Electronic Packaging Materials Science V
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MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS

*Invited Paper
Preface

This volume is the fifth in a series. It is devoted to the papers presented at the Materials Research Society Symposium on Electronic Packaging Materials Science, part of the Society’s Fall 1990 meeting held in Boston, Massachusetts.

The theme of the symposium remains unchanged, and deals with materials-related issues important to the future of technology for the packaging and interconnection of electronic components. This technology is on the critical path to increased performance of office computers and workstations, home computers, mainframes, supercomputers, control systems in automobiles, navigation and avionics, fast processors for medical diagnostics, or the huge telecommunications industry.

It is true of all these applications that major advances in packaging and interconnect are only possible with concomitant progress in materials science. Performance is not the only issue so influenced, so too is compactness, lightness and cost to the consumer.

The symposium included sessions on the mechanical and deformation properties of polymer interfaces (with emphasis on the effects of plastic behavior in polymeric thin films, and general attention to stress effects on reliability), protective coatings for IC’s, polymers and polymer-processing for high density packaging (e.g., photolimageable polyimides, use of liquid crystals to control thermal expansion, effect of curing on stress in polyimides in multilayer structures), ceramics and glass-ceramics (emphasis on aluminum nitride bulk, and interface properties), metallization techniques (low temperature CVD of copper films, laser planarization, laser assisted deposition of catalysts for electroless and electrolytic plating of copper), solders and soldering (including fatigue life predictions for solder joints), and measurement of material properties of thin films.

E.D. Lillie  
P.S. Ho  
R. Jaccodine  
K. Jackson  
March 14, 1991
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MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS


Earlier Materials Research Society Symposium Proceedings listed in the back.