# Akira Uedono

List of Publications by Year
in descending order



| 419 | 7,096 | 81743 | 110170 |
|---|---|---|---|
| papers | citations | 39 h-index | 64 g-index |

| 422 | 422 | 422 | 5066 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Origin of defect-insensitive emission probability in In-containing (Al,In,Ga)N alloy semiconductors. Nature Materials, 2006, 5, 810-816. | 13.3 | 625 |
| 2 | Correlation between the photoluminescence lifetime and defect density in bulk and epitaxial ZnO. Applied Physics Letters, 2003, 82, 532-534. | 1.5 | 232 |
| 3 | Limiting factors of room-temperature nonradiative photoluminescence lifetime in polar and nonpolar GaN studied by time-resolved photoluminescence and slow positron annihilation techniques. Applied Physics Letters, 2005, 86, 021914. | 1.5 | 138 |
| 4 | The origins and properties of intrinsic nonradiative recombination centers in wide bandgap GaN and AlGaN. Journal of Applied Physics, 2018, 123, . | 1.1 | 112 |
| 5 | Improvements in quantum efficiency of excitonic emissions in ZnO epilayers by the elimination of point defects. Journal of Applied Physics, 2006, 99, 093505. | 1.1 | 105 |
| 6 | Defects in ZnO thin films grown on ScAlMgO4 substrates probed by a monoenergetic positron beam. Journal of Applied Physics, 2003, 93, 2481-2485. | 1.1 | 103 |
| 7 | Impacts of Si-doping and resultant cation vacancy formation on the luminescence dynamics for the near-band-edge emission of Al0.6Ga0.4N films grown on AlN templates by metalorganic vapor phase epitaxy. Journal of Applied Physics, 2013, 113, . | 1.1 | 98 |
| 8 | Study of defects in GaN grown by the two-flow metalorganic chemical vapor deposition technique using monoenergetic positron beams. Journal of Applied Physics, 2001, 90, 181-186. | 1.1 | 92 |
| 9 | Radiative and nonradiative processes in strain-free AlxGa1â^'xN films studied by time-resolved photoluminescence and positron annihilation techniques. Journal of Applied Physics, 2004, 95, 2495-2504. | 1.1 | 88 |
| 10 | Generation of Thermal Muonium in Vacuum. Physical Review Letters, 1986, 56, 1463-1466. | 2.9 | 75 |
| 11 | Study of oxygen vacancies in SrTiO3 by positron annihilation. Journal of Applied Physics, 2002, 92, 2697-2702. | 1.1 | 73 |
| 12 | Effect of La doping on the lattice defects and photoluminescence properties of CuO. Journal of Alloys and Compounds, 2017, 709, 496-504. | 2.8 | 73 |
| 13 | 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. | 1.1 | 70 |
| 14 | Relation between Al vacancies and deep emission bands in AlN epitaxial films grown by NH3-source molecular beam epitaxy. Applied Physics Letters, 2007, 90, 241914. | 1.5 | 69 |
| 15 | Time-resolved photoluminescence, positron annihilation, and Al0.23Ga0.77N/GaN heterostructure growth studies on low defect density polar and nonpolar freestanding GaN substrates grown by hydride vapor phase epitaxy. Journal of Applied Physics, 2012, 111, . | 1.1 | 67 |
| 16 | Excitonâ€“polariton spectra and limiting factors for the room-temperature photoluminescence efficiency in ZnO. Semiconductor Science and Technology, 2005, 20, S67-S77. | 1.0 | 66 |
| 17 | Vacancyâ€type defects and their annealing behaviors in Mgâ€implanted GaN studied by a monoenergetic positron beam. Physica Status Solidi (B): Basic Research, 2015, 252, 2794-2801. | 0.7 | 65 |
| 18 | Vacancy-oxygen complexes and their optical properties in AlN epitaxial films studied by positron annihilation. Journal of Applied Physics, 2009, 105, . | 1.1 | 63 |

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| 19 | Synthesis, defect characterization and photocatalytic degradation efficiency of Tb doped CuO nanoparticles. Advanced Powder Technology, 2017, 28, 3026-3038. | 2.0 | 61 |
| 20 | Carrier Trapping by Vacancyâ€Type Defects in Mgâ€Implanted GaN Studied Using Monoenergetic Positron Beams. Physica Status Solidi (B): Basic Research, 2018, 255, 1700521. | 0.7 | 60 |
| 21 | Impact of growth polar direction on the optical properties of GaN grown by metalorganic vapor phase epitaxy. Applied Physics Letters, 2001, 78, 28-30. | 1.5 | 57 |
| 22 | Radiative and nonradiative excitonic transitions in nonpolar (112Ì„0) and polar (0001Ì„) and (0001) ZnO epilayers. Applied Physics Letters, 2004, 84, 1079-1081. | 1.5 | 55 |
| 23 | Large electron capture-cross-section of the major nonradiative recombination centers in Mg-doped GaN epilayers grown on a GaN substrate. Applied Physics Letters, 2018, 112, . | 1.5 | 55 |
| 24 | Effect of Free-Volume Holes on Dynamic Mechanical Properties of Epoxy Resins for Carbon-Fiber-Reinforced Polymers. Macromolecules, 2017, 50, 3933-3942. | 2.2 | 54 |
| 25 | A Study of Vacancy-Type Defects in B+-Implanted SiO2/Si by a Slow Positron Beam. Japanese Journal of Applied Physics, 1989, 28, 1293-1297. | 0.8 | 53 |
| 26 | Brightness enhancement method for a high-intensity positron beam produced by an electron accelerator. Journal of Applied Physics, 2008, 103, . | 1.1 | 53 |
| 27 | Native cation vacancies in Si-doped AlGaN studied by monoenergetic positron beams. Journal of Applied Physics, 2012, 111, . | 1.1 | 53 |
| 28 | The dependence of oxygen vacancy distributions in BiFeO3 films on oxygen pressure and substrate. Applied Physics Letters, 2009, 95, . | 1.5 | 52 |
| 29 | Point defects in group-III nitride semiconductors studied by positron annihilation. Journal of Crystal Growth, 2009, 311, 3075-3079. | 0.7 | 51 |
| 30 | Recent advances and challenges for successful pâ€type control of InN films with Mg acceptor doping by molecular beam epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1011-1023. | 0.8 | 48 |
| 31 | A study of agglomeration and release processes of helium implanted in nickel by a variable energy positron beam. Journal of Nuclear Materials, 1985, 133-134, 463-467. | 1.3 | 47 |
| 32 | Transition and relaxation processes of polyethylene, polypropylene, and polystyrene studied by positron annihilation. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 1601-1609. | 2.4 | 47 |
| 33 | Investigation of defect related photoluminescence property of multicolour emitting Gd<sub>2</sub>O<sub>3</sub>:Dy<sup>3+</sup>phosphor. RSC Advances, 2014, 4, 34257. | 1.7 | 47 |
| 34 | Free and bound exciton fine structures in AlN epilayers grown by low-pressure metalorganic vapor phase epitaxy. Journal of Applied Physics, 2009, 105, . | 1.1 | 45 |
| 35 | Rapid three-dimensional imaging of defect distributions using a high-intensity positron microbeam. Applied Physics Letters, 2009, 94, 194104. | 1.5 | 43 |
| 36 | Recent Progress in Gas Barrier Thin Film Coatings on PET Bottles in Food and Beverage Applications. Coatings, 2015, 5, 987-1001. | 1.2 | 43 |

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| 37 | AlN metalâ€“semiconductor field-effect transistors using Si-ion implantation. Japanese Journal of Applied Physics, 2018, 57, 04FR11. | 0.8 | 42 |
| 38 | Metal ion binding properties of novel wool powders. Journal of Applied Polymer Science, 2010, 115, 1642-1650. | 1.3 | 41 |
| 39 | Room-temperature photoluminescence lifetime for the near-band-edge emission of (0001Â¯) p-type GaN fabricated by sequential ion-implantation of Mg and H. Applied Physics Letters, 2018, 113, . | 1.5 | 40 |
| 40 | Defect Production in Phosphorus Ion-Implanted SiO2(43 nm)/Si Studied by a Variable-Energy Positron Beam. Japanese Journal of Applied Physics, 1991, 30, 201-206. | 0.8 | 39 |
| 41 | Improvement of crystal quality of GaInNAs films grown by atomic hydrogen-assisted RF-MBE. Journal of Crystal Growth, 2005, 278, 553-557. | 0.7 | 39 |
| 42 | Interlaboratory comparison of positron annihilation lifetime measurements for synthetic fused silica and polycarbonate. Journal of Applied Physics, 2008, 104, . | 1.1 | 39 |
| 43 | Annealing properties of vacancy-type defects in ion-implanted GaN studied by monoenergetic positron beams. Journal of Applied Physics, 2007, 102, 084505. | 1.1 | 38 |
| 44 | Defectâ€Resistant Radiative Performance of mâ€Plane Immiscible Al<sub>1â^'</sub><sub>x</sub>In<sub>x</sub>N Epitaxial Nanostructures for Deepâ€Ultraviolet and Visible Polarized Light Emitters. Advanced Materials, 2017, 29, 1603644. | 11.1 | 38 |
| 45 | Low temperature buffer growth for modulation doped SiGe/Ge/SiGe heterostructures with high hole mobility. Thin Solid Films, 2000, 369, 320-323. | 0.8 | 36 |
| 46 | Positronium formation in SiO2films grown on Si substrates studied by monoenergetic positron beams. Journal of Applied Physics, 1994, 75, 3822-3828. | 1.1 | 35 |
| 47 | Nanoporous structure of methyl-silsesquioxane films using monoenergetic positron beams. Journal of Applied Physics, 2001, 90, 2498-2503. | 1.1 | 35 |
| 48 | Leaching properties of chromate-containing epoxy films using radiotracers, PALS and SEM. Progress in Organic Coatings, 2014, 77, 257-267. | 1.9 | 35 |
| 49 | Vacancyâ€type defects in Si+â€implanted GaAs and its effects on electrical activation by rapid thermal annealing. Journal of Applied Physics, 1990, 67, 6153-6158. | 1.1 | 34 |
| 50 | Reduced defect densities in the ZnO epilayer grown on Si substrates by laser-assisted molecular-beam epitaxy using a ZnS epitaxial buffer layer. Applied Physics Letters, 2004, 85, 5586-5588. | 1.5 | 34 |
| 51 | Vacancy-type defects in BaTiO3/SrTiO3 structures probed by monoenergetic positron beams. Journal of Applied Physics, 2002, 91, 5307-5312. | 1.1 | 33 |
| 52 | Defect characterization in Mg-doped GaN studied using a monoenergetic positron beam. Journal of Applied Physics, 2012, 111, . | 1.1 | 33 |
| 53 | Formation of low resistance ohmic contacts in GaN-based high electron mobility transistors with BCl3 surface plasma treatment. Applied Physics Letters, 2013, 103, . | 1.5 | 33 |
| 54 | First-principles calculation of positron states and annihilation parameters for group-III nitrides. Journal of Physics: Conference Series, 2014, 505, 012010. | 0.3 | 33 |

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| 55 | Positron annihilation in electron irradiated Cz-Si. Hyperfine Interactions, 1993, 79, 615-619. | 0.2 | 32 |
| 56 | Annealing Properties of Defects inB+- andF+-Implanted Si Studied Using Monoenergetic Positron Beams. Japanese Journal of Applied Physics, 1997, 36, 2571-2580. | 0.8 | 32 |
| 57 | Characterization of Grown-in Dislocations in Benzophenone Single Crystals by X-Ray Topography. Japanese Journal of Applied Physics, 1992, 31, 2202-2205. | 0.8 | 31 |
| 58 | Major impacts of point defects and impurities on the carrier recombination dynamics in AlN. Applied Physics Letters, 2010, 97, . | 1.5 | 31 |
| 59 | Impact of back-grinding-induced damage on Si wafer thinning for three-dimensional integration. Japanese Journal of Applied Physics, 2014, 53, 05GE04. | 0.8 | 30 |
| 60 | Simple way of finding Ba to Si deposition rate ratios for high photoresponsivity in BaSi<sub>2</sub> films by Raman spectroscopy. Applied Physics Express, 2019, 12, 055506. | 1.1 | 30 |
| 61 | Epitaxial growth of BaTiO3/SrTiO3 structures on SrTiO3 substrate with automatic feeding of oxygen from the substrate. Journal of Applied Physics, 2002, 92, 4625-4630. | 1.1 | 29 |
| 62 | Defects Introduced by MeV-Energy Ion Implantation into Si Probed by a Monoenergetic Positron Beam. Japanese Journal of Applied Physics, 1991, 30, 1597-1603. | 0.8 | 28 |
| 63 | Investigation of Positron Moderator Materials for Electron-Linac-Based Slow Positron Beamlines. Japanese Journal of Applied Physics, 1998, 37, 4636-4643. | 0.8 | 28 |
| 64 | Behavior of oxygen vacancies in BiFeO3/SrRuO3/SrTiO3(100) and DyScO3(100) heterostructures. Applied Physics Letters, 2009, 94, . | 1.5 | 28 |
| 65 | Identification of extremely radiative nature of AlN by time-resolved photoluminescence. Applied Physics Letters, 2010, 96, . | 1.5 | 28 |
| 66 | Variableâ€energy positronâ€beam studies of SiO2/Si irradiated by ionizing radiation. Applied Physics Letters, 1988, 53, 473-475. | 1.5 | 27 |
| 67 | Vacancy-Type Defects in As+-Implanted SiO2(43 nm)/Si Proved with Slow Positrons. Japanese Journal of Applied Physics, 1990, 29, 1867-1872. | 0.8 | 27 |
| 68 | Impact of Al in Cu alloy interconnects on electro and stress migration reliabilities. Microelectronic Engineering, 2008, 85, 2137-2141. | 1.1 | 27 |
| 69 | Collateral evidence for an excellent radiative performance of AlxGa1â^'xN alloy films of high AlN mole fractions. Applied Physics Letters, 2011, 99, 051902. | 1.5 | 27 |
| 70 | Excitonic emission dynamics in homoepitaxial AlN films studied using polarized and spatio-time-resolved cathodoluminescence measurements. Applied Physics Letters, 2013, 103, . | 1.5 | 27 |
| 71 | Annealing Behavior of Vacancyâ€Type Defects in Mgâ€and Hâ€Implanted GaN Studied Using Monoenergetic Positron Beams. Physica Status Solidi (B): Basic Research, 2019, 256, 1900104. | 0.7 | 27 |
| 72 | Metal/oxide/semiconductor interface investigated by monoenergetic positrons. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 133, 82-84. | 0.9 | 26 |

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| 73 | Depth profile of vacancyâ€type defects in B+â€implanted Si with a SiO2overlayer by a variableâ€energy positron beam. Applied Physics Letters, 1988, 53, 25-27. | 1.5 | 26 |
| 74 | Positron annihilation in SiO2â€“Si studied by a pulsed slow positron beam. Applied Surface Science, 2002, 194, 89-96. | 3.1 | 26 |
| 75 | Origin of localized excitons in In-containing three-dimensional bulk (Al,In,Ga)N alloy films probed by time-resolved photoluminescence and monoenergetic positron annihilation techniques. Philosophical Magazine, 2007, 87, 2019-2039. | 0.7 | 26 |
| 76 | Positron Annihilation Spectroscopy on Nitride-Based Semiconductors. Japanese Journal of Applied Physics, 2013, 52, 08JJ02. | 0.8 | 26 |
| 77 | In-situ characterization of free-volume holes in polymer thin films under controlled humidity conditions with an atmospheric positron probe microanalyzer. Applied Physics Letters, 2012, 101, . | 1.5 | 25 |
| 78 | Room temperature photoluminescence lifetime for the near-band-edge emission of epitaxial and ion-implanted GaN on GaN structures. Japanese Journal of Applied Physics, 2019, 58, SC0802. | 0.8 | 25 |
| 79 | Defects introduced into electroplated Cu films during room-temperature recrystallization probed by a monoenergetic positron beam. Journal of Applied Physics, 2005, 98, 043504. | 1.1 | 24 |
| 80 | Vacancy-type defects in Er-doped GaN studied by a monoenergetic positron beam. Journal of Applied Physics, 2008, 103, 104505. | 1.1 | 24 |
| 81 | Vacancy-type defects in Mg-doped InN probed by means of positron annihilation. Journal of Applied Physics, 2009, 105, . | 1.1 | 24 |
| 82 | Thermal stability of semi-insulating property of Fe-doped GaN bulk films studied by photoluminescence and monoenergetic positron annihilation techniques. Journal of Applied Physics, 2009, 105, 083542. | 1.1 | 24 |
| 83 | Annealing behaviors of vacancy-type defects in AlN deposited by radio-frequency sputtering and metalorganic vapor phase epitaxy studied using monoenergetic positron beams. Journal of Applied Physics, 2020, 128, . | 1.1 | 24 |
| 84 | Characterization of Diamond Films Synthesized on Si from a Gas Phase in Microwave Plasma by Slow Positrons. Japanese Journal of Applied Physics, 1990, 29, 555-559. | 0.8 | 23 |
| 85 | Characterization of Separation-by-Implanted-Oxygen Wafers with Monoenergetic Positron Beams. Japanese Journal of Applied Physics, 1993, 32, 3682-3686. | 0.8 | 23 |
| 86 | Effects of Recoil-Implanted Oxygen on Depth Profiles of Defects and Annealing Processes inP+-Implanted Si Studied Using Monoenergetic Positron Beams. Japanese Journal of Applied Physics, 1996, 35, 2000-2007. | 0.8 | 23 |
| 87 | Vacancy-type defects in electroplated Cu films probed by using a monoenergetic positron beam. Journal of Applied Physics, 2004, 95, 913-918. | 1.1 | 23 |
| 88 | Positron Annihilation in Proton Irradiated Czochralski-Grown Si. Japanese Journal of Applied Physics, 1994, 33, 1-5. | 0.8 | 22 |
| 89 | Characterization of vacancy-type defects and phosphorus donors introduced in 6H-SiC by ion implantation. Applied Physics A: Materials Science and Processing, 1998, 67, 407-412. | 1.1 | 22 |
| 90 | Hydrogen-terminated defects in ion-implanted silicon probed by monoenergetic positron beams. Journal of Applied Physics, 2003, 93, 3228-3233. | 1.1 | 22 |

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| 91 | Characterization of HfSiON gate dielectrics using monoenergetic positron beams. Journal of Applied Physics, 2006, 99, 054507. | 1.1 | 22 |
| 92 | Optically active vacancies in GaN grown on Si substrates probed using a monoenergetic positron beam. Applied Physics Letters, 2014, 104, 082110. | 1.5 | 22 |
| 93 | Enhanced photo/electroluminescence properties of Eu-doped GaN through optimization of the growth temperature and Eu related defect environment. APL Materials, 2016, 4, 056103. | 2.2 | 22 |
| 94 | Surface sealing using self-assembled monolayers and its effect on metal diffusion in porous low- k dielectrics studied using monoenergetic positron beams. Applied Surface Science, 2016, 368, 272-276. | 3.1 | 22 |
| 95 | Vacancies and electron trapping centers in acidic ammonothermal GaN probed by a monoenergetic positron beam. Journal of Crystal Growth, 2016, 448, 117-121. | 0.7 | 22 |
| 96 | Influence of Si wafer thinning processes on (sub)surface defects. Applied Surface Science, 2017, 404, 82-87. | 3.1 | 22 |
| 97 | Effects of ultra-high-pressure annealing on characteristics of vacancies in Mg-implanted GaN studied using a monoenergetic positron beam. Scientific Reports, 2020, 10, 17349. | 1.6 | 22 |
| 98 | Study of various types of diamonds by measurements of double crystal xâ€ray diffraction and positron annihilation. Journal of Applied Physics, 1995, 78, 1510-1513. | 1.1 | 21 |
| 99 | Improvement of hydrogen absorption rate of Pd by ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 224-227. | 0.6 | 21 |
| 100 | A positron annihilation lifetime measurement system with an intense positron microbeam. Radiation Physics and Chemistry, 2009, 78, 1096-1098. | 1.4 | 21 |
| 101 | Vacancy-Boron Complexes in Plasma Immersion Ion-Implanted Si Probed by a Monoenergetic Positron Beam. Japanese Journal of Applied Physics, 2010, 49, 051301. | 0.8 | 21 |
| 102 | Low-resistivitym-plane freestanding GaN substrate with very low point-defect concentrations grown by hydride vapor phase epitaxy on a GaN seed crystal synthesized by the ammonothermal method. Applied Physics Express, 2015, 8, 095501. | 1.1 | 21 |
| 103 | Vacancy-type defects in Al2O3/GaN structure probed by monoenergetic positron beams. Journal of Applied Physics, 2018, 123, . | 1.1 | 21 |
| 104 | Effect of free-volume holes on static mechanical properties of epoxy resins studied by positron annihilation and PVT experiments. Polymer, 2020, 190, 122225. | 1.8 | 21 |
| 105 | Positron Annihilation in Vitreous Silica Glasses. Japanese Journal of Applied Physics, 1993, 32, 2687-2691. | 0.8 | 20 |
| 106 | Study of relaxation processes in polyethylene and polystyrene by positron annihilation. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 2145-2151. | 2.4 | 20 |
| 107 | Annealing properties of defects during Si-on-insulator fabrication by low-dose oxygen implantation studied by monoenergetic positron beams. Journal of Applied Physics, 2000, 87, 1659-1665. | 1.1 | 20 |
| 108 | Characterization of low temperature grown Si layer for SiGe pseudo-substrates by positron annihilation spectroscopy. Journal of Crystal Growth, 2001, 227-228, 761-765. | 0.7 | 20 |

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| 109 | Direct comparison of photoluminescence lifetime and defect densities in ZnO epilayers studied by time-resolved photoluminescence and slow positron annihilation techniques. Physica Status Solidi A, 2004, 201, 2841-2845. | 1.7 | 20 |
| 110 | Annealing properties of open volumes in HfSiOx and HfAlOx gate dielectrics studied using monoenergetic positron beams. Journal of Applied Physics, 2005, 98, 023506. | 1.1 | 20 |
| 111 | Vacancy-type defects in InxGa1â€“xN alloys probed using a monoenergetic positron beam. Journal of Applied Physics, 2012, 112, . | 1.1 | 20 |
| 112 | Characterization of Diamond Films by Means of a Pulsed Positron Beam. Japanese Journal of Applied Physics, 1992, 31, 2237-2240. | 0.8 | 19 |
| 113 | SiO2films deposited on Si substrates studied by monoenergetic positron beams. Journal of Applied Physics, 1994, 75, 216-222. | 1.1 | 19 |
| 114 | Defects in electron irradiated vitreous SiO2probed by positron annihilation. Journal of Physics Condensed Matter, 1994, 6, 8669-8677. | 0.7 | 19 |
| 115 | Free volumes in polystyrene probed by positron annihilation. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 1189-1195. | 2.4 | 19 |
| 116 | Open spaces in the subsurface region of polyethylene probed by monoenergetic positron beams. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 2597-2605. | 2.4 | 19 |
| 117 | Defects Induced by Wafer Processing and Thermal Treatment in InP Probed with Monoenergetic Positrons. Japanese Journal of Applied Physics, 1990, 29, 909-912. | 0.8 | 18 |
| 118 | Impact of Cu/III ratio on the near-surface defects in polycrystalline CuGaSe2 thin films. Applied Physics Letters, 2011, 98, 112105. | 1.5 | 18 |
| 119 | Behavior of copper contamination on backside damage for ultra-thin silicon three dimensional stacking structure. Microelectronic Engineering, 2017, 167, 23-31. | 1.1 | 18 |
| 120 | Carrier activation in Mg implanted GaN by short wavelength Nd:YAG laser thermal annealing. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700225. | 0.8 | 18 |
| 121 | Depth profiles on ion implantation induced vacancyâ€type defects in GaAs and Si observed by slow positron. Applied Physics Letters, 1988, 53, 1302-1304. | 1.5 | 17 |
| 122 | Free volumes in liquid-crystalline main-chain polymer probed by positron annihilation. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 891-897. | 2.4 | 17 |
| 123 | Thermal variation of free-volumes size distribution in polypropylenes. Probed by positron annihilation lifetime technique. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 1183-1190. | 2.4 | 17 |
| 124 | Vacancy-Type Defects in Ion-Implanted Diamonds Probed by Monoenergetic Positron Beams. Japanese Journal of Applied Physics, 1995, 34, 1772-1777. | 0.8 | 17 |
| 125 | Defects in Ion-Implanted 3Câ€“SiC Probed by a Monoenergetic Positron Beam. Japanese Journal of Applied Physics, 1996, 35, 5986-5990. | 0.8 | 17 |
| 126 | Free Volume in Polycarbonate Studied by Positron Annihilation: Effects of Free Radicals and Trapped Electrons on Positronium Formation. Japanese Journal of Applied Physics, 2001, 40, 5036-5040. | 0.8 | 17 |

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| 127 | Defects in Eu- and Tb-doped GaN probed using a monoenergetic positron beam. Journal of Applied Physics, 2003, 93, 5181-5184. | 1.1 | 17 |
| 128 | Valence band edge tail states and band gap defect levels of GaN bulk and In<sub>x</sub>Ga<sub>1â^'</sub><sub>x</sub>N films detected by hard X-ray photoemission and photothermal deflection spectroscopy. Applied Physics Express, 2018, 11, 021002. | 1.1 | 17 |
| 129 | Investigation of Al2O3/GaN interface properties by sub-bandgap photo-assisted capacitance-voltage technique. AIP Advances, 2019, 9, . | 0.6 | 17 |
| 130 | Positron Study of Vacancy-Type Defects Induced by Heavy Doping into MBE-Grown GaAs. Japanese Journal of Applied Physics, 1990, 29, L346-L348. | 0.8 | 16 |
| 131 | Impact of Point Defects on the Luminescence Properties of (Al,Ga)N. Materials Science Forum, 0, 590, 233-248. | 0.3 | 16 |
| 132 | Using X-ray tomography, PALS and Raman spectroscopy for characterization of inhibitors in epoxy coatings. Progress in Organic Coatings, 2012, 74, 726-733. | 1.9 | 16 |
| 133 | Effect of dopant concentration and annealing of Yttrium doped CuO nanocrystallites studied by positron annihilation spectroscopy. Journal of Alloys and Compounds, 2019, 788, 549-558. | 2.8 | 16 |
| 134 | Annealing Properties of Defects in Ion-Implanted 3C-SiC Studied Using Monoenergetic Positron Beams. Japanese Journal of Applied Physics, 1997, 36, 6650-6660. | 0.8 | 15 |
| 135 | Crystallization of an amorphous layer in P+-implanted 6H-SiC studied by monoenergetic positron beams. Journal of Applied Physics, 2000, 87, 4119-4125. | 1.1 | 15 |
| 136 | Positron annihilation in silicon in thermal equilibrium at high temperature. Journal of Physics Condensed Matter, 2000, 12, 719-728. | 0.7 | 15 |
| 137 | Local Bonding Structure of High-Stress Silicon Nitride Film Modified by UV Curing for Strained Silicon Technology beyond 45 nm Node SoC Devices. Japanese Journal of Applied Physics, 2007, 46, 1984-1988. | 0.8 | 15 |
| 138 | Impact of Se flux on the defect formation in polycrystalline Cu(In,Ga)Se2 thin films grown by three stage evaporation process. Journal of Applied Physics, 2013, 113, 064907. | 1.1 | 15 |
| 139 | Vacancy-type defects in InxGa1â^'xN grown on GaN templates probed using monoenergetic positron beams. Journal of Applied Physics, 2013, 114, . | 1.1 | 15 |
| 140 | Molecular motion and relaxation below glass transition temperature in poly (methyl methacrylate) studied by positron annihilation. Radiation Physics and Chemistry, 2015, 108, 81-86. | 1.4 | 15 |
| 141 | Probing the effect of point defects on the leakage blocking capability of Al0.1Ga0.9N/Si structures using a monoenergetic positron beam. Journal of Applied Physics, 2016, 120, . | 1.1 | 15 |
| 142 | Vacancy-type defects in bulk GaN grown by the Na-flux method probed using positron annihilation. Journal of Crystal Growth, 2017, 475, 261-265. | 0.7 | 15 |
| 143 | Homoepitaxial Growth of SrTiO3 in an Ultrahigh Vacuum with Automatic Feeding of Oxygen from the Substrate at Temperatures as Low as 370Â°C. Japanese Journal of Applied Physics, 2002, 41, L269-L271. | 0.8 | 14 |
| 144 | Defects in CeO[sub 2]/SrTiO[sub 3] fabricated by automatic feeding epitaxy probed using positron annihilation. Journal of Applied Physics, 2003, 94, 5193. | 1.1 | 14 |

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| 145 | Vacancy-type defects in Si-doped InN grown by plasma-assisted molecular-beam epitaxy probed using monoenergetic positron beams. Journal of Applied Physics, 2005, 97, 043514. | 1.1 | 14 |
| 146 | Effect of growth temperature on the properties of Ga(In)NAs thin films by atomic hydrogen-assisted RF-MBE. Journal of Crystal Growth, 2007, 301-302, 579-582. | 0.7 | 14 |
| 147 | Slow Positron Beam Apparatus for Surface and Subsurface Analysis of Samples in Air. Applied Physics Express, 2011, 4, 066701. | 1.1 | 14 |
| 148 | (Invited) Point Defect Characterization of Group-III Nitrides by Using Monoenergetic Positron Beams. ECS Transactions, 2014, 61, 19-30. | 0.3 | 14 |
| 149 | Computational study of positron annihilation parameters for cation mono-vacancies and vacancy complexes in nitride semiconductor alloys. Journal of Physics Condensed Matter, 2019, 31, 475401. | 0.7 | 14 |
| 150 | Characterization of the distribution of defects introduced by plasma exposure in Si substrate. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, . | 0.9 | 14 |
| 151 | Release processes of He implanted in Cu and Ni studied by a monoenergetic positron beam. Journal of Nuclear Materials, 1991, 184, 191-196. | 1.3 | 13 |
| 152 | Annihilation of positronium inÎ±-SiO2investigated by combined angular correlation and lifetime measurements. Physical Review B, 1996, 54, 15051-15055. | 1.1 | 13 |
| 153 | Characterization of residual defects in cubic silicon carbide subjected to hot-implantation and subsequent annealing. Journal of Applied Physics, 1997, 82, 5339-5347. | 1.1 | 13 |
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