

User Presentations

1. Alton, J.; Plaisted, T. J.; Hrma, P., "Kinetic Equations for Spinel Crystal Growth and Dissolution in High-Level Waste Glass" presented at 103rd Annual Meeting of the ACS, Indianapolis, IN, April 23, 2001.
2. Baer, D. R.; Lea, A. S.; Northover, J. P.; Paparazzo, E.; Salter, "High resolution elemental mapping in archaeological samples" presented at Fall Meeting of the Materials Research Society, Boston, MA, November, 2001.
3. Bahr, D., "Mechanical Properties and Testing Methods for Thin Films: Fracture and Adhesions Studies" presented at Center for Molecular Imaging Seminar, University of Toronto, October 19, 2000.
4. Balmer, M. L., "New Silicotitanate Waste Forms: Development and Characterization" presented at EMSP National Workshop, Atlanta, GA, April 24-28, 2000.
5. Begg, B. D.; Hess, N. J.; McCready, D. E.; Thevuthasan, S.; Weber, W. J., "The Susceptibility of $Gd_2(Ti_{2-x}Zr_x)O_7$ Pyrochlores to Radiation Damage" presented at 102nd Annual Meeting of the American Ceramic Society, St. Louis, MO, May 2, 2000.
6. Bunker, B. C.; Nelson, G. C.; Wall, F. D.; Barbour, C.; Sullivan, J. P.; Windisch, C.; Engelhard, M. H.; Baer, D. R.; Hren, J., "The Role of Passive Film Hydration in the Pitting of Aluminum" presented at Spring 2000 Meeting of the Materials Research Society, San Francisco, CA, April 24, 2000.
7. Chambers, S. A.; Thevuthasan, S.; McCready, D. E.; Farrow, R. F. C.; Folks, L.; Marks, R. F.; Ruzycki, N.; Ederer, D. L.; Diebold, U., "MBE Growth and Properties of Co-doped TiO_2 Anatase" presented at Spintronics 2001, Georgetown University, Washington, DC, August 9-11, 2001.
8. Chambers, S. A.; Thevuthasan, S.; McCready, D. E.; Farrow, R. F. C.; Folks, L.; Marks, R. F.; Ruzycki, N.; Ederer, D. L.; Diebold, U., "MBE Growth and Properties of Co-doped TiO_2 Anatase" presented at 48th International Symposium of the AVS, San Francisco, CA, October 29-November 2, 2001.
9. Choi, S.; Wang, Y.; Peden, C. H. F., "Mesoporous Silica Supported Tungstophosphoric Acid Based Solid Acid Catalysts" presented at 16th Annual Meeting of the North American Catalysis Society, Boston, MA, May 30-June 4, 1999.
10. Cliff, J., "Microbial Carbon and Nitrogen Assimilation in Soil Using TOF-SIMS" presented at Applied Isotope Geochemistry IV June, 2001.
11. Disselkamp, R., presented at 17th Informal Symposium on Photochemical Processes and Kinetics in the Atmosphere, UC Irvine, Irvine, CA, February 19, 2000.
12. Donley, M., "Self-Assembled Nano-Phase (SNAP) Sol-Gel Surface Treatments for Aerospace Aluminum Alloys" presented at SAMPE Technical Conference November, 2001.
13. Fluss, M. J.; Nelson, A. J.; Plitzko, J.; Wall, M.; Siekhaus, W.; Floyd, R.; Menapace, J.; Land, T.; DeYoreo, J.; Burnham, A.; Parham, T.; Whitman, P.; Engelhard, M. H.; Gaspar, D. J.; Baer, D. R., "Initiation Identification in 3ω optics" presented at 2001 Boulder Damage Symposium, Boulder, CO, 2001.

14. Gaspar, D. J.; Lea, A. S.; Engelhard, M. H.; Baer, D. R.; Miehr, R.; Tratnyek, P. G., "The Physical and Chemical Structure of Zero-Valent Iron After Corrosion by Carbon Tetrachloride" presented at 48th Annual Symposium of the AVS, San Francisco, CA, November 1, 2001.
15. Gaspar, D. J.; Baer, D. R.; Miehr, R.; Tratnyek, P. G., "An Imaging TOF-SIMS Study of the Physical and Chemical Structure of Zero-Valent Iron After Corrosion by Carbon Tetrachloride" presented at Fall 2001 Meeting of the Pacific Northwest Chapter of the AVS, Forest Grove, OR, September 21, 2001.
16. Liu, G.; Rodriguez, J. A.; Hrbek, J.; Dvorak, J.; Peden, C. H. F., "Electronic and Chemical Properties of $Ce_{0.8}Zr_{0.2}O_2(111)$ Surfaces: Photoemission, XANES, Density-Functional and NO_2 Adsorption Studies" presented at 48th International Symposium of the AVS and the 15th International Meeting of the IUUVSTA, San Francisco, CA, October 28 - November 1, 2001.
17. Liu, G.; Rodriguez, J. A.; Hrbek, J.; Dvorak, J.; Peden, C. H. F., presented at 2001.
18. Mantenieks, M. A.; Foster, J. E.; Ray, P. K.; Shutthanandan, V.; Thevuthasan, S., "Low Energy Xenon Ion Sputtering Yield Measurements" presented at 27th International Electric Propulsion Conference, Pasadena, CA, October 15 - 19, 2001.
19. Mattigod, S. V.; Hobbs, D. T.; Parker, K. E.; Nie, Z.; McCready, D. E., "Precipitation of Aluminum Containing Species in Tanks Wastes" presented at EMSP Program Review, Savannah River, June 6, 2001.
20. McClean, J. S.; Dohnalkova, A.; Korenensky, A.; Rosso, K. M.; Beveridge, T. J.; Gorby, Y. A., "Bacterial Iron-Reducing Membrane Vesicles: A Potential Source of Biogenic Nanofossils" presented at Meeting of the American Society for Microbiology, Orlando, FL, May 20, 2001.
21. Moore, L. K.; Grate, J. W.; Pomije, M. K.; Mann, K. R., "Vapochromic Sensors for the Detection of Volatile Organic Compounds" presented at Regional Meeting, American Chemical Society, Portland, OR, June 20, 1999.
22. Morton, S. A.; Waddill, G. D.; Tobin, J. G.; Kim, S.; Schuller, I. K.; Chambers, S. A., "Spin Polarized Photoemission Study of Magnetite Films: Extraction of the Bulk Polarization via a Substrate Overlayer Model" presented at ICESS 2000 2000.
23. Morton, S. A.; Waddill, G. D.; Tobin, J. G.; Kim, S.; Schuller, I. K.; Chambers, S. A., "Spin Polarized Photoemission Study of Magnetite Films" presented at 46th Annual Conference on Magnetism and Magnetic Materials, Seattle, WA, November 12-16, 2001.
24. Morton, S. A.; Waddill, G. D.; Tobin, J. G.; Kim, S.; Schuller, I. K.; Chambers, S. A., "Spin Polarized Photoemission Study of Magnetite Films: Extraction of the Bulk Polarization via a Substrate Overlayer Model" presented at 48th Annual Symposium of the AVS and the 15th International IUUVSTA Vacuum Congress, San Francisco, CA, October 29- November 2, 2001.
25. Nyman, M.; Krumhansl, J. L.; Jove-Colon, C.; Zhang, P.; Nenoff, T. M.; Headley, T. J.; Su, Y.; Li, L., "Chemical Interactions of UOPINSIV-0.1 in R IE-911 (CST) with SRS Waste Simulants" presented at Fall 2001 Meeting of the Materials Research Society, Boston, MA, November 26-30, 2001.

26. Ohuchi, F. S.; Ghose, G.; Engelhard, M. H.; Baer, D. R., "Use of Core- and Valence-Band XPS to Measure the Differences Among Similar Oxide and Mineral Phases" presented at 48th International Symposium of the AVS, San Francisco, CA, November 2, 2001.
27. Olsen, L. C.; Eschbach, P.; Kundu, S.; Gaspar, D.; Engelhard, M., "Effects of Buffer Layers on CIGSS Cell Performance" presented at National Renewable Energy Laboratory Seminar 2001.
28. Pang, M.; Rodriguez-Marek, D.; Bahr, D. F., "The Structural and Mechanical Characteristics of Passivating Films Grown Under Various Electrochemical Conditions" presented at Materials Research Society Spring Meeting 2000, Corrosion of Metals and Alloys Symposium 2000.
29. Park, P. W.; Rockwood, J. E.; Engelhard, M. H.; McCready, D.; Balmer, M. L., "A Comparison of In and Sn Doped Alumina for NO_x Reduction in Lean Conditions" presented at American Institute of Chemical Engineers (AIChE) Meeting, Los Angeles, CA, November 15, 2000.
30. Pavlick, A.; Pankow, J. F., "The solid solution/aqueous solution partitioning of cadmium to calcite" presented at Northwest Regional Meeting of the American Chemical Society, Richland, WA, June 20-23, 1999.
31. Rouse, A. A.; Szeles, C.; Ndap, J.-O.; Soldner, S. A.; Gaspar, D. J.; Engelhard, M. H.; Lea, A. S.; Shutthanandan, V.; Thevuthasan, S., "Interfacial Chemistry and the Performance of Bromine-Etched CdZnTe Radiation Detector Devices" presented at 12th International Workshop on Room-Temperature Semiconductor X- and Gamma-Ray Detectors, San Diego, CA, November 4-10, 2001.
32. Sass, B. M.; Gupta, N.; Ickes, J. A.; Engelhard, M. H.; Baer, D. R.; Bergman, P.; Byrer, C., "Interaction of Rock Minerals with Carbon Dioxide and Brine: A Hydrothermal Investigation" presented at National Energy Technology Laboratory (NETL) First Annual Conference on Carbon Sequestration March 20, 2001.
33. Suna, H. P.; Graham, G. W.; Pana, X. Q.; Peden, C. H. F.; Thevuthasan, S., "Microanalysis of Pd and Rh Particles on Ce_{1-x}Zr_xO₂ Thin Film Using Transmission Electron Microscopy" presented at 104th Annual Meeting of the American Ceramics Society, St. Louis, MO, April 28 - May 2, 2002.
34. Tanner, R. E.; Liang, Y.; Altman, E. I., "Scanning Tunneling Microscopy of Anatase TiO₂(001) Surface Reaction with Carboxylic Acids" presented at Annual Meeting of the American Institute of Chemical Engineers (AIChE), Reno, NV, November 4-9, 2001.
35. Thomson, W., "Supercritical Alkylation Using Solid Acid Catalysts" presented at Fall 2000 Meeting of the American Institute of Chemical Engineers (AIChE), Los Angeles, CA, November, 2000.
36. Tobin, J. G.; Morton, S.; Waddill, G. D.; Chambers, S. A.; Kim, S.; Schuller, I., "Fe₃O₄ Evidence for Half Metallic Ferromagnetic Behavior from Spin Polarized Photoemission" presented at Spintronics 2001 Workshop, Washington, DC, August 8-11, 2001.
37. Tobin, J. G.; Morton, S.; Waddill, G. D.; Chambers, S. A.; Kim, S.; Schuller, I., "Fe₃O₄: Evidence for Half Metallic Ferromagnetic Behavior from Spin Polarized Photoemission" presented at SpinTech 2001, Honolulu, HI, 2001.

38. Tobin, J. G.; Morton, S.; Waddill, G. D.; Chambers, S. A.; Kim, S.; Schuller, I., "Fe₃O₄: Evidence for Half Metallic Ferromagnetic Behavior From Spin Polarized Photoemission" presented at 2001 Users Meeting of the Advanced Light Source, Berkeley, CA, October, 2001.
39. Trigwell, S.; Mazumder, M. K.; Pellissier, R., "Tribocharging in Electrostatic Beneficiation of Coal: Effects of Surface Composition on Work Function as Measured by XPS and UPS in Air" presented at 48th International Symposium of the AVS, San Francisco, CA, November, 2001.
40. Trigwell, S.; Mazumder, M. K., "Effects of Surface Composition on Work Function in Tribocharging of Powders" presented at 13th Interdisciplinary Surface Science Conference (ISSC-13), UC London, London, England, April 4, 2001.
41. Wang, Y.; Choi, S.; Nie, Z.; Liu, J.; Kambhampati, D.; Peden, C. H. F., "Highly Dispersed Solid Acid Catalysts" presented at 2nd World Congress of Environmental Catalysis, Miami, FL, November 19, 1998.
42. Wang, L.-Q.; Ferris, K. F.; Baer, D. R.; Engelhard, M. H., "Interaction of HCOOH with Stoichiometric and Reduced SrTiO₃(100) Surfaces" presented at 46th National Symposium of the AVS, Seattle, WA, October 27, 2000.
43. Wang, L.-Q.; Ferris, K. F.; Engelhard, M. H., "Surface Structure Influence on Reactivity of Small Molecules on SrTiO₃(100) Surfaces" presented at 48th Annual Symposium of the AVS, San Francisco, CA, November 1, 2001.
44. Whitman, P. K.; Norton, M.; Nostrand, M.; Nelson, A. J.; Seikhaus, W.; Auerbach, G.; Burnham, A.; Engelhard, M. H.; Gaspar, D. J.; Baer, D. R., "Degradation of Bare and Sol-Gel Coated DKDP Crystals Exposed to Multiple 351-nm Laser Pulses in Vacuum and Air" presented at 2001 Boulder Damage Symposium, Boulder, CO, 2001.
45. Willey, T.; Vance, A.; van Buuren, T.; Bostedt, C.; Nelson, A. J.; Fox, G.; Engelhard, M. H.; Baer, D. R.; Terminello, L. J.; Fadley, C. S., "Characterization of Self-Assembled Monolayers Using NEXAFS" presented at ACSIN Conference, Tahoe, CA, July, 2001.
46. Willey, T.; Vance, A.; van Buuren, T.; Bostedt, C.; Nelson, A. J.; Fox, G.; Engelhard, M. H.; Baer, D. R.; Terminello, L. J.; Fadley, C. S., "Characterization of Self-Assembled Monolayers Using NEXAFS" presented at 48th Annual Symposium of the AVS, San Francisco, CA, October 30, 2001.
47. Windisch, C. F., Jr.; Baer, D. R.; Engelhard, M. H.; Danielson, M. J.; Jones, R. H., "Corrosion of Mg- and Cu-Implanted Al in 3.5% NaCl Solution" presented at 198th Meeting of the Electrochemical Society, Phoenix, AZ, October 24, 2000.
48. Xu, H.; Navrotsky, A.; Nyman, M. D.; Nenoff, T. M.; Su, Y.; Balmer, M. L., "Synthesis, Crystal Chemistry and Energetics of Microporous Silicotitanates in the (K_{1-x}Cs_x)₃Ti₄Si₃O₁₅(OH)nH₂O System" presented at Fall 2001 Meeting of the Materials Research Society, Boston, MA, November 26-30, 2001.
49. Altman, E. I., "Structure-Reactivity Relationships in Multi-Component Oxide Catalysts" proposal to DOE BES Energy Sciences (2000).
50. Cliff, J., "Hot Spots of Nitrogen Cycling in Soil" proposal to USDA NRI (2000).
51. Hubler, T. L.; Rassat, S. D.; Liang, L.; Dohnalkova, A.; Thevuthasan, S.; Wang, Z.; Cao, G.; Sinkovic, B.; Novotny, L., "The Synthesis and Characterization of Individual and Hierarchically Structured Nanorod Materials" proposal to

- Nanoscience and Nanotechnology Initiative, Laboratory Directed Research and Development, Pacific Northwest National Laboratory (2001).
52. Buck, E., "Determination of the Cerium Oxidation State in Titanate Ceramics" (Savannah River, 2001).