# Graduate Student Award Finalists Compete at 1998 MRS Fall Meeting

Thirty-five finalists will compete for the MRS Graduate Student Awards to be presented during the awards ceremony on Thursday, December 3, at 6:00 p.m., in the Boston Marriott Hotel, Salon E. The Graduate Student Award Special Talk Session, in which each finalist gives a 10minute presentation, will be held on Monday, November 30, at 12:00 noon.

The finalists, all authors or co-authors of papers to be presented at the 1998 MRS Fall Meeting, were selected on the basis of the quality and thoroughness of their research, the originality and independence of their contributions, and their promise for future achievement in materials research.

Following is the list of finalists, their places of study, titles of papers, and the symposium or symposia in which each finalist is participating.

**Rong Bai**, Brown University, "The Structure of Tilt Grain Boundaries in Aluminum" (Symposium L)

Marc A. Baldo, Princeton University, "The Excitonic Singlet-Triplet Ratio in a Conductive Organic Thin Film" (Symposium R)

**Michael V. Braginsky**, University of Pennsylvania, "Floquet Waves and Grain Boundary Phonons" (Symposium L)

**Derrick T. Carpenter**, Lehigh University, "Automated Microstructural Analysis of Polycrystalline Thin Films" (Symposium A)

**Dmitriy S. Chekmarev**, University of Chicago, "Computer Simulation Study of the Structure of the Liquid-Vapor Interface of Mercury at 20, 100 and 200°C" (Symposium C)

Xiaohua (Cinti) Chen, Georgia Institute of Technology, "Deposition and Etching of Amorphous Carbon Films Prepared by ECR-Enhanced Chemical Vapor Deposition with Benzene" (Symposium OO)

Xing Chu, Carnegie Mellon University, "Effect of Grain Orientation and Grain-Boundary Misorientation on Electromigration Failure in Sub-Micrometer Aluminum Interconnects" (Symposium A)

**John M. DeLucca**, Pennsylvania State University, "Electrodeposited Pt Contacts to *n*- and *p*-Type GaN" (Symposium G)

**Lawrence H. Friedman**, University of California—Berkeley, "Scaling Theory of Dislocation Pileups and the Hall-Petch Relation" (Symposium J)

John R. Harper, Texas A&M University, "XSTM Characterization of Sb Segregation in GaInSb/ InAs Superlattices" (Symposium H)

Alexander Hartmaier, Max-Planck-Institut für Metallforschung—Stuttgart, "Mesoscopic Simulation of Dislocation Activity at Crack Tips" (Symposium M)

**Bryan D. Huey**, University of Pennsylvania "Electronic Properties of Individual Grain Boundaries in ZnO and  $SrTiO_3$  Bicrystals and Polycrystals" (Symposium F)

Jaemo Im, Northwestern University, "In Situ Mass Spectroscopy of Recoiled Ion Studies of Degradation Processes in SrBi2Ta2O9 Thin Films During Hydrogen Gas Anneal" (Symposium O)

**Byeongwon Kang**, University of Kansas, "Puzzling Hall Sign Anomaly in High-T<sub>c</sub> Superconductors" (Symposium Q)

Catherine Klapperich, University of California—Berkeley, "Plasma Surface Modification of Medical Grade Ultrahigh Molecular Weight Polyethylene for Improved Tribological Properties" (Symposium II)

Young Joo Lee, State University of New York —Stony Brook, "<sup>6</sup>Li and <sup>7</sup>Li MAS NMR and *In Situ* X-Ray Diffraction Studies of Lithium Manganate Cathode Materials" (Symposium EE)

Ju Li, Massachusetts Institute of Technology, "Coupling Continuum to MD Simulation with Minimal Disturbance— Thermodynamic Field Estimator, Optimal Particle Controller and Buffer-Zone Feedback" (Symposium J)

**Charlene Lobo**, Australian National University, "Structural Evolution and the Role of Dislocations in InGaAs Island Formation on (110), (111)B and (311)B GaAs Surfaces" (Symposium B)

Daniel L. Polis, University of Pennsylvania, "Block Copolymer Dynamics Investigated with Simultaneous Small Angle X-Ray Scattering and Shearing" (Symposium W)

**Gwenaëlle Rousse**, Université Paris-Sud, "Charge-Ordering Phase Transition in Spinel LiMn<sub>2</sub>O<sub>4</sub> Around Room Temperature" (Symposium EE)

Yoshiko Sakairi, University of Tokyo, "Modulated Photocurrent Measurements on Icosahedral Quasicrystals of Al-Pd-Re System" (Symposium LL)

Leonid E. Shilkrot, University of Michigan, "Elastic Analysis of Heteroepitaxial Growth of Multilayers—Growth Instabilities and Lateral Composition Modulation" (Symposium B)

Moonsub Shim, University of Chicago,

"Dielectric Dispersion Studies of Semiconductor Nanocrystal Colloids—Evidence for Ground State Dipole Moment" (Symposium F)

Vera N. Smolyaninova, University of Maryland, "Anomalous Low-Temperature Specific Heat of Charge-Ordered La<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3</sub>" (Symposium P)

Jeffrey S. Sullivan, University of Wisconsin—Madison, "Heteroepitaxial Strain Stabilization of the Si $\{105\}$   $p(2 \times 1)$  Reconstruction" (Symposium B)

Madeline Torres-Lugo, Purdue University, "Novel pH-Sensitive Hydrogels with PEG-Tethered Chains for Oral Delivery of Calcitonin" (Symposium GG)

Anton Van der Ven, Massachusetts Institute of Technology, "First Principles Investigation of Lithium Transition Metal Oxides with the Spinel Crystal Structure" (Symposium EE)

Jay F. Whitacre, University of Michigan, "Biaxial Texture Evolution in Thin Sputtered Films" and "Controlling Amorphous Content and Stress State in Ultrathin Ta Films" (Symposium A)

Brian D. Wirth, University of California—Santa Barbara, "Kinetic Lattice Monte Carlo Simulations of Cascade Aging in Fe and Dilute Fe-Cu Alloys" (Symposium N/J)

**Eva M. Wong**, Johns Hopkins University, "The Growth Kinetics of Nanocrystalline ZnO Particles from Colloidal Suspensions" and "Photoluminescence of ZnO Quantum Particle Thin Films" (Symposium F)

Stanislaus S. Wong, Harvard University, "Covalently Functionalized Nanotubes as Nanometer Probes for Chemistry and Biology" (Symposium S)

William S. Wong, University of California—Berkeley, "Bonding and Laser Liftoff of GaN Thin Films from Sapphire onto Si and GaAs Substrates" (Symposium D)

Andrey Zarur, Massachusetts Institute of Technology, "Catalytic Combustion with Nanostructured Barium Hexaaluminate-Based Systems" (Symposium FF)

Mingqi Zhao, Texas A&M University, "Highly Impermeable Hyperbranched-Polymer Thin Films Derived from PAMAM or Cascade Dendrimers" (Symposium U)

Yiping Zhao, Rensselaer Polytechnic Institute, "Study of Surface Etch-Front Morphology Using Light Scattering Techniques" (Symposium C)



The MRS Exhibit, held in conjunction with the 1998 MRS Fall Meeting, will feature over 205 international exhibitors who will display a full spectrum of equipment, instrumentation, products, software, publications and services for materials research. The exhibit will closely parallel the nature of the technical symposia and, as always, the program has been arranged to allow meeting participants ample opportunity to attend the exhibit. MRS encourages attendees to visit the exhibit by offering coffee breaks, deli-style lunches, and a meeting-wide reception in University Hall.

### Partial List of 1998 Fall Exhibitors

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## Boston Marriott Hotel and Westin Hotel/Copley Place

	Marriott Hotel	Westin Hotel
U	niversity Hall & Atrium Lounge	3rd & 4th Floors
Tuesday, December 1	11:30 am - 6:30 pm	9:30 am - 5:00 pm
Wednesday, December	<b>2</b> 9:30 am - 5:00 pm	9:30 am - 5:00 pm 7:30 pm - 10:00 pm
Thursday, December 3	9:30 am - 2:30 pm	9:30 am - 1:30 pm

Complimentary Reception will be held in University Hall, Boston Marriott Hotel on Tuesday evening from 5:00 pm to 6:30 pm.

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