Hiroshi Okada

List of Publications by Year
in descending order

112	1,407	394421 19	454955 30
papers	citations	h-index	g-index

112	112	112	1430
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	GaNâ€Based Monolithic Inverter Consisting of Enhancementâ€and Depletionâ€Mode MOSFETs by Si Ion Implantation. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900550.	1.8	3
2	Photoluminescence properties of implanted Praseodymium into Gallium Nitride at elevated temperatures. Nuclear Instruments & Methods in Physics Research B, 2020, 479, 7-12.	1.4	2
3	Observation of single optical site of Eu and Mg codoped GaN grown by NH3-source molecular beam epitaxy. Journal of Applied Physics, 2019, 125, .	2.5	6
4	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
5	Estimation of Ga adatom diffusion length for GaP growth by molecular beam epitaxy. Journal of Crystal Growth, 2019, 512, 37-40.	1.5	3
6	Impact of temperature and nitrogen composition on the growth of GaAsPN alloys. Journal of Crystal Growth, 2018, 486, 24-29.	1.5	6
7	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
8	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
9	Stableâ€wavelength operation of europiumâ€doped GaN nanocolumn lightâ€emitting diodes grown by rfâ€plasmaâ€assisted molecular beam epitaxy. Electronics Letters, 2017, 53, 666-668.	1.0	6
10	Growth of a lattice-matched GaAsPN pâ€“iâ€“n junction on a Si substrate for monolithic IIIâ€“V/Si tandem solar cells. Applied Physics Express, 2017, 10, 075504.	2.4	15
11	Metalâ€organic vapor phase epitaxy of GaPN alloys via surface nitridation using ammonia. Physica Status Solidi (B): Basic Research, 2017, 254, 1600483.	1.5	2
12	Formation of SiO2 film by chemical vapor deposition enhanced by atomic species extracted from a surface-wave generated plasma. AIP Conference Proceedings, 2017, , .	0.4	9
13	Monolithic integration of Si-MOSFET and GaN-LED using Si/SiO₂/GaN-LED wafer. Applied Physics Express, 2016, 9, 104101.	2.4	20
14	Fabrication of Si/SiO₂/GaN structure by surface-activated bonding for monolithic integration of optoelectronic devices. Japanese Journal of Applied Physics, 2016, 55, 05FL01.	1.5	7
15	Investigation of HCl-based surface treatment for GaN devices. AIP Conference Proceedings, 2016, , .	0.4	9
16	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
17	Molecular-beam epitaxy growth of dilute GaAsN alloys by surface nitridation. Journal of Crystal Growth, 2016, 435, 19-23.	1.5	4
18	Investigation of Electron Irradiation Effects on Graphene by Optical and Electrical Characterization. IEICE Transactions on Electronics, 2016, E99.C, 559-562.	0.6	0

#	Article	IF	Citations
19	Chemical vapor deposition of silicon nitride film enhanced by surface-wave plasma for surface passivation of AlGaN/GaN device. , 2015, , .		1
20	Eu3+ luminescence properties of Eu- and Mg-codoped AlGaN. Journal of Luminescence, 2015, 166, 60-66.	3.1	7
21	Origin of 1/ f noise in graphene produced for largeâ€scale applications in electronics. IET Circuits, Devices and Systems, 2015, 9, 52-58.	1.4	9
22	Study of Proton Irradiation Effects on p- and n-Type GaN Based-on Two-Terminal Resistance Dependence on 380keV Proton Fluence. IEICE Transactions on Electronics, 2014, E97.C, 409-412.	0.6	4
23	Organometallic chemical vapor deposition of silicon nitride films enhanced by atomic nitrogen generated from surface-wave plasma. , 2014, , .		3
24	Effect of annealing on proton irradiated AlGaN/GaN based micro-Hall sensors. , 2014, , .		1
25	Proton Irradiation Enhancement of Low-Field Negative Magnetoresistance Sensitivity of AlGaN/GaN-Based Magnetic Sensor at Cryogenic Temperature. IEEE Electron Device Letters, 2014, 35, 1130-1132.	3.9	10
26	High Proton Radiation Tolerance of InAsSb Quantum-Well-Based micro-Hall Sensors. IEEE Electron Device Letters, 2014, 35, 1305-1307.	3.9	1
27	Partial recovery of the magnetoelectrical properties of AlGaN/GaN-based micro-Hall sensors irradiated with protons. Applied Physics Letters, 2014, 104, 023508.	3.3	6
28	Growth of dilute BGaP alloys by molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 96-99.	1.5	2
29	Influence of contact shape on AlGaN/GaN Schottky diode prepared on Si with thick buffer layer. Applied Physics A: Materials Science and Processing, 2013, 112, 847-853.	2.3	2
30	Red-Light-Emitting Diodes with Site-Selective Eu-Doped GaN Active Layer. Japanese Journal of Applied Physics, 2013, 52, 08JH01.	1.5	29
31	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
32	Demonstration of a large-area AlGaN/GaN Schottky barrier photodetector on Si with high detection limit. Semiconductor Science and Technology, 2013, 28, 094005.	2.0	14
33	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
34	Emission enhancement mechanism of GaN:Eu by Mg codoping. Journal of Applied Physics, 2013, 113, .	2.5	19
35	Characterization of graphene oxide reduced through chemical and biological processes. Journal of Physics: Conference Series, 2013, 433, 012001.	0.4	22
36	Effect of proton irradiation on AlGaN/GaN micro-Hall sensors. Applied Physics Letters, 2013, 102, 193510.	3.3	9

#	Article	IF	Citations
37	Effect of Proton Irradiation on 2DEG in AlGaN/GaN Heterostructures. Journal of Physics: Conference Series, 2013, 433, 012011.	0.4	5
38	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
39	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
40	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
41	Effects of Proton Irradiation on the Magnetoelectric Properties of 2DEG AlGaN/GaN Micro-Hall Sensors. Journal of Physics: Conference Series, 2012, 352, 012010.	0.4	4
42	Design and Fabrication of Large Scale Micro-LED Arrays and Silicon Driver for OEIC Devices. IEICE Transactions on Electronics, 2012, E95.C, 898-903.	0.6	4
43	Microorganism mediated synthesis of reduced graphene oxide films. Journal of Physics: Conference Series, 2012, 352, 012011.	0.4	17
44	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
45	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	2
46	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
47	Analysis of quantum levels for selfâ€assembled InGaAsN/GaP quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 322-324.	0.8	11
48	Growth of AlPN by solid source molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 288-290.	0.8	3
49	Annealing behavior on luminescence properties of selfâ€assembled InGaAsN/GaP quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 263-265.	0.8	3
50	Effect of Mg codoping on Eu3+ luminescence in GaN grown by ammonia molecular beam epitaxy. Applied Physics Letters, 2011, 99, 171905.	3.3	28
51	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
52	Study of Electrical Response in Pt/GaN Schottky Barrier Diode to CO Gas for High Temperature Gas Sensor. Japanese Journal of Applied Physics, 2011, 50, 01AD08.	1.5	5
53	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
54	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

#	Article	IF	Citations
55	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	5
56	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
57	Operation of Monolithically-Integrated Digital Circuits with Light Emitting Diodes Fabricated in Lattice-Matched Si/IIIâ€“Vâ€“N/Si Heterostructure. Applied Physics Express, 2010, 3, 074201.	2.4	21
58	Monolithically-Integrated Digital Circuits with Light Emitting Diodes in Lattice-Matched Si/III-V-N/Si Heterostructure. , 2010, , .		0
59	Study of Ion-Beam-Induced Damage and Luminescence Properties in Terbium-Implanted AlGaN. Japanese Journal of Applied Physics, 2010, 49, 032401.	1.5	2
60	Deep levels and compensation effects in sulfur-doped GaPN layers grown by organometallic vapor phase epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 531-536.	2.1	3
61	Light emitting FET basedâ€on spatially selective doping of Eu in AlGaN/GaN HEMT. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S631.	0.8	9
62	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
63	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
64	Luminescence properties of GaPN layer grown by OMVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1682-1684.	0.8	1
65	Investigation of Tbâ€related green emission in groupâ€III nitrides by timeâ€resolved photoluminescence measurement. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 56-59.	1.8	9
66	Doping control and evaluation of pn-junction LED in GaPN grown by OMVPE. Journal of Crystal Growth, 2008, 310, 5147-5150.	1.5	4
67	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
68	Development of Rare-earth Doped III-Nitride and its Application for Optoelectronic Devices. , 2008, , .		0
69	Epitaxial growth of zinc oxide thin films on epi-GaN/sapphire (0001) by solâ€“gel technique. Thin Solid Films, 2007, 515, 3330-3334.	1.8	5
70	Photoluminescence and absorption in solâ€“gel-derived ZnO films. Journal of Luminescence, 2007, 126, 800-806.	3.1	175
71	Structural and photoelectrochemical characteristics of nanocrystalline ZnO electrode with Eosin-Y. Ceramics International, 2006, 32, 495-498.	4.8	24
72	Study of electron irradiation-induced defects in CuInSe2 and CuInxGa1-xSe2 by electron spin resonance. Solar Energy Materials and Solar Cells, 2006, 90, 93-99.	6.2	4

#	Article	IF	Citations
73	Transparent Conducting ZnO Films on Polymer Substrates by Pulsed Laser Deposition. Key Engineering Materials, 2004, 270-273, 878-883.	0.4	5
74	Effect of Al Composition on Luminescence Properties of Rare-Earth Implanted into AlGaN. Key Engineering Materials, 2004, 270-273, 890-894.	0.4	0
75	Epitaxial growth and characterization of ZnGeN2 by metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2004, 260, 125-129.	1.5	44
76	Strong blue emission from Er3+ doped in AlxGa1â€“xN. Physica Status Solidi A, 2004, 201, 2768-2772.	1.7	8
77	Growth and characterization of AlInN on AlN template. Journal of Crystal Growth, 2004, 272, 381-385.	1.5	32
78	Fabrication and Characterization of Eosin-Y-Sensitized ZnO Solar Cell. Japanese Journal of Applied Physics, 2004, 43, 152-155.	1.5	35
79	Deep level transient spectroscopy study of electron-irradiated CuInSe2 thin films. Journal of Electronic Materials, 2003, 32, L5-L8.	2.2	2
80	Microfabrication of high quality polytetrafluoroethylene films by synchrotron radiation. Nuclear Instruments & Methods in Physics Research B, 2003, 199, 370-374.	1.4	9
81	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
82	Effect of proton irradiation on electrical properties of CuInSe thin films. Solar Energy Materials and Solar Cells, 2003, 75, 57-63.	6.2	14
83	Effects of high-energy proton irradiation on the density and Hall mobility of majority carriers in single crystalline n-type CuInSe2 thin films. Physica Status Solidi A, 2003, 199, 471-474.	1.7	2
84	Improvement of luminescence capability of Tb3+-related emission by AlxGa1â^'xN. Physica Status Solidi (B): Basic Research, 2003, 240, 372-375.	1.5	18
85	Optical properties of ZnGeN2 epitaxial layer. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2890-2893.	0.8	13
86	Effects of Al composition on luminescence properties of europium implanted AlxGa1â^'xN (0â‰¤xâ‰¤ 1). Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2623-2626.	0.8	19
87	3MeV electron irradiation-induced defects in CuInSe2 thin films. Journal of Physics and Chemistry of Solids, 2003, 64, 1887-1890.	4.0	13
88	Photoelectromagnetic effects on electron and proton irradiated CuInSe2 thin films. Journal of Applied Physics, 2003, 94, 276-278.	2.5	15
89	Effect of 3 MeV electron irradiation on the photoluminescence properties of Eu-doped GaN. Applied Physics Letters, 2002, 81, 1943-1945.	3.3	16
90	Organometallic vapor phase epitaxy of GaN on Si(111) with a Î³-Al2O3(111) epitaxial intermediate layer. Journal of Crystal Growth, 2002, 236, 21-25.	1.5	15

#	Article	IF	Citations
91	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
92	Electrical Properties of Nanometer-Sized Schottky Contacts on n-GaAs and n-InP Formed byin SituElectrochemical Process. Japanese Journal of Applied Physics, 2000, 39, 4609-4615.	1.5	13
93	Size-Controlled Formation of Decananometer InGaAs Quantum Wires by Selective Molecular Beam Epitaxy on InP Patterned Substrates. Japanese Journal of Applied Physics, 1999, 38, 1071-1074.	1.5	9
94	Molecular-Beam Epitaxy and Device Applications of III-V Semiconductor Nanowires. MRS Bulletin, 1999, 24, 25-30.	3.5	32
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	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
97	Characteristics of GaAs Schottky in-plane gate quantum wire transistors for switching of quantized conductance. Physica B: Condensed Matter, 1999, 272, 123-126.	2.7	4
98	Realization of InP-Based InGaAs single electron transistors on wires and dots grown by selective MBE. Microelectronic Engineering, 1999, 47, 201-203.	2.4	0
99	GaAs-based single electron logic and memory devices using electro-deposited nanometer Schottky gates. Microelectronic Engineering, 1999, 47, 285-287.	2.4	4
100	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
101	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
102	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
103	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
104	Controlled formation of metal-semiconductor interface to 2DEG layer by in-situ electrochemical process and its application to in-plane gated electron waveguide devices. Applied Surface Science, 1997, 117-118, 342-346.	6.1	3
105	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
106	Design and fabrication of GaAs/AlGaAs single electron transistors based on in-plane Schottky gate control of 2DEG. Physica B: Condensed Matter, 1996, 227, 112-115.	2.7	3
107	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
108	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

#	Article	IF	Citations
109	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
110	Depletion Characteristics of Direct Schottky Contacts to Quantum Wells Formed by In Situ Selective Electrochemical Process. Japanese Journal of Applied Physics, 1995, 34, 1149-1152.	1.5	4
111	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
112	Transport Characterization of Schottky In-Plane Gate Al0.3Ga0.7As/GaAs Quantum Wire Transistors Realized by wltibIn-Situ Electrochemical Process. Japanese Journal of Applied Physics, 1995, 34, 6971-6976.	1.5	15