1.Ariharan, A., Ramesh, K., Vinayagamoorthi, R., Rani, M. S., Viswanathan, B., Ramaprabhu, S., & Nandhakumar, V. (2021). Biomass derived phosphorous containing porous carbon material for hydrogen storage and high-performance supercapacitor applications. *Journal of Energy Storage*, *35*, 102185.

2.Viswanathan, B. (2021). Photo-catalytic Reduction of Carbon dioxide to Abstract Value-Added Chemicals. *Chemical Industry Digest*, (February 2021), 40–45.

3.Vinayagamoorthi Rathinasamy Thirunavukkarasu Kandasamy, K. K. R. V. B. \& S. K. (2021). Conversion of ethanol to higher alcohols on Ni/MxOy-Al2O3 (M=La, Ce, Zr, Mg and Ti) catalysts: Influence of support characteristics. *Indian Journal of Chemical Technology*, *28*(January), 9–22.

4.R Vinayagamoorthi K R Krishnamurthy, B. V. \& K. S. (2021). Ethanol condensation to butanol and higher alcohols over nickel and cobalt decorated CeO2-Al2O3 mixed oxide catalysts. *Indin Journal of Chemistry Section A*, *60*(March), 386–396.

5.Vinayagamoorthi, R., Viswanathan, B., & Krishnamurthy, K. R. (2021). Catalytic Conversion of Alcohols into Value-Added Products. *Catalysis for Clean Energy and Environmental Sustainability: Biomass Conversion and Green Chemistry-Volume 1*, 505–590.

6.Viswanathan, B., Ariharan, A., Nandhakumar, V., & others. (2020). Phosphorous-doped porous carbon derived from paste of newly growing Ficus benghalensis as hydrogen storage material. *Indian Journal of Chemistry-Section A (IJCA)*, *55*(6), 649–656.

7.Viswanathan, B., Krishnamurthy, K. R., Saranya, A., Thinauvkkarasu, K., & others. (2020). Studies on palladium based bimetallic catalysts-Pd-M/TiO2 (M= Cu, Ag \& Au): I-Selective hydrogenation of 1-heptyne. *Indian Journal of Chemistry-Section A (IJCA)*, *58*(2), 271–280.

8.Vandarkuzhali, S. A. A., Viswanathan, B., Pachamuthu, M. P., & Kishore, S. C. (2020). Fine Copper Nanoparticles on Amine Functionalized SBA-15 as an Effective Catalyst for Mannich Reaction and Dye Reduction. *Journal of Inorganic and Organometallic Polymers and Materials*, *30*(2), 359–368.

9.Viswanathan, B. V., & others. (2020). Catalysis by hydrotalcite materials. *Indian Journal of Chemistry-Section A (IJCA)*, *58*(7), 733–752.

10.Viswanathan, B. (2020). Platinum-based anode catalyst systems for direct methanol fuel cells. In *Direct Methanol Fuel Cell Technology* (pp. 177–200). Elsevier.

11.Scibioh, M. A., & Viswanathan, B. (2020). Materials for Supercapacitor Applications. Elsevier.

12.Singh, O., Agrawal, A., Selvaraj, T., Ghosh, I. K., Vempatapu, B. P., Viswanathan, B., … Sarkar, B. (2020). Renewable aromatics from tree-borne oils over zeolite catalysts promoted by transition metals. *ACS Applied Materials \& Interfaces*, *12*(22), 24756–24766.

13.Lal, M. S., Arjunan, A., Balasubramanian, V., & Sundara, R. (2020). Redox-active polymer hydrogel electrolyte in biowaste-derived microporous carbon-based high capacitance and energy density ultracapacitors. *Journal of Electroanalytical Chemistry*, *870*, 114236.

14.Viswanathan, B. (2020). The Relevance of Photocatalysis for Energy Conversion and Storage. *Chemical Industry Digest*, *2020*(April), 30–34.

15.Vatti, S. K., Krishnamurthy, K. K. R., & Viswanathan, B. (2020). Pd Supported Catalysts with Intrinsic Surface Electropositive Sites for Improved Selective Hydrogenation of Cinnamaldehyde.

16.Viswanathan, B. (2020). The Current Status of Hydrogen Economy. *Chemical Industry Digest*.

17.Viswanathan, B. (2020). The Relevance of photocatalysis for Energy conversion and storage. *Chemical Industry Digest*, 30–34.

18.Viswanathan, B. (2019). Active Materials for Photocatalytic Reduction of Carbon Dioxide. *Photocatalytic Functional Materials for Environmental Remediation*, 343–372.

19.Narayanan, H., Viswanathan, B., Krishnamurthy, K. R., & Nair, H. (2019). Hydrogen from photo-electrocatalytic water splitting. In *Solar Hydrogen Production* (pp. 419–486). Academic Press.

20.Viswanathan, B., Suryakumar, V., Venugopal, B., Roshna, S. H., & Hariprasad, N. (2019). Perovskite Materials an Introduction. *National Centre for Catalysis Research Department Of Chemistry Indian Institute of Technology Madras*.

21.Jeyalakshmi, V., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2018). Strontium titanates with perovskite structure as photo catalysts for reduction of CO2 by water: Influence of co-doping with N, S \& Fe. *Catalysis Today*, *300*, 152–159.

22.Viswanathan, B., & Gea-Banacloche, J. (2018). Analytical results for a conditional phase shift between single-photon pulses in a nonlocal nonlinear medium. *Physical Review A*, *97*(3), 32314.

23.Jeyalakshmi, V., Mahalakshmy, R., Ramesh, K., Rao, P. V. C., Choudary, N. V, Thirunavukkarasu, K., … Viswanathan, B. (2018). Metal oxides as photo catalysts: Modified sodium tantalate as catalyst for photo reduction of carbon dioxide. *Molecular Catalysis*, *451*, 105–113.

24.Scibioh, M. A., & Viswanathan, B. (2018). Carbon dioxide to chemicals and fuels. Elsevier.

25.Hariprasad, N., Viswanathan, B., Krishnamurthy, K. R., & Nair, M. V. H. (2018). Understanding Reaction Mechanism in Photon-Assisted Reduction of Carbon Dioxide. *Photocatalytic Nanomaterials for Environmental Applications*, *27*, 175.

26.Ariharan, A., Viswanathan, B., & Nandhakumar, V. (2018). Nitrogen-incorporated carbon nanotube derived from polystyrene and polypyrrole as hydrogen storage material. *International Journal of Hydrogen Energy*, *43*(10), 5077–5088.

27. Ariharan, A., & Viswanathan, B. (2018). Porous activated carbon material derived from sustainable bio-resource of peanut shell for H 2 and CO 2 storage applications.

28.Keerthiga, G., Viswanathan, B., & Chetty, R. (2018). EFFECT OF BICARBONATE AND CHLORIDE ELECTROLYTES ON PRODUCT DISTRIBUTION FOR CO 2 ELECTROCHEMICAL REDUCTION ON Cu ELECTRODE. *Catalysis in Green Chemistry and Engineering*, *1*(2).

29.Viswanathan, B. (2018). Photocatalytic degradation of dyes: an overview. *Current Catalysis*, *7*(2), 99–121.

30.Vandarkuzhali, S. A. A., Karthikeyan, S., Viswanathan, B., & Pachamuthu, M. P. (2018). Arachis hypogaea derived activated carbon/Pt catalyst: reduction of organic dyes. *Surfaces and Interfaces*, *13*, 101–111.

31.Anjugam Vandarkuzhali, S. A., Pugazhenthiran, N., Mangalaraja, R. V, Sathishkumar, P., Viswanathan, B., & Anandan, S. (2018). Ultrasmall plasmonic nanoparticles decorated hierarchical mesoporous TiO2 as an efficient photocatalyst for photocatalytic degradation of textile dyes. *ACS Omega*, *3*(8), 9834–9845.

32.Vandarkuzhali, S. A. A., Natarajan, S., Jeyabalan, S., Sivaraman, G., Singaravadivel, S., Muthusubramanian, S., & Viswanathan, B. (2018). Pineapple peel-derived carbon dots: applications as sensor, molecular keypad lock, and memory device. *ACS Omega*, *3*(10), 12584–12592.

33.Vivekanandan, G., Viswanathan, B., & Sivasanker, S. (2018). ICEEIS--PP 24 VAPOUR PHASE AROMATIC SIDE CHAIN ALKYLATION OVER CSY ZEOLITES. *SALVATIO’18*.

34.Viswanathan, B. (2018). Advances in Catalysis in Recent Times. *Chemical Industry Digest*.

35.Lakhi, K. S., Park, D.-H., Al-Bahily, K., Cha, W., Viswanathan, B., Choy, J.-H., & Vinu, A. (2017). Mesoporous carbon nitrides: synthesis, functionalization, and applications. *Chemical Society Reviews*, *46*(1), 72–101.

36.Narayanan Hariprasad Nair, M. V. H. V. B. (2017). On the current status of the mechanistic aspects of photocatalytic reduction of carbon dioxide. *Indian Journal of Chemistry -Section A*, *56*(03), 251–269.

37.R. Shanmugam, T. S., & Viswanathan, B. (2017). CO2 transformation on the active site of carbonic anhydrase enzyme leading to formation of H2CO3- A biomimetic model through computational study. *Turkish Computational and Theoretical Chemistry, 1, 17*, *1*(1), 17–26.

38.R.Shanmugam A Thamaraichelvan, T. K. G. B. V. (2017). R.Shanmugam, Computational evaluation of sub-nanometer cluster activity of singly exposed copper atom with various coordinative environment in catalytic CO 2 transformation. *Applied Surface Science*, *396*, 444–454.

39.Arjunan Ariharan Balasubramanian Viswanathan, V. N. (2017). Nitrogen Doped Graphene as Potential Material for Hydrogen Storage. *Graphene,* *6*, 41–60.

40.Surya Kumar Vatti Krishnamurthy Konda Ramaswamy, V. B. (2017). Shape Controlled Palladium Nano Particles for Hydrogenation of Cinnamaldehyde, Journal of Advances in Nanomaterials. *Journal of Advances in Nanomaterials, Vol. 2, No. 2, June 2017*, *2*(2).

41.M. G. Prakash R. Mahalakshmy, K. R. K., & Viswanathan, B. (2017). M. G. Prakash, R. MaInfluence of support phase on the nickel catalyzed selective hydrogenation of cinnamaldehyde. *European Chemical Bulletin (2017*.

42.Viswanathan, B. (2017). Hybrid Organic Inorganic perovskites (HOIP) How far these materials useful for water decomposition. *Bulletin of the Catalysis Society of India*, *15*(3–4), 14–21.

43.M. G. Prakash R. Mahalakshmy, K. R. K., & Viswanathan, B. (2017). Influence of support phase on the nickel catalyzed selective hydrogenation of cinnamaldehyde,. *European Chemical Bulletin*, *6*(3), 125–131.

44.Prakash, M. G., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2017). NIckel based catalysts for selective hydrogenation of cinnamaldehyde-influence of support phases. *Eur. Chem. Bull.*, *6*, 125.

45.Viswanathan, B. (2017). Material selection for photoelectrochemical or photocatalytic processes. In *Solar Fuel Generation* (pp. 61–76). CRC Press.

46.Lakhi, K. S., Park, D.-H., Al-Bahily, K., Cha, W., Viswanathan, B., Choy, J.-H., & Vinu, A. (2017). Correction: Mesoporous carbon nitrides: synthesis, functionalization, and applications. *Chemical Society Reviews*, *46*(2), 560.

47.Vandarkuzhali, S. A. A., Jeyalakshmi, V., Sivaraman, G., Singaravadivel, S., Krishnamurthy, K. R., & Viswanathan, B. (2017). Highly fluorescent carbon dots from Pseudo-stem of banana plant: Applications as nanosensor and bio-imaging agents. *Sensors and Actuators B: Chemical*, *252*, 894–900.

48.Kakati, N., Maiti, J., Lee, K. S., Viswanathan, B., & Yoon, Y. S. (2017). Hollow sodium nickel fluoride nanocubes deposited MWCNT as an efficient electrocatalyst for urea oxidation. *Electrochimica Acta*, *240*, 175–185.

49.V. Jeyalakshmi R. Mahalakshmy, K. R. K., & Viswanathan, B. (2017). V. Jeyalakshmi, R. Mahalakshmy, K. R. KModified Meso-Porous Titania—Sepiolite Clay Composites for Photo Catalytic Reduction of Carbon Dioxide. *Advanced Porous Materials*, *5*(2), 88–101.

50. R. Shanmugam, T. S., & Viswanathan, B. (2017). . R. ShaCO2 transformation on the active site of carbonic anhydrase enzyme leading to formation of H2CO3- A biomimetic model through computational study. *Turkish Computational and Theoretical Chemistry*, *1*(1), 17–26.

51.Jeyalakshmi, V., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2017). Modified Meso-Porous Titania—Sepiolite Clay Composites for Photo Catalytic Reduction of Carbon Dioxide. *Advanced Porous Materials*, *5*(2), 88–101.

52.Kanaparthi, R., Raman, R., Jeyalakshmi, V., Ramesh, P. S., Rao, P. V. C., Viswanathan, B., … Gandham, S. (2017). Solar Fuels by Photo, Electro and Photo-Electro Catalytic Reduction of Carbon Dioxide. In *22nd World Petroleum Congress*.

53.Viswanathan, B., & others. (2016). Adsorption of VOC on steam activated carbon derived from coconut shell charcoal. *Indian Journal of Chemical Technology (IJCT)*, *21*(5–6), 345–349.

54.Jeyalakshmi, V., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2016). Photocatalytic reduction of carbon dioxide in alkaline medium on La modified sodium tantalate with different co-catalysts under UV--Visible radiation. *Catalysis Today*, *266*, 160–167.

55.Prakash, M. G., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2016). Studies on Ni--M (M= Cu, Ag, Au) bimetallic catalysts for selective hydrogenation of cinnamaldehyde. *Catalysis Today*, *263*, 105–111.

56.Ariharan, A., Viswanathan, B., & Nandhakumar, V. (2016). Hydrogen storage on boron substituted carbon materials. *International Journal of Hydrogen Energy*, *41*(5), 3527–3536.

57.Ariharan, A., Viswanathan, B., & Nandhakumar, V. (2016). Heteroatom doped multi-layered graphene material for hydrogen storage application. *Graphene*, *5*(2), 39–50.

58.Narayanan, H., Viswanathan, B., & Yesodharan, S. (2016). Photocatalytic reduction of carbon dioxide: Issues and prospects. *Current Catalysis*, *5*(2), 79–107.

59.Kour, G., Gupta, M., Vishwanathan, B., & Thirunavukkarasu, K. (2016). (Cu/NCNTs): a new high temperature technique to prepare a recyclable nanocatalyst for four component pyridine derivative synthesis and nitroarenes reduction. *New Journal of Chemistry*, *40*(10), 8535–8542.

60.Chandravathanam, S., & Viswanathan, B. (2016). Influence of sulphonic acid groups on enhanced anchoring of Pt to carbon black support and hence enhanced methanol oxidation activity.

61.Shanmugam, R., Thamaraichelvan, A., Ganesan, T. K., & Viswanathan, B. (2016). Carbon dioxide activation and transformation to HCOOH on metal clusters (M= Ni, Pd, Pt, Cu, Ag \& Au) anchored on a polyaniline conducting polymer surface--an evaluation study by hybrid density functional theory. *RSC Advances*, *6*(103), 100829–100840.

62.Viswanathan, B. (2016). Energy sources: fundamentals of chemical conversion processes and applications. Newnes.

63.Viswanathan, B. (2016). Phot-catalytic or photo-synthetic routes for the decomposition of water- are they realizable Dreams? *Bulletin of the Catalysis Society of India*, *15*, 9–13.

64.Jeyalakshmi, V., Tamilmani, S., Mahalakshmy, R., Bhyrappa, P., Krishnamurthy, K. R., & Viswanathan, B. (2016). Sensitization of La modified NaTaO3 with cobalt tetra phenyl porphyrin for photo catalytic reduction of CO2 by water with UV–visible light. *Journal of Molecular Catalysis A: Chemical*, *420*, 200–207. https://doi.org/http://dx.doi.org/10.1016/j.molcata.2016.04.027

65.Rao, C., Muthukumar, K., Kumar, L. H., Viswanathan, B., & others. (2015). Development of Cobalt Based Non-Precious Electrocatalyst for Oxygen Reduction Reaction. *Advanced Chemistry Letters*, *2*(1), 9–15.

66.Keerthiga, G., Viswanathan, B., & Chetty, R. (2015). Electrochemical reduction of CO2 on electrodeposited Cu electrodes crystalline phase sensitivity on selectivity. *Catalysis Today*, *245*, 68–73.

67.Prakash, M. G., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2015). Selective hydrogenation of cinnamaldehyde on nickel nanoparticles supported on titania: role of catalyst preparation methods. *Catalysis Science \& Technology*, *5*(6), 3313–3321.

68.Shanmugam, R., Thamaraichelvan, A., & Viswanathan, B. (2015). Methanol formation by catalytic hydrogenation of CO 2 on a nitrogen doped zinc oxide surface: an evaluative study on the mechanistic pathway by density functional theory. *RSC Advances*, *5*(74), 60524–60533.

69.Subramanian, N., & Viswanathan, B. (2015). Nitrogen-and oxygen-containing activated carbons from sucrose for electrochemical supercapacitor applications. *RSC Advances*, *5*(77), 63000–63011.

70.Kour, G., Gupta, M., Vishwanathan, B., & Thirunavukkarasu, K. (2015). Iron nanotube-silica composite (ZVI-S-PCAT modified silica composite) preparation, characterization and application as a recyclable catalytic system for 5-membered ring organic transformations. *Dalton Transactions*, *44*(33), 14975–14990.

71.Muthuvinayagam, A., & Viswanathan, B. (2015). On the structural, morphological and gas sensing properties of nanocrystalline SnO 2.

72.Ariharan, A., Viswanathan, B., & Nandhakumar, V. (2015). Hydrogen sorption in phosphorous substituted carbon material.

73.Muthuvinayagam, A., & Viswanathan, B. (2015). Hydrothermal synthesis and LPG sensing ability of SnS nanomaterial.

74.Jeyalakshmi, V., Mahalakshmy, R., Ramesh, K., Rao, P. V. C., Choudary, N. V, Sri Ganesh, G., … Viswanathan, B. (2015). Visible light driven reduction of carbon dioxide with water on modified Sr3Ti2O7 catalysts. *RSC Adv.*, *5*(8), 5958–5966. https://doi.org/10.1039/C4RA11985A

75.Viswanathan, B., & Raghavan, P. S. (2014). Practical Physical Chemistry. MV Learning.

76.Viswanathan, B., & Scibioh, M. A. (2014). Photoelectrochemistry: Principles and Practices. Alpha Science International Limited.

77.Subramanian, N., Viswanathan, B., & Varadarajan, T. K. (2014). A facile, morphology-controlled synthesis of potassium-containing manganese oxide nanostructures for electrochemical supercapacitor application. *RSC Advances*, *4*(64), 33911–33922.

78.Viswanathan, B., & Lee, J. S. (2014). Materials and processes for solar fuel production. Springer New York.

79.Kakati, N., Maiti, J., Lee, S. H., Jee, S. H., Viswanathan, B., & Yoon, Y. S. (2014). Anode catalysts for direct methanol fuel cells in acidic media: do we have any alternative for Pt or Pt--Ru? *Chemical Reviews*, *114*(24), 12397–12429.

80.Viswanathan, B., & Konda, K. (2014). Visible light driven reduction of CO2 by water on modified Sr3Ti2O7. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 248).

81.Hariharan, S., Palanichamy, M., & Viswanathan, B. (2014). Dehydration of oxime on the self-architected MFI structure.

82.Anuradha, S., Raj, K., Vijayaraghavan, V. R., & Viswanathan, B. (2014). Sulphated Fe 2 O 3-TiO 2 catalysed transesterification of soybean oil to biodiesel.

83.Lakhi, K. S., & Viswanathan, B. (2014). Chemical Engineering: A Comprehensive Approach. Alpha Science International Limited.

84.Jeyalakshmi, V., Mahalakshmy, R., Ramesh, K., Rao, P. V. C., Choudary, N. V, Sri Ganesh, G., … Viswanathan, B. (2014). Visible light driven reduction of carbon dioxide with water on modified Sr₃Ti₂O₇ catalysts.

85.Viswanathan, B. (2014). Reduction of Carbon Dioxide: Photo-Catalytic Route to Solar Fuels. In Balasubramanian Viswanathan, V. (Ravi) Subramanian, & J. S. Lee (Eds.), *Materials and Processes for Solar Fuel Production* (pp. 211–233). New York, NY: Springer New York. https://doi.org/10.1007/978-1-4939-1628-3\_11

86.Jeyalakshmi, V., Rajalakshmi, K., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2013). Application of photo catalysis for mitigation of carbon dioxide. *Research on Chemical Intermediates*, *39*(6), 2565–2602.

87.Raj, K. J. A., Prakash, M. G., Mahalakshmy, R., Elangovan, T., & Viswanathan, B. (2013). Liquid phase hydrogenation of crotanaldehyde over nickel supported on titania. *Journal of Molecular Catalysis A: Chemical*, *366*, 92–98.

88.Viswanathan, B., Murugesan, S., Ariharan, A., & Lakhi, K. S. (2013). Hetero atom substituted carbon—potential hydrogen storage materials. *Advanced Porous Materials*, *1*(1), 122–128.

89.Jeyalakshmi, V., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2013). Photocatalytic reduction of carbon dioxide by water: A step towards sustainable fuels and chemicals. In *Materials Science Forum* (Vol. 734, pp. 1–62).

90.Kumar, L. H., Rao, C. V., & Viswanathan, B. (2013). Catalytic effects of nitrogen-doped graphene and carbon nanotube additives on hydrogen storage properties of sodium alanate. *Journal of Materials Chemistry A*, *1*(10), 3355–3361.

91.Mehla, S., Krishnamurthy, K. R., Viswanathan, B., John, M., Niwate, Y., Kumar, K., … Newalkar, B. L. (2013). n-Hexadecane hydroisomerization over Pt/ZSM-12: role of Si/Al ratio on product distribution. *Journal of Porous Materials*, *20*(5), 1023–1029.

92.Krishnamurthy, K. R., & Viswanathan, B. (2013). Catalysts for Transesterification.

93.Mehla, S., Krishnamurthy, K. R., Viswanathan, B., John, M., Niwate, Y., Kumar, S. A. K., … Newalkar, B. L. (2013). n-Hexadecane hydroisomerization over BTMACl/TEABr/MTEABr templated ZSM-12. *Microporous and Mesoporous Materials*, *177*, 120–126.

94.Viswanathan, B. (2013). Shape and Size dependent Catalysis by Gold Nano-Particles.

95.Viswanathan, B. (2013). Electrochemical/Electro-catalytic Applications of Polyoxometalates. In *Environmentally Benign Catalysts* (pp. 245–255). Springer, Dordrecht.

96.Viswanathan, B. (2013). On the selection Criteria of Semiconductors for Water Decomposition.

97.Viswanathan, B. (2013). HYDROGEN STORAGE IN NANO-MATERIALS.

98.Venkatasubramanian, V., & Viswanathan, B. (2013). One approach for the design of semiconductor materials for photo-electrochemical applications.

99.Viswanathan, B. (2013). Preface: special issue on catalysis. *International Journal of Advances in Engineering Sciences and Applied Mathematics*, *5*(4), 195–196.

100.Viswanathan, B. (2013). Electro-Catalytic Reduction of Carbon Dioxide. *New and Future Developments in Catalysis*. Elsevier: Amsterdam, The Netherlands.

101.Viswanathan, B. (2013). New and Future Developments in Catalysis: Chapter 10. Electro-Catalytic Reduction of Carbon Dioxide. Elsevier Inc. Chapters.

102.Chandravathanam, S., Kavitha, B., Viswanathan, B., & Thangam, Y. Y. (2012). Study of sulphonic acid functionalization of Vulcan XC-72 carbon black support of Pt/Vulcan XC-72 catalyst for methanol electrooxidation.

103.Maiti, J., Kakati, N., Lee, S. H., Jee, S. H., Viswanathan, B., & Yoon, Y. S. (2012). Where do poly (vinyl alcohol) based membranes stand in relation to Nafion®for direct methanol fuel cell applications? *Journal of Power Sources*, *216*, 48–66.

104.Rao, C. V., & Viswanathan, B. (2012). Microemulsion synthesis and electrocatalytic properties of carbon-supported Pd--Co--Au alloy nanoparticles. *Journal of Colloid and Interface Science*, *367*(1), 337–341.

105.Rajalakshmi, K., Jeyalakshmi, V., Krishnamurthy, K. R., & Viswanathan, B. (2012). Photocatalytic reduction of carbon dioxide by water on titania: Role of photophysical and structural properties.

106.Kaviya, S., Santhanalakshmi, J., & Viswanathan, B. (2012). Biosynthesis of silver nano-flakes by Crossandra infundibuliformis leaf extract. *Materials Letters*, *67*(1), 64–66.

107.Viswanathan, B. (2012). Reflections on the electrochemical reduction of carbon dioxide on metallic surfaces.

108.Raj, K. J. A., Prakash, M. G., Elangovan, T., & Viswanathan, B. (2012). Selective hydrogenation of cinnamaldehyde over cobalt supported on alumina, silica and titania. *Catalysis Letters*, *142*(1), 87–94.

109.Bania, K. K., Bharali, D., Viswanathan, B., & Deka, R. C. (2012). Enhanced catalytic activity of zeolite encapsulated Fe (III)-Schiff-base complexes for oxidative coupling of 2-napthol. *Inorganic Chemistry*, *51*(3), 1657–1674.

110.Raj, K. J. A., Prakash, M. G., Mahalakshmy, R., Elangovan, T., & Viswanathan, B. (2012). Liquid phase hydrogenation of nitrobenzene over nickel supported on Titania. *Chinese Journal of Catalysis*, *33*(7–8), 1299–1305.

111.Keerthiga, G., Viswanathan, B., Pulikottil, C. A., & Chetty, R. (2012). Electrochemical reduction of Carbon dioxide at surface oxidized copper electrodes. *Bonfring International Journal of Industrial Engineering and Management Science*, *2*(1), 41–43.

112.Banu, M., Venuvanalingam, P., Shanmugam, R., Viswanathan, B., & Sivasanker, S. (2012). Sorbitol hydrogenolysis over Ni, Pt and Ru supported on NaY. *Topics in Catalysis*, *55*(11–13), 897–907.

113.RAJ, K. J. A., PRAKASH, M. G., MAHALAKSHMY, R., ELANGOVAN, T., & VISWANATHAN, B. (2012). TiO\\_2 担载镍催化剂上硝基苯液相加氢 (英文). 催化学报, *8*.

114.Raj, K. J. A., Prakash, M. G., Mahalakshmy, R., Elangovan, T., & Viswanathan, B. (2012). Selective hydrogenation of acetophenone over nickel supported on titania. *Catalysis Science \& Technology*, *2*(7), 1429–1436.

115.Jeyalakshmi, V., Mahalakshmy, R., Krishnamurthy, K. R., & Viswanathan, B. (2012). Titania based catalysts for photoreduction of carbon dioxide: Role of modifiers.

116.Premalatha, K., Raghavan, P. S., & Viswanathan, B. (2012). Liquid phase oxidation of benzyl alcohol with molecular oxygen catalyzed by metal chromites. *Applied Catalysis A: General*, *419*, 203–209.

117.Deepa, G., Sankaranarayanan, T. M., Shanthi, K., & Viswanathan, B. (2012). Hydrodenitrogenation of model N-compounds over NiO-MoO3 supported on mesoporous materials. *Catalysis Today*, *198*(1), 252–262.

118.Raj, K., Elangovan, T., & Viswanathan, B. (2012). Single-step synthesis and structural study of phosphate modified titania through seeding method.

119.Viswanathan, B., & Krishanmurthy, K. R. (2012). Nitrogen incorporation in TiO2: does it make a visible light photo-active material? *International Journal of Photoenergy*, *2012*.

120.Scibioh, M. A., & Viswanathan, B. (2012). The status of catalysts in PEMFC technology. In *Catalysis for alternative energy generation* (pp. 329–368). Springer, New York, NY.

121.Lee, S., Vandiver, M., Viswanathan, B., & Subramanian, V. (2012). Harvesting Solar Energy Using Inexpensive and Benign Materials. *Handbook of Climate Change Mitigation*, 1217–1261.

122.Viswanathan, B., Rajeswari, J., & Kishore, P. S. (2012). 1D compounds of Mo/W for electrochemcial applications. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 243).

123.Keerthiga, G., Viswanathan, B., Pulikottil, C. A., & Chetty, R. (2012). Electrochemical Reduction of Carbon Dioxide at Modified Copper. In *International Conference on Control of Industrial Gaseous Emission (CIGE--2012)*.

124.Du, H.-Y., Wang, C.-H., Hsu, H.-C., Chang, S.-T., Yen, S.-C., Chen, L.-C., … Chen, K.-H. (2011). High performance of catalysts supported by directly grown PTFE-free micro-porous CNT layer in a proton exchange membrane fuel cell. *Journal of Materials Chemistry*, *21*(8), 2512–2516.

125.Viswanathan, B., Dharmaraja, J., & Balamurugan, J. (2011). Structural parameters and optical constants of CdS nanocrystalline thin films. *Nano*, *6*(03), 251–258.

126.Rao, C. V., Kumar, L. H., Viswanathan, B., & others. (2011). Iron and Nitrogen containing Carbon Catalysts withEnhanced Activity for Oxygen Reduction in ProtonExchange Membrane Fuel Cells. *Open Journal of Physical Chemistry*, *1*(01), 11.

127.Jothiramalingam, R., Viswanathan, B., & Wang, M. K. (2011). Appraisal of Heterogeneous Solid Acid—Base Catalysts for Transesterification. *ChemInform*, *42*(3), no--no.

128.Chandravathanam, S., Viswanathan, B., & Varadarajan, T. K. (2011). Effect of citrate on the Pt state of Pt/Carbon Black catalyst for methanol electro-oxidation studies. *Science of Advanced Materials*, *3*(6), 1031–1037.

129.Kaviya, S., Santhanalakshmi, J., Viswanathan, B., Muthumary, J., & Srinivasan, K. (2011). Biosynthesis of silver nanoparticles using Citrus sinensis peel extract and its antibacterial activity. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, *79*(3), 594–598.

130.Kaviya, S., Santhanalakshmi, J., & Viswanathan, B. (2011). Green synthesis of silver nanoparticles using Polyalthia longifolia leaf extract along with D-sorbitol: study of antibacterial activity. *Journal of Nanotechnology*, *2011*.

131.Beck, A., Magesh, G., Kuppan, B., Schay, Z., Geszti, O., Benkó, T., … Guczi, L. (2011). Specific role of polymorphs of supporting titania in catalytic CO oxidation on gold. *Catalysis Today*, *164*(1), 325–331.

132.Udayakumar, V., Alexander, S., Gayathri, V., Shivakumaraiah, & Viswanathan, B. (2011). Study on the influence of substituents upon the hydrogenation of nitrobenzene using a polymer-supported palladium-imidazole complex catalyst. *Reaction Kinetics, Mechanisms and Catalysis*, *103*(2), 341–352.

133.Navaladian, S., & Viswanathan, B. (2011). Synthesis of different architectures like stars, multipods, ellipsoids and spikes of zinc oxide by surfactantless precipitation. *Journal of Nanoscience and Nanotechnology*, *11*(11), 10219–10226.

134.Raj, K., & Viswanathan, B. (2011). Synthesis of nickel nanoparticles with fcc and hcp crystal structures.

135.Raj, K., Prakash, M. G., Shanmugam, R., Krishnamurthy, K. R., & Viswanathan, B. (2011). Surface acidic properties of sulphated Fe 2 O 3-TiO 2.

136.Mahendran, S., Nithya, T., Raju, K. P., Viswanathan, B., Selvam, P., & others. (2011). DEHYDRATION OF GLYCEROL OVER HIGH SURFACE AREA $γ$-ALUMINA SUPPORTED HETEROPOLY ACID CATALYSTS. In *Chemeca 2011: Engineering a Better World: Sydney Hilton Hotel, NSW, Australia, 18-21 September 2011* (pp. 1263–1273). Engineers Australia Barton, ACT.

137.Raj, K. J. A., Prakash, M. G., & Viswanathan, B. (2011). Selective ortho butylation of phenol over sulfated Fe 2 O 3--TiO 2. *Catalysis Science \& Technology*, *1*(7), 1182–1188.

138.Viswanathan, B., & Mahesh, G. (2011). Photocatalytic/electrochemical studies on Cadmium stannates for water decomposition and pollution abatement. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 241).

139.Viswanathan, B., Alagarasi, A., & Selvam, P. (2011). Photocatalytic activity of mesoporous titania. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 241).

140.Viswanathan, B. (2011). Photo-Electrochemical Processes—Principles and Possibilities. *Chennai: National Centre for Catalysis Research Indian Institute of Technology Madras*, 1À73.

141.Viswanathan, B. (2011). National Centre for Catalysis Research.

142.Viswanathan, B. (2011). Carbon dioxide to fuels and chemicals. Course materials. *National Center for Catalysis Research (India), Online: Https://Nccr. Iitm. Ac. in/Course\% 20Material1. Pdf*.

143.Rao, C. V., & Viswanathan, B. (2010). Monodispersed platinum nanoparticle supported carbon electrodes for hydrogen oxidation and oxygen reduction in proton exchange membrane fuel cells. *The Journal of Physical Chemistry C*, *114*(18), 8661–8667.

144.Prakash, A. V, Neel, P. I., & Viswanathan, B. (2010). Bio-analogous electrode for oxygen reduction reaction.

145.Selvam, P., Krishna, N. V, & Viswanathan, B. (2010). Architecting mesoporous AlSBA-15: Anoverview onthe synthetic strategy. *Journal of the Indian Institute of Science*, *90*(2), 271–285.

146.Rao, C. V., & Viswanathan, B. (2010). Carbon supported Pd--Co--Mo alloy as an alternative to Pt for oxygen reduction in direct ethanol fuel cells. *Electrochimica Acta*, *55*(8), 3002–3007.

147.Janet, C. M., Navaladian, S., Viswanathan, B., Varadarajan, T. K., & Viswanath, R. P. (2010). Heterogeneous wet chemical synthesis of superlattice-type hierarchical ZnO architectures for concurrent H2 production and N2 reduction. *The Journal of Physical Chemistry C*, *114*(6), 2622–2632.

148.Udayakumar, V., Alexander, S., Gayathri, V., Patil, K. R., Viswanathan, B., & others. (2010). Polymer-supported palladium-imidazole complex catalyst for hydrogenation of substituted benzylideneanilines. *Journal of Molecular Catalysis A: Chemical*, *317*(1–2), 111–117.

149.Smith, Y. R., Raj, K. J. A., Subramanian, V. R., & Viswanathan, B. (2010). Sulfated Fe2O3--TiO2 synthesized from ilmenite ore: a visible light active photocatalyst. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, *367*(1–3), 140–147.

150.Maiyalagan, T., & Viswanathan, B. (2010). Synthesis, characterization and electrocatalytic activity of Pt supported on poly (3, 4-ethylenedioxythiophene)--V2O5 nanocomposites electrodes for methanol oxidation. *Materials Chemistry and Physics*, *121*(1–2), 165–171.

151.Helen, M., Viswanathan, B., & Murthy, S. S. (2010). Poly (vinyl alcohol)--polyacrylamide blends with cesium salts of heteropolyacid as a polymer electrolyte for direct methanol fuel cell applications. *Journal of Applied Polymer Science*, *116*(6), 3437–3447.

152.Raj, K., Shanmugam, R., Mahalakshmi, R., & Viswanathan, B. (2010). XPS and IR spectral studies on the structure of phosphate and sulphate modified titania--a combined DFT and experimental study.

153.Smith, Y. R., Subramanian, V., & Viswanathan, B. (2010). Photo-electrochemical and photo-catalytic conversion of carbon dioxide. *Photo-Electrochemistry and Photobiology for Sustainability*.

154.Raj, K., & Viswanathan, B. (2010). CuO, K 2 O and V 2 O 5 supported on ceria-titania: Synthesis, characterization and application for diesel soot combustion.

155.Viswanathan, B., Kannan, S., & Deka, R. C. (2010). Catalysts and Surfaces: Characterization Techniques. Alpha Science International.

156.Raj, K., & Viswanathan, B. (2010). Catalytic combustion of diesel soot particles on potassium and sodium titanates.

157.Viswanathan, B. (2010). The science of nanomaterials in catalysis. *ChemInform*, *41*(12), no--no.

158.Selvam, P., Murthy, P. R., Krishna, N. V., & Viswanathan, B. (2010). Ordered nanoporous carbon (NCCR-56): Synthesis, characterization and applications. *ICAMS-2010, Bucharest, Sep*, 16–18.

159.Raj, K., Smith, Y. R., Subramanian, V. R., & Viswanathan, B. (2010). Structural studies of silica modified titania and its photocatalytic activity of 4-chlorophenol oxidation in aqueous medium.

160.Rajeswari, J., Kishore, P. S., Viswanathan, B., & Varadarajan, T. K. (2009). One-dimensional MoO2 nanorods for supercapacitor applications. *Electrochemistry Communications*, *11*(3), 572–575.

161.Venkateswara Rao, C., & Viswanathan, B. (2009). ORR activity and direct ethanol fuel cell performance of carbon-supported Pt- M (M= Fe, Co, and Cr) alloys prepared by polyol reduction method. *The Journal of Physical Chemistry C*, *113*(43), 18907–18913.

162.Viswanathan, B. (2009). Architecture of carbon support for Pt anodes in direct methanol fuel cells. *Catalysis Today*, *141*(1–2), 52–55.

163.Kumar, E. A., Maiya, M. P., Murthy, S. S., & Viswanathan, B. (2009). Structural, hydrogen storage and thermodynamic properties of some mischmetal--nickel alloys with partial substitutions for nickel. *Journal of Alloys and Compounds*, *476*(1–2), 92–97.

164.Satyananda Kishore, P., Viswanathan, B., & Varadarajan, T. K. (2009). Silicotungstic acid based carbon supported noble metal electrodes for energy conversion application. *The Journal of Physical Chemistry C*, *113*(29), 12918–12925.

165.Viswanathan, B., Neel, P. I., & Varadarajan, T. K. (2009). Development of carbon materials for energy and environmental applications. *Catalysis Surveys from Asia*, *13*(3), 164–183.

166.T.K.Varadarajan, Neel P I and Viswanathan B., (2009). Methods of Activation and Specific Applications of Carbon Materials. NCCR internal Bulletin.

167. Kishore, P. S., Viswanathan, B., & Varadarajan, T. K. (2009). Electrochemical oxygen reduction reaction by Pt nanoparticles on carbon support stabilized by polyoxometalates. *Journal of Nanoscience and Nanotechnology*, *9*(9), 5188–5197.

168. Viswanathan, B. (2009). Nano materials. Alpha Science.

169.Sangeetha, P., Shanthi, K., Rao, K. S. R., Viswanathan, B., & Selvam, P. (2009). Hydrogenation of nitrobenzene over palladium-supported catalysts—effect of support. *Applied Catalysis A: General*, *353*(2), 160–165.

170.Raj, K., & Viswanathan, B. (2009). Effect of surface area, pore volume and particle size of P25 titania on the phase transformation of anatase to rutile.

171. Magesh, G., Viswanathan, B., Viswanath, R. P., & Varadarajan, T. K. (2009). Photocatalytic behavior of CeO 2-TiO 2 system for the degradation of methylene blue.

172.Raj, K. J. A., Ramaswamy, A. V, & Viswanathan, B. (2009). Surface area, pore size, and particle size engineering of titania with seeding technique and phosphate modification. *The Journal of Physical Chemistry C*, *113*(31), 13750–13757.

173.Navaladian, S., Viswanathan, B., Varadarajan, T. K., & Viswanath, R. P. (2009). A rapid synthesis of oriented palladium nanoparticles by UV irradiation. *Nanoscale Research Letters*, *4*(2), 181–186.

174.Chakrabarty, D. K., & Viswanathan, B. (2009). Heterogeneous catalysis. New Age Science.

175.Raj, K. J. A., & Viswanathan, B. (2009). Single-step synthesis and structural study of mesoporous sulfated titania nanopowder by a controlled hydrolysis process. *ACS Applied Materials \& Interfaces*, *1*(11), 2462–2469.

176.Viswanathan, B., & Sankaran, M. (2009). Hetero-atoms as activation centers for hydrogen absorption in carbon nanotubes. *Diamond and Related Materials*, *18*(2–3), 429–432.

177.Navaladian, S., Viswanathan, B., Varadarajan, T. K., & Viswanath, R. P. (2009). Fabrication of worm-like nanorods and ultrafine nanospheres of silver via solid-state photochemical decomposition. *Nanoscale Research Letters*, *4*(5), 471–479.

178.Maiyalagan, T., & Viswanathan, B. (2009). Electrochemical fabrication and characterization of poly (o-phenylenediamine) nanotubes by template method.

179.Mahalakshmy, R., Indraneel, P., & Viswanathan, B. (2009). Surface functionalities of nitric acid treated carbon--A density functional theory based vibrational analysis.

180.Viswanathan, B., & Ramaswamy, A. V. (2009). Selection of solid heterogeneous catalysts for transesterification reaction. *ChemInform*, *40*(26), no--no.

181.Viswanathan, B. (2009). Catalysis: selected applications. Alpha Science.

182.Sabiah, S., & Viswanathan, B. (2009). Mo-amino acid complexes as analogs for molybdoenzyme: A DFT approach.

183.Viswanathan, B., Neel, P. I., & Varadarajan, T. K. (2009). Methods of activation and specific applications of carbon materials. *India, Chennai*.

184.Dhar, G. M., Sharma, L. D., Vishwanathan, B., & Garg, M. O. (2009). Preface| Catalysis Today-Volume 141, Issues 1--2. Elsevier.

185.Dhar, G. M., Sharma, L. D., Vishwanathan, B., & Garg, M. O. (2009). Selected Papers from the" Catalysis for future fuels" 18th National Symposium and INDO-US Seminar on Catalysis, Indian Institute of Petroleum, Dehradun, India, April 16-18, 2007 Preface. ELSEVIER SCIENCE BV PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS.

186.MURALI DHAR, G., VISWANATHAN, B., SHARMA, L. D., & GARG, M. O. (2009). Selected Papers from the Catalysis for future fuels. 18th National Symposium and INDO-US Seminar on Catalysis, Indian Institute of Petroleum, Dehradun, India, April 16-18, 2007. *Catalysis Today (Print)*, *141*(1–2).

187.Kishore, P., Viswanathan, B., & Varadarajan, T. (2008). Synthesis and characterization of metal nanoparticle embedded conducting polymer--polyoxometalate composites. *Nanoscale Research Letters*, *3*(1), 14–20.

188.Kumar, L. H., Viswanathan, B., & Murthy, S. S. (2008). Hydrogen absorption by Mg2Ni prepared by polyol reduction. *Journal of Alloys and Compounds*, *461*(1–2), 72–76.

189.Vasu, G., Tangirala, A. K., Viswanathan, B., & Dhathathreyan, K. S. (2008). Continuous bubble humidification and control of relative humidity of H2 for a PEMFC system. *International Journal of Hydrogen Energy*, *33*(17), 4640–4648.

190.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2008). The preparation of metal oxygen molecular cluster embedded organic--inorganic nanocomposite and its rectification behaviour. *Materials Chemistry and Physics*, *112*(3), 863–868.

191.Maiyalagan, T., & Viswanathan, B. (2008). Catalytic activity of platinum/tungsten oxide nanorod electrodes towards electro-oxidation of methanol. *Journal of Power Sources*, *175*(2), 789–793.

192.Kumar, L. H., Viswanathan, B., & Murthy, S. S. (2008). Dehydriding behaviour of LiAlH4—the catalytic role of carbon nanofibres. *International Journal of Hydrogen Energy*, *33*(1), 366–373.

193.Sankaran, M., Viswanathan, B., & Murthy, S. S. (2008). Boron substituted carbon nanotubes—How appropriate are they for hydrogen storage? *International Journal of Hydrogen Energy*, *33*(1), 393–403.

194.Navaladian, S., Viswanathan, B., Varadarajan, T. K., & Viswanath, R. P. (2008). Microwave-assisted rapid synthesis of anisotropic Ag nanoparticles by solid state transformation. *Nanotechnology*, *19*(4), 45603.

195.Arunachalam, S., & Viswanathan, B. (2008). A historiographic analysis of fuel-cell research in Asia--China racing ahead. *Current Science*, 36–49.

196.Rao, C. V., Singh, S. K., & Viswanathana, B. (2008). Electrochemical performance of nano-SiC prepared in thermal plasma.

197.Sankaran, M., & Viswanathan, B. (2008). Nitrogen-containing carbon nanotubes as a possible hydrogen storage medium.

198.Sankaran, M., & Viswanathan, B. (2008). Nitrogen-containing carbon nanotubes as a possible hydrogen storage medium.

199.Viswanathan, B. (2008). Appropriateness of Arrhenius equation for kinetic analysis of solid state reactions. In *National workshop on thermal analsyis at IGCAR february, National Centre for Catalysis Research* (pp. 1–15).

200.Viswanathan, B. (2008). PETR 47-Conceptual reflections on hydrogen generation through PEC and its storage. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 235).

201.Arunachalam, S., & Viswanathan, B. (2008). South-South cooperation: The case of Indo-Chinese collaboration in scientific research. *Current Science*, *95*(3), 311–313.

202.Selvavathi, V., Meenakshisundaram, A., Sairam, B., Indra Neel, P., Rajasekaran, M., & Viswanathan, B. (2008). Adsorptive desulphurization of diesel by modified carbons. In *6th international symposium on fuels and lubricants (ISFL-2008)*.

203.Subrahmanyam, C., Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2008). Synthesis and Characterization of Thermally Stable Mesoporous Titania. *Eurasian Chemico-Technological Journal*, *10*(1), 19–23.

204.Hima Kumar, L., Viswanathan, B., & Srinivasa Murthy, S. (2008). Dehydriding behaviour of Formula Not Shown-the catalytic role of carbon nanofibres. *INTERNATIONAL JOURNAL OF HYDROGEN ENERGY*, *33*(1), 366–373.

205.Rajeswari, J., Viswanathan, B., & Varadarajan, T. K. (2007). Tungsten trioxide nanorods as supports for platinum in methanol oxidation. *Materials Chemistry and Physics*, *106*(2–3), 168–174.

206.Janet, C. M., Viswanathan, B., Viswanath, R. P., & Varadarajan, T. K. (2007). Characterization and photoluminescence properties of MgO microtubes synthesized from hydromagnesite flowers. *The Journal of Physical Chemistry C*, *111*(28), 10267–10272.

207.Rajeswari, J., Kishore, P., Viswanathan, B., & Varadarajan, T. (2007). Facile hydrogen evolution reaction on WO 3 nanorods. *Nanoscale Research Letters*, *2*(10), 496–503.

208.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2007). Photochemically reduced polyoxometalate assisted generation of silver and gold nanoparticles in composite films: a single step route. *Nanoscale Research Letters*, *2*(3), 175–183.

209.Suresh, P., Varghese, B., Varadarajan, T. K., & Viswanathan, B. (2007). 2, 4, 6-Tris $\{$[(S)-1-hydroxy-3-methylbutan-2-ylamino] methylene$\}$ cyclohexane-1, 3, 5-trione. *Acta Crystallographica Section E: Structure Reports Online*, *63*(2), o984--o986.

210.Srimurugan, S., Suresh, P., Viswanathan, B., & Varadarajan, T. K. (2007). Facile Synthesis and Unusual Methanesulfonylation Reaction of (2 R, 3 R)-1, 4-Dimethoxy-1, 1, 4, 4-tetrasubstituted-2, 3-butanediols. *Synthetic Communications*, *37*(15), 2483–2490.

211.Sathish, M., Viswanathan, B., & Viswanath, R. P. (2007). Characterization and photocatalytic activity of N-doped TiO2 prepared by thermal decomposition of Ti--melamine complex. *Applied Catalysis B: Environmental*, *74*(3–4), 307–312.

212.Viswanathan, B., & Scibioh, M. A. (2007). Fuel cells: principles and applications. CRC Press.

213.Helen, M., Viswanathan, B., & Murthy, S. S. (2007). Synthesis and characterization of composite membranes based on $α$-zirconium phosphate and silicotungstic acid. *Journal of Membrane Science*, *292*(1–2), 98–105.

214.Navaladian, S., Viswanathan, B., Viswanath, R. P., & Varadarajan, T. K. (2007). Thermal decomposition as route for silver nanoparticles. *Nanoscale Research Letters*, *2*(1), 44–48.

215.Sankaran, M., & Viswanathan, B. (2007). Hydrogen storage in boron substituted carbon nanotubes. *Carbon*, *45*(8), 1628–1635.

216.Navaladian, S., Janet, C. M., Viswanathan, B., Varadarajan, T. K., & Viswanath, R. P. (2007). A facile room-temperature synthesis of gold nanowires by oxalate reduction method. *The Journal of Physical Chemistry C*, *111*(38), 14150–14156.

217.Rao, C. V., & Viswanathan, B. (2007). Ru x Se y/C electrodes for oxygen reduction a reverse microemulsion method of fabrication of electrode material. *The Journal of Physical Chemistry C*, *111*(44), 16538–16543.

218.Viswanathan, B., & Helen, M. (2007). Is Nafion, the only choice. *Bulletin of the Catalysis Society of India*, *6*, 50–66.

219.Chidambaram, V., & Viswanathan, B. (2007). Single step catalytic production of diisopropyl ether (DIPE) from acetone feedstock over nickel based catalysts. *Applied Catalysis B: Environmental*, *71*(1–2), 32–43.

220.Sathish, M., Sankaran, M., Viswanathan, B., & Viswanath, R. P. (2007). DFT studies on anionic hetero atom (N or/and S) substitution in TiO\~{} 2. *Indian Journal of Chemistry Section A*, *46*(6), 895.

221.Scibioh, M. A., & Viswanathan, B. (2007). Suitable electrodes for fuel cell: challenges, perhaps a necessity.

222.Sathish, M., Viswanathan, B., & Viswanath, R. P. (2007). INFLUENCE OF HETEROATOM DOPING OF TiO 2 NANOPARTICLE ON THE RED SHIFT AND THE RELATED CATALYTIC ACTIVITY. *International Journal of Nanoscience*, *6*(02), 137–141.

213.Viswanathan, B., Rao, C. V., & Varadaraju, U. V. (2007). On the search for non-noble metal based electrodes for oxygen reduction reaction. *ChemInform*, *38*(8), i.

214.Maiyalagan, T., & Viswanathan, B. (2007). Fabrication, morphology and structural characterization of tungsten oxide nanorods.

215.Kaneco, S., Viswanathan, B., Katsumata, H., & others. (2007). Photo/electrochemistry \& photobiology in the environment, energy and fuel. *Photo/Electrochemistry \& Photobiology in the Environment, Energy and Fuel.*

216.Navaladian, S., Janet, C. M., Viswanathan, B., Viswanath, R. P., & others. (2007). On the possible treatment procedures for organic contaminants. *Photo/Electrochemistry and Photobiology in the Environment, Energy and Fuel*, *37*(661), 2.

217.Sathish, M., Sankaran, M., Viswanathan, B., & Viswanath, R. P. (2007). DFT studies on anionic hetero atom (N or/and S) substitution in TiO₂.

218.Helen, B. V., & M. (2007). Is Nafion®, the only Choice? *Bulletin of the Catalysis Society of India*, *6*, 650–666.

219.Zhang, Y., Qi, J., Shu, H., & Cao, J. (2007). A hybrid KNN-LR classifier and its application in customer churn prediction. In *2007 IEEE International Conference on Systems, Man and Cybernetics* (pp. 3265–3269).

220.Maiyalagan, T., & Viswanathan, B. (2007). Catalytic activity of Pt/WO3 nanorod electrodes towards.

221.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2006). A novel single step chemical route for noble metal nanoparticles embedded organic--inorganic composite films. *Materials Chemistry and Physics*, *95*(1), 51–55.

222.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2006). Synthesis and characterization of silicotungstic acid based organic--inorganic nanocomposite membrane. *Journal of Membrane Science*, *275*(1–2), 105–109.

223.Srimurugan, S., Viswanathan, B., Varadarajan, T. K., & Varghese, B. (2006). Synthesis and crystal structure of [2+ 2] calixsalens. *Organic \& Biomolecular Chemistry*, *4*(16), 3044–3047.

224.Jothiramalingam, R., Viswanathan, B., & Varadarajan, T. K. (2006). Synthesis, characterization and catalytic oxidation activity of zirconium doped K-OMS-2 type manganese oxide materials. *Journal of Molecular Catalysis A: Chemical*, *252*(1–2), 49–55.

225.Jothiramalingam, R., Viswanathan, B., & Varadarajan, T. K. (2006). Synthesis and structural characterization of copper incorporated manganese oxide OMS-2 materials synthesized via potassium birnessite. *Materials Chemistry and Physics*, *100*(2–3), 257–261.

226.Kishore, P. S., Viswanathan, B., & Varadarajan, T. K. (2006). Heteropolyacid-catalyzed synthesis of chloromethyl methyl ether. *Tetrahedron Letters*, *47*(4), 429–431.

227.Suvitha, A., Varghese, B., Rao, M. N., Sundararajan, G., & Viswanathan, B. (2006). Effective synthesis of hexacoordinate silicates of 2, 3-dihydroxynaphthalene under microwave condition and X-ray crystal structure of bis (tri-n-butylammonium) tris (2, 3-dihydroxynaphthaloto) silicate.

228.Sathish, M., Viswanathan, B., & Viswanath, R. P. (2006). Alternate synthetic strategy for the preparation of CdS nanoparticles and its exploitation for water splitting. *International Journal of Hydrogen Energy*, *31*(7), 891–898.

229.Sankaran, M., & Viswanathan, B. (2006). The role of heteroatoms in carbon nanotubes for hydrogen storage. *Carbon*, *44*(13), 2816–2821.

230.Helen, M., Viswanathan, B., & Murthy, S. S. (2006). Fabrication and properties of hybrid membranes based on salts of heteropolyacid, zirconium phosphate and polyvinyl alcohol. *Journal of Power Sources*, *163*(1), 433–439.

231.Maiyalagan, T., Viswanathan, B., & Varadaraju, U. V. (2006). Fabrication and characterization of uniform TiO 2 nanotube arrays by sol--gel template method. *Bulletin of Materials Science*, *29*(7).

232.Maiyalagan, T., Viswanathan, B., & Varadaraju, U. V. (2006). Electro-oxidation of methanol on TiO2 nanotube supported platinum electrodes. *Journal of Nanoscience and Nanotechnology*, *6*(7), 2067–2071.

233.Helen, M., Viswanathan, B., Himakumar, L., & Srinivasamurthy, S. (2006). Strategies for the design of membranes for fuel cells. *Photo/Electrochemistry and Photobiology in the Environment, Energy and Fuel; Funasaka, K., Satoshi Kaneco, YA, Eds*, 1–42.

234.Maiyalagan, T., & Viswanathan, B. (2006). Template synthesis and characterization of well-aligned carbon nanotubes by carbonization of polyparaphenylene.

235.Rajeswari, J., Viswanathan, B., & Varadarajan, T. K. (2006). FUEL 243-Pt Supported on WO3 nanorods: An efficient catalytic system for methanol oxidation. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 232).

236.Viswanathan, B. (2006). FUEL 240-Hetero atom substituted carbon nano tubes as candidates for hydrogen storage. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 232).

237.Viswanathan, B. (2006). Structure and Properties of Solid State Materials. Alpha Science International.

238.Abecassis-Wolfovich, M., Jothiramalingam, R., Landau, M. V, Herskowitz, M., Viswanathan, B., & Varadarajan, T. K. (2005). Cerium incorporated ordered manganese oxide OMS-2 materials: Improved catalysts for wet oxidation of phenol compounds. *Applied Catalysis B: Environmental*, *59*(1–2), 91–98.

239.Jothiramalingam, R., Viswanathan, B., & Varadarajan, T. K. (2005). Preparation, characterization and catalytic properties of cerium incorporated porous manganese oxide OMS-2 catalysts. *Catalysis Communications*, *6*(1), 41–45.

240.Srimurugan, S., Viswanathan, B., Varadarajan, T. K., & Varghese, B. (2005). Microwave assisted cyclocondensation of dialdehydes with chiral diamines forming calixsalen type macrocycles. *Tetrahedron Letters*, *46*(18), 3151–3155.

241.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2005). Preparation of noble metal supported carbon electrodes using photochemically reduced heteropolyanions in composite films. *Journal of Molecular Catalysis A: Chemical*, *241*(1–2), 52–58.

242.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2005). Preparation, characterization and electrocatalytic activity of phosphomolybdic acid embedded organic-inorganic nanocomposites.

243.Ganesan, R., & Viswanathan, B. (2005). Encapsulation of bis (ethylenediamine) copper (II) complex in zeolite matrices. *Korean Journal of Chemical Engineering*, *22*(1), 32–35.

244.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2005). Polyoxometalate based soft chemical route for preparation of Pt nanorods and self-assemblies. *Bulletin of Materials Science*, *28*(6), 629–633.

245.Jothiramalingam, R., Viswanathan, B., & Varadarajan, T. K. (2005). Synthesis and structural characterization of cerium incorporated manganese oxide OMS-2 type catalysts.

246.Sathish, M., Viswanathan, B., Viswanath, R. P., & Gopinath, C. S. (2005). Synthesis, characterization, electronic structure, and photocatalytic activity of nitrogen-doped TiO2 nanocatalyst. *Chemistry of Materials*, *17*(25), 6349–6353.

247.Maiyalagan, T., Viswanathan, B., & Varadaraju, U. V. (2005). Nitrogen containing carbon nanotubes as supports for Pt--Alternate anodes for fuel cell applications. *Electrochemistry Communications*, *7*(9), 905–912.

248.Maiyalagan, T., & Viswanathan, B. (2005). Template synthesis and characterization of well-aligned nitrogen containing carbon nanotubes. *Materials Chemistry and Physics*, *93*(2–3), 291–295.

249.Raghuveer, V., & Viswanathan, B. (2005). Synthesis, characterization and electrochemical studies of Ti-incorporated tungsten trioxides as platinum support for methanol oxidation. *Journal of Power Sources*, *144*(1), 1–10.

250.Rajesh, B., Thampi, K. R., Bonard, J.-M., Mathieu, H. J., Xanthopoulos, N., & Viswanathan, B. (2005). Electronically conducting hybrid material as high performance catalyst support for electrocatalytic application. *Journal of Power Sources*, *141*(1), 35–38.

251.Subrahmanyam, C., Viswanathan, B., & Varadarajan, T. K. (2005). Alkylation of naphthalene with alcohols over acidic mesoporous solids. *Journal of Molecular Catalysis A: Chemical*, *226*(2), 155–163.

252.Subrahmanyam, C., Louis, B., Viswanathan, B., Renken, A., & Varadarajan, T. K. (2005). Synthesis, characterisation and catalytic properties of vanadium substituted mesoporous aluminophosphates. *Applied Catalysis A: General*, *282*(1–2), 67–71.

253.Sankaran, M., Muthukumar, K., & Viswanathan, B. (2005). Boron-Substituted Fullerenes—Can They be One of the Options for Hydrogen Storage? *Fullerenes, Nanotubes and Carbon Nanostructures*, *13*(1), 43–52.

254.Raghuveer, V., & Viswanathan, B. (2005). Nanocrystalline pyrochlore bonded to proton exchange membrane electrolyte as electrode material for oxygen reduction. *Journal of Materials Science*, *40*(23), 6249–6255.

255.Viswanathan, B., HELEN, M., & SRINIVASA MURTHY, S. (2005). Noble metal based anodes for polymer electrolyte membrane fuel cells. In *Photo/electrochemistry and photobiology in the environment, energy and fuel 2005* (pp. 61–104).

256.VISWANATHAN, B. (2005). Photo electrochemical production of hydrogen: A dream or reality? In *Photo/electrochemistry and photobiology in the environment, energy and fuel 2005* (pp. 1–12).

257.HIMA KUMAR, L., Viswanathan, B., & SRINIVASA MURTHY, S. (2005). Alanates: Are they the appropriate hydrogen storage material? In *Photo/electrochemistry and photobiology in the environment, energy and fuel 2005* (pp. 13–42).

258.Chidambaram, V., Srinivas, B., & Viswanathan, B. (2005). Carbon (CDX-975) based Pt electrodes for direct methanol fuel cell applications.

259.Viswanathan, B., & Jacob, B. (2005). Alkylation, hydrogenation and oxidation catalyzed by mesoporous materials. *Catalysis Reviews*, *47*(1), 1–82.

260.M Aulice, S., & others. (2005). Carbon dioxide reduction catalysis for the production of fuels and chemicals.

261.Jothiramalingam, R., Viswanathan, B., & Varadarajan, T. K. (2004). Zirconium Doped Tunnel Structure Manganese Oxide OMS-2 Catalysts. *Eurasian Chemico-Technological Journal*, *6*(2), 117–122.

262.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2004). Esterification by solid acid catalysts—a comparison. *Journal of Molecular Catalysis A: Chemical*, *223*(1–2), 143–147.

263.Rajesh, B., Thampi, K. R., Bonard, J.-M., McEvoy, A. J., Xanthopoulos, N., Mathieu, H. J., & Viswanathan, B. (2004). Pt particles supported on conducting polymeric nanocones as electro-catalysts for methanol oxidation. *Journal of Power Sources*, *133*(2), 155–161.

264.Ganesan, R., & Viswanathan, B. (2004). Physicochemical and catalytic properties of copper ethylenediamine complex encapsulated in various zeolites. *The Journal of Physical Chemistry B*, *108*(22), 7102–7114.

265.Rajesh, B., Thampi, K. R., Bonard, J. M., Mathieu, H. J., Xanthopoulos, N., & Viswanathan, B. (2004). Nanostructured conducting polyaniline tubules as catalyst support for Pt particles for possible fuel cell applications. *Electrochemical and Solid State Letters*, *7*(11), A404.

266.Scibioh, M. A., & Viswanathan, B. (2004). Electrochemical reduction of carbon dioxide: a status report. In *Proc Indian Natn Sci Acad* (Vol. 70, pp. 1–56).

267.Subrahmanyam, C., Viswanathan, B., & Varadarajan, T. K. (2004). Synthesis, characterization and catalytic activity of mesoporous trivalent iron substituted aluminophosphates. *Journal of Molecular Catalysis A: Chemical*, *223*(1–2), 149–153.

268.Rajesh, B., Thampi, K. R., Bonard, J.-M., Xanthopoulos, N., Mathieu, H. J., & Viswanathan, B. (2004). Template synthesis of conducting polymeric nanocones of poly (3-methylthiophene). *The Journal of Physical Chemistry B*, *108*(30), 10640–10644.

269.Ganesan, R., & Viswanathan, B. (2004). Redox properties of bis (8-hydroxyquinoline) manganese (II) encapsulated in various zeolites. *Journal of Molecular Catalysis A: Chemical*, *223*(1–2), 21–29.

270.Rao, C. V., & Viswanathan, B. (2004). Oxygen reduction by FeN4-A DFT study.

271.Viswanathan, B. (2004). Adsorption of small molecules on metallic surfaces. *Bulletin of the Catalysis Society of India*, *3*, 43–53.

272.Viswanathan, B., Chidambaram, V., & Chandravadanam, S. (2004). On the nature of noble metal electrodes prepared using formaldehyde as reducing agent.

273.RAJESH, B., RAVINDRANATHAN THAMPI, K., SCIBIOH, A., VISWANATHAN, B., & KANECO, S. (2004). Advances in direct methanol fuel cells. In *Photo/electrochemistry and photobiology in environment, energy and fuel 2004* (pp. 91–137).

274.VISWANATHAN, B. (2004). R. SANJEEVI AND N. RAMANATHAN. *Journal of Colloid and Interface Science*, 207.

275.Sathish, M., Viswanathan, B., Viswanath, R. P., & others. (2004). Decontamination of water by photocatalytic means. *Photo/Electrochemistry \& Photobiology in the Environment, Energy and Fuel*, 1–29.

276.Muthukumar, K., Sankaran, M., & Viswanathan, B. (2004). Hydrogenation of Substituted Fullerenes--a DFT Study. *Eurasian Chemico-Technological Journal*, *6*(2), 139–143.

277.Rajesh, B., Ravindranathan Thampi, K., Bonard, J. M., Mathieu, H. J., Xanthopoulos, N., & Viswanathan, B. (2004). Batteries, Fuel Cells, and Energy Conversion-Nanostructured Conducting Polyaniline Tubules as Catalyst Support for Pt Particles for Possible Fuel Cell Applications. *Electrochemical and Solid State Letters*, *7*(11), A404.

Gowda, N. M. N., Ganesan, R., & Viswanathan, B. (2004). R. Mary Magdalene, EG Leelamani. *Journal of Molecular Catalysis A: Chemical*, *223*, 1–13.

278.Scibioh, M. A., & Viswanathan, B. (2004). Hydrogen Future: Facts and Fallacies. *Bulletin of the Catalysis Society of India*, *3*, 72–81.

279.Maiyalagan, T., & Viswanathan, B. (2004). Session 4: Nitrogen containing carbon nano-tubes as supports for Pt for fuel cell electrode applications.

280.Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (2004). Polyoxometalate Based Organic-Inorganice Nanocomposites. *Eurasian Chemico-Technological Journal*, *6*(3), 227–231.

281.Ranjit, K. T., & Viswanathan, B. (2003). Photoelectrochemical reduction of nitrite ions to ammonia on CdS photocatalysts. *Journal of Photochemistry and Photobiology A: Chemistry*, *154*(2–3), 299–302.

282.Srinivasan, C., & Viswanathan, B. (2003). Copper containing mixed oxides for catalytic oxidation of toluene and phenol in solid-liquid phase.

283.Rajesh, B., Ravindranathan Thampi, K., Bonard, J.-M., Xanthopoulos, N., Mathieu, H. J., & Viswanathan, B. (2003). Carbon nanotubes generated from template carbonization of polyphenyl acetylene as the support for electrooxidation of methanol. *The Journal of Physical Chemistry B*, *107*(12), 2701–2708.

284., C., Louis, B., Rainone, F., Viswanathan, B., Renken, A., & Varadarajan, T. K. (2003). Catalytic oxidation of toluene with molecular oxygen over Cr-substituted mesoporous materials. *Applied Catalysis A: General*, *241*(1–2), 205–215.

285.Rajesh, B., Thampi, K. R., Bonard, J.-M., Mathieu, H. J., Xanthopoulos, N., & Viswanathan, B. (2003). Conducting polymeric nanotubules as high performance methanol oxidation catalyst support. *Chemical Communications*, (16), 2022–2023.

286.Viswanathan, B. (2003). Photocatalytic processes--selection criteria for the choice of materials. *Bulletin of the Catalysis Society of India*, *2*, 71–74.

287.Viswanathan, B., Sankaran, M., & Scibioh, M. A. (2003). Carbon nanomaterials: are they appropriate candidates for hydrogen storage? *Bull. Catal. Soc. India*, *2*, 12–32.

288.Vidhya, R., Antony, M. P., Rao, P. R. V., & Viswanathan, B. (2003). Enthalpy and Gibbs energy of formation of cerium dicarbide. *Journal of Nuclear Materials*, *317*(1), 102–108.

289., B., Sankaran, M., & Ganesan, R. (2003). Can heteroatoms be the activators for hydrogen storage in carbon nanotubes. *Prepr. Pap.-Am. Chem. Soc., Div. Fuel Chem*, *48*(2), 943–944.

290.Scibioh, M. A., Viswanathan, B., & others. (2003). Electrochemistry for a cleaner environment. *Photo/Electrochemistry \& Photobiology in Environment, Energy and Fuel*, 1–64.

291.Rani, S., SCIBIOH, M. A., Helen, M., Viswanathan, B., & Vijayaraghavan, V. R. (2003). Studies on carbon dioxide binding to metal macrocycles using electrochemical technique. *Transactions of the SAEST*, *38*(1), 25–28.

292.SCIBIOH, M. A., & VISWANATHAN, B. (2003). Hydrogen storage in carbon nanomaterials-possibilities and challenges. In *Photo/electrochemistry and photobiology in environment, energy and fuel 2003* (pp. 65–100).

293.Raghuveer, V., & Viswanathan, B. (2003). ALTERNATE METHANOL TOLERANT CATHODES FOR PEMFC APPLICATIONS. *Prepr. Pap.-Am. Chem. Soc., Div. Fuel Chem*, *48*(2), 897.

294.Kaneco, S., Viswanathan, B., Funasaka, K., & Arachi, Y. (2003). Photo/electrochemistry \& photobiology in environment, energy and fuel 2003.

295.Sankaran, M., & Viswanathan, B. (2003). Hydriding of nitrogen containing carbon nanotubes. *Bull Catal Soc India*, *2*(1\&2), 9–11.

296.Vidhya, R., Antony, M. P., Vasudeva Rao, P. R., & Viswanathan, B. (2003). Erratum to:’Enthalpy and Gibbs energy of formation of cerium dicarbide’[J. Nucl. Mater. 317 (2003) 102-108]. *Journal of Nuclear Materials*, *321*(1), 118.

297.Srinivasan, C., & Viswanathan, B. (2002). Vapour phase oxidation of benzyl alcohol on A 2 BO 4 type perovskite related oxide.

298.Rajesh, B., Karthik, V., Karthikeyan, S., Thampi, K. R., Bonard, J.-M., & Viswanathan, B. (2002). Pt--WO3 supported on carbon nanotubes as possible anodes for direct methanol fuel cells. *Fuel*, *81*(17), 2177–2190.

299.Raghuveer, V., & Viswanathan, B. (2002). Can La2- xSrxCuO4 be used as anodes for direct methanol fuel cells? *Fuel*, *81*(17), 2191–2197.

300.Subrahmanyam, C., Louis, B., Rainone, F., Viswanathan, B., Renken, A., & Varadarajan, T. K. (2002). Partial oxidation of toluene by O2 over mesoporous Cr--AlPO. *Catalysis Communications*, *3*(2), 45–50.

301. Viswanathan, B., Sivasanker, S., & Ramaswamy, A. V. (2002). Catalysis: principles and applications. Alpha Science Int’l Ltd.

302.Rajesh, B., Thampi, K. R., Bonard, J.-M., Xanthapolous, N., Mathieu, H. J., & Viswanathan, B. (2002). Pt supported on polyaniline-V 2 O 5 nanocomposite as the electrode material for methanol oxidation. *Electrochemical and Solid State Letters*, *5*(12), E71.

303.Louis, B., Subrahmanyam, C., Kiwi-Minsker, L., Viswanathan, B., Buffat, P. A., & Renken, A. (2002). Synthesis and characterization of MCM-41 coatings on stainless steel grids. *Catalysis Communications*, *3*(4), 159–163.

304.Ganesan, R., & Viswanathan, B. (2002). Synthesis, characterization and catalytic activity of $μ$-oxo bridged dinuclear iron 1, 10 phenanthroline complex encapsulated in MCM-41. *Journal of Molecular Catalysis A: Chemical*, *181*(1–2), 99–107.

305.Raghuveer, Y., Viswanathan, B., & others. (2002). Nanocrystalline lead ruthenium pyrochlore as oxygen reduction electrode.

306.Scibioh, M. A., Rajesh, B., & Viswanathan, B. (2002). Anode Materials for Direct Methanol Fuel Cell. *PROCEEDINGS-INDIAN NATIONAL SCIENCE ACADEMY PART A*, *68*(2), 99–140.

307.Aulice Scibioh, M., Ragini, P. V, Vijayaraghavan, V. R., & Viswanathan, B. (2002). Electrochemical reduction of CO2 at hanging mercury drop electrode by nickel (II) macrocyclic complex of 1, 3, 6, 8, 12, 15-hexaazatricyclo [13.3. 1.1] eicosane. *Bulletin of Electrochemistry*, *18*(2), 57–61.

308.AULICE SCIBIOH, M., & Viswanathan, B. (2002). Photo-/photoelectro-catalytic pathways for carbon dioxide reduction. In *Photo/electrochemistry and photobiology in environment, energy and fuel* (pp. 1–46).

309.Viswanathan, B. (2002). 7. Role of Thermal Analysis in the Development of Catalysts. *Catalysis: Principles and Applications*, 116.

310.Viswanathan, B. (2002). 27. The Concept of Active Centers in Catalysis. *Catalysis: Principles and Applications*, 384.

311.Scibioh, M. A., Viswanathan, B., & Vijayaraghavan, V. R. (2002). Influence of pH and supporting electrolyte on electrochemical reduction of CO 2 using nickel (II) macrocyclic complex of 1, 3, 6, 9, 11, 14-hexaazacyclohexadecane as catalyst at HMDE.

312.Viswanathan, B. (2002). 20. Photocatalysis. *Catalysis: Principles and Applications*, 289.

313.Rajesh, B., Scibioh, M. A., & Viswanathan, B. (2002). 29. The Scope and Development of Fuel Cells. *Catalysis: Principles and Applications*, 396.

314.Sairam, T. N., & Viswanathan, B. (2002). A study on the effect of melt-intercalation of PEO in HNbWO6. *Journal of Physics and Chemistry of Solids*, *63*(2), 317–322.

315., C Subrahmanian., Viswanathan, B., & Varadarajan, T. K. (2002). Mesoporous V-AlPO--New Partial Oxidation Catalyst. *Eurasian Chemico-Technological Journal*, *4*(3), 169–174.

316.Raghuveer, V., & Viswanathan, B. (2002). Can La $\{$sub 2-x$\}$ Sr $\{$sub x$\}$ CuO $\{$sub 4$\}$ be used as anodes for direct methanol fuel cells? *Fuel*, *81*.

317.Sivasanker, S., Ramaswamy, A. V, & Viswanathan, B. (2002). Catalysis: Principles and Applications. Narosa.

318.Varadarajan, T. K., Sumathi, R., & Viswanathan, B. (2001). Partial oxidation of 2-propanol on perovskites.

Raghuveer, V., Thampi, K. R., Xanthopoulos, N., Mathieu, H. J., & Viswanathan, B. (2001). Rare earth cuprates as electrocatalysts for methanol oxidation. *Solid State Ionics*, *140*(3–4), 263–274.

Louis, B., Viswanathan, B., Iouranov, I., & Renken, A. (2001). Partial oxidation of benzene catalysed by heteropolycompounds.

Vidhya, R., Antony, M. P., Rao, P. R. V., & Viswanathan, B. (2001). Enthalpy and Gibbs energy of formation of lanthanum dicarbide. *Journal of Nuclear Materials*, *295*(2–3), 221–227.

Vidhya, R., Antony, M. P., Rao, P. R. V., & Viswanathan, B. (2001). Enthalpy and Gibbs energy of formation of neodymium dicarbide. *Journal of Nuclear Materials*, *295*(2–3), 228–232.

Scibioh, M. A., Ragini, P. V, Rani, S., Vijayaraghavan, V. R., & Viswanathan, B. (2001). Reduction of CO 2 by nickel (II) macrocycle catalyst at HMDE. *Journal of Chemical Sciences*, *113*(4), 343–350.

Rajesh, B., & Viswanathan, B. (2001). Anodes for Direct Methanol Fuel Cells. *CHEMICAL INDUSTRY DIGEST*, *14*(6), 83–87.

Scibioh, M. A., Viswanathan, B., & Vijayaraghavan, V. R. (2001). Influence of solvent on the electrocatalytic behaviour of nickel (II) macrocyclic complex of 1, 3, 6, 9, 11, 14-hexaazacyclohexadecane towards the reduction of carbon dioxide at HMDE. *Bulletin of Electrochemistry*, *17*(9), 397–404.

Ganesan, R., & Viswanathan, B. (2001). Redox properties of metal complexes encapsulated in various zeolites.

Raghuveer, V., & Viswanathan, B. (2001). Perovskites as alternative anode materials for direct methanol fuel cells.

Subrahmanyam, C., Louis, B., Viswanathan, B., Renken, A., & Varadarajan, T. K. (2001). Hydroxylation of Phenol over M-MCM-48. *Eurasian Chemico-Technological Journal*, *3*(1), 59–63.

Rajesh, B., Karthikeyan, S., Bonard, J. M., Thampi, K. R., & Viswanathan, B. (2001). Carbon nanotubes generated from polyphenyl acetylene. *Eurasian Chemico-Technological Journal*, *3*(1), 11–16.

Viswanathan, B. (2001). Microscopic, Spectroscopic, and Physical Techniques.

Ravindranathan Thampi, K., & others. (2000). Preparation of a Pt--Ru bimetallic system supported on carbon nanotubes. *Journal of Materials Chemistry*, *10*(8), 1757–1759.

Rajesh, B., Thampi, K. R., Bonard, J.-M., & Viswanathan, B. (2000). Preparation of Pt-Ru bimetallic catalyst supported on carbon nanotubes. *Bulletin of Materials Science*, *23*(5), 341–344.

Rajesh, B., & Viswanathan, B. (2000). Polymer based oxidation catalyst for direct methanol fuel cell.

Babu, R. S., Viswanathan, B., & Srinivasamurthy, S. (2000). Electrochemical characterization of LaNi 5 hydride electrode.

Raghuveer, V., & Viswanathan, B. (2000). Rare earth cuprates as electrodes for methanol oxidation. *Bulletin of Electrochemistry*, *16*(4), 175–176.

Rana, R. K., & Viswanathan, B. (2000). On the Possibility of Mo Substitution in Mesoporous Materials-Cluster Model Calculations. *Eurasian Chemico-Technological Journal*, *2*(1), 1–10.

Viswanathan, B., & Athilakshmi, B. (2000). Catalytic Oxidation of Aromatic Hydrocarbons and Sulphides by Heteropoly Metalates. *Eurasian Chemico-Technological Journal*, *2*(1), 45–51.

Sumathi, R., Johnson, K., Viswanathan, B., & Varadarajan, T. K. (1999). Catalytic properties of BaPb 1-x Bi x O 3 perovskite oxide for partial oxidation of benzyl alcohol.

Chakraborty, B., & Viswanathan, B. (1999). Surface acidity of MCM-41 by in situ IR studies of pyridine adsorption. *Catalysis Today*, *49*(1–3), 253–260.

Sastri, M. V. C., Viswanathan, B., & Achyuthlala Babu, R. S. (1999). Kinetics of Metal Hydride Formation and Decomposition. *ChemInform*, *30*(19), no--no.

Sumathi, R., Johnson, K., Viswanathan, B., & Varadarajan, T. K. (1999). Catalytic properties of BaPb Bi O, perovskite oxide for partial oxidation. *Indian Journal of Chemistry: Inorganic, Bio-Inorganic, Physical, Theoretical \& Analytical Chemistry. Section A*, *38*, 38.

Rana, R. K., & Viswanathan, B. (1998). Mo incorporation in MCM-41 type zeolite. *Catalysis Letters*, *52*(1), 25–29.

Sumathi, R., Johnson, K., Viswanathan, B., & Varadarajan, T. K. (1998). Selective oxidation and dehydrogenation of benzyl alcohol on ABB′ O3 (A= Ba, B= Pb, Ce, Ti and B′= Bi, Cu, Sb)-type perovskite oxides-temperature programmed reduction studies. *Applied Catalysis A: General*, *172*(1), 15–22.

Viswanathan, B., & others. (1998). Oxidation of trimethylbenzene by the heteropoly vanadomolybdate-hydrogen peroxide system. *Reaction Kinetics and Catalysis Letters*, *64*(1), 193–197.

Johnson, K., Viswanathan, B., & Varadarajan, T. K. (1998). Alkylation of toluene with methanol on microporous M x H 3- X PW 12 O 40 [M= K+, Cs+, NH 4+ and Tl+]. *Reaction Kinetics and Catalysis Letters*, *63*(2), 365–370.

Viswanathan, B., & others. (1998). Homogeneous oxidation of alkylbenzene catalysed by heteropoly compounds. In *Studies in Surface Science and Catalysis* (Vol. 113, pp. 301–308). Elsevier.

Johnson, K., Viswanathan, B., & Varadarajan, T. K. (1998). Alkylation of toluene with methanol on heteropoly compounds: p-xylene selectivity. In *Studies in Surface Science and Catalysis* (Vol. 113, pp. 233–240). Elsevier.

Sumathi, R., Viswanathan, B., & Varadarajan, T. K. (1998). Selective oxidation of benzyl alcohol on BaPb1-xBixO3 and related perovskite oxides. In *Studies in Surface Science and Catalysis* (Vol. 113, pp. 937–946). Elsevier.

Chakraborty, B., Pulikottil, A. C., & Viswanathan, B. (1998). Physico-chemical and MAS NMR characterization of mesoporous SAPOs. *Applied Catalysis A: General*, *167*(2), 173–181.

Narayan, R., & Viswanathan, B. (1998). *Chemical and electrochemical energy systems*. Universities Press.

Rana, R. K., Pulikottil, A. C., & Viswanathan, B. (1998). Synthesis, characterization and activity of Mo-MCM-41. In *Studies in Surface Science and Catalysis* (Vol. 113, pp. 211–217). Elsevier.

Malathi, R., Rao, P. M., Viswanathan, B., & Viswanath, R. P. (1998). Surface analysis of supported platinum catalysts-encapsulation model for metal-support interaction: An XPS study.

Babu, R. S. A., Murthy, S. S., & Viswanathan, B. (1998). Electrocatalytic oxidation of methanol on platinum based catalysts. In *Studies in Surface Science and Catalysis* (Vol. 113, pp. 787–792). Elsevier.

Chakraborty, B., Pulikotti, A. C., Das, S., & Viswanathan, B. (1998). Synthesis and characterization of mesoporous silicoaluminophosphate. In *Studies in Surface Science and Catalysis* (Vol. 113, pp. 631–636). Elsevier.

Viswanathan, B., & others. (1998). Homogeneous oxidation of aromatic hydrocarbons using heteropolyvanadomolybdate-H2O2, catalytic system.

Viswanathan, B., & others. (1998). Oxidation of organic sulphides by heteropolyvanadomolybdate-hydrogen peroxide system.

Rajagopal, K., Rao, T. A. P., & Viswanathan, B. (1998). Tables of experimental dipolemoments Tables of experimental dipolemoments, 1963. *Journal of the Physical Society of Japan*, *67*(2), 658–663.

Chakraborty, B., Pulikottil, A. C., Viswanathan, B., Cubeiro, M. L., LoÂpez, C. M., Colmenares, A., … others. (1998). Catalytic and electrical behaviour of Li0. 9Ni0. 5Co0. 5O2À below 4008C 225. *Applied Catalysis A: General*, *167*(367), 369.

Viswanathan, B., Sastri, M. V. C., & Murthy, S. S. (1998). Metal hydrides: fundamentals and applications. Springer.

Rajagopal, K., Rao, T. A. P., & Viswanathan, B. (1998). IEEE Trans. Dielec. Electr. Insul. IEEE Trans. Dielec. Electr. Insul. 1, 63, 1994. *Journal of the Physical Society of Japan*, *67*(2), 658–663.

Sumathi, R., Viswanathan, B., & Varadarajan, T. K. (1998). Partial oxidation of 2-propanol on perovskites.

Rajagopal, K., Rao, T. A. P., & Viswanathan, B. (1998). J. Mole. Liq. J. Mole. Liq. 68, 81, 1996. *Journal of the Physical Society of Japan*, *67*(2), 658–663.

Rajagopal, K., Rao, T. A. P., & Viswanathan, B. (1998). Natal. Tech. Rep. Natal. Tech. Rep. 22, 826, 1976. *Journal of the Physical Society of Japan*, *67*(2), 658–663.

Sastri, M. V. C., & Viswanathan, B. (1998). Metal hydrides: fundamentals and applications. Narosa Publishing House [publisher].

Ranjit, K. T., & Viswanathan, B. (1997). Synthesis, characterization and photocatalytic properties of iron-doped TiO2 catalysts. *Journal of Photochemistry and Photobiology A: Chemistry*, *108*(1), 79–84.

Ranjit, K. T., & Viswanathan, B. (1997). Photocatalytic reduction of nitrite and nitrate ions to ammonia on M/TiO2 catalysts. *Journal of Photochemistry and Photobiology A: Chemistry*, *108*(1), 73–78.

Ranjit, K. T., & Viswanathan, B. (1997). Photocatalytic reduction of nitrite and nitrate ions over doped TiO2 catalysts. *Journal of Photochemistry and Photobiology A: Chemistry*, *107*(1–3), 215–220.

Sivasubramanian, V., Murthy, V. R. K., & Viswanathan, B. (1997). Microwave dielectric properties of certain simple alkaline earth perovskite compounds as a function of tolerance factor. *Japanese Journal of Applied Physics*, *36*(1R), 194.

Satheesh, V., Murugavel, P., Murthy, V. R. K., & Viswanathan, B. (1997). Synthesis and role of Nd and Sm on the microwave dielectric properties of BaNd2 (1- x) Sm2xTi5O14 dielectric resonator. *Materials Science and Engineering: B*, *48*(3), 202–204.

Usha, N., Viswanathan, B., Murthy, V. R. K., & Sobhanadri, J. (1997). X-ray photoelectron spectroscopic study of some pure stages of graphite ferric chloride intercalation compounds. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, *53*(11), 1761–1765.

Johnson, K., Viswanathan, B., & Varadarajan, T. K. (1997). Alkylation of aromatic substrates with methanol on heteropolyoxometalate.

Sumathi, R., Johnson, K., Viswanathan, B., & Varadarajan, T. K. (1997). Partial oxidation of benzyl alcohol on ABO 3 (A= Ba, B= Pb, Bi and Cu) type perovskite oxides.

Olaofe, O., Viswanathan, B., & others. (1997). Kinetics of benzyl alcohol reaction on heteropoly molybdate and salts.

Srinivasan, C., Viswanathan, B., Mulla, S. A. R., & Choudhary, V. R. (1997). Oxidative coupling of methane on LnBa 2 Cu 3 O 7-x (123; Ln= Sm, Dy or Y) perovskites. *Indian Journal of Chemistry. Section A: Inorganic, Physical, Theoretical and Analytical*, *36*(11), 926–930.

Pulikottil, A., & others. (1997). Synthesis and characterization of mesoporous SAPO. *Chemical Communications*, (10), 911–912.

Werner, H. (1997). Allenylidenes: their multifaceted chemistry at rhodium. *Chemical Communications*, (10), 903–904.

Sivasubramanian, V., Murthy, V. R. K., Viswanathan, B., & Sieskind, M. (1996). Morphotropic phase transition studies in by far-infrared reflectance spectroscopy. *Journal of Physics: Condensed Matter*, *8*(14), 2447.

Ranjit, K. T., Varadarajan, T. K., & Viswanathan, B. (1996). Photocatalytic reduction of dinitrogen to ammonia over noble-metal-loaded TiO2. *Journal of Photochemistry and Photobiology A: Chemistry*, *96*(1–3), 181–185.

Ranjit, K. T., Viswanathan, B., & Varadarajan, T. K. (1996). Photocatalytic reduction of nitrite and nitrate ions over TiO 2 semiconductors. *Journal of Materials Science Letters*, *15*(10), 874–877.

Ranjit, K. T., Varadarajan, T. K., & Viswanathan, B. (1996). Photocatalytic reduction of nitrite and nitrate ions over oxide (ZnO, ZrO 2 and Fe 2 O 3) semiconductors.

Ranjit, K. T., & Viswanathan, B. (1996). Photocatalytic reduction of dinitrogen to ammonia.

Ranjit, K. T., & Viswanathan, B. (1996). Photocatalytic reduction of nitrite and nitrate ions to ammonia on ZnO-Fe 2 O 3 coupled semiconductor.

Usha, N., Murthy, V. R. K., Viswanathan, B., & Sobhanadri, J. (1996). Low field Hall coefficient measurements of graphite ferric chloride intercalation compounds. *Journal of Materials Science Letters*, *15*(13), 1175–1177.

Rufus, I. B., Ramakrishnan, V., Viswanathan, B., & Kuriacose, J. C. (1996). Interface and surface analysis of Ru/CdS. *Journal of Materials Science Letters*, *15*(21), 1921–1923.

Chakraborty, B., Pulikottil, A. C., & Viswanathan, B. (1996). Alkylation of naphthalene with alcohols over mesoporous MCM-41. *Catalysis Letters*, *39*(1), 63–65.

Rajagopal, K., Prasadarao, T. A., Pulikotti, A. C., & Viswanathan, B. (1996). Influence of inductive effect in some homologous organic liquids on the Kerr constant values. *Journal of Molecular Liquids*, *68*(1), 81–93.

Viswanathan, B. (1996). 15 Years of Strong Metal-Support Interaction. *ChemInform*, *27*(11), no--no.

Viswanathan, B., & Jayashree, S. (1996). Isomorphous substitution of trivalent cations in ZSM-5-a theoretical study.

Babu, R. S., Viswanathan, B., & Murthy, S. S. (1996). ERMO Cluster calculations on hyperstoichiometric Laves phase alloys and hydrides.

Viswanathan, B. (1996). Design of active species in zeolite cages. *JOURNAL OF ENERGY HEAT AND MASS TRANSFER*, *18*, 281–290.

KRISHNAN, C. N., & VISWANATHAN, B. (1996). The Performance of Modern Science and Technology in India. *Handbook of Libraries, Archives \& Information Centres in India*, *13*, 221.

Ranjit, K. T., Varadarajan, T. K., & Viswanathan, B. (1995). Photocatalytic reduction of nitrite and nitrate ions to ammonia on Ru/TiO2 catalysts. *Journal of Photochemistry and Photobiology A: Chemistry*, *89*(1), 67–68.

Rufus, I. B., Viswanathan, B., Ramakrishnan, V., & Kuriacose, J. C. (1995). Cadmium sulfide with iridium sulfide and platinum sulfide deposits as a photocatalyst for the decomposition of aqueous sulfide. *Journal of Photochemistry and Photobiology A: Chemistry*, *91*(1), 63–66.

Ranjit, K. T., Krishnamoorthy, R., Varadarajan, T. K., & Viswanathan, B. (1995). Photocatalytic reduction of nitrite on CdS. *Journal of Photochemistry and Photobiology A: Chemistry*, *86*(1–3), 185–189.

Sivasubramanian, V., Rao, M. V, Murthy, V. R. K., & Viswanathan, B. (1995). Influence of structure on the microwave dielectric properties of ti substituted (ca, sr) zro3 ceramics. *Ferroelectrics*, *173*(1), 233–242.

Rufus, I. B., Ramakrishnan, V., Viswanathan, B., & Kuriacose, J. C. (1995). Surface analysis of Rh/CdS. *Journal of Materials Science Letters*, *14*(1), 15–18.

Rao, P. M., Viswanathan, B., & Viswanath, R. P. (1995). Strong metal support interaction state in the Fe/TiO 2 system—an XPS study. *Journal of Materials Science*, *30*(19), 4980–4985.

Viswanathan, B., Viswanath, R. P., & Mary, U. D. (1995). Photocatalytic activity of metallised titania systems.

Viswanathan, B. (1995). Homogeneous hydrogenation (Editors: Penny A Chaloner, Miguel A Esteruelas, Ferenc Joo \& Luis A Oro). *INDIAN JOURNAL OF CHEMISTRY SECTION A*, *34*, 164.

*.* Ranjit, K. T., Krishnamoorthy, R., & Viswanathan, B. (1994). Photocatalytic reduction of nitrite and nitrate on ZnS. *Journal of Photochemistry and Photobiology A: Chemistry*, *81*(1), 55–58.

Murthy, V. R. K. (1994). Methods of measurement of dielectric constant and loss in the microwave frequency region. In *Microwave Materials* (pp. 100–111). Springer, Berlin, Heidelberg.

Viswanathan, B. (1994). Metallization of plastics by electroless plating. In *Microwave Materials* (pp. 79–99). Springer, Berlin, Heidelberg.

Dias, E. D., Pragasam, R., Murthy, V. R. K., & Viswanathan, B. (1994). An automated loop tracer for the study of the growth of ferroelectric hysteresis. *Review of Scientific Instruments*, *65*(9), 3025–3027.

Pragasam, R., Murthy, V. R. K., Viswanathan, B., & Sobhanadri, J. (1994). Measurement of transition temperatures (simultaneously at DC and microwave frequencies) on high-Tc superconducting systems. *Physica Status Solidi (A)*, *142*(2), 465–471.

Raman, N. S., Viswanathan, B., & Varadarajan, T. K. (1994). Catalytic properties of YBa2Cu3O7-x and alkaline earth cuprates.

Korah, P. C., & Viswanathan, B. (1994). Acidity of HY-zeolite catalysts-Catalytic titrimetry by isopropyl alcohol dehydration.

Pulikottil, A. C., Vetrivel, R., & Viswanathan, B. (1994). Theoretical studies on topography and acid properties of phosphorus containing ZSM-5.

Viswanathan, B., Mary, U. D., & Viswanath, R. P. (1994). X-Ray photoelectron spectroscopic investigation of metalized (Pt, Pd, Rh and Ru) titania systems.

Murthy, V. R. K., Sundaram, S., & Viswanathan, B. (1994). Microwave materials. Springer Berlin Heidelberg.

Srinivasan, T. K. K., Devanathan, T., & Viswanathan, B. (1994). UPS and molecular orbital calculation studies on bromate anion.

Raman, N. S., Viswanathan, B., & Varadarajan, T. K. (1994). Catalytic properties of YBa 2 Cu 3 O 7 Catalytic properties of YBa 2 Cu 3 O 7-x and alkaline earth cuprates-x and alkaline earth cuprates.

Rajam, K. S., Rajagopal, I., Rajagopalan, S. R., & Viswanathan, B. (1993). DSC, X-ray and magnetic studies on electroless Ni-P films grown in alkaline ethanolamine baths. *Materials Chemistry and Physics*, *33*(3–4), 289–297.

Raju, K. C. J., Sivasubramanian, V., Pragasam, R., Viswanathan, B., & Murthy, V. R. K. (1993). Contributions to the dielectric constant of the system BaLn2Ti4O12 from packing fraction and nephelauxetic ratio. *Journal of Applied Physics*, *74*(3), 1968–1971.

Raman, N. S., & Viswanathan, B. (1993). Effect of substitution at the barium site in YBa 2 Cu 3 O 7-$δ$. *Bulletin of Materials Science*, *16*(5), 381–391.

Rufus, I. B., Ramakrishnan, V., Viswanathan, B., & Kuriacose, J. C. (1993). X-ray photoelectron spectroscopic studies on Pd/CdS. *Journal of Materials Science Letters*, *12*(19), 1536–1538.

Pragasam, R., Srinivasan, C., Murthy, V. R. K., Viswanathan, B., Sobhanadri, J., Satyalakshmi, K. M., & Hegde, M. S. (1993). Comparison of the effect of processing parameters and degradation on the DC and microwave properties of thin films and polycrystalline bulk high-Tc superconducting materials. *Superconductor Science and Technology*, *6*(6), 402.

Viswanathan, B., & Pulikottil, A. C. (1993). Surface properties of ZSM-5 modified by phosphorus. *Catalysis Letters*, *22*(4), 373–379.

Viswanathan, B., Mary, U. D., & Viswanath, R. P. (1993). Photocatalytic and Physicochemical Studies on Metallised Titania Systems. In *Studies in Surface Science and Catalysis* (Vol. 75, pp. 2147–2150). Elsevier.

Viswanathan, B., & Lakshmi, T. (1993). Strong metal support interaction (SMSI) state in titania supported iron catalysts-EHMO model cluster calculations.

Viswanathan, B. (1993). Metallization of plastics by electroless plating. *Current Science*, 537–543.

Raman, N. S., & Viswanathan, B. (1993). Effect of substitution at the barium site in YBa [sub 2] Cu [sub 3] Osub (7-[delta]). *Bulletin of Materials Science;(India)*, *16*(5).

Viswanathan, B. (1992). CO oxidation and NO reduction on perovskite oxides. *Catalysis Reviews*, *34*(4), 337–354.

Rufus, I. B., Ramakrishnan, V., Viswanathan, B., & Kuriacose, J. C. (1992). Surface characterization of CdS 0.62 Se 0.38 by X-ray photoelectron spectroscopy. *Journal of Materials Science Letters*, *11*(5), 252–254.

Viswanathan, B., & Pillai, C. N. (1992). Recent developments in catalysis: theory and practice. Editions Technip.

Raman, N. S., Viswanathan, B., & Varadarajan, T. K. (1992). Valency of copper in 123 oxides. *Journal of Materials Science*, *27*(23), 6440–6446.

Rufus, I. B., Viswanathan, B., Ramakrishnan, V., & Kuriacose, J. C. (1992). Effect of photodeposition of nickel on the photocatalytic, photoelectrochemical and surface properties of CdS.

Venkataraman, D., Raman, N. S., Viswanathan, B., Pragasam, R., & Murthy, V. R. K. (1992). Effect of processing parameters on Bi-Sr-Ca-Cu-O system.

Murthy, V. R. K., Raju, K. C. J., & Viswanathan, B. (1992). Characteristics of materials for microwave devices. *Bulletin of Materials Science*, *15*(3), 213–217.

Viswanathan, B., Lakshmi, T., & Mary, U. D. (1992). Strong metal support interaction (SMSI) and encapsulation model. *Indian Journal of Technology*, *30*(2), 99–103.

Vishwanathan, V., Narayanan, S., Lakshmi, T., & Viswanathan, B. (1992). The influence of preparation methods on strong metal support interaction (SMSI) in Rh/TiO2 system. *Indian Journal of Technology*, *30*(2), 104–106.

Viswanathan, B. (1992). Collective indicators as alternatives for science and technology measurement in developing countries. *Les Indicateurs de Science Pour Les Pays En Développement*, 93.

CHAKRABARTY, D. K., & VISWANATHAN, B. (1992). Special issue on catalysis. 1. Foreword. COUNCIL SCIENTIFIC INDUSTRIAL RESEARCH.

RUFUS, I. B., RAMAKRISHNAN, V., VISWANATHAN, B., & KURIACOSE, J. C. (1992). Surface-Analysis of PD/CDS by X-ray Photoelectro-Spectroscopy, Photocatalysis and PHotoelectrochemistry. In *Abstracts of Papers of the American Chemical Society* (Vol. 204, p. 181).

.Rajam, K. S., Rajagopalan, S. R., Hegde, M. S., & Viswanathan, B. (1991). Characterization of electroless nickel by esca. *Materials Chemistry and Physics*, *27*(2), 141–154.

Viswanathan, B. (1991). Chemistry of ferrites. *ChemInform*, *22*(50), no--no.

Raman, R., Murthy, V. R. K., & Viswanathan, B. (1991). Microwave dielectric loss studies on lithium-zinc ferrites. *Journal of Applied Physics*, *69*(7), 4053–4055.

Sanyal, R. M., Ghorai, D. K., Dutta, D. R., Adhya, S. K., & Sen, B. (1991). Characterization of rhodium catalysts supported on various inorganic oxides for carbon monoxide hydrogenation. *Applied Catalysis*, *74*(2), 153–161.

Raman, R., Murthy, V. R. K., & Viswanathan, B. (1991). Magnetic loss studies on lithium zinc ferrites. *Journal of Magnetism and Magnetic Materials*, *102*(1–2), 181–183.

Pragasam, R., Raman, N. S., Murthy, V. R. K., & Viswanathan, B. (1991). Conductivity Measurements of Some High-TC Superconducting Materials at Microwave Frequencies. *Physica Status Solidi (A)*, *125*(2), 583–588.

RUFUS, I. B., VISWANATHAN, B., RAMAKRISHNAN, V., & KURIACOSE, J. C. (1991). X-Ray Photoelectron Spectroscopy Studies on Metallized (Pt, Rh, Ru, Pd and Ni) Cadmium Sulfide. *ChemInform*, *22*(46), no--no.

Ishi, S., & Viswanathan, B. (1991). Adsorption of xenon atoms on metal surfaces. *Thin Solid Films*, *201*(2), 373–402.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1991). Surface properties of LaNi5: a reinvestigation. *International Journal of Hydrogen Energy*, *16*(1), 23–33.

Vishwanathan, V., Narayanan, S., Pandey, G., & Viswanathan, B. (1991). Benzyl chloride transformation as a probe for electron transfer on Rh/TiO 2 under SMSI state. *Reaction Kinetics and Catalysis Letters*, *45*(1), 155–159.

Viswanathan, B., & Amarendra, G. (1991). Positron studies of helium in Ni, Ni-Ti and Ti-stabilised steel. In *Fundamental aspects of inert gases in solids* (pp. 209–219). Springer, Boston, MA.

Murthy, V. R. K., Raman, R., & Viswanathan, B. (1991). Dielectric Properties and X-Ray Photo Electron Spectroscopy Studies on Substituted Lithium Ferrites. In *Retrospective Collection* (Vol. 7, pp. 233–238).

Viswanathan, B., & Murthy, V. R. K. (1990). Ferrite materials: science and technology. Springer Verlag.

Rufus, I. B., Ramakrishnan, V., Viswanathan, B., & Kuriacose, J. C. (1990). Rhodium and rhodium sulfide coated cadmium sulfide as a photocatalyst for photochemical decomposition of aqueous sulfide. *Langmuir*, *6*(3), 565–567.

Subba Rao, T., Murthy, V. R. K., & Viswanathan, B. (1990). Review of perovskite ceramics—microwave dielectric resonator materials. *Ferroelectrics*, *102*(1), 155–160.

Pragasam, R., Murthy, V. R. K., Viswanathan, B., & Natarajan, T. S. (1990). Development of a microprocessor-based four probe DC resistivity setup for T/sub c/measurement of superconducting materials. *IEEE Transactions on Instrumentation and Measurement*, *39*(5), 792–795.

Padma, A. K., Murthy, V. R. K., & Viswanathan, B. (1990). Measurement of conductivity of graphite intercalation compounds by the contactless method. *Indian Journal of Technology*, *28*(5), 208–210.

VISWANATHAN, B., OMANA, M. J., & VARADARAJAN, T. K. (1990). Mechanism of hydrocarbon formation from alcohols on heteropoly compounds: propane from isopropyl alcohol on 12-tungstophosphoric acid and its salts. *Indian Journal of Technology*, *28*(10), 571–579.

Murthy, V. R. K., Raman, R., & Viswanathan, B. (1990). Magnetic Properties of Substituted Lithium Ferrites. In *Advances in Ferrites: Proceedings of the Fifth International Conference on Ferrites, January 10-13, 1989, Bombay, India* (p. 447).

Sundararajan, V., Sivasubramanian, V., RAJU, K. C. J., Viswanathan, B., & MURTHY, V. R. K. (1990). Microwave characteristics of metallised PTFE substrates. *Indian Journal of Technology*, *28*(10), 609–611.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1990). Surface properties and their consequences on the hydrogen sorption characteristics of certain materials. *Journal of the Less Common Metals*, *163*(1), 89–108.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1990). Evidence for the formation of surface carbonates on some hydrogen storage intermetallic compounds: an XPS study. *International Journal of Hydrogen Energy*, *15*(2), 133–137.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1990). Ion-induced carbide formation of TiFe: evidence from XPS and AES studies. *Journal of the Less Common Metals*, *161*(1), 77–85.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1990). The influence of atmospheric CO2 on the surface properties of Mg2NiH4 and a comparison with some hydrogen storage alloys. *Journal of the Less Common Metals*, *158*(1), L1--L7.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1990). Note on the formation of surface carbides. *Journal of Electron Spectroscopy and Related Phenomena*, *50*(2), 277–287.

Kumar, M. P. S., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1990). Investigation of the oxidation behaviour of FeTi alloy. *Materials Chemistry and Physics*, *24*(5), 495–501.

Viswanathan, B., Raman, N. S., & Varadarajan, T. K. (1990). Conversion of isopropyl alcohol on Y-Ba-Cu-oxide system-IR study.

Lakshmi, T., & Viswanathan, B. (1990). Cluster model for titania supported iron SMSI catalyst.

Selvanathan, A., Viswanathan, B., & Kuriacose, J. C. (1990). Mechanism of methanol synthesis on copper/zinc oxide/chromia catalyst.

Viswanathan, B. (1990). Extended Huckel molecular orbital calculations on anionic units simulated for heteropoly acid catalysts.

Viswanathan, B., Mary, U. D., & Viswanath, R. P. (1990). Photocatalytic dehydrogenation of methanol on Pt/TiO2.

Raman, N. S., Viswanathan, B., & Varadarajan, T. K. (1990). Analysis of Cu 3+ in 123 oxide superconductors by cyclic voltammetry. *Bulletin of Electrochemistry*, *6*(9), 785–786.

Krishnaratnam, M., Viswanathan, B., & Ramaswamy, R. (1990). Perturbations in bromate oscillators by gamma irradiation. *Collection of Czechoslovak Chemical Communications*, *55*(3), 668–673.

Krishnaratnam, M., Sudhakar Rao, K., Viswanathan, B., & Ramaswamy, R. (1990). Effect of gamma-irradiation on the catalyzed bromate oscillator. *Journal of Radioanalytical and Nuclear Chemistry*, *140*(2), 247–253.

Viswanathan, B., Omana, M. J., & Varadarajan, T. K. (1989). Acidity of heteropoly compounds from XPS measurements. *Catalysis Letters*, *3*(3), 217–221.

Rufus, I. B., Ramakrishnan, V., Viswanathan, B., & Kuriacose, J. C. (1989). Photocorrosion studies on CdS, CdS 0·62 Se 0·38 and Pt/CdS 0·62 Se 0·38 in aqueous halide solutions. In *Proceedings of the Indian Academy of Sciences-Chemical Sciences* (Vol. 101, pp. 487–497).

Viswanathan, B., Raman, N. S., Suchithra, S., Varadarajan, T. K., & Viswanath, R. P. (1989). Electrochemical Studies on High T sub c 1-2-3 Type Superconductors. *Journal of the Electrochemical Society of India*, *38*(1), 76–78.

Viswanathan, B., & Sudha, K. (1989). Photoelectrochemical properties of platinised TiO2. *Asian Journal of Chemistry*, *1*(2), 129.

Viswanathan, B., & Meenakshisundaram, A. (1989). Catalysis, Concepts and Applications: Proceedings of the Ninth National Symposium on Catalysis, December 15-17, 1988. Tata McGraw-Hill Publishing Company.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1989). XPS studies of the surface properties of CaNi5. *Journal of Electron Spectroscopy and Related Phenomena*, *49*(2), 203–211.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1989). Some comments on modes of activation of LaNi5 and CaNi5 alloys for hydrogen storage. *International Journal of Hydrogen Energy*, *14*(9), 687–689.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1989). XPS and XAES studies on hydrogen storage magnesium-based alloys. *International Journal of Hydrogen Energy*, *14*(12), 899–902.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1989). Surface Studies of Some Hydrogen Storage Materials. *Zeitschrift Für Physikalische Chemie*, *164*(2), 1199–1206.

Kumar, M. P. S., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1989). Interaction of carbon monoxide with the hydrogen storage alloy, CaNi5; kinetic and surface studies. *Reactivity of Solids*, *7*(2), 157–166.

Kumar, M. P. S., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1989). Surface properties of CaNi 5 hydrogen storage alloy. *Journal of Materials Science*, *24*(12), 4387–4391.

NARAYANAN, S., & VISWANATHAN, B. (1989). APPLICATION OF X-RAY PHOTOELECTRON-SPECTROSCOPY FOR CHARACTERIZATION OF CATALYSTS AND MATERIALS. *JOURNAL OF SCIENTIFIC \& INDUSTRIAL RESEARCH*, *48*(5), 229–239.

Kumar, M. P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1989). Decomposition of Isopropyl Alcohol on Oxidised Intermetallic Compound LaNi5.

Viswanathan, B., Omana, M. J., & Varadarajan, T. K. (1989). Hydrocarbon formation from alcohols on heteropoly acids: XPS and TES studies.

Rufus, I. B., Ramakrishnan, V., Viswanathan, B., & Kuriacose, J. C. (1989). PHOTOELECTROCHEMICAL AND PHOTOCATALYTIC STUDIES ON PD/CDS. *Indian Journal of Technology*. COUNCIL SCIENTIFIC INDUSTRIAL RESEARCH PUBL \& INFO DIRECTORATE, NEW DELHI~….

PILLAI, C. N., & VISWANATHAN, B. (1989). SOME INVESTIGATIONS IN HETEROGENEOUS CATALYSIS. *RESEARCH AND INDUSTRY*, *34*(4), 307–311.

Raman, R., VISWANATHAN, B., & Murthy, V. R. K. (1989). ELECTRICAL, MAGNETIC AND XPS STUDIES ON LITHIUM FERRITE. *INDIAN JOURNAL OF TECHNOLOGY*, *27*(3), 165–167.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1989). Some comments on modes of activation of LaNi sub 5 and CaNi sub 5 alloys for hydrogen storage. *International Journal of Hydrogen Energy;(UK)*, *14*(9).

Viswanathan, B., Raman, R., Raman, N. S., & Murthy, V. R. K. (1988). Microwave power loss and XPS measurements on high Tc Nd Ba Cu Oxide superconducting system. *Solid State Communications*, *66*(4), 409–411.

Viswanathan, B., Raman, N. S., Suchithra, S., Viswanathan, R. P., & Varadarajan, T. K. (1988). Cyclic--Voltammetric Study of Cuprate Based High T sub c Superconductors in Non-Aqueous Medium. *J. Electrochem. Soc. India*, *37*(2), 147–149.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1988). Studies on the thermal characteristics of hydrides of Mg, Mg2Ni, Mg2Cu and Mg2Ni1- xMx (M= Fe, Co, Cu or Zn; 0<$\times$< 1) alloys. *International Journal of Hydrogen Energy*, *13*(2), 87–94.

Selvam, P., Viswanathan, B., & Srinivasan, V. (1988). X-ray photoelectron spectroscopic, electrical and magnetic studies on Mg2NiH4. *Journal of Electron Spectroscopy and Related Phenomena*, *46*(2), 357–361.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1988). Thermal studies on Mg2NiH4: Existence of additional hydride phase in the Mg2Ni-Hydrogen system. *Thermochimica Acta*, *125*, 1–8.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1988). Mg2NiH: A new hydride phase in the Mg2Ni H2 system. *International Journal of Hydrogen Energy*, *13*(12), 749–759.

Kumar, M. P. S., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1988). High temperature interaction of hydrogen with intermetallic compound CaNi5. *Materials Chemistry and Physics*, *20*(3), 245–253.

Viswanathan, B., Omana, M. J., & Varadarajan, T. K. (1988). Catalytic Properties of Heteropolyacids-Conversion of Isopropyl Alcohol into Saturated Hydrocarbons.

Krishnaratnam, M., Viswanathan, B., & Ramaswamy, R. (1988). Effect of gamma-irradiation on the uncatalyzed bromate oscillator. *Journal of Radioanalytical and Nuclear Chemistry*, *120*(2), 353–359.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1988). Mg/sub 2/NiH: a new hydride phase in the Mg/sub 2/Ni-H/sub 2/system. *Int. J. Hydrogen Energy;(United Kingdom)*, *13*(12).

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1988). Studies on the thermal characteristics of hydrides of Mg, Mg/sub 2/Ni, Mg/sub 2/Cu and Mg/sub 2/Nisub (1-x) Msub (x)(M= Fe, Co, Cu or Zn; 0< x< 1) alloys. *Int. J. Hydrogen Energy;(United Kingdom)*, *13*(2).

Viswanathan, B., & Krishnan, C. N. (1988). Our Science and Technology journals-can we not improve them?

Gopaiakrishnan, R., Viswanathan, B., Ramakrishnan, V., & Kuriacose, J. C. (1987). Photoelectrochemcal properties of ZrxTi1- xNb2O7 mixed oxides. *Materials Chemistry and Physics*, *18*(1–2), 171–179.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1987). X-ray photoelectron spectroscopic investigations of the activation of FeTi for hydrogen uptake. *International Journal of Hydrogen Energy*, *12*(4), 245–250.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1987). X-ray crystallographic and thermal studies on the hydrides of magnesium and its intermetallics. *Bulletin of Materials Science*, *9*(1), 21–27.

Viswanathan, B., & Ramesh, D. (1987). On the nature of activation of anchored rhodium catalysts by borohydride. *Polyhedron*, *6*(2), 345–346.

Vishwanathan, V., Narayanan, S., & Viswanathan, B. (1987). Role of Zeolite Supported Metal Systems in the Conversion of CO (Hydrogenation) to Hydrocarbons.

SELVAM, P., VISWANATHAN, B., SWAMY, C. S., & SRINIVASAN, V. (1987). SATELLITE STRUCTURES IN THE X-RAY PHOTOELECTRON-SPECTRA OF SURFACE OXIDES FORMED ON FETI ALLOYS. *INDIAN JOURNAL OF TECHNOLOGY*, *25*(12), 639–648.

Viswanathan, B., & Gopalakrishnan, R. (1987). Role of Promoter in Cobalt Fischer-Tropsch Catalysts on Adsorption of Carbon Monoxide.

Ishi, S. I., Ohno, Y., & Viswanathan, B. (1987). ADSORPTION OF CARBON-MONOXIDE ON METAL-SURFACES. *JOURNAL OF SCIENTIFIC \& INDUSTRIAL RESEARCH*, *46*(12), 541–567.

Krishnaratnam, M., Viswanathan, B., & Ramaswamy, R. (1987). Influence of gamma irradiation on the oscillatory characteristics of Belousov-Zhabotinsky reaction. *Indian Journal of Technology*, *25*(4), 191–193.

Vishwanathan, V., Narayanan, S., & Viswanathan, B. (1987). EFFECT OF REDUCTION ON STRONG METAL SUPPORT INTERACTION (SMSI) BEHAVIOR OF RH/TIO2 SYSTEM. *INDIAN JOURNAL OF CHEMISTRY SECTION A-INORGANIC BIO-INORGANIC PHYSICAL THEORETICAL \& ANALYTICAL CHEMISTRY*. COUNCIL SCIENTIFIC INDUSTRIAL RESEARCH PUBL \& INFO DIRECTORATE, NEW DELHI~….

Vishwanathan, V., Narayanan, S., & Viswanathan, B. (1987). Effect of Reduction on Strong Metal Support Interaction (SMSI) Behaviour of Rh/TiO2 System.

SELVAM, P., VISWANATHAN, B., SWAMY, C. S., & SRINIVASAN, V. (1987). XPS AND AES STUDIES ON THE ACTIVATION OF FeTi ALLOY FOR HYDROGEN STORAGE APPLICATIONS. In *Challenges in Catalysis Science and Technology: Proceedings of the 8th National Symposium on Catalysis Held at Sindri During Feb. 12-14, 1987 Under the Joint Auspices of Projects and Development India Limited and Catalysis Society of India* (Vol. 1, p. 306).

Viswanathan, B., Chokkalingam, S., Varadarajan, T. K., & Badrinarayanan, S. (1986). Characterization of Sn-5at.\% Sb mixed oxide catalyst studied by x-ray photoelectron spectroscopy and Auger electron spectroscopy. *Surface and Coatings Technology*, *28*(2), 201–206.

Balasubrahmanyam, S., Viswanathan, B., Rao, V., & Kuriacose, J. (1986). Influence of60Co gamma radiation on La2CuO4 catalyst for the decomposition of hydrogen peroxide. *Journal of Radioanalytical and Nuclear Chemistry*, *103*(5), 281–289.

Gopalakrishnan, R., & Viswanathan, B. (1986). Effect of support and promoter on the coadsorption of carbon monoxide and hydrogen on Fischer--Tropsch cobalt catalysts. *Journal of the Chemical Society, Faraday Transactions 1: Physical Chemistry in Condensed Phases*, *82*(9), 2635–2643.

Selvam, P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1986). Magnesium and magnesium alloy hydrides. *International Journal of Hydrogen Energy*, *11*(3), 169–192.

Viswanathan, B., & Gopalakrishnan, R. (1986). Effect of support and promoter in Fischer-Tropsch cobalt catalysts. *Journal of Catalysis*, *99*(2), 342–348.

Viswanathan, B., Madhavan, S., & Swamy, C. S. (1986). Charge transfer satellites in X-ray photoelectron spectra of La2CuO4. *Physica Status Solidi (B)*, *133*(2), 629–632.

Kumar, M. P. S., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1986). Surface studies on activated and hydrided CaNi 5 alloy. *Journal of Materials Science*, *21*(7), 2335–2338.

GOPALAKRISHNAN, R., & VISWANATHAN, B. (1986). Coadsorption of carbon monoxide and hydrogen on cobalt Fischer-Tropsch catalysts. *Chemical Age of India*, *37*(6), 411–413.

Viswanathan, B., & Vetrivel, R. (1986). Mechanism of hydrogenation of carbon monoxide over ferrous metal catalysts: cluster calculation by EHMO method. *Journal of Molecular Catalysis*, *37*(2–3), 157–163.

Viswanathan, B., Tanaka, K., & Toyoshima, I. (1986). Cluster model and charge transfer in a strong metal-support interaction (SMSI) state. *Langmuir*, *2*(1), 113–116.

Joosten, G. E. H., Baudisch, H., Beck, I. E., Berry, M., Blum, J., Bondarenko, T. N., … others. (1986). Jimenez, MS, 151 Jin-Kai Wang, 327. *Journal of Molecular Catalysis*, *37*(387), 387.

Kumar, M. P. S., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1986). TEMPERATURE PROGRAMMED DESORPTION STUDIES ON CaNi 5 HYDRIDES. *Current Science*, 334–336.

Viswanathan, B., & Gopalakrishnan, R. (1986). NITROGEN CHEMISORPTION SUPPRESSION IN THE STRONG METAL SUPPORT INTERACTION STATE OF Co/TiO 2 CATALYST. *Current Science*, *55*(1), 32–34.

Sridhar Kumar, M. P., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1986). Surface studies on activated and hydrided CaNi5 alloy. *Journal of Materials Science*, *21*(7), 2335–2338.

Viswanathan, B., & George, S. (1985). Oxidation of carbon monoxide on rare earth cobaltites—Role of spin state equilibrium. *Reaction Kinetics and Catalysis Letters*, *27*(2), 321–324.

Balasubrahmanyam, S., Viswanathan, B., Rao, V. R. S., & Kuriacose, J. C. (1985). J"\~{} Radi\~{} Nucl. *Chem.\~{} Letters*, *96*, 301.

Viswanathan, B. (1985). Seventh national symposium of the catalysis society of India Baroda, India, 6th--8th february, 1985. *Applied Catalysis*, *16*(3), 448–451.

Ishi, S., Ohno, Y., & Viswanathan, B. (1985). An overview on the electronic and vibrational properties of adsorbed CO. *Surface Science*, *161*(2–3), 349–372.

Moffat, J. B., Vetrivel, R., & Viswanathan, B. (1985). A model cluster study of the acid-base properties of phosphate catalysts. *Journal of Molecular Catalysis*, *30*(1–2), 171–180.

Viswanathan, B., Tanaka, K., & Toyoshima, I. (1985). Charge transfer in the Ni/SiOx/n-Si (111) system. *Chemical Physics Letters*, *113*(3), 294–298.

Tanaka, K., Viswanathan, B., & Toyoshima, I. (1985). CO Adsorption suppression due to charge transfer in the Ni--SiO x--n-Si (111) system at low Ni coverage. *Journal of the Chemical Society, Chemical Communications*, (8), 481–482.

CHOKKALINGAM, S., VISWANATHAN, B., & VARADARAJAN, T. K. (1985). STRUCTURE OF OXIDATION CATALYSTS UNDER REACTION CONDITIONS. *Chemischer Informationsdienst*, *16*(45), no--no.

Viswanathan, B., & George, S. (1985). On the nature of active species in the oxidation of CO on LnCoO3 type perovskites. *Indian Journal of Technology*. COUNCIL SCIENTIFIC INDUSTRIAL RESEARCH PUBL \& INFO DIRECTORATE, NEW DELHI~….

VISWANATHAN, B. (1985). CLUSTER MODEL FOR STRONG METAL SUPPORT INTERACTION (SMSI) STATE. *Advances in Catalysis--Science \& Technology*, 63.

SANKARAN, C. S., NAMBOODIRI, R. V., & VISWANATHAN, B. (1985). INTERACTION OF HYDROGEN WITH TRANSITION METALS C-AN EHMO STUDY. *Advances in Catalysis--Science \& Technology*, 109.

Viswanathan, B. (1984). Solid state and catalytic properties of rare earth orthocobaltites―New generation catalysts. *Journal of Scientific \& Industrial Research*, *43*(3), 151–162.

Jayamani, M., Viswanathan, B., & Pillai, C. N. (1984). Preparation, characterization, and comparison of properties of alumina catalysts. *Journal of Catalysis*, *89*(2), 560–563.

Viswanathan, B., & Chokkalingam, S. (1984). Some reflections on mixed tin and antimony oxide catalysts. *Surface Technology*, *23*(3), 231–244.

Chokkalingam, S., Viswanathan, B., & Varadarajan, T. K. (1984). Oxidative dehydrogenation of isopropyl alcohol on mixed tin and antimony oxide catalysts. *Surface Technology*, *21*(1), 91–96.

Vetrivel, R., & Viswanathan, B. (1984). Acid-base properties of H3PO4 and phosphate catalysts. *Surface Technology*, *22*(1), 1–8.

Gopalakrishnan, R., & Viswanathan, B. (1984). Temperature-programmed desorption and infrared studies on the activation of carbon monoxide on cobalt surfaces. *Journal of Colloid and Interface Science*, *102*(2), 370–372.

Gopalakrishnan, R., & Viswanathan, B. (1984). Interaction of CO and hydrogen on cobalt surfaces: a temperature-programmed desorption study. *Surface Technology*, *23*(2), 173–177.

Viswanathan, B., & Swaminathan, L. (1984). Activation of carbon monoxide on metal clusters. Extended Hückel molecular orbital model calculations. *Reaction Kinetics and Catalysis Letters*, *25*(3), 339–344.

Vetrivel, R., & Viswanathan, B. (1984). Interaction of carbon monoxide and hydrogen with $α$-iron (100) surface. *Journal of Molecular Catalysis*, *24*(2), 245–256.

Viswanathan, B., & Swaminathan, L. (1984). Activation of Carbon Monoxide on Transition Metals. *Indian J. Technol.*, *22*(5), 178–184.

VISWANATHAN, B., SWAMINATHAN, L., GOPALAKRISHNAN, R., & VETRIVEL, R. (1984). THE BONDING PROPERTIES OF CARBON-MONOXIDE ADSORBED ON METALS. *REVUE ROUMAINE DE PHYSIQUE*, *29*(5), 477–480.

Chokkalingam, S., Viswanathan, B., & Varadarajan, T. K. (1984). Decomposition of Isopropyl Alcohol on y-Phase Bismuth Molybdate Catalyst.

CHOKKALINGAM, S., Viswanathan, B., & VARADARAJAN, T. K. (1984). STUDIES ON THE CATALYTIC PROPERTIES OF U-SB OXIDE OXIDATION SYSTEM-DECOMPOSITION OF ISOPROPYL-ALCOHOL IN PRESENCE OF OXYGEN. *HUNGARIAN JOURNAL OF INDUSTRIAL CHEMISTRY*, *12*(3), 341–345.

Viswanathan, B., & George, S. (1984). KINETICS AND MECHANISM OF CARBON-MONOXIDE OXIDATION ON RARE-EARTH ORTHOCOBALTITES. *INDIAN JOURNAL OF TECHNOLOGY*, *22*(9), 348–352.

George, S., & Viswanathan, B. (1983). Catalytic oxidation of CO on La 1- x Sr x CoO 3 perovskite oxides. *Reaction Kinetics and Catalysis Letters*, *22*(3–4), 411–415.

George, S., & Viswanathan, B. (1983). Catalytic oxidation of carbon monoxide on LnCoO3 perovskite oxides. *Journal of Colloid and Interface Science*, *95*(2), 322–326.

George, S., & Viswanathan, B. (1983). CO oxidation on LnCoO3 perovskite oxides: Effect of initial total pressure and gas composition. *Surface Technology*, *19*(3), 217–223.

Chokkalingam, S., Viswanathan, B., & Varadarajan, T. K. (1983). Studies of the structural stability of Sn-Sb mixed oxide in the decomposition of isopropyl alcohol. *Surface Technology*, *19*(3), 225–232.

Vetrivel, R., Gopalakrishnan, R., & Viswanathan, B. (1983). THEORETICAL STUDIES ON THE INTERACTION OF CO AND HYDROGEN ON Ni (100) SURFACE. *JOURNAL OF THE RESEARCH INSTITUTE FOR CATALYSIS HOKKAIDO UNIVERSITY*, *31*(1), 39–52.

Swaminathan, L., & Viswanathan, B. (1983). Activation of carbon monoxide on nickel \& copper clusters.

Drachsel, W., Block, J. H., & Viswanathan, B. (1983). Laser-Pulse Induced Field Desorption of Small Molecules. In *Surface Studies with Lasers* (pp. 221–225). Springer, Berlin, Heidelberg.

Vetrivel, R., & Viswanathan, B. (1983). Model cluster study of the acid—base properties of zeolite catalysts. *Journal of Molecular Structure*, *94*, 187–192.

Gopalakrishnan, R., Vetrivel, R., & Viswanathan, B. (1983). INTERACTION OF CARBON-MONOXIDE AND HYDROGEN ON COBALT SURFACES IN RELATION TO FISCHER-TROPSCH REACTION. *INDIAN JOURNAL OF TECHNOLOGY*, *21*(9), 344–348.

Viswanathan, B., & George, S. (1983). Catalytic Oxidation of Carbon Monoxide on LnCoO3 Perovskite Type Oxides.

Raj, S. L., Viswanathan, B., & Srinivasan, V. (1982). The activity of Mn 3+ and Mn 4+ in lanthanum strontium manganite for the decomposition of nitrous oxide. *Journal of Catalysis*, *75*(1), 185–187.

Devarajan, R., Balakrishnan, T., Santappa, M., & Viswanathan, B. (1982). Gamma radiation-induced bulk polymerization of some methyl aryloxymethacrylates. *Journal of Polymer Science: Polymer Chemistry Edition*, *20*(7), 1863–1873.

Sastri, M. V. C., Viswanath, R. P., & Viswanathan, B. (1982). Studies on the reduction of iron oxide with hydrogen. *International Journal of Hydrogen Energy*, *7*(12), 951–955.

Viswanathan, B., Gopalakrishnan, R., & Vetrivel, R. (1982). Temperature programmed desorption (TPD) of carbon monoxide from cobalt surfaces. *Reaction Kinetics and Catalysis Letters*, *18*(1), 209–212.

VETRIVEL, R., & VISWANATHAN, B. (1982). ACTIVATION OF CARBON MONOXIDE ON SODIUM CLUSTERS CNDO CALCULATIONS. *JOURNAL OF THE RESEARCH INSTITUTE FOR CATALYSIS HOKKAIDO UNIVERSITY*, *30*(1), 39–47.

Viswanath, R. P., Viswanathan, B., & Jeyanthi, V. (1982). Studies on Photocatalytic Microcells: Photocatalytic Decomposition of Glucose.

Vetrivel, R., Gopalakrishnan, R., & Viswanathan, B. (1982). Chemisorption of Nitrous Oxide on Transition Metal Surfaces-Bond Energy Bond Order Model Calculation.

Chokkalingam, S., Varadarajan, T. K., & Viswanathan, B. (1982). Studies on the catalytic properties of U-Sb oxide oxidation system. *Hungarian Journal of Industrial Chemistry*, *10*(3), 299–306.

Viswanathan, B., Narayanan, S. R., Viswanath, R. P., & Varadrajan, T. K. (1982). Photoelectrochemical properties of LaRhO 3. *Indian Journal of Technology*, *20*(5), 199–200.

Raj, S. L., Viswanathan, B., & Srinivasan, V. (1982). Role of adsorbed oxygen species in kinetics of catalytic decomposition of nitrous oxide.

Balasubramanyam, S., Viswanathan, B., Rao, V. R. S., & Kuriacose, J. C. (1982). Studies on the catalytic decomposition of hydrogen peroxide on lanthanum cuprate-effect of gamma irradiation [Paper No. RD-10].

Sastri, M. V. C., & Nagasubramanian, G. (1982). Studies on ferric oxide electrodes for the photo-assisted electrolysis of water. *International Journal of Hydrogen Energy*, *7*(11), 873–876.

Josyulu, O. S., Sobhanadri, J., & Viswanathan, B. (1981). LATTICE-CONSTANT AND SATURATION MAGNETIZATION OF COBALT ZINC FERRITES AND MAGNESIUM ZINC FERRITE. *Revue Roumaine de Chimie*, *26*(5), 687–692.

Appandairajan, N. K., Viswanathan, B., & Gopalakrishnan, J. (1981). Lithium-substituted cobalt oxide spinels LixM1- xCo2O4 (M= Co2+, Zn2+; 0≤ x≤ 0.4). *Journal of Solid State Chemistry*, *40*(1), 117–121.

Sastri, M. V. C., Viswanathan, B., & Bhuvana, C. V. (1981). Studies on the Catalytic Oxidation of Propylene on AMoO4 Type Molybdates. In *Studies in Surface Science and Catalysis* (Vol. 7, pp. 1113–1125). Elsevier.

Sanjeevi, R., & others. (1981). Mobility of water vapor adsorbed on proteins and polypeptides.

REDDY, S. R., RICE, R. F., SANJEEVI, R., SASIDHAR, V., SCHELUDKO, A., SEINFELD, J. H., … others. (1981). SUTERA, SP, 423. *Journal of Colloid and Interface Science*, *82*(2).

Bhuvana, C. V, Viswanathan, B., & Sastri, M. V. C. (1981). THE EFFECT OF SUBSTRATES ON THE OXIDATION OF PROPYLENE ON AM0O4 TYPE MOLYBDATES. *INDIAN JOURNAL OF TECHNOLOGY*, *19*(8), 330–335.

Krishnamurthy, K. R., Viswanathan, B., & Sastri, M. V. C. (1981). Structure \& Activity Correlation in Catalytic Oxidation of Carbon Monoxide on Copper Ferrite.

Sastri, M. V. C., Viswanath, R. P., & Viswanathan, B. (1981). Direct Reduction of Iron-Oxide by Gaseous Reductants. *JOURNAL OF SCIENTIFIC \& INDUSTRIAL RESEARCH*, *40*(7), 448–457.

Narayanan, S. R., RP, V., TK, V., & others. (1981). PHOTOELECTROCHEMICAL AND SOLID STATE PROPERTIES OF NB2O5.

RAMASWAMY, D., DEVARAJAN, R., BALAKRISHNAN, T., VISWANATHAN, B., & others. (1981). GAMMA-RADIATION-INDUCED SOLUTION POLYMERIZATION OF SOME METHYL ARYLOXYMETHACRYLATES.

Balakrishnan, T., Devarajan, R., Santappa, M., & Viswanathan, B. (1980). Kinetics of gamma radiation induced solution polymerization of methyl 2-(4-nitrophenoxymethyl) acrylate. *Die Makromolekulare Chemie, Rapid Communications*, *1*(6), 373–378.

Appandairajan, N. K., Viswanathan, B., & Gopalakrishnan, J. (1980). Magnetic-properties of NIXCO3-XO4 System. *Revue Roumaine de Physique*, *25*(2), 207–208.

Bhuvana, C. V, Viswanathan, B., & Sastri, M. V. C. (1980). Studies on the catalytic oxidation of propylene on ferric molybdate. *Reaction Kinetics and Catalysis Letters*, *14*(3), 375–380.

Viswanathan, B., Bhuvana, C. V, & Sastri, M. V. C. (1980). Adsorption of propylene and oxygen on AMoO/sub 4/type molybdates in relation to catalytic oxidation of propylene. *Indian J. Technol.;(India)*, *18*(10).

Raj, S. L., Srinivasan, V., & Viswanathan, B. (1980). EVALUATION OF TRUE RATE CONSTANTS FOR THE CATALYTIC DECOMPOSITION OF NITROUS OXIDE—A GENERAL NUMERICAL METHOD. *Current Science*, *49*(16), 628–630.

Josyulu, O. S., Sobhanadri, J., Viswanathan, B., & Appanraj, N. K. (1980). Dielectric behaviour of some metal oxides. In *Proceedings of the nuclear physics and solid state physics symposium [held at] Madras, December 26-30, 1979 201: Vol. 22C: Solid state physics*.

THAYIKKANNU, BALAKRISHNAN, T., DEVERAJAN, R., VISWANATHAN, B., & others. (1980). KINETICS OF GAMMA RADIATION INDUCED SOLUTION POLYMERIZATION OF METHYL 2-(4-NITROPHENOXYMETHYL) ACRYLATE.

Viswanathan, B. (1979). On Ritchie’s equation for the analysis of kinetics of adsorption of gases on solids. *Journal of the Chemical Society, Faraday Transactions 1: Physical Chemistry in Condensed Phases*, *75*, 477–478.

Viswanathan, B., TK, V., & others. (1979). Magnetic properties of HoFe2O4.

VISWANATHAN, B. (1979). CQ3-xZaxO4 (0< x\^{} 1) spnri oxides. In *Proceedings* (p. 217).

Varadarajan, T. K., Viswanathan, B., & Sastri, M. V. C. (1979). Studies on the formation of zinc molybdate. *Thermochimica Acta*, *30*(1–2), 367–370.

Viswanathan, B., Bhuvana, C. V, & Sastri, M. V. C. (1979). Theoretical considerations on the oxidation of propylene on transition metal molybdates. *Reaction Kinetics and Catalysis Letters*, *11*(2), 173–177.

Bhuvana, C. V, Viswanathan, B., & Sastri, M. V. C. (1979). ESR study in zinc molybdate catalyst in relation to propylene oxidation. *J. Colloid Interface Sci.;(United States)*, *69*(2).

Viswanathan, B., RP, V., & others. (1979). KINETICS OF REDUCTION OF IRON OXIDE: EFFECT OF PRODUCTS.

Gopalakrishnan, J., Appandairajan, N. K., & Viswanathan, B. (1979). Co 3-x Zn x O 4 (0≤ x≤ 1) spinel oxides. In *Proceedings of the Indian Academy of Sciences-Chemical Sciences* (Vol. 88, pp. 217–222).

Viswanathan, B., Krishnamurthy, K. R., & Sastri, M. V. C. (1979). Mechanism of oxidation of carbon monoxide on spinel type ferrites. *JOURNAL OF THE RESEARCH INSTITUTE FOR CATALYSIS HOKKAIDO UNIVERSITY*, *27*(2), 79–87.

Viswanathan, B., Drachsel, W., Block, J. H., & Tsong, T. T. (1979). Photon enhanced field ionization on semiconductor surfaces. *The Journal of Chemical Physics*, *70*(5), 2582–2583.

Krishnamurthy, K. R., Viswanathan, B., & Sastri, M. V. C. (1979). Catalytic Oxidation of Carbon Monoxide on Ferrites: Infrared Spectral Studies.

Varadarajan, T. K., & Viswanathan, B. (1979). SURFACE HETEROGENEITY AND ELOVICH EQUATION. *Current Science*, *48*(1), 17–19.

WISWANATHAN, B., CV, B., & others. (1979). STUDIES ON THE OXIDATION OF PROPYLENE ON AMOO4 TYPE MOLYBDATES OF MN (II), CO (II), NI (II) CU (II) \& ZN (II).

KRISHNAMURTHY, K. R.. & others. (1979). RELATIONSHIP BETWEEN MAGNETIC PROPERTIES AND KINETIC PARAMETERS FOR CO-OXIDATION ON NI-ZN MIXED FERRITES.

Nagasubramanian, G., & others. (1979). SUPRAFACIAL CATALYSIS: IS N2O DECOMPOSITION A MODEL REACTION.

.Viswanathan, B., Ramanan, A., & Varadarajan, T. K. (1979). Magnetic properties of HoFe/sub 2/O/sub 4. *Phys. Status Solidi (a);(German Democratic Republic)*, *55*(1).

Viswanathan, B., Bhuvana, C. V, & Sastri, M. V. C. (1979). Studies on the Oxidation of Propylene on AMoO4 Molybdates of Mn (II), Co (II), Ni (II) Cu (II) Type \& Zn (II).

BALASUBRAMANIAN, V., & VISWANATHAN, B. (1979). ON RITCHIE’S EQUATION FOR THE ANALYSIS OF KINETICS OF ADSORPTION OF GASES ON SOLIDS.

Baynes, P., Narayanasamy, A., Nagarajan, T., Viswanathan, B., Appanandairajan, N. K., & Kimizuka, N. (1979). Magnetic susceptibilities of RFe/sub 2/O/sub 4/systems (R= Ho, Er, Tm, Yb, Y, Lu).

Sanjeevi, R., & others. (1978). Pore size distribution and sorption-desorption hysteresis with water.

Viswanathan, B., Bhuvana, C. V, & Sastri, M. V. C. (1978). Binding state of propylene in relation to partial oxidation reaction. *Proceedings of the Indian Academy of Sciences-Section A, Chemical Sciences*, *87*(12), 405–408.

Nagasubramanian, G., & others. (1978). Energy Resonance Hypothesis in Heterogeneous Catalysts.

Nagasubramanian, G., Viswanathan, B., & Sastri, M. V. C. (1978). Catalytic Oxidation of Carbon Monoxide on Perovskite Type Titanates: Kinetic Characteristics.

Nagasubramanian, G., Viswanathan, B., & Sastri, M. V. C. (1978). Studies on catalytic decomposition of nitrous oxide on titanates.

Nagasubramanian, G., Viswanathan, B., & Sastri, M. V. C. (1978). Orbital Symmetry \& Its Role in Catalysis: Decomposition of Nitrous Oxide \& Oxidation of Carbon Monoxide.

Nagasubramanian, G., & others. (1978). Catalytic activity of ternary oxides of titanates and volcano relationships.

.VISWANATHAN, B., & others. (1978). SOME REFLECTIONS ON THE MECHANISM OF THE DECOMPOSITION OF NITROUS OXIDE CATALYSTS.

VISWANATHAN, B., KRISHNAMURTHY, R., & SASTRI, M. V. C. (1978). MECHANISM OF OXIDATION OF CARBON MONOXIDE ON SPINEL. *Journal of the Research Institute for Catalysis, Hokkaido University*, *26*, 79.

Murthy, V. R. K., Sobhanadri, J., & Viswanathan, B. (1977). X-ray diffraction and saturation magnetization studies of some nickel-zinc ferrites. *Revue Roumaine de Physique*, *22*(8), 821–826.

Krishnamurthy, K. R., Viswanathan, B., & Sastri, M. V. C. (1977). CATALYTIC ACTIVITY OF TRANSITION METAL SPINEL TYPE FERRITES: STRUCTURE-ACTIVITY CORRELATIONS IN THE OXIDATION OF CO. *JOURNAL OF THE RESEARCH INSTITUTE FOR CATALYSIS HOKKAIDO UNIVERSITY*, *24*(3), 219–226.

Krishnamurthy, K. R., Viswanathan, B., & Sastri, M. V. C. (1977). Catalytic Oxidation of Carbon Monoxide on Spinel type Ferrites Role of Magnetic Exchange Interactions. *Proceedings of Indian National Science Academy*, *43*, 34–38.

RP, V., & Viswanathan, B. (1977). Kinetics and mechanism of reduction of ferric oxide by hydrogen. *Transactions of the Japan Institute of Metals*, *18*(3), 149–154.

Viswanath, R. P., Viswanathan, B., & Sastri, M. V. C. (1977). EFFECT OF FOREIGN METAL-OXIDES ON KINETICS OF REDUCTION OF IRON-OXIDE BY HYDROGEN. *TRANSACTIONS OF THE INDIAN INSTITUTE OF METALS*, *30*(3), 159–163.

Varadarajan, T. K., Viswanathan, B., & Sastri, M. V. C. (1977). Studies on the Oxidation of Propylene by Zinc Molybdate.

Varadarajan, T. K., Viswanathan, B., & Sastri, M. V. C. (1977). Catalytic Decomposition of Formic Acid on Zinc Molybdate.

George, S., Viswanathan, B., & Sastri, M. V. C. (1977). KINETICS OF OXIDATION OF CARBON-MONOXIDE ON LANTHANUM COBALTITE. *INDIAN JOURNAL OF CHEMISTRY SECTION A-INORGANIC BIO-INORGANIC PHYSICAL THEORETICAL \& ANALYTICAL CHEMISTRY*, *15*(4), 285–287.

Viswanathan, B., Aggarwal, V. V, & Nair, K. P. K. (1977). Multiple criteria Markov decision processes. *TIMS Studies in the Management Sciences*, *6*, 263–272.

Viswanathan, B., Sastri, M. V. C., & others. (1977). Kinetics of Oxidation of Carbon Monoxide on Lanthanum Cobaltite.

Varadarajan, T. K., Viswanathan, B., & Sastri, M. V. C. (1976). Dehydrogenation of Isopropyl Alcohol on Zinc Molybdate (ZnMoO4).

Viswanath, R. P., Viswanathan, B., & Sastri, M. V. C. (1976). Kinetics of reduction of Fe2O3 to Fe3O4 by the constant temperature differential thermal analysis method. *Thermochimica Acta*, *16*(2), 240–244.

Sanjeevi, R., Ramanathan, N., & Viswanathan, B. (1976). Pore size distribution in collagen fiber using water vapor adsorption studies. *Journal of Colloid and Interface Science*, *57*(2), 207–211.

Nagasubramanian, G., & others. (1976). KINETICS OF DECOMPOSITION OF NITROUS OXIDE OVER NICKEL TITANATE.

Tsong, T. T., Block, J. H., Nagasaka, M., & Viswanathan, B. (1976). Photon stimulated field ionization. *The Journal of Chemical Physics*, *65*(6), 2469–2470.

SASTRI, M. V. C., VISWANATHAN, B., & KRISHNAMURTHY, K. R. (1976). KINETICS AND MECHANICS OF OXIDATION OF CARBON-MONOXIDE ON SPINEL TYPE FERRITES. In *ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY* (Vol. 172, p. 3).

Viswanath, R. P., Viswanathan, B., & Sastri, M. V. S. (1975). Hydrogen spillover effects in the reduction of iron oxide. *Reaction Kinetics and Catalysis Letters*, *2*(1), 51–56.

Sastri, M. V. C., Gupta, R. B., & Viswanathan, B. (1974). Interaction of hydrogen and carbon monoxide on cobalt catalysts. Part II. *Journal of Catalysis*, *32*(2), 325–332.

Rajaram, P., Sastri, M. V. C., Viswanathan, B., & Srinivasan, V. (1974). Electronic Factor in Catalysis.

Rajaram, P., & others. (1974). CATALYTIC DECOMPOSITION OF FORMIC ACID ON MANGANESE MOLYBDATE.

MARUTHAMUTHU, P., CS, S., & others. (1974). KINETICS OF CHEMISORPTION OF HYDROGEN ON IRON POWDER. APPLICATION OF ELOVICH EQUATION.

Nanthakumar, P., & Viswanathan, B. (1974). IR Studies of hydrated and anhydrous cobalt metavanadate. *Technology (Sindri);(India)*, *10*(3).

Viswanathan, B., & others. (1974). OXIDATION OF PROPYLENE ON A MANGANESE MOLYBDATE CATALYST.

Rajaram, P., Viswanathan, B., Aravamudan, G., Srinivasan, V., & Sastri, M. V. C. (1973). Studies on the formation of manganese molybdate. *Thermochimica Acta*, *7*(2), 123–129.

Viswanathan, B., & Viswanathan, N. S. (1973). Effect of surface heterogeneity on physical adsorption. *Kolloid-Zeitschrift Und Zeitschrift Für Polymere*, *251*(7), 498–499.

Thanikachalam, V., & Viswanathan, B. (1973). A differential thermal analysis study of homoionised bentonites. *Journal of Thermal Analysis*, *5*(5), 677–680.

Sitalakshmi, S., Viswanathan, B., Swamy, C. S., & Srinivasan, V. (1973). ENTROPY AND MOBILITY OF BENZENE MOLECULES ADSORBED ON ALUMINA. *Current Science*, *42*(20), 716–717.

Gupta, R. B., Viswanathan, B., & Sastri, M. V. C. (1972). Interaction of hydrogen and carbon monoxide on cobalt catalysts. Part I. *Journal of Catalysis*, *26*(2), 212–217.

Rajaram, P., Viswanathan, B., Srinivasan, V., & Sastri, M. V. C. (1972). Adsorption of Organic Vapours on Silica Gel by Gas Chromatography. *Zeitschrift Für Physikalische Chemie*, *79*(3\\_4), 142–149.

Viswanathan, B., Sastri, M. V. C., & Srinivasan, V. (1972). Electronic Factor in Catalysis. *Zeitschrift Für Physikalische Chemie*, *79*(3\\_4), 216–223.

RAJARAM, P., VISWANATHAN, B., SRINIVASAN, V., & SASTRI, M. V. C. (1972). UNTERSUCHUNG DER ADSORPTION VON ORGANISCHEN DAEMPFEN AN SILICAGEL DURCH GASCHROMATOGRAPHIE. *Chemischer Informationsdienst*, *3*(43), no--no.

Rajagopal, K., Rao, T. A. P., Viswanathan, B., RAJAGOPAL, K., & PRASADA, R. A. O. (1972). Kerr Effect of Some New Organic Kerr Solutions. *Rev. Sci. Instrum*, *43*, 1839.

VISWANATHAN, B., SASTRI, M. V. C., & SRINIVASAN, V. (1972). ELEKTRONISCHE FAKTOREN BEI DER KATALYSE 1. MITT. ZERS. VON ISOPROPANOL. *Chemischer Informationsdienst*, *3*(43), no--no.

Palanisamy, T., Gopalakrishnan, J., Viswanathan, B., Srinivasan, V., & Sastri, M. V. C. (1971). Kinetics of thermal decomposition of some metal oxalates. *Thermochimica Acta*, *2*(3), 265–273.

Viswanathan, B., Gopalakrishnan, J., Srinivasan, V., & Sastri, M.V C (1971). Thermal decomposition of hydrated iron (II) oxalate and manganese (II) oxalate in vacuum. *Journal of Thermal Analysis and Calorimetry*, *3*(4), 429–431.

Viswanath, R. P., Viswanathan, B., Srinivasan, V., & Sastri, M. V. C. (1971). DIFFERENTIAL THERMAL ANALYSIS STUDY OF THE REDUCTION OF FERRIC OXIDE BY H. *INDIAN J TECHNOL*, *9*(11), 439–440.

Viswanathan, B., V, S., & Sastri, M. V. C. (1971). DETERMINATION OF PORE-SIZE DISTRIBUTION IN CATALYSTS-CORRELATION EQUATION FOR EVALUATION OF THICKNESS OF ADSORBED LAYERS. *INDIAN JOURNAL OF CHEMISTRY*. NATL INST SCIENCE COMMUNICATION-NISCAIR DR KS KRISHNAN MARG, PUSA CAMPUS~….

Rajaram, P., Viswanathan, B., Sastri, M. V. C., & Srinivasan, V. (1971). KINETICS OF DEHYDRATION OF t-BUTANOL BY GAS CHROMATOGRAPHY. *Current Science*, *40*(12), 318–319.

Gopalakrishnan, J., Viswanathan, B., & Srinivasan, V. (1970). Preparation and thermal decomposition of some oxomolybdenum (VI) oxalates. *Journal of Inorganic and Nuclear Chemistry*, *32*(8), 2565–2568.

Maruthamuthu, P., VISWANATHAN, B., Swamy, C. S., & Srinivasan, V. (1970). KINETICS OF CHEMISORPTION OF H ON FE POWDER-- EVIDENCE FOR SURFACE HETEROGENEITY. *INDIAN J CHEM*, *8*(12), 1135–1136.

Sastri, M. V. C., Srinivasan, V., & Viswanathan, B. (1970). Electrical Properties of Solid Catalysts. In *Modern Aspects of Solid- State Chemistry* (pp. 425–445). Springer, Boston, MA.

Viswanath, R. P., Viswanathan, B., Srinivasan, V., & SASTRI, M. V. C. (1970). A NEW APPROACH TO ELOVICH EQUATION. *Current Science*, *39*(18), 407–408.

Viswanathan, B., Srinivasan, V., & Sastri, M. V. C. (1970). DECOMPOSITION OF ISOPROPYL ALCOHOL ON ZnO-Al 2 O 3 CATALYST—EFFECT OF CRYSTAL STRUCTURE ON CATALYTIC ACTIVITY. *Current Science*, *39*(5), 109–110.

Viswanath, R. P., Viswanathan, B., Srinivasan, V., & Sastri, M. V. C. (1970). THE EFFECT OF TEMPERATURE AND PRESSURE ON CHEMISORPTION KINETICS. *Current Science*, *39*(24), 558–559.

RUKMINI, P., VISWANATHAN, B., SRINIVASAN, V., & SASTRI, V. C. (1969). EVIDENCE FOR CHEMISORPTION OF NITROGEN ON IRON POWDER AT LOW TEMPERATURES. *CURRENT SCI*, *38*(3), 59–60.

Viswanathan, B., Srinivasan, V., & Sastri, M. V. C. (1969). SURFACE HETEROGENEITY OF IRON FROM TEMPERATURE VARIATION CHEMISORPTION STUDIES. *Indian J Chem*, *7*(4), 363–366.

Viswanathan, B., V, S., & Sastri, M. V. C. (1969). THERMODYNAMIC CONSIDERATIONS OF INFLUENCE OF CHEMISORPTION ON PHYSICAL ADSORPTION OF GASES. *INDIAN JOURNAL OF CHEMISTRY*, *7*(4), 360--+.

Chandrasekaran, N., Viswanathan, B., Srinivasan, V., & Sastri, M. V. C. (1968). Kinetics of hydrogen chemisorption. *Australian Journal of Chemistry*, *21*(10), 2575–2578.

Viswanathan, B., & Sastri, M. V. C. (1967). Computation of pore-size distribution in terms of surface area. *Journal of Catalysis*, *8*(4), 312–315.

§ M. (n.d.). Effect of steric hindrance of ketones in the dielectric relaxation of methanol+ ketone systems.

Prakash, V., Neel, P. I., & Viswanathan, B. (n.d.). Bio analogous electrodes for ORR.

Rajeswari, J., Viswanathan, B., & Varadarajan, T. K. (n.d.). Comparison of electrochemical behaviour of poly anions with that of biological species.

Viswanathan, B., Kishore, P. S., Rajeswari, J., & Varadarajan, T. K. (n.d.). Experiences in the synthesis and Exploitation of Nanomaterials.

Viswanathan, B., Neel, P. I., & Varadarajan, T. K. (n.d.). ON THE DEVELOPMENT OF CARBON MATERIALS FOR SPECIFIC APPLICATIONS.

Subrahmanyam, C., Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (n.d.). Novel synthetic procedure for the preparation of thermally stable mesoporous titania.

Rao, C. V., & Viswanathan, B. (n.d.). Role of alloying elements on the electrochemical performance of Pd-Co-Au electrocatalysts prepared by water-in-oil microemulsion technique.

Venkatasubramanian, V., & Viswanathan, B. (n.d.). The role of tungsten carbide as support for Pt in electrochemical reactions.

Jothiramalingam, R., Viswanathan, B., & Varadarajan, T. K. (n.d.). Rare earth exchanged manganese oxide OMS-2 materials-Selective catalyst for specific oxidative transformation reactions.

Shanmugam, S., Viswanathan, B., & Varadarajan, T. K. (n.d.). Nanocrystalline supported noble metal electrocatalysts-An unconventional reduction method.

Viswanathan, B. (n.d.). Kinetics of Solid-State Decomposition Reactions. *Interface*, *10*, 12.

Helen, M., Viswanathan, B., & Murthy, S. S. (n.d.). Nanocomposite Membranes for DMFC Applications.

Viswanathan, B. (n.d.). How to proceed with a PhD Thesis writing.

Premalatha, K., Raghavan, P. S., & Viswanathan, B. (n.d.). Sulpholane--A better co-solvent for the oxidation of benzyl alcohol.

Kuppan, B., Viswanathan, B., & Selvam, P. (n.d.). Synthesis and Characterisation of Ordered Mesoporous Carbon.

Viswanathan, B. (n.d.). Electronically Conducting Hybrid Nanomaterial as High Performance Catalyst Support for Methanol Oxidation.

Viswanathan, B. (n.d.). Some Reflections on the concept of active centres in catalysis.

Kumar, L. H., Viswanathan, B., & Murthy, S. S. (n.d.). STUDIES ON THE HYDROGEN DESORPTION AND READSORPTION KINETICS OF N-CNT DOPED NaAlH 4.

Viswanathan, B. (n.d.). Thermo-chemical routes for hydrogen production Electrolytic generation of hydrogen Photolytic means of hydrogen formation Biochemical pathways for hydrogen evolution and Chemical (steam) reformation of naphtha.

Helen, M., Viswanathan, B., & Murthy, S. S. (n.d.). Heteropolyacid Based Hybrid Membranes for DMFC Applications Authors \& affiliations.

Viswanathan, B. (n.d.). Part 1. The role of nanotubes and nanorods in energy conversion.

Keerthiga, G., Viswanathan, B., Pulikottil, C. A., & Chetty, R. (n.d.). Comparison of Cu and Zn electrodes for the electrochemical conversion of CO 2.

Ganesan, R., & Viswanathan, B. (n.d.). Redox properties of copper oxinate complexes in zeolite matrices. *Bull. Catal. Soc. India*.

Raj, K. J. A., Prakash, M. G., & Viswanathan, B. (n.d.). Catalysis Science \& Technology c1cy00157d.

Viswanathan, B. (n.d.). THE RELEVANCE OF THE SCIENCE OF NANOMATERIALS IN CATALYSIS.

Magesh, G., Viswanathan, B., Viswanath, R. P., & Varadarajan, T. K. (n.d.). 11 Photocatalytic routes for chemicals.

Mahalakshmy, R., & Viswanathan, B. (n.d.). Electronic and geometrical effects of anchoring bio-mimetic catalyst onto oxidized carbon support A Density Functional Theory approach.

Magesh, G., Viswanathan, B., Viswanath, R. P., & Varadarajan, T. K. (n.d.). 2. Experimental.

Vidya, K., Sankaranarayanan, T. M., Selvam, P., & Viswanathan, B. (n.d.). Chromium containing SBA-15: Potential photocatalyst for the reduction of nitric oxide.

Viswanathan, B. (n.d.). Fuel Cells-Challenges Ahead.

Maiyalagan, T. (n.d.). Nitrogen containing carbon nanotubes as supports for Pt for fuel cell electrode applications.

Abecassis-Wolfovich, M., Jothiramalingam, R., Landau, M. V, Herskowitz, M., … Varadarajan, T. K. (n.d.). The effects of the use of weak organic acids on the improvement of oxygen storage and release properties of aged commercial three-way catalysts PS Lambrou, SY Christou, AP Fotopoulos, FK Foti, TN Angelidis and AM Efstathiou (Cyprus, Greece)................. 1 The effect of calcination temperature on the oxygen storage and release properties of CeO2 and Ce--Zr--O metal oxides modified by phosphorus incorporation.

Viswanathan, B. (n.d.). Photoassisted catalytic properties of semiconductors without and with modification.

Viswanathan, B. (n.d.). Nitrogen Incorporation (doping) in Metal Oxides.

Viswanathan, B. (n.d.). Nitrogen and Fluorine Incorporation in TiO2.

Viswanathan, B. (n.d.). Hydrogen Economy--Where do we stand?

RAMASWAMY, R., SCIBIOH, M. A., & VISWANATHAN, B. (n.d.). OSCILLATORY INTERFACIAL SYSTEMS.

RANJIT, S., CHAKRABORTY, S., PRADEEP, T., & VISWANATHAN, B. (n.d.). SEMINAR PRESENTED FOR CY 653 ON PHOTOELECTRON SPECTROSCOPY OF COPPER CLUSTERS. DATE: 24/02/2006.

SELVAM, P., KRISHNA, N. V., & VISWANATHAN, B. (n.d.). ORDERED NANOPOROUS SILICATES (IITM-56): SYNTHESIS, CHARACTERIZATION AND APPLICATIONS.

Chakrabartty, D., Dadape, V. V, Keer, H. V, Deenadas, C., Rao, R. V. G., Biswas, A. B., … others. (n.d.). SYMPOSIUM ON THERMAL ANALYSIS, BOMBAY, 1971.

Viswanathan, B. (n.d.). Shape and Size Dependent Catalysis by Metallic nano Particles.

Viswanathan, B., & Ariharan, A. (n.d.). Hydrogen Storage Possibilities in Carbon Materials.

Ariharan, A., & Viswanathan, B. (n.d.). Phosphorous-doped porous carbon derived from renewable source of newly growing Ficus-benghalensis paste for hydrogen storage material.

Viswanathan, B., & Subramanian, V. R. (n.d.). Harvesting Solar Energy Using Inexpensive and Benign Materials.

Sivasubramanian, V., Murthy, V. R. K., & Viswanathan, B. (n.d.). A Designer’s Guide to Microwave Dielectric Ceramics, Trans-Tech, USA A Designer’s Guide to Microwave Dielectric Ceramics, Trans-Tech, USA.

Sivasubramanian, V., Murthy, V. R. K., & Viswanathan, B. (n.d.). IEEE Trans. Microwave Theor. \& Tech. IEEE Trans. Microwave Theor. \& Tech. 18, 476, 1976.

Ariharan, A., Nandhakumar, V., & Viswanathan, B. (n.d.). Heteroatom Substituted Graphitic Carbon for Hydrogen Storage Applications.

Subramanian, N., Viswanathan, B., & Varadarajan, T. K. (n.d.). Supporting Data.

TAMILMANI, S., RENGANATHAN, R., & VISWANATHAN, B. (n.d.). HCHO@ Ni-FSM-5.

Krishnamurthy, K. R., & Viswanathan, B. (n.d.). Selective hydrogenation of cinnamaldehyde on nickel nanoparticles supported on titania: role of catalyst preparation methods.

Pilli, S. K., & Viswanathan, B. (n.d.). Synthesis and Characterization of Metal Nanoparticle Embedded Conducting Polymer--Polyoxometalate Composites.

Kaneco, S., Viswanathan, B., Funasaka, K., & Arachi, Y. (n.d.). Pascal and Francis Bibliographic Databases.

Viswanathan, B., & George, S. (n.d.). OXIDATION OF CARBON MONOXIDE ON RARE EARTH COBALTITES--ROLE OF SPIN STATE.

Scibioh, M. A., & Viswanathan, B. (n.d.). electrochemistry for a cleaner environment abstract-Catalysis...

Viswanathan, B., & Pillai, C. N. (n.d.). Recent developments in catalysis.

Viswanathan, B. (n.d.). THEORETICAL STUDIES ON THE INTERACTION OF CO AND HYDROGEN ON Ni (100) SURFACE.

Balasubrahmanyam, S., Viswanathan, B., Rao, V. R. S., & Kuriacose, J. C. (n.d.). Effect of 60Co gamma radiation on La2CuO 4.