

List of Publications

1. Y.-S. Lin, R. Puthenkovilakam, J.P. Chang, C. Bouldin, I. Levin, N.V. Nguyen, Y. Sun, P. Pianetta, T. Conard, W. Vandervost, V. Venturo, S. Selbrede, "Tailoring the High-k Gate Dielectric/Silicon Interface for CMOS Applications, *J. Appl. Phys.*, submitted, 2002
2. B-O. Cho, J.P. Chang, J-H. Min, S.H. Moon, Y. W. Kim, I. Levin, "Material Characteristics of Electrically Tunable Zirconium Oxide Thin Films," *J. Appl. Phys.* submitted, 2002
3. I. Levin, T.A. Vanderah, R. Coutts and S.M. Bell, "Phase Equilibria and Dielectric Properties in Perovskite-Like $(1-x)\text{LaCa}_{0.5}\text{Zr}_{0.5}\text{O}_3\text{-ATiO}_3$ (A=Ca, Sr) Ceramics," *J. Mater. Res.*, 17(7),1729-1734, 2002
4. I. Levin, T. J. Amos, J. C. Nino, T.A. Vanderah, C. A. Randall, and M. E. Lanagan "Structural Study of an Unusual Cubic Pyrochlore $\text{Bi}_{1.5}\text{Zn}_{0.92}\text{Nb}_{1.5}\text{O}_{6.92}$," *J. Solid State Chem.*, 2002, in press
5. I. Levin, T. J. Amos, J. C. Nino, T.A. Vanderah, C. A. Randall, M. E. Lanagan and I.M. Reaney, "Crystal Structure of Compound $\text{Bi}_2\text{Zn}_{2/3}\text{Nb}_{4/3}\text{O}_3$," *J. Mater. Res.*, 17 (6), 1406-1411, 2002
6. I. Levin, J.Y. Chan, J.H. Scott, L. Farber, T.A. Vanderah and J.E. Maslar, "Complex Polymorphic Behavior and Dielectric Properties of Perovskite-Related $\text{Sr}(\text{Sr}_{1/3}\text{Nb}_{2/3})\text{O}_3$," *J. Solid State Chem.*, 166(1), 24-41 2002
7. L. Farber, I. Levin, A. Borisevich, I.E. Gray, R.S. Roth, P.K. Davies, "Structural Study of $\text{Li}_{1+x-y}\text{Nb}_{1-x-3y}\text{Ti}_{x+4y}\text{O}_3$ Solid Solutions," *J. Solid State Chem.*, 166 (1), 81-90 2002
8. W. Wong-Ng, Kaduk J.A., I. Levin, Greenwood W., J. Dillingham, "Powder X-ray reference patterns of $\text{Sr}_2\text{RGeCu}_2\text{O}_y$ (R=Pr, Nd, Sm, Eu, Gd, Dy, Ho, Er, Tm, and Y)," *J. Res. NIST*, 106 (4), 691-707, 2001
9. I. Levin, J.Y. Chan, S.M. Bell, J.E. Maslar and T.A. Vanderah, "Phase transitions and Microwave Dielectric Properties in the $\text{CaAl}_{0.5}\text{Nb}_{0.5}\text{O}_3\text{-CaTiO}_3$ System," *J. Appl. Phys.*, 90 (2) 904-914, 2001
10. L.A. Bendersky, I. Levin, R.S. Roth and A. Shapiro, $\text{Ca}_4\text{Nb}_2\text{O}_9\text{-CaTiO}_3$: "Phase Equilibria and Microstructures," *J. Solid. State Chem.*, 160 (1) 257-271, 2001
11. J.E. Maslar, W.S. Hurst, W.J. Bowers, J.H. Hendricks, M.I. Aquino, and I. Levin, "In-Situ Raman Spectroscopic Investigation of Chromium Surfaces Under Hydrothermal Conditions," *Appl. Surf. Sci.*, 180 (1:2) 102-118, 2001
12. I. Levin, L.H. Robbins, J.A. Tuchman, M.D. Vaudin, and E. Lakin, "Spontaneous Compositional Modulation in AlGaIn Layers in a Thick AlGaIn/GaN Multilayer Stack," *J. Appl. Phys.*, 89 (1), 188-193 (2001)
13. I. Levin, J. Y. Chan, R. G. Geyer, J. Maslar and T.A. Vanderah, "Different Cation Ordering Types and Dielectric Properties in Complex Perovskite $\text{Ca}(\text{Ca}_{1/3}\text{Nb}_{2/3})\text{O}_3$ " *J. Solid State Chem.*, 2001, 156, 122-134 (2001)
14. W. Wong-Ng, Q. Huang, I. Levin, J.A. Kaduk, J. Dillingham, Haugan T., J. Suh and Cook L. P., "Crystal Chemistry and Phase Equilibria of selected $\text{SrO-R}_2\text{O}_3\text{-CuO}_x$ and Related Systems; R=Lanthanides and Yttrium," *Int.J. Inorg. Mater.*, 3(8), 1283-1290 (2001)
15. J.E. Maslar, W.S. Hurst, T.A. Vanderah and I. Levin, "The Raman Spectra of Cr_3O_8 and Cr_2O_3 ," *J. Raman Spectroscopy*, 32, 201-206 2001

16. J. Dillingham W. Wong-Ng and I. Levin, "Phase Equilibria of the SrO-Yb₂O₃-CuO_x System in Air," *Int.J. Inorg. Mater.*, 3 (6) 569-573 (2001)
17. I. Levin, R.D. Leapman and D. L. Kaiser, "Microstructure and Chemistry of Non-Stoichiometric (Ba,Sr)TiO₃ Thin Films Deposited by MOCVD," *J. Mater. Res.*, 15[7], 1433-1436(2000)
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20. D. L. Kaiser, M.D. Vaudin, L.D. Rotter, J.E. Bonevich, I. Levin, J.T. Armstrong, A. L. Roytburd and D. G. Schlom, "Effect of Film Composition on the Orientation of (Ba,Sr)TiO₃ Grains in (Ba, Sr)_yTiO_{2-y} Thin Films", *J. Mater. Res.*, 14 [12] 4657-4666 (1999)
21. I. Levin and L.A. Bendersky, "Symmetry Classification of the Layered Perovskite-Derived A_nB_nX_{3n+2} Structures," *Acta Cryst. B* 55 [6], 853-866 (1999)
22. I. Levin, L.A. Bendersky and T.A. Vanderah, " A Structural Study of the Layered Perovskite-Derived Sr_n(NbTi)_nO_{3n+2} Compounds by TEM," *Phil. Mag.* 80[3], 411-446 (2000)
23. I. Levin, R.D. Leapman and D.L. Kaiser " Accommodation of Excess Ti in a (Ba,Sr)TiO₃ Thin Film With 53.4% Ti Deposited on Pt/SiO₂/Si by MOCVD, *Appl. Phys. Lett.*, 75 [9], 1299-1301 (1999)
24. L. Farber, I. Levin, M. W. Barsoum, "HRTEM Study of Some Ti_{n+1}BX_n (B=Al or Si; X=C or N) Compounds," *J Appl. Phys.* 86: (5) 2540-2543, (1999)
25. M. W. Barsoum, L. Farber, I. Levin, A. Procopio, T. El-Raghy and A. Berner, "High Resolution Transmission Electron Microscopy of Ti₄AlN₃, or Ti₃Al₂N₂," *J. Am. Ceram. Soc.*, 82 [9] 2545-2547 (1999)
26. L. Farber, I. Levin and M.W. Barsoum, "HRTEM Study of a Low-Angle Boundary in a Plastically Deformed Ti₃SiC₂," *Phil. Mag. Letters*, 79 [4], 163-170 (1999)
27. I. Levin and D.G. Brandon, "Metastable Alumina Polymorphs: Crystal Structures and Transition Sequences," (Feature) *J. Am. Ceram. Soc.*, 81 [8], 1995 (1998)
28. M. Beregovsky, I. Levin, A. Berner, M. Eizenberg, V. Demuth, H.P. Strunk, "Effect of Impurities on Initial Stages of Phase Formation for the System of Ti Deposited on (001) Si-Ge layers," *Thin Solid Films*, 338, 100-117 (1999)
29. I. Levin, A. Berner, C. Scheu, D.G. Brandon and H. Müllejans, "Electron Energy Loss Near-Edge Structure of Alumina Polymorphs," *Mikrochimica Acta*, 15, 93-96 (1998)
30. J. Yang, E. Schumann, I. Levin and M. Rühle, "Transient Oxidation of NiAl", *Acta Mater.* 46 [6] 2195-2201 (1998)
31. I. Levin, L.A. Bendersky, T.A. Vanderah, R.S. Roth and O. Staffsud, "A Series of Incommensurately Modulated A_nB_nO_{3n+2} Phases in the SrTiO₃-Sr₂Nb₂O₇ Quasibinary System," *Mater. Res. Bull.* 33[3], 501-517 (1998)
32. I. Levin and D.G. Brandon, "Polymorphic Phase Transformations in Alumina," *Trans. Ind.Inst.Met.*, 50: (6) 581-589, 1997
33. L. Farber, M.W. Barsoum, A. Zavaliangos and I. Levin, "Dislocations and Stacking Faults in Ti₃SiC₂ " *J.Am. Ceram.Soc.* 81 (6), 1677, 1998

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36. I. Levin, L.A. Bendersky, D.G. Brandon and M. Rühle, "Cubic-to-Monoclinic Phase Transformations in Alumina", *Acta Mater.*, 45 [9], 3659-3669, 1997
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39. W.D. Kaplan, I. Levin and D.G. Brandon, "Significance of Faceting on SiC Nanoparticles in Alumina," *Materials Science Forum*, 733, 1995
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