# Hironori Okumura

List of Publications by Year
in descending order

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| | | 759233 | 580821 |
|---|---|---|---|
| 28 | 598 | 12 | 25 |
| papers | citations | h-index | g-index |

| | | | |
|---|---|---|---|
| 28 | 28 | 28 | 864 |
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Vertical GaN Junction Barrier Schottky Rectifiers by Selective Ion Implantation. IEEE Electron Device Letters, 2017, 38, 1097-1100. | 3.9 | 136 |
| 2 | Systematic investigation of the growth rate of Î²-Ga<sub>2</sub>O<sub>3</sub>(010) by plasma-assisted molecular beam epitaxy. Applied Physics Express, 2014, 7, 095501. | 2.4 | 122 |
| 3 | AlN metalâ€“semiconductor field-effect transistors using Si-ion implantation. Japanese Journal of Applied Physics, 2018, 57, 04FR11. | 1.5 | 42 |
| 4 | Dry and wet etching for Î²-Ga<sub>2</sub>O<sub>3</sub> Schottky barrier diodes with mesa termination. Japanese Journal of Applied Physics, 2019, 58, 120902. | 1.5 | 33 |
| 5 | Nitrogen-Polar Polarization-Doped Field-Effect Transistor Based on Al<sub>0.8</sub>Ga<sub>0.2</sub>N/AlN on SiC With Drain Current Over 100 mA/mm. IEEE Electron Device Letters, 2019, 40, 1245-1248. | 3.9 | 32 |
| 6 | Reduction of Threading Dislocation Density in 2H-AlN Grown on 6H-SiC(0001) by Minimizing Unintentional Active-Nitrogen Exposure before Growth. Applied Physics Express, 2011, 4, 025502. | 2.4 | 29 |
| 7 | Demonstration of lateral field-effect transistors using Sn-doped Î²-(AlGa)<sub>2</sub>O<sub>3</sub> (010). Japanese Journal of Applied Physics, 2019, 58, SBBD12. | 1.5 | 29 |
| 8 | Impact of surface step heights of 6Hâ€“SiC (0001) vicinal substrates in heteroepitaxial growth of 2Hâ€“AlN. Applied Surface Science, 2008, 254, 7858-7860. | 6.1 | 26 |
| 9 | Over-700-nm Critical Thickness of AlN Grown on 6H-SiC(0001) by Molecular Beam Epitaxy. Applied Physics Express, 2012, 5, 105502. | 2.4 | 26 |
| 10 | N-polar AlN buffer growth by metalâ€“organic vapor phase epitaxy for transistor applications. Applied Physics Express, 2018, 11, 101002. | 2.4 | 16 |
| 11 | Enhancement of initial layer-by-layer growth and reduction of threading dislocation density by optimized Ga pre-irradiation in molecular-beam epitaxy of 2H-AlN on 6H-SiC(0001). Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2094-2096. | 0.8 | 14 |
| 12 | Formation mechanism of threading-dislocation array in AlN layers grown on 6H-SiC (0001) substrates with 3-bilayer-high surface steps. Applied Physics Letters, 2014, 105, . | 3.3 | 14 |
| 13 | Optical Properties of Highly Strained AlN Coherently Grown on 6H-SiC(0001). Applied Physics Express, 2013, 6, 062604. | 2.4 | 12 |
| 14 | Low p-type contact resistance by field-emission tunneling in highly Mg-doped GaN. Applied Physics Letters, 2016, 109, . | 3.3 | 11 |
| 15 | Vacancy-type defects in Mg-doped GaN grown by ammonia-based molecular beam epitaxy probed using a monoenergetic positron beam. Journal of Applied Physics, 2016, 119, 245702. | 2.5 | 9 |
| 16 | Fabrication of an AlN ridge structure using inductively coupled Cl<sub>2</sub>/BCl<sub>3</sub> plasma and a TMAH solution. Japanese Journal of Applied Physics, 2019, 58, 026502. | 1.5 | 9 |
| 17 | Impurity diffusion in ion implanted AlN layers on sapphire substrates by thermal annealing. Japanese Journal of Applied Physics, 2022, 61, 026501. | 1.5 | 8 |
| 18 | In situGravimetric Monitoring of Thermal Decomposition and Hydrogen Etching Rates of 6H-SiC(0001) Si Face. Japanese Journal of Applied Physics, 2009, 48, 095505. | 1.5 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Observation of novel defect structure in 2H-AlN grown on 6H-SiC(0001) substrates with 3-bilayer-height step-and-terrace structures. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1187-1189. | 1.8 | 5 |
| 20 | Coherent Growth of AlN/GaN Short-Period Superlattice with Average GaN Mole Fraction of up to 20% on 6H-SiC(0001) Substrates by Plasma-Assisted Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 08JE21. | 1.5 | 4 |
| 21 | AlN/GaN Short-Period Superlattice Coherently Grown on 6H-SiC(0001) Substrates by Molecular Beam Epitaxy. Applied Physics Express, 2012, 5, 051002. | 2.4 | 3 |
| 22 | Growth of Nitrogen-Polar 2H-AlN on Step-Height-Controlled 6H-SiC(0001Ì„) Substrate by Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2012, 51, 02BH02. | 1.5 | 3 |
| 23 | Photo-induced conductivity transient in n-type Î²-(Al0.16Ga0.84)2O3 and Î²-Ga2O3. Japanese Journal of Applied Physics, 2021, 60, SBBD15. | 1.5 | 2 |
| 24 | Electrical properties of heavily Sn-doped (AlGa)2O3 layers on Î²-Ga2O3 (010) substrates. Japanese Journal of Applied Physics, 2021, 60, 065504. | 1.5 | 2 |
| 25 | Optical and electrical properties of silicon-implanted Î±-Al<sub>2</sub>O<sub>3</sub>. Japanese Journal of Applied Physics, 2021, 60, 106502. | 1.5 | 2 |
| 26 | Growth of double-barrier Î²-(AlGa)<sub>2</sub>O<sub>3</sub>/Ga<sub>2</sub>O<sub>3</sub> structure and heavily Sn-doped Ga<sub>2</sub>O<sub>3</sub> layers using molecular-beam epitaxy. Japanese Journal of Applied Physics, 2020, 59, 075503. | 1.5 | 2 |
| 27 | Growth of Nitrogen-Polar 2H-AlN on Step-Height-Controlled 6H-SiC(0001Ì„) Substrate by Molecular-Beam Epitaxy. Japanese Journal of Applied Physics, 2012, 51, 02BH02. | 1.5 | 1 |
| 28 | Photoconductivity buildup and decay kinetics in unintentionally doped Î²-Ga<sub>2</sub>O<sub>3</sub>. Japanese Journal of Applied Physics, 0, , . | 1.5 | 1 |