

Journal of Materials Research Enters Second Year of Publication

**108 Papers Totaling 890 Pages
Published in 1986**

On the heels of a successful first year of publication, *Journal of Materials Research* continues to show growth in volume and breadth of materials research topics during the first part of 1987. The January/February 1987 issue has been published, and the contents are listed in the MRS BULLETIN, Vol. XII No. 1, p. 74. The second issue is expected to be published within six weeks.

Journal of Materials Research publishes archival papers, commentaries and reviews, and rapid communications encompassing physical, chemical, and engineering insights on advanced materials and processing techniques. Under the direction of Editor-in-Chief Walter L. Brown and a board of internationally recognized authorities in materials research serving as Principal Editors, *Journal of Materials Research* is a key forum for the presentation of significant developments occurring in the many disciplines contributing to the rapid advancement of understanding and use of materials.

A partial list of papers expected to appear in the second issue of *JMR* includes the following:

- A Study of the Thermodynamics of Crystalline to Amorphous Transformation in Zr-Based Hydrides by Means of Thermal Analysis by X.L. Yeh and E.J. Cotts
- An Investigation of the $Al_{86}Mn_{14}$ Alloy and Its Quasicrystalline Phases by J.G. Perez-Ramirez, R. Perez, A. Gomez, L. Cota-Araiza, L. Martinez, and M. Jose-Yacamán
- An Investigation of the Ni_5Al_3 Phase by P.S. Khadkikar and K. Vedula
- Characterization of a Synthetic Apatite Sinter for Study of Diffusion Processes During Acidic Dissolution of Dental Enamel and Other Porous Solids by G.H. Dibdin, J.C. Elliott, and P. Anderson
- Effect of Material and Design Parameters on the Life and Operating Voltage of ZnO Varistor by T.K. Gupta
- Effects of Milling Brominated P-100 Graphite Fibers by James R. Gaier, Michael E. Dillehay, and Paul D. Hambourger
- Glass Corrosion in Ambient Temperature Lithium Battery Headers by Bruce C. Bunker, Sally C. Douglas, and Rod K. Quinn
- High Energy (MeV) Ion Beam Mixing of Ti with SiC and Si_3N_4 by R.S. Bhattacharya, A.K. Rai, and P.P. Pronko
- Laser Photosublimation of Compound Semiconductors by M. Rothschild, C. Arnone, and D.J. Ehrlich
- Magnetic Susceptibility Study of Te-rich Mn_xTe_{1-x} by X.M. Zou, and J.A. Gardner
- Mechanical Properties of GaAs Crystals

by Ichiro Yonenaga, Utako Onose, and Koji Sumino

- Ni, Pd and Pt on GaAs: A Comparative Study of Interfacial Structures, Compositions and Reacted Film Morphologies by T. Sands, V.G. Keramidis, A.J. Yu, K-M. Yu, R. Gronsky, and J. Washburn
- Silicon Oxidation and Si - SiO_2 Interface of Thin Oxides by N.M. Ravindra and J. Narayan
- Solid-Phase Epitaxy of Ion-Implanted $LiNbO_3$ for Optical Waveguide Fabrication by Ch. Buchal, P.R. Ashley, and B.R. Appleton
- Spark Erosion: A Method for Producing Rapidly Quenched Fine Powders by A.E. Berkowitz and J.L. Walter
- The Oriented Growth of Anatase in Thin Films of Amorphous Titania by D.G.

Howitt and A.B. Harker

- The Role of Diffusion in Amorphous-Phase Formation and Crystallization of Amorphous Ni-Zr by J.C. Barbour, R. de Reus, A.W. Denier van der Gon, and F.W. Saris

For further information on article submission requirements for *Journal of Materials Research*, contact Linda Kryszinski, Editorial Office Supervisor, Journal of Materials Research, Materials Research Society, 9800 McKnight Road, Suite 327, Pittsburgh, PA 15237; telephone (412) 367-9111.

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Graduate Student Awards Announced for 1987 MRS Spring Meeting

The Materials Research Society Awards Committee has selected six recipients of the Graduate Student Awards to be presented at the 1987 Spring Meeting in Anaheim, CA. The students will receive a cash grant, waiver of the registration fee for the 1987 Spring Meeting, and a certificate of achievement. They will be recognized during the Plenary and Student Awards Session on Wednesday, April 22 in the Anaheim Marriott.

Students were judged on the originality of their contributions and on the quality and thoroughness of their research related to one of the Spring symposium topics. Other criteria were the independence they displayed in their research and their promise for future achievement in materials research.

The following students will receive awards:

Brent A. Detering, Department of Chemistry, University of Idaho, "Reduction of Selected Metal Oxides in a Thermal Plasma Produced by a Non-Transferred Arc Torch" (Symposium K)

Suliman A. Dregia, Metallurgical Engineering and Materials Science, Carnegie Mellon University, "Epitaxy for Weakly Interacting Systems of Large Misfit" (Symposium D)

Tony E. Haynes, Department of Physics and Astronomy, University of North Carolina, "Effects of Ga and As Evaporation on Properties of $TaSi_2$ -GaAs Schottky Barriers" (Symposium B)

Dusit Kruangam, Department of Electrical Engineering, Osaka University, "Amorphous Silicon-Carbide Multilayered Visible-Light Emitting Diode" (Symposium E)

Mark A. Petrich, Department of Chemical Engineering, University of California, "Local Bonding Arrangements in Amorphous Silicon Alloys" (Symposium E)

R. Ramesh, Materials Science, University of California, "Effect of Heavy Rare Earth Additions on Microstructure and Magnetic Properties of Fe-Nd-B Magnets" (Symposium F)