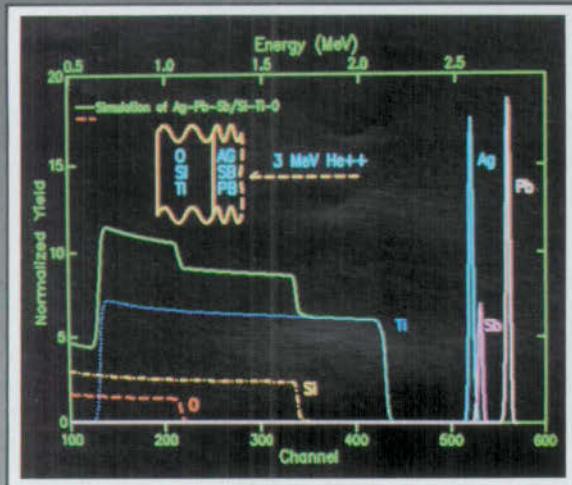


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## September/October Issue of Journal of Materials Research Nears Completion

The fifth issue of *Journal of Materials Research* for 1987 will be published within six weeks. Articles in this issue span superconductors, alloys, insulators, glasses, and semiconductors. The following is a partial list of papers expected to appear in the September/October issue:

- Contrast Enhancements Due to Superconductivity in Scanning Electron Microscopy from  $Y_{1-x}BaCu_{2+x}O_y$  High  $T_c$  Superconductors, by W.S. Millman, M. Ulla, Z. Han, M. MacLaurin, and B.P. Tonner.
- Defect Model of Melt-Grown GaAs, by R.A. Morrow.
- Effect of Halide Ions on  $Li^+$  Ionic Conductivity in Oxyhalo-Borate Glasses, by Y. Wang, A. Osaka, Y. Miura, and K. Takahashi.
- An Electron Microscopic Study of a Rapidly Solidified Al-5wt.% Co Alloy, by G. Van Tendeloo, J. Menon, and C. Suryanarayana.
- *In Situ* Optical and Structural Studies of  $H_2$  Chemisorption in  $C_6K$ , by G.L. Doll and P.C. Eklund.
- Inhibition of Tribo-Oxidation Preceding Wear by Single Phased  $TiN_x$  Films Formed by Ion Implantation into  $TiAl_6V_4$ , by F. Pons, J.C. Pivin, and G. Farges.
- Interfacial Reaction Induced Morphological Instabilities in Thin Al/Pt and Al/Pd Films, by E.G. Colgan, C-Y. Li, and J.W. Mayer.
- Investigation of the Dielectric and Thermal Properties of Sintered  $Li_{1-x}Ta_{1-3x}Ti_4O_3$  Solid Solution Ceramics, by K.K. Deb.
- Neutron Irradiation Scoping Study of Twenty-Five Copper-Base Materials, by O.K. Harling, N.J. Grant, G. Kohse, M. Ames, T-S. Lee, and L.W. Hobbs.
- Optical Properties of Amorphous Hydrogenated Carbon Films: A Spectroscopic Ellipsometry Study, by S. Lin and S. Chen.
- Properties and Microstructure of Thin  $LiNbO_3$  Films Prepared by a Sol-Gel Process, by D.P. Partlow and J. Gregg.
- Selective Electron-Induced Decomposition of CVD  $SiO_2$  Overlays on Oxides, by T. Okuhara and J.M. White.
- Solidification of Highly Undercooled Liquid Silicon Produced by Pulsed Laser Melting of Ion-Implanted Amorphous Silicon: Time-Resolved and Microstructural Studies, by D.H. Lowndes, S.J. Pennycook, G.E. Jellison, Jr., S.P. Withrow, and D.N. Mashburn.
- Synthetic Diamonds Produce Pressure of 125 GPa (1.25 Mbar), by A.L. Ruoff, S.T. Weir, K.E. Brister, and Y.K. Vohra.
- Theory of Chemically Induced Kink Formation on Cracks in Silica: I. 3D Crack Green's Functions, by R. Thomson, V.K. Tewary, and K. Masuda-Jindo.
- Theory of Chemically Induced Kink Formation on Cracks in Silica: II. Force Law Calculations, by K. Masuda-Jindo, V.K. Tewary, and R. Thomson.
- Thin Film Interactions and Their Relevance to Electronic Packaging, by C-A. Chang.

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