

PAGE **REGULAR ISSUE PAPERS**

- 2337 Deep Traps in AlGaIn/GaN Heterostructure Field-Effect Transistors Studied by Current-Mode Deep-Level Transient Spectroscopy: Influence of Device Location
Z.-Q. Fang, B. Clafin, and D.C. Look
- 2344 Elevated-Temperature Annealing Effects on AlGaIn/GaN Heterostructures
Benedict Ofuonye, Jaesun Lee, Minjun Yan, Qhalid Fareed, Iftikhar Ahmad, Asif Khan, and Ilesanmi Adesida
- 2348 S-Graded Buffer Layers for Lattice-Mismatched Heteroepitaxial Devices
S. Khurshi, F. Obst, D. Sidoti, B. Bertoli, T. Kujofsa, S. Cheruku, J.P. Correa, P.B. Rago, E.N. Suarez, F.C. Jain, and J.E. Ayers
- 2355 Study of 4H-SiC JBS Diodes Fabricated with Tungsten Schottky Barrier
M. Berthou, P. Godignon, J. Montserrat, J. Millan, and D. Planson
- 2363 Fabrication and Characterization of Silicon Microchannel Plates as Temperature-Sensing Materials
Pengliang Ci, Jing Shi, Fei Wang, Shaohui Xu, Zhenya Yang, Pingxiong Yang, Lianwei Wang, and Paul K. Chu
- 2368 Increase in the Thermoelectric Efficiency of the Disordered Phase of Layered Antiferromagnetic CuCrS₂
Girish C. Tewari, T.S. Tripathi, P. Kumar, A.K. Rastogi, S.K. Pasha, and Govind Gupta
- 2374 High-Vacuum Evaporation of *n*-CuIn₃Se₅ Photoabsorber Films for Hybrid PV Structures
N. Adhikari, S. Bereznev, K. Laes, J. Kois, O. Volobujeva, T. Raadik, R. Traksmaa, A. Tverjanovich, A. Öpik, and E. Mellikov
- 2382 Structural, Optical, and Electrical Properties of Nb-Doped ZnO Thin Films Prepared by Spray Pyrolysis Method
V. Gokulakrishnan, S. Parthiban, K. Jeganathan, and K. Ramamurthi
- 2388 Luminescence of 2,6-Distyrylpyridine-Doped Titania Nanostructured Monoliths
R. Palomino-Merino, M. Judith Percino, Victor M. Chapela, R. Lozada-Morales, J. Martínez-Juárez, G. Juárez-Díaz, G. Beltrán-Pérez, S.A. Tomas, and V.M. Castaño
- 2392 Self-Assembly, Optical, and Electrical Properties of a Novel Water-Soluble Perylene Bisimide
Gopal Boobalan, Predhanekar Mohamed Imran, and Samuthira Nagarajan
- 2398 A Low-Temperature Pressureless Bonding Process Using a Trimodal Mixture System of Ag Nanoparticles
Y. Morisada, T. Nagaoka, M. Fukusumi, Y. Kashiwagi, M. Yamamoto, M. Nakamoto, H. Kakiuchi, and Y. Yoshida
- 2403 Uniaxial Ratchetting Behavior of Solder Alloys and Its Simulation by an Elasto-Plastic-Creep Constitutive Model
Katsuhiko Sasaki and Ken-ichi Ohguchi
- 2415 Microvoid Formation at Solder-Copper Interfaces During Annealing: a Systematic Study of the Root Cause
Santosh Kumar, Joseph Smetana, David Love, James Wathowski, Richard Parker, and Carol A. Handwerker
- 2425 Solder Volume Effects on the Microstructure Evolution and Shear Fracture Behavior of Ball Grid Array Structure Sn-3.0Ag-0.5Cu Solder Interconnects
X.P. Li, J.M. Xia, M.B. Zhou, X. Ma, and X.P. Zhang
- 2436 Effects of Minor Amounts of Zn on the Sn-Zn/Ni Interfacial Reactions and Phase Equilibria of the Ternary Sn-Zn-Ni System at 250°C
Chao-hong Wang, Hsien-hsin Chen, and Wei-han Lai
- 2445 Grain Orientation Evolution and Deformation Behaviors in Pb-Free Solder Interconnects Under Mechanical Stresses
H.T. Chen, L. Wang, J. Han, M.Y. Li, Q.B. Wu, and J.M. Kim
- 2458 One-Step Fabrication of Al/Sn-Bi Core-Shell Spheres via Phase Separation
R. Dai, S.G. Zhang, and J.G. Li
- 2465 Surface Tension, Density, and Thermal Expansion of (Bi-Ag)_{out}-Zn Alloys
Janusz Pstruś, Przemysław Fima, and Władysław Gąsior

- 2470 **Localized Recrystallization Induced by Subgrain Rotation in Sn-3.0Ag-0.5Cu Ball Grid Array Solder Interconnects During Thermal Cycling**
Hongtao Chen, Jing Han, and Mingyu Li
- 2480 **Metal-Assisted Chemical Etching Using Tollen's Reagent to Deposit Silver Nanoparticle Catalysts for Fabrication of Quasi-ordered Silicon Micro/Nanostructures**
Xuewen Geng, Meicheng Li, Liancheng Zhao, and Paul W. Bohn