EDITORIAL COMMENTARY

Aims and Scope of JEM, Embracing the Past and Looking Toward the Future

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For the past 46 years, the *Journal of Electronic Materials* (JEM) has reported monthly on the science and technology of electronic materials, welcoming articles on methods for preparing and evaluating the chemical, physical, electronic, and optical properties of electronic materials while also examining new applications for semiconductors, magnetic alloys, dielectrics, nanoscale materials, and photonic materials.

Owing to the ever changing landscape of uses of electronic materials to address future problems of society, the Journal would like to reaffirm our commitment to traditional core areas including state-of-the-art transistors, electronic packaging, metallization, detectors, emitters, and superconductivity while also looking toward the exciting new developments charting the future of technology. Nanotechnology, particularly in the context of electronic materials, plays a central role in forging solutions for future problems facing society including manufacturing, creating an environmentally and socially sustainable world, and finding targeted and personal health management solutions to name a few. The Journal expects to be at the forefront of scientific engagement for articles reporting on our traditional and key future areas in electronic materials. The Journal welcomes articles on topics such as electronic materials for sustainable energy including solar energy

materials, electrochemical and photocatalytic energy conversion, magnetocaloric materials for cooling technology, energy interconnects for fuel cells and thermoelectric materials, 2D materials and devices, emergent memory architectures including neuromorphic computing, and soft electronic materials such as polymers involved with interconnects, bioelectronics, and biosensors. In addition, the Journal will continue to keep a focus on critical issues such as doping and defects in wide bandgap materials that are vital in enabling power electronics and photonics. The Journal views novel theoretical and computational approaches as indispensable to the advancement of such fields and welcomes high quality papers in the areas listed previously.

With the preceding considerations in mind, in future issues we will endeavor to introduce new ways of highlighting the latest and most inspiring research in electronic materials. The Journal will, from time to time, publish special issues and commentaries. We expect that these special issues and commentaries will stimulate engagement across interdisciplinary fields within the broader field of electronic materials. Finally, the Journal will strive to be a standard bearer for dissemination of articles reporting on electronic materials of the highest scientific and ethical quality as we move toward our 50th anniversary and beyond.