

LIST OF PUBLICATIONS

PAPER PUBLISHED / COMMUNICATED IN INTERNATIONAL JOURNALS

✓ Polyol-mediated thermolysis process for the synthesis of MgO nanoparticles and nanowires

✓ Preparation of a novel composite micro-porous polymer electrolyte membrane for high performance Li-ion battery

A.Subramania, N.T.Kalyana Sundaram, and G. Vijaya Kumar

J. Membr. Sci, 294 (2007) 8-15

Impact factor = 3.442

✓ Structural and electrochemical properties of micro-porous polymer blend electrolytes based on PVdF-co-HFP – PAN for Li-ion battery applications

A.Subramania, N.T.Kalyana Sundaram and G.Vijaya Kumar

✓ New polymer electrolyte based on (PVA-PAN) blend for Li-ion battery applications

A Subramania, N.T.Kalyana Sundaram , **G Vijaya Kumar**, and T Vasudevan lonics, 12 (2006) 175-178.
Impact factor = 0.62

✓ Effect of MgO nanoparticles on ionic conductivity and electrochemical properties of nanocomposite polymer electrolyte

R.Kumar^{*}, A.Subramania, N.T.Kalyana Sundaram, **G.VijayaKumar** and I.Baskaran

J Membr. Sci, (In Press) 2007,

Impact factor = 3.442

✓ A Comparative study between the composite membrane electrolytes obtained by preferential polymer dissolution and conventional phase inversion methods.

A.Subramania*, S.Ramalingam, G.Vijaya Kumar
Communicated to J. Power Sources

PAPER PRESENTED IN INTERNATIONAL / NATIONAL CONFERENCES

✓ Effect of salt concentration in (PVA-PAN) based plasticized polymer blend electrolyte for Li-ion battery applications

A.Subramania, G.Vijaya Kumar, N.T.Kalyana Sundaram
International Conference on Polymers for Advanced Technologies
(Macro- 2004), Dec. 14 -17, 2004, Organized by "Society for polymer Science", Thiruvananthapuram chapter, India.

✓ Electrochemical behaviour of plasticized PVDF-co-HFP based polymer electrolyte for Li-ion batteries

N.T.Kalyana Sundaram, **G.Vijaya Kumar**, R.Gangadharan, T.Vasudevan, A.Subramania

National conference on "Application Orientated Nanomaterials"

(NANOMAT-2005), March 10-11, 2005, Organized by Department of Industrial chemistry, Alagappa University, Karaikudi, India.

✓ Enhancement in ionic conductivity and electrochemical properties of polymer electrolyte by the inclusion of nano-crystalline CuO particles
 A.Subramania, N.T.K.alyana Sundaram, G.Vijaya kumar, Ragi.S.Robert

T.Vasudevan,

National Conference on Nanomaterials and Applications, May 27-28, 2005, Organized by Amity Institute of Nano technology, Noida, India.

AC-impedance and Dielectric Spectroscopic Studies of synthesized MgO nanoparticles on Poly (methyl methacrylate) based polymer electrolyte
 A.Subramania, N.T.Kalyanasundaram, R.Kumar, I.Baskaran, T.Vasudevan,
 G.Vijayakumar

National Seminar on Recent Advances in Nano Science and Technology, Sep 29-30, 2005, Organized by Periyar University, Salem, India.

✓ Effect of fumed SiO₂ on thermal, transport properties, rheology and electrochemical stability of PVdF-HFP based nano-composite polymer electrolyte for Li-ion thin film battery.

A.Subramania, N.T.Kalyanasundaram, T.Vasudevan, G.Vijayakumar

National Seminar on Materials for Advanced Technologies, Jan 23-25,

2006, Organized by Shivaji University, Kolhapur, India.

✓ 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), Aug 26-28, 2006, Organized by "Centre for Nanoscience and Nanotechnology", University of Madras, Chennai, India.

✓ Influence of CeO₂ nanoparticles on the electrochemical properties of PVDF-HFP based microporous nanocomposite polymer electrolytes for lithium-ion batteries

G.Vijaya Kumar and A.Subramania

Third International Conference on IONIC DEVICES, (ICID-2006), Dec, 7-9, 2006, Organised by Anna University, Chennai, India.

- ✓ Polyol Mediated Thermolysis (PMT) process for the synthesis of MgO nanoparticles and nanowires
 - G.Vijaya kumar, S.N.Karthick and A.Subramania,
 - International conference on Nanomaterial and its applications (ICNA-2007), Feb 4-6, 2007, Organized by "National Institute of Technology", Trichy, India.
- ✓ Synthesis of ZnO nanoparticles and nanowires from Polyol Mediated

 Thermolysis route
 - G.Vijaya Kumar, S.N.Karthick and A.Subramania*,
 - National Conference on Smart Electroceramics (NSCE 2007), March-8-9 2007, Organized by "Centre for materials for electronics Technology (C-MET)", Thrissur, India.