

# JAPANESE JOURNAL OF APPLIED PHYSICS

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## Invited Review Papers

- 080001 Frequency Metrology with Optical Lattice Clocks (12 pages)  
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## Rapid Communications

- 080201 Process Conditions for Improvement of Electrical Properties of Al<sub>2</sub>O<sub>3</sub>/n-GaN Structures Prepared by Atomic Layer Deposition (3 pages)  
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- 080202 Characteristics of *m*-Plane InN Films Grown on ZnO Substrates at Room Temperature by Pulsed Laser Deposition (3 pages)  
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- 080203 High Power and High Efficiency Blue InGaN Light Emitting Diodes on Free-Standing Semipolar (3031) Bulk GaN Substrate (3 pages)  
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- 080204 Growth Orientation Control of Semipolar InN Films Using Yttria-Stabilized Zirconia Substrates (3 pages)  
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- 080205 Effect of Oxygen Precipitation in Nitrogen-Doped Annealed Silicon Wafers on Thermal Strain Induced by Rapid Thermal Processing (3 pages)  
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- 080206 Theoretical Investigation of the Crystal Structure and Electronic and Dielectric Properties of the Potential Multiferroic (C<sub>2</sub>H<sub>5</sub>NH<sub>3</sub>)<sub>2</sub>FeCl<sub>4</sub> (3 pages)  
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- 080207 Surface Relief Formation in Photo-Cross-Linkable Polymer/Benzophenone Composite Films Using 325 nm Laser (3 pages)  
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- 080208 3,6-Diarylcbazole Derivatives as a Host Material in Organic Electrophosphorescent Diodes (2 pages)  
Kenji Muneuchi, Masaomi Sasaki, Hiroyuki Sasabe, Chihaya Adachi
- 080209 Antiferroelectric Switching between Optically Isotropic and Birefringent B2 Phases of Bent-Shaped Molecules with High Tilt Angle of 45° (3 pages)  
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- 080210 Vertical Stand Transparent Light-Emitting Diode Architecture for High-Efficiency and High-Power Light-Emitting Diodes (3 pages)  
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- 080211 Effects of Pulse Rate and Temperature on Nonlinear Absorption of Pulsed 262-nm Laser Light in β-BaB<sub>2</sub>O<sub>4</sub> (3 pages)  
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- 080212 Phase Change Memory Cell Using Si<sub>2</sub>Sb<sub>2</sub>Te<sub>3</sub> Material (3 pages)  
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- 080213 Dynamic Behavior of Magnetic Alignment in Rotating Field for Magnetically Weak Particles (3 pages)  
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- 080214 Growth of Single-Walled Carbon Nanotubes below 450 °C Using Cobalt Catalyst (3 pages)  
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- 080215 Transparent Conductor: TiO<sub>x</sub>N<sub>y</sub> (3 pages)  
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- 080216 Composition Shift as a Function of Thickness in Fe<sub>3-x</sub>O<sub>4</sub>(001) Epitaxial Films (3 pages)  
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- 080220 **Vertically Aligned Liquid Crystal Molecules on TiO<sub>2</sub> Film Treated by Ion-Beam Irradiation** (3 pages)  
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**Regular Papers***Semiconductors, dielectrics, and organic materials*

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- 081202 **Growth and Optical Properties of Cd<sub>1-x</sub>Zn<sub>x</sub>S Thin Films** (5 pages)  
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- 081203 **Properties of InGaN Films Grown by Reactive Sputtering** (4 pages)  
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- 081301 **Contribution of Carbon to Growth of Boron-Containing Cluster in Heavily Boron-Doped Silicon** (5 pages)  
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- 087002 **Dielectric Relaxation Analysis of Single-Stranded DNA in Liquid Crystals** (5 pages)  
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- 088001 **EuCl<sub>2</sub> Powder as a Pressure-Memory Material** (2 pages)  
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**Errata**

- 089201 Erratum: "Microwave and Light-Wave Measurements for Nematic-Liquid-Crystal-Loaded Phase Shifter Using Coplanar Waveguide with Floating Electrode" [49 (2010) 01AF03] (1 page)  
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- 089202 Erratum: "Semiconducting Electronic Structure of Graphene Adsorbed on Insulating Substrate: Fragility of the Graphene Linear Dispersion Band" [49 (2010) 020204] (1 page)  
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