Daisuke Nakamura

List of Publications by Year in Descending Order

32 papers	735 citations	10 h-index	27 g-index
36 ext. papers	833 ext. citations	4.2 avg, IF	4.11 L-index

#	Paper	IF	Citations
32	Mechanism and enhancement of anti-parasitic-reaction catalytic activity of tungsten-carbide-coated graphite components for the growth of bulk GaN crystals. *Applied Physics Express*, **2022**, 15, 045501	2.4	
31	Tungsten carbide layers deposited on graphite substrates via a wet powder process as anti-parasitic-reaction coatings for reactor components in GaN growth. *CrystEngComm*, **2020**, 22, 2632-2641	3.2	1
30	Growth of high-quality GaN by halogen-free vapor phase epitaxy. *Applied Physics Express*, **2020**, 13, 085509	2.4	2
29	Transformation of hollow-core screw dislocations: transitional configuration of superscrew dislocations. *Japanese Journal of Applied Physics*, **2020**, 59, 095502	1.4	2
28	Resistive heater element made of highly durable TaC-coated graphite for high-temperature and highly corrosive processes: application to MOCVD GaN epitaxial growth. *Japanese Journal of Applied Physics*, **2019**, 58, 075509	1.4	4
27	Hansen Solubility Parameters of Stacked Silicanes Derived from Porous Silicon. *ACS Omega*, **2019**, 4, 11838-11843	3.9	4
26	Self-Assembled Single-Crystalline GaN Having a Bimodal Meso/Macropore Structure To Enhance Photoabsorption and Photocatalytic Reactions. *ACS Applied Materials & Interfaces*, **2019**, 11, 4233-4241	9.5	9
25	Macro-defect-free homoepitaxial GaN growth through halogen-free vapor-phase epitaxy on native GaN seeds. *Journal of Crystal Growth*, **2018**, 494, 17-25	1.6	10
24	Liquid-Phase Exfoliation of Germanane Based on Hansen Solubility Parameters. *Chemistry of Materials*, **2018**, 30, 5333-5338	9.6	23
23	Porosity-controlled multilayer TaC coatings prepared via wet powder process for multi-functional reactor components in GaN crystal growth system. *Ceramics International*, **2018**, 44, 21284-21288	5.1	5
22	Ultrahigh-yield growth of GaN via halogen-free vapor-phase epitaxy. *Applied Physics Express*, **2018**, 11, 065502	2.4	7
21	Nontoxic organic solvents identified using an a priori approach with Hansen solubility parameters. *Chemical Communications*, **2017**, 53, 4096-4099	5.8	10
20	TaC-coated graphite prepared via a wet ceramic process: Application to CVD susceptors for epitaxial growth of wide-bandgap semiconductors. *Journal of Crystal Growth*, **2017**, 478, 163-173	1.6	12
19	Significant increase in GaN growth rate by halogen-free vapor phase epitaxy with porosity-controlled evaporator. *Applied Physics Express*, **2017**, 10, 095503	2.4	6
18	Origin and effective reduction of inversion domains in aluminum nitride grown by a sublimation method. *Journal of Crystal Growth*, **2017**, 478, 33-41	1.6	3
17	Tantalum carbide coating via wet powder process: From slurry design to practical process tests. *Journal of the European Ceramic Society*, **2017**, 37, 1175-1185	6	18
16	Halogen-free vapor phase epitaxy for high-rate growth of GaN bulk crystals. *Applied Physics Express*, **2017**, 10, 045504	2.4	10

15	Fabrication of large-sized TaC-coated carbon crucibles for the low-cost sublimation growth of large-diameter bulk SiC crystals. *Japanese Journal of Applied Physics*, **2017**, 56, 085504	1.4	7
14	Simple and quick enhancement of SiC bulk crystal growth using a newly developed crucible material. *Applied Physics Express*, **2016**, 9, 055507	2.4	14
13	Nanopipe formation as a result of boron impurity segregation in gallium nitride grown by halogen-free vapor phase epitaxy. *Journal of Applied Physics*, **2016**, 120, 245703	2.5	12
12	Sintered tantalum carbide coatings on graphite substrates: Highly reliable protective coatings for bulk and epitaxial growth. *Applied Physics Letters*, **2015**, 106, 082108	3.4	22
11	Direct determination of Burgers vector sense and magnitude of elementary dislocations by synchrotron white x-ray topography. *Journal of Applied Physics*, **2008**, 103, 013510	2.5	9
10	Topographic study of dislocation structure in hexagonal SiC single crystals with low dislocation density. *Journal of Crystal Growth*, **2007**, 304, 57-63	1.6	35
9	Investigation of carrier lifetime in 4H-SiC epilayers and lifetime control by electron irradiation. *Applied Physics Letters*, **2007**, 90, 202109	3.4	158
8	Synchrotron X-ray Topographic Analysis of Dislocation Structures in Bulk SiC Single Crystal. *Materials Science Forum*, **2006**, 527-529, 407-410	0.4	
7	Reduction of Dislocations in the Bulk Growth of SiC Crystals. *Materials Science Forum*, **2006**, 527-529, 3-8	0.4	9
6	Ultrahigh-quality single crystals of silicon carbide by alternate repetition of growth perpendicular to c-axis. *Microelectronic Engineering*, **2006**, 83, 139-141	2.5	2
5	Ultrahigh-quality silicon carbide single crystals. *Nature*, **2004**, 430, 1009-12	50.4	307
4	Impact of SiC Structural Defects on the Degradation Phenomenon of Bipolar SiC Devices. *Materials Science Forum*, **2003**, 433-436, 917-920	0.4	8
3	Local atomic arrangement of Pb and Sn on the Si(111)□□-(Pb,Sn) surface. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 96, 145-149	3.1	9
2	Self-Healing Phenomenon of Micropipes in Silicon Carbide. *Materials Science Forum*, **2002**, 389-393, 103-106	0.4	8
1	Self-recovery of monolayer Pb adsorbates on the Si(111)-1□-Pb surface under ion irradiation at room temperature. *Surface Science*, **1999**, 425, 174-179	1.8	9