1704.	2.1	13
45	Optical characterization and laser operation of InGaAs quantum wires on GaAs multiatomic steps. Solid-State Electronics, 1998, 42, 1233-1238.	1.4	12
46	Lattice-mismatched InGaAs nanowires formed on GaAs(1 1 1)B by selective-area MOVPE. Journal of Crystal Growth, 2011, 315, 148-151.	1.5	12
47	Synthesis and structural characterization of vertical ferromagnetic MnAs/semiconducting InAs heterojunction nanowires. Japanese Journal of Applied Physics, 2016, 55, 075503.	1.5	10
48	Growth and Characterization of MnAs Nanoclusters Embedded in GaAs Nanowires by Metalâ€“Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2012, 51, 02BH01.	1.5	10
49	Fabrication and Characterization of InP Nanowire Light-Emitting Diodes. Japanese Journal of Applied Physics, 2012, 51, 02BN03.	1.5	9
50	Framework for automatic information extraction from research papers on nanocrystal devices. Beilstein Journal of Nanotechnology, 2015, 6, 1872-1882.	2.8	9
51	Magnetoresistance effects and spin-valve like behavior of an arrangement of two MnAs nanoclusters. Applied Physics Letters, 2015, 106, .	3.3	9
52	Magnetization in vertical MnAs/InAs heterojunction nanowires. Journal of Crystal Growth, 2017, 464, 80-85.	1.5	9
53	Magnetization characterization of MnAs nanoclusters at close range in bended MnAs/InAs heterojunction nanowires. Journal of Crystal Growth, 2019, 507, 241-245.	1.5	8
54	Selective-Area Growth and Electrical Characterization of Hybrid Structures between Semiconducting GaAs Nanowires and Ferromagnetic MnAs Nanoclusters. Japanese Journal of Applied Physics, 2012, 51, 11PE01.	1.5	8

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55	Metalâ€"Organic Vapor Phase Epitaxial Growth Condition Dependences of MnAs Nanocluster Formation on GaInAs (111)A Surfaces. Japanese Journal of Applied Physics, 2008, 47, 3253-3256.	1.5	7
56	Selective-Area Growth of InAs Nanowires with Metal/Dielectric Composite Mask and Their Application to Vertical Surrounding-Gate Field-Effect Transistors. Applied Physics Express, 2013, 6, 045001.	2.4	7
57	Selectiveâ€area growth and magnetic reversals of ferromagnetic nanoclusters on semiconducting substrate for magnetic logic applications. Physica Status Solidi (B): Basic Research, 2015, 252, 1925-1933.	1.5	7
58	Selective-area growth and transport properties of MnAs/InAs heterojunction nanowires. Journal of Materials Research, 2019, 34, 3863-3876.	2.6	7
59	Anomalous Angle-Dependent Magnetotransport Properties of Single InAs Nanowires. Nano Letters, 2020, 20, 618-624.	9.1	7
60	A Novel Electron Wave Interference Device Using Multiatomic Steps on Vicinal GaAs Surfaces Grown by Metalorganic Vapor Phase Epitaxy: Investigation of Transport Properties. Japanese Journal of Applied Physics, 1997, 36, 1966-1971.	1.5	6
61	Ferromagnetic MnAs Nanocluster Composites Position-Controlled on GaAs (111)B Substrates toward Lateral Magnetoresistive Devices. Japanese Journal of Applied Physics, 2011, 50, 06GH01.	1.5	6
62	Growth and Characterization of MnAs Nanoclusters Embedded in GaAs Nanowires by Metalâ€"Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2012, 51, 02BH01.	1.5	6
63	Ferromagnetic MnAs Nanocluster Composites Position-Controlled on GaAs (111)B Substrates toward Lateral Magnetoresistive Devices. Japanese Journal of Applied Physics, 2011, 50, 06GH01.	1.5	6
64	Theoretical and experimental investigation of an electron interference device using multiatomic steps on vicinal GaAs surfaces. Physica B: Condensed Matter, 1996, 227, 295-298.	2.7	5
65	Selective-area growth and magnetic characterization of MnAs/AlGaAs nanoclusters on insulating Al2O3 layers crystallized on Si(111) substrates. Applied Physics Letters, 2016, 108, 043108.	3.3	5
66	Shape control of ferromagnetic MnAs nanoclusters exhibiting magnetization switching in vertical MnAs/InAs heterojunction nanowires. Japanese Journal of Applied Physics, 2017, 56, 06GH03.	1.5	5
67	Growth and Characterization of a GaAs Quantum Well Buried in GaAsP/GaAs Vertical Heterostructure Nanowires by Selective-Area Metal Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2011, 50, 04DH03.	1.5	4
68	Automatic Information Extraction of Experiments from Nanodevices Development Papers. , 2012, , .		4
69	Difference in formation of ferromagnetic MnAs nanoclusters on III-V semiconducting nanowire templates. , 2013, , .		4
70	Compositionâ€"dependent growth dynamics of selectively grown InGaAs nanowires. Materials Research Express, 2014, 1, 015036.	1.6	4
71	Selective-area growth and magnetic characterization of lateral MnAs nanowires. Journal of Crystal Growth, 2015, 414, 151-155.	1.5	4
72	The transport properties of InAs nanowires: an introduction to MnAs/InAs heterojunction nanowires for spintronics. Journal Physics D: Applied Physics, 2020, 53, 333002.	2.8	4

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73	Magnetic properties of hexagonal MnAs nanoclusters formed on GaInAs (111) surfaces by metal-organic vapor phase epitaxy. Journal of Magnetism and Magnetic Materials, 2007, 310, e833-e835.	2.3	3
74	Construction of tagged corpus for Nanodevices development papers. , 2011, , .		3
75	Selective-Area Growth and Electrical Characterization of Hybrid Structures between Semiconducting GaAs Nanowires and Ferromagnetic MnAs Nanoclusters. Japanese Journal of Applied Physics, 2012, 51, 11PE01.	1.5	3
76	Analysis of magnetic random telegraph noise in individual arrangements of a small number of coupled MnAs nanoclusters. Physical Review B, 2015, 92, .	3.2	3
77	Analyses of magnetization switching and magnetic domains in lateral MnAs nanowires in combination with structural characterization. Japanese Journal of Applied Physics, 2017, 56, 06GH05.	1.5	3
78	Magnetic domain structure and domain wall analysis of ferromagnetic MnAs nanodisks selectively-grown on Si (111) substrates for spintronic applications. Journal of Applied Physics, 2018, 124, .	2.5	3
79	Optical activity of a single MnAs cluster: Birefringence or Kerr effect. Journal of Magnetism and Magnetic Materials, 2006, 301, 478-488.	2.3	2
80	Growth of AlGaAs nanostructures on crystallized Al2O3interlayers for semiconducting nanowire growth on glass substrate. Japanese Journal of Applied Physics, 2015, 54, 075504.	1.5	2
81	Nanowire Field-Effect Transistors. , 2021, , 371-431.		2
82	Growth and Characterization of a GaAs Quantum Well Buried in GaAsP/GaAs Vertical Heterostructure Nanowires by Selective-Area Metal Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2011, 50, 04DH03.	1.5	2
83	Tailoring Magnetic Domains and Magnetization Switching in CoFe Nanolayer Patterns with Their Thickness and Aspect Ratio on GaAs (001) Substrate. Physica Status Solidi (B): Basic Research, 2022, 259, .	1.5	2
84	Catalyst-free growth of semiconductor nanowires by selective area MOVPE. AIP Conference Proceedings, 2005, , .	0.4	1
85	Selective-area MOVPE growth and optical properties of single InAsP quantum dots embedded in InP NWs. , 2010, , .		1
86	Bottom-Up Formation of Vertical Free-Standing Semiconductor Nanowires Hybridized with Ferromagnetic Nanoclusters. Materials Science Forum, 0, 783-786, 1990-1995.	0.3	1
87	NaDev: An Annotated Corpus to Support Information Extraction from Research Papers on Nanocrystal Devices. Journal of Information Processing, 2016, 24, 554-564.	0.4	1
88	Selective-area growth of magnetic MnAs nanodisks on Si (1â€¯1â€¯1) substrates using multiple types of dielectric masks. Journal of Crystal Growth, 2019, 507, 226-231.	1.5	1
89	Formation of InP and InGaAs Air-Hole Arrays on InP(111) Substrates by Selective-Area Metalâ€“Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2008, 47, 3354-3358.	1.5	0
90	Fabrication of III-V semicondctor nanowires by SA-MOVPE and their applications to photonic and photovoltaic devices. , 2010, , .		0

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91	Selectiveâ€area growth and magnetic reversals of ferromagnetic nanoclusters on semiconducting substrate for magnetic logic applications (Phys. Status Solidi B 9/2015). Physica Status Solidi (B): Basic Research, 2015, 252, .	1.5	0
92	Magnetization switching depending on magnetic fields applied to ferromagnetic MnAs nanodisks selectively-grown on Si (111) substrates. AIP Advances, 2020, 10, 125003.	1.3	0