1/81 Eighth Annual Conference on the Physics of Compound Semiconductor Interfaces, Williamsburgh
"Surface Core Excitons in III-V Semiconductors"

1/81 Eighth Annual Conference on the Physics of Compound Semiconductor Interfaces, Williamsburgh
"Surface Vacancies in II-VI and III-V Zincblende Semiconductors"

3/81 APS Solid State Division Conference, Phoenix
"Fano Resonances in Semiconductor Surface Core Excitons"

5/81 Xerox Research Lab, Palo Alto
"The Defect Model of Schottky Barrier Formation"

i 6/82 Third International Conference on Hydrogen and Materials, Paris, France
"Hydrogen Trapping in Metals"

i 6/82 Symposium at the KFA, Julich, Germany
"Hydrogen Trapping in Metals"

i 6/82 University of Odense, Denmark
"Hydrogen Trapping in Metals"

i 10/82 TMS-AIME Fall Meeting, St. Louis, Missouri
"Theory of Hydrogen Embrittlement"

3/83 Solid/Liquid Storage Review, Los Alamos
"Hydrogen and Helium in Pd"
3/83 High-Power Microwave Technology Conference, Harry Diamond Laboratory, Maryland
"High-Power Microwave Breakdown in Semiconductors"

6/83 Vineyard Review, Livermore

4/84 High-Temperature Alloys: Theory and Design, Bethesda
"Embedded Atom Theory of Metal Alloys"

i 4/84 Materials Science/Physics Colloquium, University of Utah
"Hydrogen Embrittlement"

i 6/84 Sandia National Laboratories in Albuquerque, Solid State Group Seminar
"Hydrogen in Metals"

i 7/84 Oak Ridge National Laboratory, Solid State Division Seminar
"Hydrogen on Pd(111)"

i 8/84 UC Berkeley/LBNL Joint Surface Science Seminar
"Hydrogen on Pd(111)"

i 11/84 MIT Materials Group Symposium
"Hydrogen Embrittlement"

i 11/84 MRS Fall Meeting, Boston
"Atomistic Theory of Hydrogen Embrittlement: Embedded Atom Method"

i 1/85 West Coast Theoretical Chemistry Conference, Livermore
"The Molecular Dynamics of Hydrogen on Transition Metal Surfaces: Order-Disorder Transformations"

i 7/85 Gordon Conference on Hydrogen in Metals, NH
"Theory of Hydrogen on Transition Metal Surfaces"
i 6/85 Keynote address at International Conference on
   Fundamentals of Fracture, Gatlinburg
   "Mechanical Properties from Atomistic Simulations"

8/85 32nd National AVS Symposium, Houston, Texas
   "Calculations of the Energetics and Structure of Pt(110)
   Using the Embedded Atom Method"

i 6/86 Surface Science Seminar, Free University of Berlin
   "Reconstruction of Pt and Au(110)"

i 6/86 NATO Workshop on the Physics and Chemistry of Fracture,
   Bad Reichenhall, Germany
   "Hydrogen Embrittlement of Metals"

8/86 Northern California Chapter of AVS
   "Reconstruction of Pt(110) Using the Embedded Atom Method"

i 9/86 Materials Science Department Seminar, U. of Minnesota
   "Hydrogen Embrittlement of Metals"

i 2/87 Special Symposium on Crack Tip Plasticity,
   Spring Meeting of the Metallurgical Society, Denver
   "Atomistic Simulation of Fracture"

i 3/87 National Research Council, Materials Advisory Board, La Jolla
   Workshop on "Advanced Computation and Simulation
   of Complex Materials Phenomena"

i 4/87 Surface Science and Catalysis Science Seminar, LBNL
   "Reconstruction of Au and Pt(110)"

i 5/87 General Science Seminar at Xerox Research, Palo Alto
   "Reconstruction of Au and Pt(110)"

i 6/87 Bell Labs, Solid State Symposium, Murray Hill
"Embedded Atom Method"

i 6/87 2nd International Conference on Structure of Surfaces, Amsterdam
"Calculations of Structure and Dynamics of Transition Metal Surfaces Using the Embedded Atom Method"

8/87 EAM Workshop-I, Livermore

i 10/87 BES Task Force on Nickel Aluminides
"Metallic Alloys"

i 12/87 Rice University Materials Department, Houston
"Calculation of Mechanical Properties of Metals Using the Embedded Atom Method"

i 1/88 Physics Department Seminar, UC Davis
"Surface Phonon Calculations with the Embedded Atom Method"

i 2/88 UC Berkeley, Solid State Physics Colloquium
"Calculation of Surface Structure and Dynamics Using the Embedded Atom Method"

i 9/88 World Materials Congress, Chicago
"Embedded Atom Method: Many-Atom Description of Metallic Bonding"

10/88 AVS Annual Meeting, Atlanta
"Surface Phonons on Cu(100) and Cu(111)"

i 7/89 Many-Atom Interactions in Solids, an International Workshop, Pajulahti, Finland
"Embedded Atom Method: Many-Atom Description of Metallic Cohesion"
7/89 Solid State Seminar, Sandia Albuquerque
"Structure of Grain Boundaries in Aluminum"

11/89 Physics Colloquium, UC Davis
"Small Metal Clusters on Metal Surfaces"

7/90 Physical Electronics Conference, Gaithersburg
"Small Metal Clusters on Metal Surfaces"

8/90 Solid State Colloquium, Oak Ridge National Labs
"Structure of Grain Boundaries in Aluminum"

9/90 Surface Science Seminar, LBL/UC Berkeley
"Small Metal Clusters on Metal Surfaces"

10/90 TMS-AIME Fall Meeting, Special Symposium (presented by S. Foiles)

4/91 Physics Colloquium, U. Florida
"Atomistic Studies in Materials Physics"

5/91 International Workshop on Radiation Effects, La Jolla
"Embedded Atom Method"

7/91 NATO Advanced Study Institute on Surfaces and Interfaces, Greece
"Atomistic Properties of Interfaces" (presented by S. Foiles)

9/91 DOE/BES Workshop on Intermetallics, La Jolla
"Theoretical Work on Intermetallics"

10/91 DOE/BES Workshop on Theory of Materials, Williamsburg
"Atomistic Calculations of Materials Properties"

11/91 Washington U. Physics Department Colloquium, St. Louis
"Calculations of Grain Boundary Structure"
1/92 Clemson University, Physics Dept.
"Grain boundary structure in metals"

1/92 NC State Joint Physics/Materials Colloquium, Raleigh
"Calculations of Grain Boundary Structure"

5/92 MRS Spring Meeting
"Tight-Binding Study of Many-Body Potentials for BCC Transition Metals"

8/92 IMS Special Symposium, Denver
"Atomistic Calculations of Grain Boundary Structure"

11/92 MRS Fall Meeting
"Using the Density Matrix For Atomistic Simulations"

1/93 Princeton Materials Institute
"Atomistic Calculations in Materials Science"

1/93 Brookhaven National Labs
"Electronic Structure Calculations of Large Systems"

1/93 Lawrence Livermore Labs
"Electronic Structure Calculations of Large Systems"

1/93 Stanford U., Materials Science Dept.
"Atomistic Calculations in Materials Science"

1/93 Oak Ridge National Labs
"Atomistic Calculations in Materials Science"

1/93 Georgia Tech, Physics Dept
"Electronic Structure Calculations of Large Systems"

3/93 U. of Illinois, Materials Science Dept.
"Atomistic Calculations in Materials Science"

4/93 U. of Minnesota, Materials Science Dept.
"Electronic Structure Calculations of Large Systems"

5/93 Briefing for Dr. W. Happer, Director of Energy Research, DOE
"Contributions of atomic-scale calculations to Materials Science"

6/93 Princeton University, Princeton Materials Institute
"Theoretical Investigation of the Mechanical Properties of Intermetallics"

9/93 Electronic Structure of Solids/Greece
"An O(N) electronic structure algorithm based on direct solution for the density matrix"

9/93 Atomistic Simulation of Complex Systems/Germany
"An O(N) electronic structure algorithm based on direct solution for the density matrix"

11/93 NC State, Materials Science Dept.
"Atomistic Calculations in Materials Science"

11/93 Clemson U., Physics Dept.
"An O(N) electronic structure algorithm based on direct solution for the density matrix"

11/93 Sandia National Labs, Albuquerque
"An O(N) electronic structure algorithm based on direct solution for the density matrix"

2/94 Sanibel Symposium, Florida
"An O(N) electronic structure algorithm based on direct solution for the density matrix"
"An O(N) electronic structure algorithm based on direct solution for the density matrix"

"Atomic-Scale Calculations of Dislocation Structure"

"Dislocation Structure and Dynamics"

"Atomic-Scale Calculations of Dislocations"

"How Things Bend"

"Pinning/Depinning Transition in Dislocation Dynamics"

"How Things Bend"

"Dislocation Dynamics"

"Computational Materials Program"

"Dislocation Dynamics"

"Instabilities in Dislocation Dynamics"
4/98 Motorola Applied R&D Lab, Austin, TX
"Backend Materials for Microelectronics"

9/98 Society for Engineering Science, Pullman, WA
"Delayed Decomposition of Dislocations in Intermetallic Alloys"

1/99 Materials Science & Engineering Dept, Ohio State U
"Challenges for Computational Materials Science in the Microelectronics Industry"

3/00 APS March Meeting
"Stress effects on dopant diffusion in Si"

4/00 MRS Spring Meeting
"Stress effects on dopant diffusion in Si"

11/01 UC Berkeley, Materials Science Departmental Colloquium
"A random walk through the diffusion field"

12/02 MRS Fall Meeting
"Point Defect Diffusion in Intermetallics"

4/02 TMS National Conference, San Diego
"Point Defect Diffusion in Intermetallics"

1/03 Seminar, Center for Simulation, UGa
"A random walk through the field of diffusion"

4/03 TMS National Conference, Charlotte
"First-principles calculations of the screw dislocation in Fe"

4/05 MRS Spring Conference, San Francisco
"Simulating diffusion-limited processes in intermetallics"
2/06 Materials Seminar, UNT
"Simulating diffusion-limited processes in intermetallics"

i 9/06 European MRS, Warsaw, Poland
"Simulating diffusion-limited processes in intermetallics"

2/07 TMS Annual Meeting, Orlando
"Diffusion in Ordered Intermetallics by Accelerated MD"

2/07 TMS Annual Meeting, Orlando
"Scaling in Dislocation Dynamics"

2/07 TMS Annual Meeting, Orlando
(co-author) "Dislocations on Carbon Nanotubes"

3/07 APS March Meeting
(co-author) "MoS2 Nanotubes"

3/07 APS March Meeting
(co-author) "Diffusion in Intermetallic Alloys"

3/07 APS March Meeting
(co-author) "Effects of Disorder in (Pb,Sn)Te"

i 3/07 Clemson, Physics Colloquium
"Random Walk Through the Field of Diffusion"

i 4/07 Pi Tau Sigma (Mechanical Engineering Honor Society) Banquet Speaker
"How Should Engineers View Physics?"

i 7/07 IAP Conference (Realism in Physics, U Notre Dame)
"Summary of Physical Concepts in the Realist Approach"
<table>
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<tr>
<th>Date</th>
<th>Location/Event</th>
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<tr>
<td>11/07</td>
<td>MRS Fall Meeting</td>
<td>&quot;Diffusion in Intermetallics using on-the-fly KMC&quot;</td>
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<tr>
<td>11/07</td>
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<td>&quot;Quantifying Microstructure of Nanocomposites&quot;</td>
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<tr>
<td>7/08</td>
<td>IAP Conference (Notre Dame)</td>
<td>&quot;Realism in Physics&quot;</td>
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<td>7/08</td>
<td>IAP Conference (Notre Dame)</td>
<td>&quot;Teaching Realism&quot;</td>
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<tr>
<td>8/08</td>
<td>ICT 2008</td>
<td>&quot;Quantifying Microstructure of Nanocomposites&quot;</td>
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<tr>
<td>2/09</td>
<td>IAP Workshop for College Physics Teachers (Philadelphia)</td>
<td>&quot;Physics for Realists&quot;</td>
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<tr>
<td>4/09</td>
<td>NASA-Ames</td>
<td>&quot;Quantifying Microstructural Effects&quot;</td>
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<td>4/09</td>
<td>St. Joe's High School Faith &amp; Reason Class</td>
<td>&quot;Science and Catholic Culture&quot;</td>
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<td>7/09</td>
<td>IAP Conference (Notre Dame)</td>
<td>&quot;Physics for Realists: Classical Mechanics&quot;</td>
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<td>&quot;Physics for Realists&quot;</td>
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11/09  Physics Colloquium (N Ga College & State University)  
"Physics for Realists"

11/09  Physics Colloquium (Wofford College)  
"Physics for Realists"

12/09  Faculty Colloquium (Ave Maria University)  
"Physics for Realists"

7/10  IAP Conference (Notre Dame)  
"Physics for Realists: Electricity and Magnetism"

4/11  SACS-AAPT Spring Meeting  
"Workshop: Physics for Realists"

7/11  IAP Conference (Notre Dame)  
"Physics for Realists: Mechanics"

4/12  Annual Meeting, Center for Simulational Physics (UGa)  
"Dissipation from microscopic dynamics"

7/12 IAP Conference (LSU)  
“Physics for Realists: E&M”

8/12 DOE TCMP PI meeting  
poster: "Improved Calculation of Vibrational Mode Lifetimes in Anharmonic Solids"

2/13 Solid State Seminar, Wake Forest, Dept of Physics  
"Improved Calculation of Vibrational Mode Lifetimes in Anharmonic Solids"

2/13 Colloquium, Wake Forest, Dept of Physics  
"Physics for Realists"

2/13 Annual Workshop, UGa Center for Simulational Physics (Athens, GA)
"Improved Calculation of Vibrational Mode Lifetimes in Anharmonic Solids"

3/13 APS March Meeting (Baltimore, MD)
"Improved Calculation of Vibrational Mode Lifetimes in Anharmonic Solids"

i 7/13 IAP Conference (LSU)
   “Physics for Realists: E&M”

i 7/13 IAP Conference (LSU)
   “Entangled States in deBroglie-Bohm Dynamics”

i 2/14 TMS Special Symposium: 30 Years of EAM
   “Calculating Vibrational Mode Lifetimes in Solids”

i 4/14 Solid State Seminar (Auburn)
   “Calculating Vibrational Mode Lifetimes in Solids”

i 5/14 Solid State Seminar (Los Alamos)
   “Calculating Vibrational Mode Lifetimes”

i 5/14 Physics Colloquium (Los Alamos)
   “First Principles of Physics”

i 5/14 Solid State Seminar (Sandia Albuquerque)
   “Calculating Vibrational Mode Lifetimes”

i 5/14 Special Seminar (Sandia Albuquerque)
   “First Principles: Maintaining the Big Picture”

i 7/14 IAP Conference (LSU)
   “Teaching from ‘Physics for Realists’”

i 7/14 IAP Conference (LSU)
   “Entangled States in deBroglie-Bohm Dynamics”
8/14 PI Conference (DOE, Gaithersburg)  
“Calculating Vibrational Mode Lifetimes”

9/14 Materials Science Seminar (Mississippi State)  
“Calculating Vibrational Mode Lifetimes”

9/14 Special Colloquium (Mississippi State)  
“First Principles: Maintaining the Big Picture”

10/14 Special Presentation to Office of Economic Development (Clemson)  
“First Principles: Maintaining the Big Picture”

7/15 IAP Conference (LSU)  
“Teaching from ‘Physics for Realists’”

7/15 IAP Conference (LSU)  
“Resonant Interaction of a Compton Dipole in a Cavity”

2/16 EMA Conference (Orlando)  
“Anomalous Vibrational Modes in Clathrates and Graphene”

Other Duties

*Symposium Organizer of special focus session,  
American Physical Society, Solid State Division, March Meeting, 1985

*EAM Workshop-I, 8/87, Livermore

*EAM Workshop-II, 8/89, Livermore

*Symposium Co-Organizer, Special Symposium, Spring MRS meeting 1990

editor of proceedings for the above symposium: Atomic Scale Calculations of Structure in Materials, ed. M. S. Daw and M. A. Schluter, MRS
*Symposium co-Organizer of special focus session,  
American Physical Society, Solid State Division, March Meeting, 1998

*Symposium co-organizer of 2000 MRS Fall Meeting special focus session,  
"The Limit of Strength in Theory and Practice"

*Symposium co-organizer, ICCN Spring 2001, Puerto Rico,  
"Mechanical Properties at the Nanoscale"