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## **LIST OF PUBLICATIONS**

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### PAPERS PUBLISHED / COMMUNICATED IN INTERNATIONAL JOURNALS

- ✚ Combustion synthesis of inverse spinel  $\text{LiNiVO}_4$  nano-particles using gelatine as the new fuel.  
A.Subramania, N.Angayarkanni, **S.N.Karthick** and T.Vasudevan  
**Materials Letters, 60 (2006) 3023**
  
- ✚ Preparation and electrochemical behaviour of  $\text{LiMn}_2\text{O}_4$  thin film by spray pyrolysis method  
A.Subramania, **S.N.Karthick**, N.Angayarkanni  
**Thin Solid Films, (In Press) 2008**
  
- ✚ Effect of PEG on the formation of nanocrystalline  $\text{LiMn}_2\text{O}_4$  thin film cathode material in spray pyrolysis method for Li-microbatteries  
**S.N.Karthick**, G.Vijayakumar, A.Subramania  
**Communicated, Materials Letters**
  
- ✚ Preparation of  $\text{y}^{3+}$  doped nanocrystalline  $\text{LiMn}_2\text{O}_4$  thin film by polymer spray pyrolysis method  
**S.N. Karthick**, B. Sureshkannan, A. Subramania  
**Proc. International conference on 11<sup>th</sup> Asian Solid State Ionics**, Organized by Bharathiar University, Coimbatore, June 9-13<sup>th</sup>, 2008.

### PAPERS PRESENTED IN INTERNATIONAL / NATIONAL CONFERENCES

- ✚ Hexamine combustion for the synthesis of nanocrystalline cubic spinel  $\text{LiMn}_2\text{O}_4$  powder for lithium ion batteries.  
N.Angayarkanni, **S.N.Karthick**, R.Gangadharan, T.Vasudevan and  
A.Subramania

**National conference on Nanomaterials and Applications, May 27-28, 2005,**  
Organized by "Amity institute of nano technology", Noida, India.

✦ Synthesis and characterization of  $\text{LiCa}_y\text{Mn}_{2-y}\text{O}_4$  cathode materials by a sol-gel thermolysis process for Li-ion batteries.

A.Subramania, N.Angayarkanni, **S.N.Karthick** and T.Vasudevan

**National Seminar on Emerging Trends and New Vistas in Chemistry (EMTIC-2005), Nov. 29-30, 2005,** Organized by Dept. of Chemistry, University of Calicut, Kerala, India.

✦ Physical and electrochemical characterization of  $\text{LiMn}_2\text{O}_4$  thin film electrode prepared by spray pyrolysis method

A.Subramania, **S.N.Karthick**, N.Angayarkanni and T.Vasudevan

**International Conference on Recent Advancements in Chemistry, Jan.5-6, 2006,**  
Organized by Auxilium college, Vellore, India.

✦ Synthesis of Nano-crystalline ZnO powder by a novel polyol-mediated solvothermal process for gas sensor application.

A.Subramania, **S.N.Karthick**, G.Vijayakumar and T.Vasudevan

**Indo-Australian symposium on Nanoscience and Nanotechnology, March 31-April 1, 2006,** Organized by Indian Institute of Science, Bangalore.

✦ A new (PVdF-Co-HFP:MgO) based microporous nanocomposite polymer electrolyte for lithium batteries.

G.Vijaya kumar , **S.N.Karthick** and A.Subramania

**International conference on nanoscience and nanotechnology (ICNSNT - 2006), Center for nanoscience and nanotechnology, Aug.26-28, 2006,** Organized by University of madras, Guindy campus, Chennai.

† Spray pyrolytic synthesis of cobalt oxide ( $\text{Co}_3\text{O}_4$ ) thin films with large surface area from cobalt nitrate solutions

S.N.Karthick, P.Mangayarkarasi, A.Subramania

**International symposium for research scholars on Metallurgy, Materials science & Engineering, Dec. 18-20, 2006**, Organized by IIT madras, Chennai.

† Effect of PEG on the formation of nanocrystalline  $\text{LiMn}_2\text{O}_4$  thin film cathode material in spray pyrolysis method for thin film Li-batteries.

S.N.Karthick, G.Vijayakumar, A.Subramania

**International Conference on Nanomaterial and its Applications (ICNA-2007), Feb.4-6, 2007**, Organized by Department of chemistry, National Institute of Technology, Tiruchirappalli, India.

† Preparation of Ga doped  $\text{LiMn}_2\text{O}_4$  Nanocrystalline thin film cathode materials by sol-gel spin coating technique for Li-ion Microbattery.

S.N.Karthick, N.Suresh, G.Vijayakumar, T.Vasudevan, A. Subramania

**National Seminar on Recent Advances in Textile and Electrochemical Sciences (RATES 2007), June 1-2, 2007**, Organized by Dept. of Industrial Chemistry, Alagappa University, Karaikudi.

† Preparation and characterization of  $\text{LiGd}_x\text{Mn}_{2-x}\text{O}_4$  thin film cathode materials by polymer spin coating technique for rechargeable lithium batteries.

S.N.Karthick, B.Suresh kannan, G.Vijayakumar, A.Subramania

**International conference on Material science research and Nanotechnology (ICMSRN 2008), Feb. 27-29, 2008**, Organized by Dept. of Physics, Mother Teresa Women's University, Kodaikanal.