

Hiroshi Okada

List of Publications by Year in descending order

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112
papers

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citations

394421

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112
all docs

112
docs citations

112
times ranked

1430
citing authors

#	ARTICLE	IF	CITATIONS
1	Photoluminescence and absorption in sol-gel-derived ZnO films. Journal of Luminescence, 2007, 126, 800-806.	3.1	175
2	Growth of pit-free GaP on Si by suppression of a surface reaction at an initial growth stage. Journal of Crystal Growth, 2009, 311, 794-797.	1.5	45
3	Epitaxial growth and characterization of ZnGeN ₂ by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2004, 260, 125-129.	1.5	44
4	Growth of low defect density GaP layers on Si substrates within the critical thickness by optimized shutter sequence and post-growth annealing. Journal of Crystal Growth, 2010, 312, 2179-2184.	1.5	42
5	Fabrication and Characterization of Eosin-Y-Sensitized ZnO Solar Cell. Japanese Journal of Applied Physics, 2004, 43, 152-155.	1.5	35
6	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
7	Molecular-Beam Epitaxy and Device Applications of III-V Semiconductor Nanowires. MRS Bulletin, 1999, 24, 25-30.	3.5	32
8	Growth and characterization of AlInN on AlN template. Journal of Crystal Growth, 2004, 272, 381-385.	1.5	32
9	Red-Light-Emitting Diodes with Site-Selective Eu-Doped GaN Active Layer. Japanese Journal of Applied Physics, 2013, 52, 08JH01.	1.5	29
10	Effect of Mg codoping on Eu ³⁺ luminescence in GaN grown by ammonia molecular beam epitaxy. Applied Physics Letters, 2011, 99, 171905.	3.3	28
11	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
12	Current status for light-emitting diode with Eu-doped GaN active layer grown by MBE. Journal of Luminescence, 2012, 132, 3113-3117.	3.1	27
13	Observation of Coulomb Blockade Type Conductance Oscillations up to 50 K in Gated InGaAs Ridge Quantum Wires Grown by Molecular Beam Epitaxy on InP Substrates. Japanese Journal of Applied Physics, 1997, 36, 1672-1677.	1.5	25
14	Structural and photoelectrochemical characteristics of nanocrystalline ZnO electrode with Eosin-Y. Ceramics International, 2006, 32, 495-498.	4.8	24
15	Characterization of graphene oxide reduced through chemical and biological processes. Journal of Physics: Conference Series, 2013, 433, 012001.	0.4	22
16	Novel GaAs-Based Single-Electron Transistors with Schottky In-Plane Gates Operating up to 20 K. Japanese Journal of Applied Physics, 1996, 35, 1132-1139.	1.5	21
17	Operation of Monolithically-Integrated Digital Circuits with Light Emitting Diodes Fabricated in Lattice-Matched Si/III-V _N /Si Heterostructure. Applied Physics Express, 2010, 3, 074201.	2.4	21
18	Quantum transport in a Schottky in-plane-gate controlled GaAs/AlGaAs quantum well wires. Physica B: Condensed Matter, 1996, 227, 42-45.	2.7	20

#	ARTICLE	IF	CITATIONS
19	Monolithic integration of Si-MOSFET and GaN-LED using Si/SiO ₂ /GaN-LED wafer. Applied Physics Express, 2016, 9, 104101.	2.4	20
20	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
21	Voltage Gain in GaAs-Based Lateral Single-Electron Transistors Having Schottky Wrap Gates. Japanese Journal of Applied Physics, 1999, 38, 410-414.	1.5	19
22	Effects of Al composition on luminescence properties of europium implanted Al _x Ga _{1-x} N (0 ≤ x ≤ 1). Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2623-2626.	0.8	19
23	Robust Hall Effect Magnetic Field Sensors for Operation at High Temperatures and in Harsh Radiation Environments. IEEE Transactions on Magnetics, 2012, 48, 4421-4423.	2.1	19
24	Emission enhancement mechanism of GaN:Eu by Mg codoping. Journal of Applied Physics, 2013, 113, .	2.5	19
25	Improvement of luminescence capability of Tb ³⁺ -related emission by Al _x Ga _{1-x} N. Physica Status Solidi (B): Basic Research, 2003, 240, 372-375.	1.5	18
26	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
27	Effects of implantation conditions on the luminescence properties of Eu-doped GaN. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 1033-1036.	1.4	17
28	Microorganism mediated synthesis of reduced graphene oxide films. Journal of Physics: Conference Series, 2012, 352, 012011.	0.4	17
29	Effect of 3 MeV electron irradiation on the photoluminescence properties of Eu-doped GaN. Applied Physics Letters, 2002, 81, 1943-1945.	3.3	16
30	Transport Characterization of Schottky In-Plane Gate Al _{0.3} Ga _{0.7} As/GaAs Quantum Wire Transistors Realized by In-Situ Electrochemical Process. Japanese Journal of Applied Physics, 1995, 34, 6971-6976.	1.5	15
31	Organometallic vapor phase epitaxy of GaN on Si(111) with a β -Al ₂ O ₃ (111) epitaxial intermediate layer. Journal of Crystal Growth, 2002, 236, 21-25.	1.5	15
32	Photoelectromagnetic effects on electron and proton irradiated CuInSe ₂ thin films. Journal of Applied Physics, 2003, 94, 276-278.	2.5	15
33	Growth of a lattice-matched GaAsPN p-n junction on a Si substrate for monolithic III-V/Si tandem solar cells. Applied Physics Express, 2017, 10, 075504.	2.4	15
34	Effect of proton irradiation on electrical properties of CuInSe thin films. Solar Energy Materials and Solar Cells, 2003, 75, 57-63.	6.2	14
35	MBE growth of GaAsN/GaP(N) quantum wells with abrupt heterointerfaces for photonics applications on Si substrates. Journal of Crystal Growth, 2009, 311, 1748-1753.	1.5	14
36	Demonstration of a large-area AlGaIn/GaN Schottky barrier photodetector on Si with high detection limit. Semiconductor Science and Technology, 2013, 28, 094005.	2.0	14

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37	Basic Control Characteristics of Novel Schottky In-Plane and Wrap Gate Structures Studied by Simulation and Transport Measurements in GaAs and InGaAs Quantum Wires. Japanese Journal of Applied Physics, 1997, 36, 4156-4160.	1.5	13
38	Electrical Properties of Nanometer-Sized Schottky Contacts on n-GaAs and n-InP Formed by in Situ Electrochemical Process. Japanese Journal of Applied Physics, 2000, 39, 4609-4615.	1.5	13
39	Optical properties of ZnGeN ₂ epitaxial layer. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2890-2893.	0.8	13
40	3MeV electron irradiation-induced defects in CuInSe ₂ thin films. Journal of Physics and Chemistry of Solids, 2003, 64, 1887-1890.	4.0	13
41	Plasma-Induced Damage and Recovery on Au/n-GaN Schottky Diode in Different Processes. Japanese Journal of Applied Physics, 2012, 51, 076503.	1.5	13
42	Plasma-Induced Damage and Recovery on Au/n-GaN Schottky Diode in Different Processes. Japanese Journal of Applied Physics, 2012, 51, 076503.	1.5	12
43	Analysis of quantum levels for self-assembled InGaAsN/GaP quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 322-324.	0.8	11
44	Simple method to transfer graphene from metallic catalytic substrates to flexible surfaces without chemical etching. Journal of Physics: Conference Series, 2013, 433, 012002.	0.4	11
45	Structural and optical properties of Eu-doped GaN nanocolumns on (111) Si substrates grown by RF-plasma-assisted molecular beam epitaxy. Japanese Journal of Applied Physics, 2016, 55, 05FG07.	1.5	11
46	Self-Organized Eu-Doped GaN Nanocolumn Light-Emitting Diode Grown by RF-Molecular-Beam Epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2018, 216, 1800501.	1.8	11
47	Proton Irradiation Enhancement of Low-Field Negative Magnetoresistance Sensitivity of AlGaIn/GaN-Based Magnetic Sensor at Cryogenic Temperature. IEEE Electron Device Letters, 2014, 35, 1130-1132.	3.9	10
48	Regularly arranged Eu-doped GaN nanocolumns grown by RF-plasma-assisted molecular beam epitaxy through Ti-mask selective-area growth technique. Journal of Crystal Growth, 2019, 511, 73-78.	1.5	10
49	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
50	Size-Controlled Formation of Decanometer InGaAs Quantum Wires by Selective Molecular Beam Epitaxy on InP Patterned Substrates. Japanese Journal of Applied Physics, 1999, 38, 1071-1074.	1.5	9
51	Microfabrication of high quality polytetrafluoroethylene films by synchrotron radiation. Nuclear Instruments & Methods in Physics Research B, 2003, 199, 370-374.	1.4	9
52	Investigation of Tb-related green emission in group III nitrides by time-resolved photoluminescence measurement. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 56-59.	1.8	9
53	Light emitting FET based on spatially selective doping of Eu in AlGaIn/GaN HEMT. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S631.	0.8	9
54	Effect of proton irradiation on AlGaIn/GaN micro-Hall sensors. Applied Physics Letters, 2013, 102, 193510.	3.3	9

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55	Origin of 1/f noise in graphene produced for large-scale applications in electronics. IET Circuits, Devices and Systems, 2015, 9, 52-58.	1.4	9
56	Investigation of HCl-based surface treatment for GaN devices. AIP Conference Proceedings, 2016, , .	0.4	9
57	Doping control of GaAsPN alloys by molecular beam epitaxy for monolithic III-V/Si tandem solar cells. Journal of Crystal Growth, 2017, 473, 55-59.	1.5	9
58	Formation of SiO ₂ film by chemical vapor deposition enhanced by atomic species extracted from a surface-wave generated plasma. AIP Conference Proceedings, 2017, , .	0.4	9
59	Strong blue emission from Er ³⁺ doped in Al _x Ga _{1-x} N. Physica Status Solidi A, 2004, 201, 2768-2772.	1.7	8
60	380 keV proton irradiation effects on photoluminescence of Eu-doped GaN. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 853-856.	1.4	7
61	Integration of Micro-Light-Emitting-Diode Arrays and Silicon Driver for Heterogeneous Optoelectronic Integrated Circuit Device. Japanese Journal of Applied Physics, 2011, 50, 04DG12.	1.5	7
62	Eu ³⁺ luminescence properties of Eu- and Mg-codoped AlGa _x N. Journal of Luminescence, 2015, 166, 60-66.	3.1	7
63	Fabrication of Si/SiO ₂ /GaN structure by surface-activated bonding for monolithic integration of optoelectronic devices. Japanese Journal of Applied Physics, 2016, 55, 05FL01.	1.5	7
64	Novel Single Electron Memory Device Using Metal Nano-Dots and Schottky In-Plane Gate Quantum Wire Transistors. Japanese Journal of Applied Physics, 2001, 40, 2797-2800.	1.5	6
65	Effect of Growth Mode on Eu-Incorporation and Luminescence of Eu-Doped GaN Epitaxial Film Grown by Plasma-Assisted Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2011, 50, 031003.	1.5	6
66	Intelligent Ultraviolet Sensor Composed of GaN-Based Photodiode and N-Channel Metal Oxide Semiconductor Si-Charge Transfer Type Signal Processor. Japanese Journal of Applied Physics, 2012, 51, 044101.	1.5	6
67	Partial recovery of the magnetoelectrical properties of AlGa _x N/GaN-based micro-Hall sensors irradiated with protons. Applied Physics Letters, 2014, 104, 023508.	3.3	6
68	Stable-wavelength operation of europium-doped GaN nanocolumn light-emitting diodes grown by rf-plasma-assisted molecular beam epitaxy. Electronics Letters, 2017, 53, 666-668.	1.0	6
69	Impact of temperature and nitrogen composition on the growth of GaAsPN alloys. Journal of Crystal Growth, 2018, 486, 24-29.	1.5	6
70	Observation of single optical site of Eu and Mg codoped GaN grown by NH ₃ -source molecular beam epitaxy. Journal of Applied Physics, 2019, 125, .	2.5	6
71	Effect of Growth Mode on Eu-Incorporation and Luminescence of Eu-Doped GaN Epitaxial Film Grown by Plasma-Assisted Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2011, 50, 031003.	1.5	6
72	Transparent Conducting ZnO Films on Polymer Substrates by Pulsed Laser Deposition. Key Engineering Materials, 2004, 270-273, 878-883.	0.4	5

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73	Epitaxial growth of zinc oxide thin films on epi-GaN/sapphire (0001) by sol-gel technique. <i>Thin Solid Films</i> , 2007, 515, 3330-3334.	1.8	5
74	Study of Electrical Response in Pt/GaN Schottky Barrier Diode to CO Gas for High Temperature Gas Sensor. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 01AD08.	1.5	5
75	Effect of Proton Irradiation on 2DEG in AlGaIn/GaN Heterostructures. <i>Journal of Physics: Conference Series</i> , 2013, 433, 012011.	0.4	5
76	Integration of Micro-Light-Emitting-Diode Arrays and Silicon Driver for Heterogeneous Optoelectronic Integrated Circuit Device. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 04DG12.	1.5	5
77	Depletion Characteristics of Direct Schottky Contacts to Quantum Wells Formed by In Situ Selective Electrochemical Process. <i>Japanese Journal of Applied Physics</i> , 1995, 34, 1149-1152.	1.5	4
78	Characteristics of GaAs Schottky in-plane gate quantum wire transistors for switching of quantized conductance. <i>Physica B: Condensed Matter</i> , 1999, 272, 123-126.	2.7	4
79	GaAs-based single electron logic and memory devices using electro-deposited nanometer Schottky gates. <i>Microelectronic Engineering</i> , 1999, 47, 285-287.	2.4	4
80	Study of electron irradiation-induced defects in CuInSe ₂ and CuIn _x Ga _{1-x} Se ₂ by electron spin resonance. <i>Solar Energy Materials and Solar Cells</i> , 2006, 90, 93-99.	6.2	4
81	Doping control and evaluation of pn-junction LED in GaPN grown by OMVPE. <i>Journal of Crystal Growth</i> , 2008, 310, 5147-5150.	1.5	4
82	Effects of Proton Irradiation on the Magnetoelectric Properties of 2DEG AlGaIn/GaN Micro-Hall Sensors. <i>Journal of Physics: Conference Series</i> , 2012, 352, 012010.	0.4	4
83	Design and Fabrication of Large Scale Micro-LED Arrays and Silicon Driver for OEIC Devices. <i>IEICE Transactions on Electronics</i> , 2012, E95.C, 898-903.	0.6	4
84	Study of Proton Irradiation Effects on p- and n-Type GaN Based-on Two-Terminal Resistance Dependence on 380keV Proton Fluence. <i>IEICE Transactions on Electronics</i> , 2014, E97.C, 409-412.	0.6	4
85	Molecular-beam epitaxy growth of dilute GaAsN alloys by surface nitridation. <i>Journal of Crystal Growth</i> , 2016, 435, 19-23.	1.5	4
86	Design and fabrication of GaAs/AlGaAs single electron transistors based on in-plane Schottky gate control of 2DEG. <i>Physica B: Condensed Matter</i> , 1996, 227, 112-115.	2.7	3
87	Controlled formation of metal-semiconductor interface to 2DEG layer by in-situ electrochemical process and its application to in-plane gated electron waveguide devices. <i>Applied Surface Science</i> , 1997, 117-118, 342-346.	6.1	3
88	Electrochemical formation and characterization of Schottky in-plane and wrap gate structures for realization of GaAs- and InP-based quantum wires and dots. <i>Applied Surface Science</i> , 1998, 123-124, 335-338.	6.1	3
89	Deep levels and compensation effects in sulfur-doped GaPN layers grown by organometallic vapor phase epitaxy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2009, 27, 531-536.	2.1	3
90	Growth of AlPN by solid source molecular beam epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 288-290.	0.8	3

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91	Annealing behavior on luminescence properties of self-assembled InGaAsN/GaP quantum dots. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 263-265.	0.8	3
92	Organometallic chemical vapor deposition of silicon nitride films enhanced by atomic nitrogen generated from surface-wave plasma. , 2014, , .		3
93	Estimation of Ga adatom diffusion length for GaP growth by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2019, 512, 37-40.	1.5	3
94	GaN-Based Monolithic Inverter Consisting of Enhancement- and Depletion-Mode MOSFETs by Si Ion Implantation. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 1900550.	1.8	3
95	Deep level transient spectroscopy study of electron-irradiated CuInSe ₂ thin films. <i>Journal of Electronic Materials</i> , 2003, 32, L5-L8.	2.2	2
96	Effects of high-energy proton irradiation on the density and Hall mobility of majority carriers in single crystalline n-type CuInSe ₂ thin films. <i>Physica Status Solidi A</i> , 2003, 199, 471-474.	1.7	2
97	Study of Ion-Beam-Induced Damage and Luminescence Properties in Terbium-Implanted AlGaIn. <i>Japanese Journal of Applied Physics</i> , 2010, 49, 032401.	1.5	2
98	Growth of dilute BGaP alloys by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2013, 378, 96-99.	1.5	2
99	Influence of contact shape on AlGaIn/GaN Schottky diode prepared on Si with thick buffer layer. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 112, 847-853.	2.3	2
100	Metal-organic vapor phase epitaxy of GaPN alloys via surface nitridation using ammonia. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600483.	1.5	2
101	Photoluminescence properties of implanted Praseodymium into Gallium Nitride at elevated temperatures. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2020, 479, 7-12.	1.4	2
102	Intelligent Ultraviolet Sensor Composed of GaN-Based Photodiode and N-Channel Metal Oxide Semiconductor Si-Charge Transfer Type Signal Processor. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 044101.	1.5	2
103	Luminescence properties of GaPN layer grown by OMVPE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1682-1684.	0.8	1
104	Effect of annealing on proton irradiated AlGaIn/GaN based micro-Hall sensors. , 2014, , .		1
105	High Proton Radiation Tolerance of InAsSb Quantum-Well-Based micro-Hall Sensors. <i>IEEE Electron Device Letters</i> , 2014, 35, 1305-1307.	3.9	1
106	Chemical vapor deposition of silicon nitride film enhanced by surface-wave plasma for surface passivation of AlGaIn/GaN device. , 2015, , .		1
107	Realization of InP-Based InGaAs single electron transistors on wires and dots grown by selective MBE. <i>Microelectronic Engineering</i> , 1999, 47, 201-203.	2.4	0
108	Effect of Al Composition on Luminescence Properties of Rare-Earth Implanted into AlGaIn. <i>Key Engineering Materials</i> , 2004, 270-273, 890-894.	0.4	0

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109	Monolithically-Integrated Digital Circuits with Light Emitting Diodes in Lattice-Matched Si/III-V-N/Si Heterostructure. , 2010, , .		0
110	Complementary Metal Oxide Semiconductor-Compatible Back-Side-Illuminated Photodiode for Optoelectronic Integrated Circuit Devices. Japanese Journal of Applied Physics, 2013, 52, 04CG12.	1.5	0
111	Development of Rare-earth Doped III-Nitride and its Application for Optoelectronic Devices. , 2008, , .		0
112	Investigation of Electron Irradiation Effects on Graphene by Optical and Electrical Characterization. IEICE Transactions on Electronics, 2016, E99.C, 559-562.	0.6	0