

**SMESA PRESENTATIONS  
YEARS 1995 - 2000**

**YEAR 95-96**

- W. Jia, H. Liu, and W.M. Yen, "**Photoexcitation of transition ions of unusual valence in laser material**". Proceedings of the First International Conference on Frontiers of Physics, Shantou, PR China, Aug. 5-9, 1995.
- R. Tao, A.R. Quo, C.S. Tu, I.G. Sing, R.S. Katiyar, R. Quo, and A.S. Bhalla "**Raman studies on Sr(Al<sub>1-x</sub>Ta<sub>x</sub>)O<sub>3</sub> (SAT) and Sr(Al<sub>1-115</sub>Vb<sub>1n</sub>)O<sub>3</sub> (SAN) thin films and single crystals**". MRS Fall Meeting, Nov.27 - Dec. 1, 1995.
- S. Farali, "**Pulsed Laser Deposition**", Presented at South-Easter APS Meeting, Tallahassee, Florida, November 9-11, 1995.

**YEAR 96-97**

- H. Liu, Y. Wang, W. Jia and F. Fernandez, "**Excitation dynamics of cerium in niobate crystals**", 21st Rare Earth Res. Cont, July 7-12, 1996, Duluth, MI.
- H. Liu, Y. Wang, W. Jia, "**Degenerate four-wave-mixing of nonether polyphenylquinoxaline solution**", SPIE, Opt.Sci.Eng.Instr.Conf., Aug.4-9, 1996, Denver.
- H. Liu, Y. Wang, W. Jia, "**Formation of small polaron by two-photon excitation in niobate crystals**". Inter Conf. Lumin.'96, Aug.18-23, 1996, Prague, Czech.
- J.D. Romero, H. Liu and W. Jia, "**Dispersion effects of population grating in Cr-doped YAG crystal by four wave mixing**". Inter.Conf. Lumin.'96, Aug.18-23, 1996, Prague, Czech.
- H. Liu, Y. Wang, W. Jia, M. Shen and S. Fu, "**Nonlinear optical response of polyphenylquinoxaline solution**", Intern.Conf. Organ.Nonl.Opt.'3, Marco Island, FL, Dec.16-20, 1996.
- W. Jia and H. Liu, "**Up-conversion dynamics of Er<sup>3+</sup> doped LiNbO<sub>3</sub> crystal fibers**", 190th Meeting of the Electrochemical Society, Oct. 6-10, 1996, San Antonio.
- H. Liu and W. Jia, "**Validity using pump-probe pulses to determine the optical response of niobate crystals**", NASA LJRC-TC'97, Feb. 16-19, 1997, Albuquerque, NM.

- H. Liu, W. Jia, **“Orientation dependence of fast optical response in barium tantanate crystals”**, Intern.Conf. DPC97, July 20-24, 1997.
- F. Torres, J. Pastrana, R. Colon, E. Delgado, and B. Ray, **“Low temperature characterization of CMOS operational amplifier Ics”**, Proc. 31st Intersociety Energy Conversion Engineering Conference, pp. 546-552, August 1996.
- B. Ray, S. S. Gerber, and R. L. Patterson, **“Low temperature performance of a full-bridge dc-dc convener”**, Proc. 31st Intersociety Energy Conversion Engineering Conference, pp.553-559, August 1996.
- C. Anglada, D. Perez, and B. Ray, **“Low temperature operation of a switching power converter”**, Proc. NASA URC Technical Conference, Feb.1997.
- F. Perez and B. Ray, **“Low temperature operation of a three-level buck dc-dc converter”**, 32nd Intersociety Energy Conversion Engineering Conference, Aug.1997.
- R. Tao, I.G. Siny, and R.S. Katiyar, **“Raman Scattering Studies in the Relaxor Ferroelectric”**, PSI American Physical Society March Meeting, St. Louis, March IS - 22, 1996.
- I.G. Siny, R.S. Katiyar, and S.G. Lushnikov, **“Dynamic breaking of the Translational Symmetry in the Relaxor ferroelectrics”**, American Physical Society March Meeting, St. Louis, March IS - 22, 1996.
- E. Ching-Prado, W. Perez, S. Sen, R.S. Katiyar, M.H. Frey, and D.A. Payne, **“Grain size Study of Fine and ultrafine BaTiO<sub>3</sub> Particles”**, American Physical Society March Meeting, St. Louis, March 18 - 22, 1996.
- R.S. Katiyar, R. Tao, I.G. Siny, R. Quo, and A.S. Bhalla, **“Comparative Study of the 1:1 and 1:2 B-site Ordering in Complex Perovskite Materials AB<sub>x</sub>B<sub>1-x</sub>O<sub>3</sub> by Raman Scattering”**, American Physical Society March Meeting, St. Louis, March 18 - 22, 1996.
- I.G. Siny, R.S. Katiyar, F. Husson, S.G. Lushnikov, and E.A. Rogacheva, **“Broad Central Peak in Light Scattering from the relaxor Ferroelectrics PMN and NBT”**, American Physical Society March Meeting, St. Louis, March 18 - 22,1996.
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- Ruiwu Tao, I.G.Siny, A.R. Guo, R.S. Katiyar, Ruyan Guo, and A.S. Bhalla, **“Raman and Temperature Dependent Raman Studies in Ba(Mg<sub>1/3</sub>Ta<sub>2/3</sub>)O<sub>3</sub> (BMT)”**, Materials Research Society Spring Meeting, San Francisco, April 8-12,1996.

- I.G. Siny, R. Tao, R.S. Katiyar, R. Quo, and A.S. Bhalla, **“Comparative study of the 1:1 and 1:2 B-site ordering in complex perovskite-type materials  $AB_{1-x}B_2O_3$  by Raman scattering”**, AAAS -EPSCoR Annual Conference, Ponce, P.R., May 24-25, 1996.
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- R.S. Katiyar, B.K. Rai, M.T. Nair, and P.K. Nair, **“Raman and Photoluminescence Studies of Chemically deposited CdSe Thin Films”**, American Vacuum Society 43<sup>rd</sup> National Symposium, Philadelphia, Oct. 14-18, 1996.
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- R.S. Katiyar, Jinfang Meng, **“Morphotropic Phase Boundary in the Nanocrystalline  $PbZr_xTi_{1-x}O_3$  System”**, Materials Research Society Fall Meeting, Boston, Dec. 2 - 6, 1996.
- I. Siny and R.S Katiyar, **“Transition Dynamics in Relaxor Ferroelectrics”**, 2997 Williamsburg Workshop on Ferroelectrics, Willimsburg, Feb. 2-5, 1997.

R.S. Katiyar and Meng Jinfang, **“A new probe to change Curie temperature of PbTiO<sub>3</sub> sensors”**. NASA University Research center Technical Conference, Albuquerque, Feb. 16 - 20(1997).

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