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***Dr. K.V. Ramanujachary***

### **Education:**

1978-82: Ph.D. in Chemistry, Indian Institute of Technology, Madras, India.  
1976-78: M.S. Chemistry, Andhra University, Vizag, India.[Gold Medalist]  
1973-76: B.Sc. Chemistry, Andhra University, Vizag, India.[College First]

### **Employment:**

Rowan University, Glassboro, NJ. (1998-present)  
**Professor**, Department of Chemistry and Biochemistry  
Rowan University, Glassboro, NJ (1996-98)  
**Associate Professor**, Department of Chemistry and Physics  
Rowan University, Glassboro, NJ (1994-96)  
**Assistant Professor**, Department of Chemistry and Physics  
Rutgers University, Piscataway, NJ (1988-93)  
**Research Associate Professor**, Department of Chemistry.

### **Areas of Research Interest:**

Oxide Chemistry of Transition Metals, Mixed metal Chalcogenides, Electrical and Magnetic Properties of Materials, Ionically conducting polymers and oxides, Sensors for Humidity and pH, Heterogeneous Catalysis.

### **Synthetic Techniques:**

Solid State Synthesis of ceramic materials, Precursor and Meta-thesis methods for preparing inorganic oxides, Crystal growth by Molten-salt-electrolysis and Flux methods, Chemical vapor transport reactions, Hydrothermal synthesis, Sono-chemical Techniques, Microwave-assisted synthesis of Novel materials.

### **Characterization Methods:**

Powder X-ray Diffraction, Thermal analysis (TGA, DTA and DSC), Single crystal film work (Weissenberg and Precession techniques), Single Crystal X-ray diffraction (CAD4), Electrical resistivity measurements at cryogenic temperatures, Ionic conductivity measurements (AC complex-impedance), Magnetic susceptibility (SQUID and PPMS), Electron microscopy (SEM-EDAX, TEM, AFM, STM and EMPA), **ICP-MS and AA** for elemental analysis, FTIR, EPR and Luminescence spectroscopy methods of solids.

**Membership:**

American Chemical Society with affiliation to the South Jersey ACS Chapter.  
Materials Research Society of Singapore

**List of Collaborators in the last 48 months:**

Prof. Martha Greenblatt, Rutgers University, Piscataway, NJ.  
Prof. W.H.M. McCarroll, Rider University, Lawrenceville, NJ  
Prof. G.V.S. Rao, National University of Singapore, Singapore.  
Prof. H.T. Hintzen, Technical University of Eindhoven, The Netherlands.  
Profs. Ganguli and Ramanan of I.I.T. Delhi.

**Funding:**

Secured nearly \$15 million dollars as a PI or Co-PI from various funding agencies such as NSF, Research Corporation, Rowan University Foundation, New Jersey Departments of Transportation, Education and Several Local Industries.

**Names of Post-Doctoral and Graduate Advisors:**

Prof. Martha Greenblatt, Rutgers University, New Jersey.  
Prof. C.S. Swamy, Indian Institute of Technology, Madras, India.

**Books:**

‘Oxides-Solid State Chemistry’, published by John Wiley & Sons as a part of their series on Chemical Encyclopedia

Co-authored a A comprehensive solution manual for the book ‘Inorganic chemistry’ by Shriver and Atkins of Oxford University Press.

## **Publications:**

1. Novel Borothermal Process for the Synthesis of Nano Crystalline Oxides and Borides of Niobium, Jha Menaka; Ramanujachary, Kandalam V; Lofland Samuel E; Gupta Govind; Ashok K. Ganguli, From Dalton Transactions (2011), 40(31), 7879-7888.
2. Enhanced Electrocatalytic Activity of Copper-Cobalt Nano Structures, Ahmed, Jahanger; Ganguly, Aparna; Saha, Soumen; Gupta Govind; Trinh, Phong; Mugweru, Amos M: Lofland Samuel E: Ramanujachary, Kandalam V; Ganguli, Ashok K, from Journal of Physical Chemistry C (2011), 115(30), 14526-14533.
3. Controlling the Size and Morphology of Anisotropic Nanostructures of Nicel Borate using Microemulsions and their Magnetic Properties, Menaka; Sharma, Soma; Ramanujachary, Kandalam V; Lofland, Samuel E; Ganguli, Ashok K, from Journal of Colloid and Interface Science (2011), 360(2), 393-397.
4. Synthesis of Core-Shell Nanostructures of Co<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> with controlled shell thickness (5-20nm) and Hollow Shells of Silica, Vaidya Sonalika; Thaplyl, Pallavi; Ramanujachary, K.V.; Lofland, S.E.; Ganguli, Ashok K, from Journal of Nanoscience and Nanotechnology (2011), 11(4), 3405-3413.
5. Stabilization of Mn(IV) in Nanostructured Zinc Manganese Oxide and Their Facile Transformation from Nanospheres to Nanorods, Menaka; Samal, S.L.; Ramanujachary, K.V.; Lofland, S.E.; Govind Ganguli, A.K. from Journal of Materials Chemistry (2011), 21(24), 8566-8573.
6. Spectroscopic, Thermal, Magnetic and Structural Characterization of K<sub>3</sub>Vf<sub>6</sub> Prepared at Room Temperature, Nagarajan, R; Tyagi, Neetu; Lofland, Samuel; Ramanujachary, K.V.; Polyhedron (2011), 30(8), 1425-1429.
7. High-Throughput Study of the Cu(CH<sub>3</sub>Coo)<sub>2</sub>.H<sub>2</sub>O-5-Nitroisophthalic Acid Heterocyclic Ligand System: Synthesis, Structure, Magnetic and Heterogeneous Catalytic Studies of Three Copper Nitroisophthalates, Sarma, Debajit; Ramanujachary, K.V.; Stock Norbert, Natarajan Srinivasan, Crystal Growth & Design (2011), 11(4), 1357-1369.
8. Crystallization of Anderson-Evans Type Chromium Molybdate Solids Incorporated with a Metal Pyrazine Complex or Coordination Polymer, Singh, Monika; Lofland, Samuel E; Ramanujachary, Kandalam V; Ramanan, Arunachalam, Crystal Growth & Design (2010), 10(12), 5105-5112.
9. BiMnFe<sub>2</sub>O<sub>6</sub>, a Polysynthetically twinned hcp MO Structure, Yang, Tao, Abakumov, Artem M; Hadermann, Joke; Van Tendeloo Gustaaf; Nowik, Israel; Stephens, Peter W; Hemberger, Joachim; Tsirlin, Alexander A; Ramanujachary, Kandalam V; Lofland, Samuel, Chemical Science (2010), 1(6), 751-762.

10. Reverse Micellar Based Synthesis of Ultrafine MgO nanoparticles (8-10nm): Characterization and Catalytic Properties, Ganguly, Aparna; Trinh, Phong; Ramanujachary, K.V.; Ahmad, Tokeer; Mugweru, Amos; Ganguli, Ashok K, Journal of Colloid and Interface Science (2010), 353(1), 137-142.
11. Synthesis and Characterization of Different Shaped Sm<sub>2</sub>O<sub>3</sub> Nanocrystals, Ghosh, Pushpal; Kundu, Simanta; Kar, Arik; Ramanujachary, K.V.; Lofland Samuel; Patra, Amitava, Journal of Physics D: Applied Physics (2010), 43(40), 405401/1-405401/7.
12. Binary Fe-Co Alloy Nanoparticles Showing Significant Enhancement in Electrocatalytic Activity Compared with Bulk Alloys, Ahmed, Jahangeer, Kumar, Bharat, Mugweru, Amos M: Trinh, Phong; Ramanujachary, Kandalam V; Lofland Samuel E; Journal of Physical Chemistry C (2010), 114(44), 18779-18784.
13. New Double Perovskite, LaBaTaNi<sub>1-x</sub>CoxO<sub>6</sub>: Structural, Dielectric and Magnetic Studies, Samal, S.L; Magdaleno, T; Ramanujachary, K.V.; Lofland, S.E.; Ganguli, A.K. Solid State Sciences (2010), 12(8), 1382-1386.
14. A new low temperature methodology to obtain pure nanocrystalline nickel borate By Menaka; Lofland, Samuel E.; **Ramanujachary, Kandalam V.**; Ganguli, Ashok K. From Journal of Organometallic Chemistry (2010), 695(7), 1002-1005.
15. Enhancement of magnetic ordering temperature in iron substituted ytterbium manganate (YbMn<sub>1-x</sub>FexO<sub>3</sub>) By Samal, S. L.; Magdaleno, T.; **Ramanujachary, K. V.**; Lofland, S. E.; Ganguli, A. K. From Journal of Solid State Chemistry (2010), 183(3), 643-648.
16. New quaternary Zintl phases - Synthesis, crystal and electronic structures of KA<sub>2</sub>Cd<sub>2</sub>Sb<sub>3</sub> (A = Ca, Sr, Ba, Eu, Yb) ; By Saparov, Bayrammurad; Broda, Matthew; **Ramanujachary, Kandalam V.**; Bobev, Svilen From Polyhedron (2010), 29(1), 456-462.
17. Amino acid based MOFs: synthesis, structure, single crystal to single crystal transformation, magnetic and related studies in a family of cobalt and nickel aminoisophthalates By Sarma Debajit; **Ramanujachary K V**; Lofland S E; Magdaleno Travis; Natarajan Srinivasan From Inorganic chemistry (2009), 48(24), 11660-76.
18. An investigation of structural, magnetic and dielectric properties of R<sub>2</sub>NiMnO<sub>6</sub> (R=rare earth, Y) By Booth, R. J.; Fillman, R.; Whitaker, H.; Nag, Abanti; Tiwari, R. M.; **Ramanujachary, K. V.**; Gopalakrishnan, J.; Lofland, S. E. From Materials Research Bulletin (2009), 44(7), 1559-1564.

19. Claisen-Schmidt Condensation Reaction Catalyzed by Magnesium Oxide Nanoparticles By Trinh, Phong; **Ramanujachary, Kandalam V.**; Ganguly, Aparna; Ganguli, Ashok; Mugweru, Amos Northeast Regional Meeting of the American Chemical Society, Hartford, CT, United States, October 7-10 (2009), NERM-338
20. Crystal, electronic structures, optical and magnetic properties of  $Tb_4Al_2O_9$  By Li, Y. Q.; Hirosaki, N.; Xie, R. J.; Takeda, T.; Lofland, S. E.; **Ramanujachary, K. V.** From Journal of Alloys and Compounds (2009), 484(1-2), 943-948.
21. Engineering of copper molybdates: Piperazine dictated pseudopolymorphs By Pavani, Katikaneani; Singh, Monika; Ramanan, Arunachalam; Lofland, Samuel E.; **Ramanujachary, Kandalam V.** From Journal of Molecular Structure (2009), 933(1-3), 156-162.
22. Magnetic and photocatalytic properties of nanocrystalline  $ZnMn_2O_4$  By Mohammed Qamar, Menaka; Lofland, Samuel E.; **Ramanujachary, Kandalam V.**; Ganguli, Ashok K. From Bulletin of Materials Science (2009), 32(3), 231-237.
23. Microemulsion-mediated synthesis of cobalt (pure fcc and hexagonal phases) and cobalt-nickel alloy nanoparticles By Ahmed, Jahangeer; Sharma, Shudhanshu; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Ganguli, Ashok K. From Journal of Colloid and Interface Science (2009), 336(2), 814-819.
24. Synthesis of Homogeneous  $NiO@SiO_2$  Core-shell Nanostructures and the Effect of Shell Thickness on the Magnetic Properties By Vaidya, Sonalika; **Ramanujachary, K. V.**; Lofland, S. E.; Ganguli, Ashok K. From Crystal Growth & Design (2009), 9(4), 1666-1670.
25. Bimetallic Cu-Ni nanoparticles of varying composition ( $CuNi_3$ ,  $CuNi$ ,  $Cu_3Ni$ ) By Ahmed, Jahangeer; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Furiato, Anthony; Gupta, Govind; Shivaprasad, S. M.; Ganguli, Ashok K. From Colloids and Surfaces, A: Physicochemical and Engineering Aspects (2008), 331(3), 206-212.
26. Development of a microemulsion-based process for synthesis of cobalt (Co) and cobalt oxide ( $Co_3O_4$ ) nanoparticles from submicrometer rods of cobalt oxalate By Ahmed, Jahangeer; Ahmad, Tokeer; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Ganguli, Ashok K. From Journal of Colloid and Interface Science (2008), 321(2), 434-441.
27. Effect of disorder on the electrical and superconducting properties in  $Ln_{1.2}Ba_{1.2}Ca_{0.6}Cu_3O_{7+\delta}$  ( $Ln = La, Nd, Sm$ ) and  $La_{1.2-x}Nd_xBa_{1.2}Ca_{0.6}Cu_3O_{7+\delta}$  By Samal, S. L.; Lofland, S. E.; **Ramanujachary, K. V.**; Sarkar, N.; Ghosh, S.; Ganguli, A. K. From Superconductor Science and Technology (2008), 21(8), 085007/1-085007/7.

28. Nanospheres, Nanocubes, and Nanorods of Nickel Oxalate: Control of Shape and Size by Surfactant and Solvent By Vaidya, Sonalika; Rastogi, Pankaj; Agarwal, Suman; Gupta, Santosh K.; Ahmad, Tokeer; Antonelli, Anthony M.; **Ramanujachary, K. V.**; Lofland, S. E.; Ganguli, Ashok K. From Journal of Physical Chemistry C (2008), 112(33), 12610-12615.
29. Role of carboxylate ion and metal oxidation state on the morphology and magnetic properties of nanostructured metal carboxylates and their decomposition products By Ganguly, Aparna; Kundu, Rituparna; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Das, Dipankar; Vasanthacharya, N. Y.; Ahmad, Tokeer; Ganguli, Ashok K. From Journal of Chemical Sciences (Bangalore, India) (2008), 120(6), 521-528.
30. Study on the solid solution of  $\text{YMn}_{1-x}\text{Fe}_x\text{O}_3$ : Structural, magnetic and dielectric properties By Samal, S. L.; Green, W.; Lofland, S. E.; **Ramanujachary, K. V.**; Das, D.; Ganguli, A. K. From Journal of Solid State Chemistry (2008), 181(1), 61-66.
31. A novel one-pot metathesis route for the synthesis of double perovskites,  $\text{Ba}_3\text{MM}'_2\text{O}_9$  ( $\text{M} = \text{Mg, Ni, Zn}$ ;  $\text{M}' = \text{Nb, Ta}$ ) with 1:2 ordering of M and M' atoms By Mani, Rohini; Bhuvanesh, N. S. P.; **Ramanujachary, K. V.**; Green, William; Lofland, S. E.; Gopalakrishnan, J. From Journal of Materials Chemistry (2007), 17(16), 1589-1592.
32. Metal-insulator transitions in reduced molybdenum oxides  $\text{Sm}_4\text{Mo}_{18}\text{O}_{32}$  and  $\text{Nd}_4\text{Mo}_{18}\text{O}_{32}$  By Lofland, S. E.; Tyagi, S.; Hettinger, J. D.; McCarroll, W. H.; **Ramanujachary, K. V.**; Gall, P.; Gougeon, P. From Materials Research Bulletin (2007), 42(7), 1230-1241
33. Method of measuring fluoride in fluxes using the fluoride ion-selective electrode By Yeager, Jerry L.; **Ramanujachary, Kandalam V.** From U.S. Pat. Appl. Publ. (2007), US 2007082404 A1 20070412.
34.  $\text{R}_3\text{Mn}_{1.5}\text{CuV}_{0.5}\text{O}_9$  ( $\text{R} = \text{Y, Ho, Er, Tm, Yb and Lu}$ ) and  $\text{Lu}_3\text{Mn}_{3-3x}\text{Cu}_{2x}\text{V}_x\text{O}_9$ : New noncentrosymmetric oxides related to  $\text{YMnO}_3$  By Surendran, K. P.; Mani, Rohini; Gopalakrishnan, J.; **Ramanujachary, K. V.**; Lofland, S. E.; Green, William L. From Materials Research Bulletin (2007), 42(4), 618-625.
35. The hydrothermal synthesis of transition metal complex templated octamolybdates By Pavani, Katikaneani; Lofland, Samuel E.; **Ramanujachary, Kandalam V.**; Ramanan, Arunachalam From European Journal of Inorganic Chemistry (2007), (4), 568-578.
36. Determination of Total Fluoride Content in Electroslag Refining Fluxes Using a Fluoride Ion-Selective Electrode By Yeager, Jerry L.; Miller, Michael D.; **Ramanujachary, Kandalam V.** From Industrial & Engineering Chemistry Research (2006), 45(13), 4525-4529.

37. Emission Moessbauer studies of the magnetoresistive compound,  $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$  By Nath, Amar; Chechersky, Vladimir; **Ramanujachary, K. V.**; Butterick, Robert; Lofland, Sam; Preite, Steve From Solid State Communications (2006), 138(5), 224-228.
38. Formation of high nuclearity mixed-valent polyoxovanadates in the presence of copper amine complexes By Thomas, Jency; Sharma, Sanjeev; Lofland, S. E.; **Ramanujachary, K. V.**; Ramanan, A. From Journal of Chemical Sciences (Bangalore, India) (2006), 118(1), 79-86.
39. Magnetic and electrochemical properties of nickel oxide nanoparticles obtained by the reverse-micellar route By Ahmad, Tokeer; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Ganguli, Ashok K. From Solid State Sciences (2006), 8(5), 425-430.
40. Optical and magnetic properties of  $\text{EuSi}_2\text{O}_2\text{N}_2$  By Li, Y. Q.; **Ramanujachary, K. V.**; Lofland, S. E.; de With, G.; Hintzen, H. T. From Journal of Materials Research (2006), 21(2), 396-401.
41. Reverse micellar synthesis and properties of nanocrystalline GMR materials ( $\text{LaMnO}_3$ ,  $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$  and  $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$ ): ramifications of size considerations By Ahmad, Tokeer; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Ganguli, Ashok K. From Journal of Chemical Sciences (Bangalore, India) (2006), 118(6), 513-518.
42.  $\text{Sr}_3\text{Fe}_{5/4}\text{Mo}_{3/4}\text{O}_{6.9}$ , an  $n = 2$  Ruddlesden -Popper phase: Synthesis and properties By Whaley, Louis W.; Lobanov, Maxim; Sheptyakov, Denis; **Ramanujachary, Kandalam V.**; Lofland, Samuel; Stephens, Peter; Her, Jae-Hyuk; Van Tendeloo, Gustaff; Rossell, Marta; Greenblatt, Martha From Abstracts, 38th Middle Atlantic Regional Meeting of the American Chemical Society, Hershey, PA, United States, June 4-7 (2006), MRM-516.
43.  $\text{Sr}_3\text{Fe}_{5/4}\text{Mo}_{3/4}\text{O}_{6.9}$ , an  $n = 2$  Ruddlesden-Popper Phase: Synthesis and Properties By Whaley, Louis W.; Lobanov, Maxim V.; Sheptyakov, Denis; Croft, Mark; **Ramanujachary, Kandalam V.**; Lofland, Samuel; Stephens, Peter W.; Her, Jae-Hyuk; Van Tendeloo, Gustaf; Rossell, Marta; et al From Chemistry of Materials (2006), 18(15), 3448-3457.
44. Synthesis, structure and electronic properties of oxides with strong metal-metal bonds By **Ramanujachary, Kandalam V.** From Abstracts, 38th Middle Atlantic Regional Meeting of the American Chemical Society, Hershey, PA, United States, June 4-7 (2006), MRM-515.

45.  $(La_{2/5}Ba_{2/5}Ca_{1/5})(Mn_{(2/5)-x}Ni_xTi_{3/5})O_3$ . Rietveld studies, dielectric and magnetic properties of new perovskite-related oxides By Jha, Pika; Samal, Saroj L.; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Ganguli, Ashok K. From Bulletin of Materials Science (2005), 28(6), 571-577.
46. Canted antiferromagnetism in copper oxide nanoparticles synthesized by the reverse-micellar route By Ahmad, T.; Chopra, R.; **Ramanujachary, K. V.**; Lofland, S. E.; Ganguli, A. K. From Solid State Sciences (2005), 7(7), 891-895.
47. Investigation of cation-deficient quaternary thiospinels: single crystal study of  $Ag_{1.41}Cr_{1.47}Sn_{2.53}S_8$  By Garg, Gunjan; Gupta, Shalabh; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Ganguli, Ashok K. From Journal of Alloys and Compounds (2005), 390(1-2), 46-50.
48. Nanorods of copper and nickel oxalates synthesized by the reverse micellar route By Ahmad, Tokeer; Chopra, Reenu; Ramanujachary, Kandalam V.; Lofland, Samuel E.; Ganguli, Ashok K. From Journal of Nanoscience and Nanotechnology (2005), 5(11), 1840-1845.
49. Novel topotactic conversion of an organically templated vanadyl phosphate framework into layered structures By Asnani, Minakshi; Sharma, Sanjeev; Lofland, Samuel E.; **Ramanujachary, Kandalam V.**; Buffat, Philippe A.; Ramanan, Arunachalam From European Journal of Inorganic Chemistry (2005), (2), 401-409.
50.  $Sr_3Fe_{1.225}Mo_{0.775}O_7$ , a Unique  $n = 2$  Ruddlesden-Popper Phase with a Metal-Insulator Transition By Whaley, Louis W.; Greenblatt, Martha; Croft, Mark C.; Ramanujachary, Kandalam V.; Lobanov, Maxim; Sheptyakov, Denis From Abstracts, 37th Middle Atlantic Regional Meeting of the American Chemical Society, New Brunswick, NJ, United States, May 22-25, 2005 (2005), GENE-389.
51.  $SrFe_{1/4}Re_{3/4}O_3$ : A metallic ferromagnetic double perovskite with an uncommon octahedral tilt as revealed by high-resolution synchrotron powder X-ray diffraction By Whaley, Louis W.; Greenblatt, Martha; Croft, Mark C.; **Ramanujachary, Kandalam V.** From Abstracts, 37th Middle Atlantic Regional Meeting of the American Chemical Society, New Brunswick, NJ, United States, May 22-25, 2005 (2005), GENE-387.
52. Synthesis and Characterization of  $Sr_3FeMoO_{6.88}$ : An Oxygen-Deficient 2D Analogue of the Double Perovskite  $Sr_2FeMoO_6$  By Veith, Gabriel M.; Greenblatt, Martha; Croft, Mark; **Ramanujachary, K. V.**; Hattrick-Simpers, J.; Lofland, Samuel E.; Nowik, Israel From Chemistry of Materials (2005), 17(10), 2562-2567.
53.  $(La_{0.4}Ba_{0.4}Ca_{0.2})(Mn_{0.4}Ti_{0.6})O_3$ : A new titano-manganate with a high dielectric constant and antiferromagnetic interactions By Jha, Pika; Rai, Sarita; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Ganguli, Ashok K. From Journal of Solid State Chemistry (2004), 177(8), 2881-2888.

54. 2D-3D Transformation of Layered Perovskites through Metathesis: Synthesis of New Quadruple Perovskites  $A_2La_2CuTi_3O_{12}$  ( $A = Sr, Ca$ ) By Sivakumar, T.; Ramesha, K.; Lofland, S. E.; **Ramanujachary, K. V.**; Subbanna, G. N.; Gopalakrishnan, J. From Inorganic Chemistry (2004), 43(6), 1857-1864.
55. Lead precipitation by Vibrio harveyi: Evidence for novel quorum-sensing interactions By Mire, Chad E.; Tourjee, Jeanette A.; O'Brien, William F.; **Ramanujachary, Kandalam V.**; Hecht, Gregory B. From Applied and Environmental Microbiology (2004), 70(2), 855-864
56. Nanorods of manganese oxalate: A single source precursor to different manganese oxide nanoparticles ( $MnO$ ,  $Mn_2O_3$ ,  $Mn_3O_4$ ) By Ahmad, Tokeer; **Ramanujachary, Kandalam V.**; Lofland, Samuel E.; Ganguli, Ashok K. From Journal of Materials Chemistry (2004), 14(23), 3406-3410.
57. On the origin of high-temperature ferromagnetism in the low-temperature-processed Mn-Zn-O system By Kundaliya Darshan C; Ogale S B; Lofland S E; Dhar S; Metting C J; Shinde S R; Ma Z; Varughese B; **Ramanujachary K V**; Salamanca-Riba L; et al From Nature materials (2004), 3(10), 709-14.
58. Optical reflectance of blue bronze crystals near the Peierls transition By Knösel, E.; Guyon, G. J.; McDonald, K. F.; Lofland, S. E.; **Ramanujachary, K. V.**; McCarroll, W. H. From Solid State Communications (2004), 130(9), 613-617.
59. Quantitative determination of  $Eu^{2+}$  and  $Eu^{3+}$  content in (Eu,Y)-Si-Al-O-N glasses by magnetic measurements By De Graaf, D.; Hintzen, H. T.; De With, G.; **Ramanujachary, K. V.**; Lanci, C.; Lofland, S. E. From Solid State Communications (2004), 131(11), 693-696.
60. Transforming  $n = 1$  members of the Ruddlesden-Popper phases to a  $n = 3$  member through metathesis: synthesis of a new layered perovskite,  $Ca_2La_2CuTi_2O_{10}$  By Sivakumar, T.; Lofland, S. E.; **Ramanujachary, K. V.**; Ramesha, K.; Subbanna, G. N.; Gopalakrishnan, J. From Journal of Solid State Chemistry (2004), 177(7), 2635-2638.
61. Tuning the multiferroic properties of  $Pb(Fe_{1/2}Nb_{1/2})O_3$  by cationic substitution By Bhat, V. V.; **Ramanujachary, K. V.**; Lofland, S. E.; Umarji, A. M. From Journal of Magnetism and Magnetic Materials (2004), 280(2-3), 221-226.
62.  $[MQ(L)_{1/2}]$  ( $M = Mn, Zn, Cd$ ;  $Q = S, Se, Te$ ;  $L = 1,3$ -diaminopropane or 1,5-diaminopentane): organic-inorganic hybrid II-VI semiconductors By Huang, Xiaoying; Li, Jing; Knösel, Ernst; McDonald, Keith; **Ramanujachary, K. V.** From Abstracts, 36th Middle Atlantic Regional Meeting of the American Chemical Society, Princeton, NJ, United States, June 8-11 (2003), 265.

63. Crystal structure, magnetic and electrochemical properties of a quaternary thiospinel:  $\text{Ag}_2\text{MnSn}_3\text{S}_8$  By Garg, G.; **Ramanujachary, K. V.**; Lofland, S. E.; Lobanov, M. V.; Greenblatt, M.; Maddanimath, T.; Vijayamohanan, K.; Ganguli, A. K. From Journal of Solid State Chemistry (2003), 174(1), 229-232.
64. Defect driven magnetism in calcium hexaboride By Lofland, S. E.; Seaman, B.; **Ramanujachary, K. V.**; Hur, Nanjing; Cheong, S. W. From Physical Review B: Condensed Matter and Materials Physics (2003), 67(2), 020410/1-020410/3. Language:
65. Electronic structure of magnesium nitride-fluorides from first-principles calculations By Fang, C. M.; **Ramanujachary, K. V.**; Hintzen, H. T.; de With, G. From Journal of Alloys and Compounds (2003), 351(1-2), 72-76.
66. Investigation of the electrical and magnetic properties of electron-doped Ruddlesden-Popper phases,  $\text{CaO}(\text{Pr}_{0.08}\text{Ca}_{0.92}\text{MnO}_3)_n$  ( $n=1, 2, 3$  and  $\infty$ ) By Sudheendra, L.; Raju, A. R.; Lofland, S. E.; **Ramanujachary, K. V.** From Solid State Communications (2003), 126(8), 447-451
67. Magnetic properties of crystals of  $\text{La}_5\text{Mo}_{4-x}\text{T}_x\text{O}_{16}$  By Lofland, S. E.; Hattrick-Simpers, J.; **Ramanujachary, K. V.**; McCarroll, W. H. From Journal of Magnetism and Magnetic Materials (2003), 265(2), 113-118.
68. Novel magnetic properties of some low-valent oxides of molybdenum with the rare earths By **Ramanujachary, K. V.**; Lofland, S. E.; McCarroll, W. H.; Hettinger, Jeffery D. From Abstracts, 36th Middle Atlantic Regional Meeting of the American Chemical Society, Princeton, NJ, United States, June 8-11 (2003), 31.
69. Spectral, magnetic and electrochemical studies of layered manganese oxides with P2 and O2 structure By Shaju, K. M.; **Ramanujachary, K. V.**; Lofland, S. E.; Subba Rao, G. V.; Chowdari, B. V. R. From Journal of Materials Chemistry (2003), 13(10), 2633-2640.
70. Unusual magnetic properties of  $\text{La}_5\text{Mo}_4\text{O}_{16}$  By Lofland, S. E.; Scabarozzi, T.; **Ramanujachary, K. V.**; McCarroll, W. H. From Journal of Magnetism and Magnetic Materials (2003), 260(1-2), 184-187.
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