

Hideki Hasegawa

List of Publications by Year in descending order

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2445
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#	ARTICLE	IF	CITATIONS
1	Design, Fabrication and Characterization of GaAs-Based Interdigital-Gated HEMT Devices for Solid-State THz Wave Amplifiers. , 2011, , .		0
2	Distributed Pinning Spot Model for High-k Insulator - III-V Semiconductor Interfaces. E-Journal of Surface Science and Nanotechnology, 2009, 7, 122-128.	0.4	5
3	Mechanism and control of current transport in GaN and AlGaN Schottky barriers for chemical sensor applications. Applied Surface Science, 2008, 254, 3653-3666.	6.1	27
4	Surface passivation technology for III-V semiconductor nanoelectronics. Applied Surface Science, 2008, 255, 628-632.	6.1	49
5	Performance comparison of InP and AlGaIn/GaN Schottky diode hydrogen sensors. , 2008, , .		0
6	Admittance study of GaAs high-k metal-insulator-semiconductor capacitors with Si interface control layer. Journal of Vacuum Science & Technology B, 2008, 26, 1569.	1.3	14
7	On the Band Alignment and Fermi Level Pinning at Compound Semiconductor Interfaces. Hyomen Kagaku, 2008, 29, 76-83.	0.0	1
8	Formation of ultrathin SiN _x /Si interface control double layer on (001) and (111) GaAs surfaces for ex situ deposition of high-k dielectrics. Journal of Vacuum Science & Technology B, 2007, 25, 1481.	1.3	16
9	Control of surfaces and heterointerfaces of AlGaIn/GaN system for sensor devices and their on-chip integration on nanostructures. Current Applied Physics, 2007, 7, 318-327.	2.4	14
10	Selective MBE growth of hexagonal networks of trapezoidal and triangular GaAs nanowires on patterned (111)B substrates. Journal of Crystal Growth, 2007, 301-302, 857-861.	1.5	1
11	MBE growth and in situ XPS characterization of silicon interlayers on (111)B surfaces for passivation of GaAs quantum wire devices. Journal of Crystal Growth, 2007, 301-302, 951-954.	1.5	5
12	Sensing dynamics and mechanism of a Pd/AlGaIn/GaN Schottky diode type hydrogen sensor. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2629-2633.	0.8	12
13	In-situ X-ray photoelectron spectroscopy characterization of Si interlayer based surface passivation process for AlGaAs/GaAs quantum wire transistors. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1034-1040.	1.8	0
14	Interdigital-Gated HEMT Structure for High Frequency Devices. , 2006, , .		2
15	Properties of a GaAs Single Electron Path Switching Node Device Using a Single Quantum Dot for Hexagonal BDD Quantum Circuits. Journal of Physics: Conference Series, 2006, 38, 104-107.	0.4	4
16	Self-assembled formation of uniform InP nanopore arrays by electrochemical anodization in HCl based electrolyte. Applied Surface Science, 2006, 252, 5457-5461.	6.1	21
17	Dynamics and control of recombination process at semiconductor surfaces, interfaces and nano-structures. Solar Energy, 2006, 80, 629-644.	6.1	20
18	III-V semiconductor nanoelectronics for post si era. , 2006, , .		0

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19	Device interference in GaAs quantum wire transistors and its suppression by surface passivation using Si interface control layer. Journal of Vacuum Science & Technology B, 2006, 24, 2060.	1.3	11
20	Selective molecular beam epitaxy growth of size- and position-controlled GaN ^x AlGa ^{1-x} N nanowires on nonplanar (0001) substrates and its growth mechanism. Journal of Vacuum Science & Technology B, 2006, 24, 2087.	1.3	4
21	Large reduction of leakage currents in AlGa ^x N Schottky diodes by a surface control process and its mechanism. Journal of Vacuum Science & Technology B, 2006, 24, 2148.	1.3	45
22	TOWARD ULTRA-LOW POWER III-V QUANTUM LARGE SCALE INTEGRATED CIRCUITS FOR UBIQUITOUS NETWORK ERA. International Journal of High Speed Electronics and Systems, 2006, 16, 421-436.	0.7	5
23	Liquid-phase sensors using open-gate AlGa ^x N ^y GaN high electron mobility transistor structure. Journal of Vacuum Science & Technology B, 2006, 24, 1972.	1.3	55
24	Electrochemical Formation of Chaotic and Regular Nanostructures on (001) and (111)B InP Substrates and Their Photoluminescence Characterizations. E-Journal of Surface Science and Nanotechnology, 2006, 4, 184-191.	0.4	1
25	TOWARD ULTRA-LOW POWER III-V QUANTUM LARGE SCALE INTEGRATED CIRCUITS FOR UBIQUITOUS NETWORK ERA. , 2006, , .		0
26	Electrochemical processes for formation, processing and gate control of III ^A -V semiconductor nanostructures. Electrochimica Acta, 2005, 50, 3015-3027.	5.2	41
27	Study on ECR dry etching and selective MBE growth of AlGa ^x N/GaN for fabrication of quantum nanostructures on GaN (0001) substrates. Applied Surface Science, 2005, 244, 84-87.	6.1	6
28	Pt Schottky diode gas sensors formed on GaN and AlGa ^x N/GaN heterostructure. Applied Surface Science, 2005, 244, 273-276.	6.1	73
29	Tunneling Injection of Electrons at Nanometer-Scale Schottky Gate Edge of AlGa ^x N/GaN Heterostructure Transistors and Its Computer Simulation. E-Journal of Surface Science and Nanotechnology, 2005, 3, 433-438.	0.4	5
30	Lateral tunneling injection and peripheral dynamic charging in nanometer-scale Schottky gates on AlGa ^x N/GaN heterostructure transistors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1799.	1.6	17
31	Effects of surface states and Si-interlayer based surface passivation on GaAs quantum wires grown by selective molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1714.	1.6	14
32	Growth kinetics and theoretical modeling of selective molecular beam epitaxy for growth of GaAs nanowires on nonplanar (001) and (111)B substrates. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1706.	1.6	12
33	Hydrogen Response of Pd Schottky Diodes Formed on AlGa ^x N/GaN Heterostructure. E-Journal of Surface Science and Nanotechnology, 2005, 3, 314-318.	0.4	4
34	Removal of Side-gating Effects in GaAs Quantum Nanodevices with Nano-Schottky Gates by Surface Passivation Using Si Interface Control Layer. E-Journal of Surface Science and Nanotechnology, 2005, 3, 332-337.	0.4	2
35	Growth kinetics and modeling of selective molecular beam epitaxial growth of GaAs ridge quantum wires on pre-patterned nonplanar substrates. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2266.	1.6	24
36	Analysis and control of excess leakage currents in nitride-based Schottky diodes based on thin surface barrier model. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2179.	1.6	70

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37	Leakage mechanism in GaN and AlGa _N Schottky interfaces. Applied Physics Letters, 2004, 84, 4884-4886.	3.3	180
38	Formation of high-density GaAs hexagonal nano-wire networks by selective MBE growth on pre-patterned substrates. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 521-526.	2.7	10
39	Surface plasma wave interactions between semiconductor and electromagnetic space harmonics from microwave to THz range. Thin Solid Films, 2004, 464-465, 464-468.	1.8	10
40	Effects of nitrogen deficiency on electronic properties of AlGa _N surfaces subjected to thermal and plasma processes. Applied Surface Science, 2004, 234, 387-394.	6.1	164
41	Computer simulation of current transport in GaN and AlGa _N Schottky diodes based on thin surface barrier model. Applied Surface Science, 2004, 237, 213-218.	6.1	11
42	Terahertz response of Schottky wrap gate-controlled quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1329-1332.	0.8	1
43	Fabrication of BDD quantum node switches on embedded GaAs quantum wires grown by selective MBE. Superlattices and Microstructures, 2003, 34, 485-491.	3.1	1
44	Formation of III-V low dimensional structures and their applications to intelligent quantum chips. Microelectronics Journal, 2003, 34, 341-345.	2.0	10
45	Fabrication of GaAs-based integrated half and full adders by novel hexagonal BDD quantum circuit approach. Solid-State Electronics, 2003, 47, 199-204.	1.4	29
46	Effects of surface states on control characteristics of nano-meter scale Schottky gates formed on GaAs. Solid-State Electronics, 2003, 47, 323-331.	1.4	9
47	Pinning-free GaAs MIS structures with Si interface control layers formed on (4 × 6) reconstructed (001) GaAs. Applied Surface Science, 2003, 216, 519-525.	6.1	8
48	Effects of surface processing on 2DEG current transport at AlGa _N /GaN interface studied by gateless HFET structure. Applied Surface Science, 2003, 216, 519-525.	6.1	8
49	A UHV contactless capacitance-voltage characterization method applicable to semiconductor layers grown on insulating substrates. Physica Status Solidi A, 2003, 195, 248-254.	1.7	1
50	Characterization and control of surfaces and interfaces for III-V nanoelectronics. Physica Status Solidi A, 2003, 195, 9-17.	1.7	5
51	Al ₂ O ₃ -based surface passivation and insulated gate structure for AlGa _N /GaN HFETs. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2380-2384.	0.8	19
52	III-V nanoelectronics and related surface/interface issues. Applied Surface Science, 2003, 212-213, 311-318.	6.1	7
53	Mechanisms of current collapse and gate leakage currents in AlGa _N /GaN heterostructure field effect transistors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1844.	1.6	195
54	Suppression of current collapse in insulated gate AlGa _N /GaN heterostructure field-effect transistors using ultrathin Al ₂ O ₃ dielectric. Applied Physics Letters, 2003, 83, 2952-2954.	3.3	237

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55	Effects of Si deposition on the properties of Ga-rich (4Å–6) GaAs (001) surfaces. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2003, 21, 1945.	1.6	16
56	Surface passivation of GaN and GaN/AlGaN heterostructures by dielectric films and its application to insulated-gate heterostructure transistors. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2003, 21, 1828.	1.6	209
57	Mechanism of anomalous current transport in n-type GaN Schottky contacts. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002, 20, 1647.	1.6	154
58	Electrochemical Formation of Self-Assembled InP Nanopore Arrays and Their Use as Templates for Molecular Beam Epitaxy Growth of InGaAs Quantum Wires and Dots. <i>Japanese Journal of Applied Physics</i> , 2002, 41, 977-981.	1.5	8
59	Influence of Initial Amorphous Layer Deposition Temperature on Lateral solid-Phase Epitaxy of Silicon. <i>Japanese Journal of Applied Physics</i> , 2002, 41, 472-481.	1.5	2
60	Properties of Surface States on GaN and Related Compounds and Their Passivation by Dielectric Films. <i>Materials Research Society Symposia Proceedings</i> , 2002, 743, L2.6.1.	0.1	0
61	Surface passivation of epitaxial multilayer structures for InP-based high-speed devices by an ultrathin silicon layer. <i>Electronics and Communications in Japan</i> , 2002, 85, 17-28.	0.2	1
62	GaAs and InGaAs single electron hexagonal nanowire circuits based on binary decision diagram logic architecture. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 13, 925-929.	2.7	10
63	Photoluminescence and capacitance–voltage characterization of GaAs surface passivated by an ultrathin GaN interface control layer. <i>Applied Surface Science</i> , 2002, 190, 343-347.	6.1	11
64	Effects of nitrogen addition on methane-based ECR plasma etching of gallium nitride. <i>Applied Surface Science</i> , 2002, 190, 361-365.	6.1	25
65	III–V quantum devices and circuits based on nanoscale Schottky gate control of hexagonal quantum wire networks. <i>Applied Surface Science</i> , 2002, 190, 176-183.	6.1	2
66	Gate control characteristics in GaAs nanometer-scale Schottky wrap gate structures. <i>Applied Surface Science</i> , 2002, 190, 242-246.	6.1	18
67	Mechanism of current leakage through metal/n-GaN interfaces. <i>Applied Surface Science</i> , 2002, 190, 322-325.	6.1	72
68	Graph-based quantum logic circuits and their realization by novel GaAs multiple quantum wire branch switches utilizing Schottky wrap gates. <i>Microelectronic Engineering</i> , 2002, 63, 287-291.	2.4	10
69	Formation of high-density hexagonal networks of InGaAs ridge quantum wires by atomic hydrogen-assisted selective molecular beam epitaxy. <i>Applied Surface Science</i> , 2002, 190, 231-235.	6.1	9
70	Properties of III-V Semiconductor Surfaces and Their Control From Gallium Arsenide to Nitrides. <i>Shinku/Journal of the Vacuum Society of Japan</i> , 2002, 45, 775-782.	0.2	0
71	Current transport and capacitance–voltage characteristics of GaAs and InP nanometer-sized Schottky contacts formed by in situ electrochemical process. <i>Applied Surface Science</i> , 2001, 175-176, 181-186.	6.1	25
72	Ultra high vacuum-based in situ characterization of compound semiconductor surfaces by a contactless capacitance–voltage technique. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2001, 80, 147-151.	3.5	2

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73	Hexagonal binary decision diagram quantum logic circuits using Schottky in-plane and wrap-gate control of GaAs and InGaAs nanowires. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2001, 11, 149-154.	2.7	63
74	Electrical Properties of Nanometer-Sized Schottky Contacts for Gate Control of μ Single Electron Devices and Quantum Devices. <i>Japanese Journal of Applied Physics</i> , 2001, 40, 2021-2025.	1.5	11
75	Quantum-Dot Logic Circuits Based on the Shared Binary-Decision Diagram. <i>Japanese Journal of Applied Physics</i> , 2001, 40, 4485-4488.	1.5	21
76	Chemistry and electrical properties of surfaces of GaN and GaN/AlGaN heterostructures. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2001, 19, 1675.	1.6	144
77	Computer analysis of photon-induced non-equilibrium phenomena at Si and AlGaAs surfaces. <i>Vacuum</i> , 2000, 57, 111-120.	3.5	4
78	MBE growth and applications of silicon interface control layers. <i>Thin Solid Films</i> , 2000, 367, 58-67.	1.8	43
79	Analysis of photoluminescence efficiency and surface recombination velocity of MBE-grown AlGaAs layers. <i>Thin Solid Films</i> , 2000, 367, 180-183.	1.8	7
80	Origin of non-uniformity in MBE grown nanometer-sized InGaAs ridge quantum wires and its removal by atomic hydrogen-assisted cleaning. <i>Thin Solid Films</i> , 2000, 380, 189-191.	1.8	14
81	Formation of device-oriented InGaAs coupled quantum structures by selective MBE growth on patterned InP substrates. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2000, 7, 864-869.	2.7	17
82	Scanning tunneling microscopy and spectroscopy study of ultrathin Si interface control layers grown on (001) GaAs for surface passivation. <i>Applied Surface Science</i> , 2000, 159-160, 292-300.	6.1	1
83	Surface passivation of GaAs by ultra-thin cubic GaN layer. <i>Applied Surface Science</i> , 2000, 159-160, 456-461.	6.1	44
84	Unpinning of Fermi level in nanometer-sized Schottky contacts on GaAs and InP. <i>Applied Surface Science</i> , 2000, 166, 92-96.	6.1	25
85	Advanced mesoscopic device concepts and technology. <i>Microelectronic Engineering</i> , 2000, 53, 29-36.	2.4	1
86	Electrochemical Formation of Uniform and Straight Nano-Pore Arrays on (001) InP Surfaces and Their Photoluminescence Characterizations. <i>Japanese Journal of Applied Physics</i> , 2000, 39, 4616-4620.	1.5	51
87	Electrical Properties of Nanometer-Sized Schottky Contacts on n-GaAs and n-InP Formed by in Situ Electrochemical Process. <i>Japanese Journal of Applied Physics</i> , 2000, 39, 4609-4615.	1.5	13
88	MICROSCOPIC UNDERSTANDING AND CONTROL OF SURFACES AND INTERFACES OF COMPOUND SEMICONDUCTORS FOR MESOSCOPIC DEVICES. <i>Surface Review and Letters</i> , 2000, 07, 583-588.	1.1	3
89	Insulator-GaN interface structures formed by plasma-assisted chemical vapor deposition. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2000, 7, 953-957.	2.7	39
90	Effects of gap states on scanning tunneling spectra observed on (110)- and (001)-oriented clean surfaces and ultrathin Si layer covered surfaces of GaAs prepared by molecular beam epitaxy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000, 18, 2100.	1.6	27

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91	A Novel Non-Destructive Characterization Method of Electronic Properties of Pre- and Post-Processing Silicon Surfaces Based on Ultrahigh-Vacuum Contactless Capacitance-Voltage Measurements. Japanese Journal of Applied Physics, 1999, 38, 2349-2354.	1.5	12
92	X-Ray Photoelectron Spectroscopy and Ultrahigh Vacuum Contactless Capacitance-Voltage Characterization of Novel Oxide-Free InP Passivation Process Using a Silicon Surface Quantum Well. Japanese Journal of Applied Physics, 1999, 38, 1128-1132.	1.5	15
93	Molecular-Beam Epitaxy and Device Applications of III-V Semiconductor Nanowires. MRS Bulletin, 1999, 24, 25-30.	3.5	32
94	Properties of nanometer-sized metal-semiconductor interfaces of GaAs and InP formed by an in situ electrochemical process. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 1856.	1.6	38
95	Formation of Size- and Position-Controlled Nanometer Size Pt Dots on GaAs and InP Substrates by Pulsed Electrochemical Deposition. Japanese Journal of Applied Physics, 1999, 38, 2448-2452.	1.5	27
96	Effects of Initial Surface Reconstruction on Silicon Interface Control Layer Based Passivation of (001) GaAs Surfaces Studied in an Ultrahigh-Vacuum Multichamber System. Japanese Journal of Applied Physics, 1999, 38, 2538-2543.	1.5	16
97	In-situ characterization technique of compound semiconductor heterostructure growth and device processing steps based on UHV contactless capacitance-voltage measurement. Solid-State Electronics, 1999, 43, 1561-1570.	1.4	20
98	Selective molecular beam epitaxy growth of quantum wire-coupled structures with novel high index facets for InGaAs single electron transistor arrays. Microelectronics Journal, 1999, 30, 397-401.	2.0	3
99	Conductance oscillation characteristics of GaAs Schottky wrap-gate single-electron transistors. Physica B: Condensed Matter, 1999, 272, 88-91.	2.7	2
100	Electrochemical Etching of Indium Phosphide Surfaces Studied by Voltammetry and Scanned Probe Microscopes. Japanese Journal of Applied Physics, 1999, 38, 1147-1152.	1.5	15
101	A Novel Surface Pivation Structure for III-V Compound Semiconductors Utilizing a Silicon Interface Control Layer and its Application. Materials Research Society Symposia Proceedings, 1999, 573, 45.	0.1	1
102	A novel wrap-gate-controlled single electron transistor formed on an InGaAs ridge quantum wire grown by selective MBE. Solid-State Electronics, 1998, 42, 1419-1423.	1.4	9
103	Photoluminescence characterization of air exposed AlGaAs surface and passivated ex situ by ultrathin silicon interface control layer. Physica E: Low-Dimensional Systems and Nanostructures, 1998, 2, 261-266.	2.7	8
104	Electrochemical formation and characterization of Schottky in-plane and wrap gate structures for realization of GaAs- and InP-based quantum wires and dots. Applied Surface Science, 1998, 123-124, 335-338.	6.1	3
105	Surface passivation of GaAs with ultrathin Si ₃ N ₄ /Si interface control layer formed by MBE and in situ ECR plasma nitridation. Applied Surface Science, 1998, 123-124, 599-602.	6.1	27
106	Novel InP metal-insulator-semiconductor structure having an ultrathin silicon interface control layer. Applied Surface Science, 1998, 123-124, 615-618.	6.1	14
107	Scanning tunneling microscopy and x-ray photoelectron spectroscopy studies of atomic level structure and Fermi level pinning on GaAs(110) surfaces grown by molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 2387.	1.6	14
108	In-Situ Scanning Tunneling Microscope Study of Formation Process of Ultrathin Si Layer by Molecular Beam Epitaxy on GaAs(001)-(2Å-4) Surface. Japanese Journal of Applied Physics, 1998, 37, 1501-1507.	1.5	19

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109	Computer Analysis of Surface Recombination Process at Si and Compound Semiconductor Surfaces and Behavior of Surface Recombination Velocity. Japanese Journal of Applied Physics, 1998, 37, 1631-1637.	1.5	36
110	Kink defects and Fermi level pinning on (2 \times 4) reconstructed molecular beam epitaxially grown surfaces of GaAs and InP studied by ultrahigh-vacuum scanning tunneling microscopy and x-ray photoelectron spectroscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1163.	1.6	52
111	Evolution mechanism of nearly pinning-free platinum/n-type indium phosphide interface with a high Schottky barrier height by in situ electrochemical process. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 1227.	1.6	36
112	Missing-Dimer Structures and Their Kink Defects on Molecular Beam Epitaxially Grown (2 \times 4) Reconstructed (001) InP and GaAs Surfaces Studied by Ultrahigh-Vacuum Scanning Tunneling Microscopy. Japanese Journal of Applied Physics, 1997, 36, 1749-1755.	1.5	10
113	Fabrication and Characterization of GaAs Single Electron Devices Having Single and Multiple Dots Based on Schottky In-Plane-Gate and Wrap-Gate Control of Two-Dimensional Electron Gas. Japanese Journal of Applied Physics, 1997, 36, 1678-1685.	1.5	58
114	Large Schottky Barrier Heights on Indium Phosphide-Based Materials Realized by In-Situ Electrochemical Process. Japanese Journal of Applied Physics, 1997, 36, 1811-1817.	1.5	20
115	Formation of InP-based quantum structures by selective MBE on patterned substrates having high-index facets. Microelectronics Journal, 1997, 28, 887-901.	2.0	3
116	Self-ordered quantum dots: A new growth mode on high-index semiconductor surfaces. , 1996, , 103-122.		5
117	Self-organization phenomenon of strained InGaAs on InP (311) substrates grown by metalorganic vapor phase epitaxy. Journal of Electronic Materials, 1996, 25, 431-437.	2.2	9
118	Contactless capacitance-voltage and photoluminescence characterization of ultrathin oxide-silicon interfaces formed on hydrogen terminated (111) surfaces. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2872.	1.6	3
119	Surface passivation of In _{0.53} Ga _{0.47} As ridge quantum wires using silicon interface control layers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2888.	1.6	22
120	Self-organized microstructure growth. Chemical Vapor Deposition, 1995, 1, 81-88.	1.3	9
121	Novel Wire Transistor Structure with In-Plane Gate Using Direct Schottky Contacts to 2DEG. Japanese Journal of Applied Physics, 1995, 34, 1315-1319.	1.5	33
122	Novel Formation Method of Quantum Dot Structures by Self-Limited Selective Area Metalorganic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1995, 34, 4387-4389.	1.5	51
123	Novel Surface Passivation Scheme for Compound Semiconductor Using Silicon Interface Control Layer and Its Application to Near-Surface Quantum Wells. Japanese Journal of Applied Physics, 1995, 34, 1143-1148.	1.5	32
124	Silicon interlayer based surface passivation of near-surface quantum wells. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 1794.	1.6	22
125	Fabrication and characterization of quantum wire transistors with Schottky in-plane gates formed by an in situ electrochemical process. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 1744.	1.6	19
126	Observation of Conductance Quantization in A Novel Schottky In-Plane Gate Wire Transistor Fabricated by Low-Damage In Situ Electrochemical Process. Japanese Journal of Applied Physics, 1995, 34, L635-L638.	1.5	17

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127	Schottky Contacts on n-InP with High Barrier Heights and Reduced Fermi-Level Pinning by a Novel In Situ Electrochemical Process. Japanese Journal of Applied Physics, 1995, 34, 1162-1167.	1.5	26
128	More than 10^3 Times Photoluminescence Intensity Recovery by Silicon Interface-Control-Layer-Based Surface Passivation of Near-Surface Quantum Wells. Japanese Journal of Applied Physics, 1995, 34, L495-L498.	1.5	23
129	Self-organization of strained GaInAs microstructures on InP (311) substrates grown by metalorganic vapor-phase epitaxy. Applied Physics Letters, 1995, 66, 2525-2527.	3.3	68
130	Epitaxy on High-Index Surfaces: A Key to Self-Organizing Quantum-Wires and Dots. , 1995, , 81-92.		0
131	Effects of Phosphorus Pressure on Growth Rate and Layer Quality of InP Grown by Gas Source Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1994, 33, 742-748.	1.5	38
132	Mechanism of Multiatomic Step Formation during Metalorganic Chemical Vapor deposition Growth of GaAs on (001) Vicinal Surface Studied by Atomic Force Microscopy. Japanese Journal of Applied Physics, 1994, 33, 721-726.	1.5	63
133	Formation of Oxide-Free Nearly Ideal Pt/GaAs Schottky Barriers by Novel In Situ Photopulse-Assisted Electrochemical Process. Japanese Journal of Applied Physics, 1994, 33, 936-941.	1.5	30
134	Atomic force microscopy study of strained InGaAs quantum disks self-organizing on GaAs (n11)B substrates. Applied Physics Letters, 1994, 65, 2854-2856.	3.3	109
135	Measurement of surface recombination velocity of silicon wafers under sunlight condition by novel photoluminescence surface state spectroscopy. Solar Energy Materials and Solar Cells, 1994, 34, 161-167.	6.2	2
136	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
137	Fabrication and electrical characterization of InGaAs MISFET using ultrathin Si interface control layer. Electronics and Communications in Japan, 1994, 77, 66-76.	0.2	0
138	Control of Silicon Nitride-In _{0.53} Ga _{0.47} As Interface by Ultrathin Silicon Interface Control Layer. , 1994, , 277-282.		0
139	In-situ Characterization of AlGaAs/GaAs Quantum Well Interfaces by Photoluminescence Surface State Spectroscopy. , 1994, , 109-114.		0
140	Barrier Height Control and Current Transport in GaAs and InP Schottky Diodes Having An Ultrathin Silicon Interface Control Layer. , 1994, , 187-192.		0
141	Interface profile optimization in novel surface passivation scheme for InGaAs nanostructures using Si interface control layer. Journal of Electronic Materials, 1993, 22, 289-295.	2.2	8
142	In-Situ Characterization of Compound Semiconductor Surfaces by Novel Photoluminescence Surface State Spectroscopy. Japanese Journal of Applied Physics, 1993, 32, 511-517.	1.5	45
143	Relationship among surface state distribution, recombination velocity and photoluminescence intensity on semiconductor surfaces. Applied Surface Science, 1992, 56-58, 94-99.	6.1	10
144	Formation mechanism of Schottky barriers on MBE-grown GaAs surfaces subjected to various treatments. Applied Surface Science, 1992, 56-58, 317-324.	6.1	8

#	ARTICLE	IF	CITATIONS
145	Control of GaAs and InGaAs Insulator-Semiconductor and Metal-Semiconductor Interfaces by Ultrathin Molecular Beam Epitaxy Si Layers. Japanese Journal of Applied Physics, 1991, 30, 3744-3749.	1.5	45
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