Hiroyuki Sazawa

List of Publications by Year
in descending order

18 papers	330 citations	1307594 7 h-index	940533 16 g-index
18 all docs	18 docs citations	18 times ranked	291 citing authors

#	Article	IF	Citations
1	High-mobility 2D electron gas in carbon-face 3C-SiC/4H-SiC heterostructure with single-domain 3C-SiC layer. Applied Physics Letters, 2022, 120, .	3.3	12
2	Electrical properties of GaAs metalâ€"oxideâ€"semiconductor structure comprising Al2O3 gate oxide and AlN passivation layer fabricated in situ using a metalâ€"organic vapor deposition/atomic layer deposition hybrid system. AIP Advances, 2015, 5, 087149.	1.3	15
3	Nitride passivation reduces interfacial traps in atomic-layer-deposited Al2O3/GaAs (001) metal-oxide-semiconductor capacitors using atmospheric metal-organic chemical vapor deposition. Applied Physics Letters, 2014, 105, .	3.3	31
4	High-performance GaAs-based metalâ€"oxideâ€"semiconductor heterostructure field-effect transistors with atomic-layer-deposited Al2O3gate oxide and in situ AlN passivation by metalorganic chemical vapor deposition. Applied Physics Express, 2014, 7, 106502.	2.4	4
5	Electronic Structure and Spontaneous Polarization in Sc_xAl_yGa_{1-x-y}N Alloys Lattice-Matched to GaN: A First-Principles Study. Japanese Journal of Applied Physics, 2013, 52, 08JM04.	1.5	1
6	Reduction in Buffer Leakage Current with Mn-Doped GaN Buffer Layer Grown by Metal Organic Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2013, 52, 08JN12.	1.5	15
7	First-principles study of spontaneous polarization and band gap bowing in ScxAlyGa1 âˆ’xâˆ’yN alloys lattice-matched to GaN. Semiconductor Science and Technology, 2012, 27, 105014.	2.0	4
8	Spontaneous polarization and band gap bowing in YxAlyGa1-x-yN alloys lattice-matched to GaN. Journal of Applied Physics, 2011, 110, 074114.	2.5	9
9	A lowâ€leakage and reduced current collapse AlGaN/GaN heterojunction field effect transistor with AlO_x gate insulator formed by metalâ€organic chemical vapor deposition. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1986-1988.	0.8	4
10	rfâ€MBE growth and characterizations of AlGaN/GaN HEMTs on vicinal sapphire (0001) substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1995-1997.	0.8	2
11	Influence of Micropipe and Domain Boundary in SiC Substrate on the DC Characteristics of AlGaN/GaN HFET. Materials Science Forum, 2007, 556-557, 1043-1046.	0.3	1
12	A study on influence of micropipes in SiC substrate on overgrown AlGaN/GaN HEMT DC characteristics. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1662-1666.	0.8	0
13	Influence of macro defects in SiC substrate on AlGaN/GaN HEMT DC characteristics. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2321-2324.	0.8	2
14	Correlation between micropipes on SiC substrate and dc characteristics of AlGaNâˆ•GaN high-electron mobility transistors. Journal of Applied Physics, 2006, 100, 114502.	2.5	3
15	Factors Affecting Background Permeabilities of Ordered Mono-, Bi- and Multilayers as Channel Mimetic Sensing Membranes. Analytical Sciences, 1994, 10, 343-347.	1.6	7
16	Effect of the membrane surface charge on the host-guest complex of valinomycin in a synthetic lipid monolayer at the air-water interface. Langmuir, 1992, 8, 609-612.	3.5	26
17	Ion-channel sensors. Analytical Chemistry, 1987, 59, 2842-2846.	6.5	193
18	Improved Contact Resistance in AlGaN/GaN Heterostructures by Titanium Distribution Control at the Metalâ€"Semiconductor Interface. Applied Physics Express, 0, 1, 081101.	2.4	1