

Takayoshi Oshima

List of Publications by Year in descending order

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3073
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| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Selective area growth of $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ by HCl-based halide vapor phase epitaxy. Applied Physics Express, 2022, 15, 075503. | 2.4 | 11 |
| 2 | Rapid growth of $\text{In}^{\pm}\text{-Ga}_2\text{O}_3$ by HCl-boosted halide vapor phase epitaxy and effect of precursor supply conditions on crystal properties. Semiconductor Science and Technology, 2020, 35, 055022. | 2.0 | 19 |
| 3 | Phase-controlled epitaxial lateral overgrowth of $\text{In}^{\pm}\text{-Ga}_2\text{O}_3$ by halide vapor phase epitaxy. Japanese Journal of Applied Physics, 2020, 59, 025512. | 1.5 | 10 |
| 4 | In-plane orientation control of (001) $\text{In}^{\pm}\text{-Ga}_2\text{O}_3$ by epitaxial lateral overgrowth through a geometrical natural selection mechanism. Japanese Journal of Applied Physics, 2020, 59, 115501. | 1.5 | 26 |
| 5 | In-plane anisotropy in the direction of the dislocation bending in $\text{In}^{\pm}\text{-Ga}_2\text{O}_3$ grown by epitaxial lateral overgrowth. Applied Physics Express, 2020, 13, 115502. | 2.4 | 7 |
| 6 | Photodetectors. Springer Series in Materials Science, 2020, , 703-725. | 0.6 | 0 |
| 7 | Microwave Power Rectification Using $\text{In}^{\pm}\text{-Ga}_2\text{O}_3$ Schottky Barrier Diodes. IEEE Electron Device Letters, 2019, 40, 1393-1395. | 3.9 | 7 |
| 8 | Characterization of pseudomorphic $\text{In}^{\pm}\text{-Ga}_2\text{O}_3$ and $\text{In}^{\pm}\text{-Al}_2\text{O}_3$ films on MgAl_2O_4 substrates and the band-alignment at the coherent $\text{In}^{\pm}\text{-Ga}_2\text{O}_3/\text{Al}_2\text{O}_3$ heterojunction interface. Japanese Journal of Applied Physics, 2019, 58, 060910. | 1.5 | 15 |
| 9 | Fabrication of coherent $\text{In}^{\pm}\text{-Al}_2\text{O}_3/\text{Ga}_2\text{O}_3$ superlattices on MgAl_2O_4 substrates. Applied Physics Express, 2019, 12, 065503. | 2.4 | 11 |
| 10 | Demonstration of lateral field-effect transistors using Sn-doped $\text{In}^{2+}\text{-(AlGa)}_2\text{O}_3$ (010). Japanese Journal of Applied Physics, 2019, 58, SBBD12. | 1.5 | 29 |
| 11 | $\text{In}^{\pm}\text{-Al}_2\text{O}_3/\text{Ga}_2\text{O}_3$ superlattices coherently grown on r -plane sapphire. Applied Physics Express, 2018, 11, 065501. | 2.4 | 21 |
| 12 | $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ -based metal-oxide semiconductor photodiodes with HfO_2 as oxide. Applied Physics Express, 2018, 11, 112202. | 2.4 | 9 |
| 13 | Measurements of the band alignment at coherent $\text{In}^{\pm}\text{-Ga}_2\text{O}_3/\text{Al}_2\text{O}_3$ heterojunctions. Japanese Journal of Applied Physics, 2018, 57, 080308. | 1.5 | 14 |
| 14 | Carrier confinement observed at modulation-doped $\text{In}^{2+}\text{-(AlGa)}_2\text{O}_3$ interface. Applied Physics Express, 2017, 10, 035701. | 2.4 | 105 |
| 15 | Epitaxial growth of $\text{In}^{2+}\text{-(AlGa)}_2\text{O}_3$ alloy films for band-gap engineering. Applied Physics Express, 2017, 10, 051104. | 2.4 | 29 |
| 16 | Hetero-epitaxial growth control of single-crystalline anatase TiO_2 nanosheets predominantly exposing the {001} facet on oriented crystalline substrates. CrystEngComm, 2017, 19, 4734-4741. | 2.6 | 4 |
| 17 | Formation of stacking fault and dislocation behavior during the high-temperature annealing of single-crystal HPHT diamond. Diamond and Related Materials, 2017, 75, 155-160. | 3.9 | 20 |
| 18 | Microwave Effects on Co-Pi Cocatalysts Deposited on $\text{In}^{\pm}\text{-Fe}_2\text{O}_3$ for Application to Photocatalytic Oxygen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 10349-10354. | 8.0 | 36 |

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|----|---|-----|-----------|
| 19 | Crystal defects observed by the etch-pit method and their effects on Schottky-barrier-diode characteristics on $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$. Japanese Journal of Applied Physics, 2017, 56, 091101. | 1.5 | 63 |
| 20 | Electrical properties of Schottky barrier diodes fabricated on (001) $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$ substrates with crystal defects. Japanese Journal of Applied Physics, 2017, 56, 086501. | 1.5 | 74 |
| 21 | Epitaxial growth and electric properties of $\text{In}^{3+}\text{-Al}_{2}\text{O}_{3}$ (110) films on $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$ (010) substrates. Japanese Journal of Applied Physics, 2016, 55, 1202B6. | 1.5 | 33 |
| 22 | Strain-induced metal-insulator transition in a system of perovskite titanate | 3.2 | 6 |
| 23 | Relationship between crystal defects and leakage current in $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$ Schottky barrier diodes. Japanese Journal of Applied Physics, 2016, 55, 1202BB. | 1.5 | 70 |
| 24 | Formation of indium-tin oxide ohmic contacts for $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$. Japanese Journal of Applied Physics, 2016, 55, 1202B7. | 1.5 | 36 |
| 25 | Fabrication and Characterization of Semiconductor Photoelectrodes with Orientation-Controlled $\text{In}^{\pm}\text{-Fe}_{2}\text{O}_{3}$ Thin Films. Journal of Physical Chemistry C, 2016, 120, 2747-2752. | 3.1 | 20 |
| 26 | Reversible superconductor-insulator transition in $\text{LiTi}_{2}\text{O}_{4}$ induced by Li-ion electrochemical reaction. Scientific Reports, 2015, 5, 16325. | 3.3 | 17 |
| 27 | Direct growth of metallic TiH_{2} thin films by pulsed laser deposition. Applied Physics Express, 2015, 8, 035801. | 2.4 | 8 |
| 28 | Synthesis and magnetic properties of double-perovskite oxide films. Physical Review B, 2015, 91, . | 2.2 | 39 |
| 29 | Oxygen-radical-assisted pulsed-laser deposition of $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$ and $\text{In}^{2+}\text{-(Al Ga)}_{2}\text{O}_{3}$ films. Journal of Crystal Growth, 2015, 424, 77-79. | 1.5 | 45 |
| 30 | Conducting Si-doped $\text{In}^{3+}\text{-Ga}_{2}\text{O}_{3}$ epitaxial films grown by pulsed-laser deposition. Journal of Crystal Growth, 2015, 421, 23-26. | 1.5 | 48 |
| 31 | Pulsed-laser deposition of superconducting $\text{LiTi}_{2}\text{O}_{4}$ ultrathin films. Journal of Crystal Growth, 2015, 419, 153-157. | 1.5 | 11 |
| 32 | Epitaxial growth of wide-band-gap $\text{ZnGa}_{2}\text{O}_{4}$ films by mist chemical vapor deposition. Journal of Crystal Growth, 2014, 386, 190-193. | 1.5 | 30 |
| 33 | Formation of Semi-Insulating Layers on Semiconducting $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$ Single Crystals by Thermal Oxidation. Japanese Journal of Applied Physics, 2013, 52, 051101. | 1.5 | 39 |
| 34 | $\text{In}^{2+}\text{-Ga}_{2}\text{O}_{3}$ Single Crystal as a Photoelectrode for Water Splitting. Japanese Journal of Applied Physics, 2013, 52, 111102. | 1.5 | 47 |
| 35 | Epitaxial Synthesis and Electronic Properties of Double-Perovskite $\text{Sr}_{2}\text{TiRuO}_{6}$ Films. Applied Physics Express, 2013, 6, 105502. | 2.4 | 8 |
| 36 | Spontaneous atomic ordering and magnetism in epitaxially stabilized double perovskites. Journal of Materials Research, 2013, 28, 689-695. | 2.6 | 30 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Epitaxial Structures of Band-Gap-Engineered $\text{In}_{1-x}\text{Fe}_x\text{Ga}_2\text{O}_3$ (0 ≤ x ≤ 1) Films Grown on C-Plane Sapphire. Japanese Journal of Applied Physics, 2012, 51, 11PG11. | 1.5 | 8 |
| 38 | Epitaxial growth of In^{3+} -Ga ₂ O ₃ films by mist chemical vapor deposition. Journal of Crystal Growth, 2012, 359, 60-63. | 1.5 | 98 |
| 39 | Growth of SnO ₂ crystalline thin films by mist chemical vapour deposition method. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 540-542. | 0.8 | 46 |
| 40 | Band-gap narrowing in $\text{In}_{1-x}\text{Fe}_x\text{Ga}_2\text{O}_3$ solid-solution films. Applied Physics Letters, 2011, 99, . | 3.3 | 59 |
| 41 | Flame Detection by a In^{2+} -Ga ₂ O ₃ -Based Sensor. Japanese Journal of Applied Physics, 2009, 48, 011605. | 1.5 | 142 |
| 42 | In^{2+} -Al ₂ Ga ₂ O ₃ Thin Film Growth by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2009, 48, 070202. | 1.5 | 110 |
| 43 | Wet Etching of In^{2+} -Ga ₂ O ₃ Substrates. Japanese Journal of Applied Physics, 2009, 48, 040208. | 1.5 | 53 |
| 44 | UV-B Sensor Based on a SnO ₂ Thin Film. Japanese Journal of Applied Physics, 2009, 48, 120207. | 1.5 | 36 |
| 45 | Properties of Ga ₂ O ₃ -based $\text{In}_x\text{Tl}_{1-x}\text{Ga}_2\text{O}_3$ epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3113-3115. | 0.8 | 75 |
| 46 | Surface morphology of homoepitaxial In^{2+} -Ga ₂ O ₃ thin films grown by molecular beam epitaxy. Thin Solid Films, 2008, 516, 5768-5771. | 1.8 | 128 |
| 47 | Atomically controlled surfaces with step and terrace of In^{2+} -Ga ₂ O ₃ single crystal substrates for thin film growth. Applied Surface Science, 2008, 254, 7838-7842. | 6.1 | 32 |
| 48 | Vertical Solar-Blind Deep-Ultraviolet Schottky Photodetectors Based on In^{2+} -Ga ₂ O ₃ Substrates. Applied Physics Express, 2008, 1, 011202. | 2.4 | 342 |
| 49 | Ga ₂ O ₃ Thin Film Growth on c-Plane Sapphire Substrates by Molecular Beam Epitaxy for Deep-Ultraviolet Photodetectors. Japanese Journal of Applied Physics, 2007, 46, 7217. | 1.5 | 480 |
| 50 | Carrier concentration dependence of band gap shift in n-type ZnO:Al films. Journal of Applied Physics, 2007, 101, 083705. | 2.5 | 380 |
| 51 | Zno-based thin films synthesized by atmospheric pressure mist chemical vapor deposition. Journal of Crystal Growth, 2007, 299, 1-10. | 1.5 | 160 |
| 52 | (111)-Oriented Zn ₃ N ₂ Growth on a-Plane Sapphire Substrates by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2006, 45, 8653-8655. | 1.5 | 19 |