Tokio Takahashi

List of Publications by Year
in descending order

28 papers	305 citations	933447 10 h-index	888059 17 g-index
28 all docs	28 docs citations	28 times ranked	343 citing authors

#	Article	IF	Citations
1	Nitrogen vacancies as a common element of the green luminescence and nonradiative recombination centers in Mg-implanted GaN layers formed on a GaN substrate. Applied Physics Express, 2017, 10, 061002.	2.4	70
2	Nearâ€Complete Elimination of Sizeâ€Dependent Efficiency Decrease in GaN Microâ€Lightâ€Emitting Diodes. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900380.	1.8	33
3	Realization of compressively strained GaN films grown on Si(110) substrates by inserting a thin AlN/GaN superlattice interlayer. Applied Physics Letters, 2012, 101, .	3.3	19
4	Electrical properties of Ni/n-GaN Schottky diodes on freestanding<i>m</i>-plane GaN substrates. Applied Physics Express, 2017, 10, 041001.	2.4	15
5	Role of an ultra-thin AlN/GaN superlattice interlayer on the strain engineering of GaN films grown on Si(110) and Si(111) substrates by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2013, 103, 231908.	3.3	14
6	Investigating the bistability characteristics of GaN/AlN resonant tunneling diodes for ultrafast nonvolatile memory. Japanese Journal of Applied Physics, 2015, 54, 034201.	1.5	14
7	Impact of substrate off-angle on the<i>m</i>-plane GaN Schottky diodes. Japanese Journal of Applied Physics, 2018, 57, 04FG01.	1.5	14
8	High thermal stability of abrupt SiO₂/GaN interface with low interface state density. Japanese Journal of Applied Physics, 2018, 57, 04FG11.	1.5	14
9	High-quality nanodisk of InGaN/GaN MQWs fabricated by neutral-beam-etching and GaN regrowth: towards directional micro-LED in top-down structure. Semiconductor Science and Technology, 2020, 35, 075001.	2.0	13
10	High quality thin AlN epilayers grown on Si(110) substrates by metal-organic chemical vapor deposition. CrystEngComm, 2017, 19, 1204-1209.	2.6	12
11	Self-generated microcracks in an ultra-thin AlN/GaN superlattice interlayer and their influences on the GaN epilayer grown on Si(110) substrates by metalâ€“organic chemical vapor deposition. CrystEngComm, 2015, 17, 5014-5018.	2.6	9
12	Resistance switching memory operation using the bistability in currentâ€“voltage characteristics of GaN/AlN resonant tunneling diodes. Japanese Journal of Applied Physics, 2016, 55, 100301.	1.5	9
13	Comparison of Electrical Properties of Ni/nâ€GaN Schottky Diodes on câ€Plane and mâ€Plane GaN Substrates. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700362.	1.8	9
14	Modulation of Strain States in GaN Films by a Thin AlN/GaN Superlattice Interlayer Grown on Si(110) Substrates. Japanese Journal of Applied Physics, 2013, 52, 08JB05.	1.5	8
15	Highâ€quality GaN film and AlGaN/GaN HEMT grown on 4â€inch Si(110) substrates by MOCVD using an ultraâ€thin AlN/GaN superlattice interlayer. Physica Status Solidi (B): Basic Research, 2015, 252, 1075-1078.	1.5	8
16	Enhanced light extraction in GaN-based light-emitting diodes by evanescent wave coupling effect. Applied Physics Express, 2014, 7, 102101.	2.4	7
17	Stabilization of nonvolatile memory operations using GaN/AlN resonant tunneling diodes by reducing structural inhomogeneity. Japanese Journal of Applied Physics, 2018, 57, 070310.	1.5	6
18	Mechanisms of the micro-crack generation in an ultra-thin AlN/GaN superlattice structure grown on Si(110) substrates by metalorganic chemical vapor deposition. Journal of Applied Physics, 2015, 118, .	2.5	5

#	Article	IF	Citations
19	Strain states in GaN films grown on Si(111) and Si(110) substrates using a thin AlN/GaN superlattice interlayer. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 473-476.	0.8	4
20	Nearâ€Complete Elimination of Sizeâ€Dependent Efficiency Decrease in GaN Microâ€Lightâ€Emitting Diodes. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1970075.	1.8	4
21	Light Source Position Dependence of Evanescent Wave Coupling Effect in Narrow GaAs/AlGaAs Ridge Structure. Japanese Journal of Applied Physics, 2012, 51, 040205.	1.5	4
22	Enhancement of the evanescent wave coupling effect in a sub-wavelength-sized GaAs/AlGaAs ridge structure by low-refractive-index surface layers. Optics Express, 2014, 22, A1559.	3.4	3
23	Effect of double superlattice interlayers on growth of thick GaN epilayers on Si(110) substrates by metalorganic chemical vapor deposition. Japanese Journal of Applied Physics, 2016, 55, 05FB02.	1.5	3
24	Switching characteristics of nonvolatile memory using GaN/AlN resonant tunneling diodes. Japanese Journal of Applied Physics, 2019, 58, 091001.	1.5	3
25	Impact of strain state on the ultrathin AlN/GaN superlattice growth on Si(110) substrates by metalorganic chemical vapor deposition. Japanese Journal of Applied Physics, 2018, 57, 010306.	1.5	2
26	Light Source Position Dependence of Evanescent Wave Coupling Effect in Narrow GaAs/AlGaAs Ridge Structure. Japanese Journal of Applied Physics, 2012, 51, 040205.	1.5	1
27	Study on AlGaN/GaN growth on carbonized Si substrate. Japanese Journal of Applied Physics, 2014, 53, 04EH09.	1.5	1
28	Growth and Characterization of GaN/AlN Resonant Tunneling Diodes for Highâ€Performance Nonvolatile Memory. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000495.	1.8	1