

List of Publications

Papers Published/communicated in cited Journals

1. Transport properties and battery discharge characteristics of Ag⁺ ion conducting electrolyte system: (1-x) [0.75AgI:0.25AgCl] : xFe₂O₃.
R.C. Agrawal, R.K. Gupta, C.K. Sinha, R. Kumar, G. P. Pandey
Ionics (Springer-Verlag), 10 (2004) 126.
2. Novel liquid-solid lead-acid secondary battery: Study of charge-discharge behavior.
R.C. Agrawal, G. P. Pandey, D. Singh, M.L. Verma
Indian J. Phys., 79 (2005) 711.
3. Electrochemical cell performance studies on all-solid-state battery using nano-composite polymer electrolyte membrane.
R.C. Agrawal, S.A. Hashmi, G.P. Pandey
Ionics (Springer-Verlag), 13 (2007) 295.
(Content of this paper appeared in Chapter 6)
4. Hot-press synthesized polyethylene oxide based proton conducting nanocomposite polymer electrolyte dispersed with SiO₂ nanoparticles.
G. P. Pandey, S. A. Hashmi, R. C. Agrawal
Solid State Ionics, 179 (2008) 543.
(Content of this paper appeared in Chapter 3)
5. Experimental investigations on a proton conducting nanocomposite polymer electrolyte.
G. P. Pandey, S.A. Hashmi, R.C. Agrawal
J. Phys. D: Appl. Phys., 41 (2008) 055409.
(Content of this paper appeared in Chapter 3)
6. Solid polymer electrolytes: materials designing and all-solid-state battery applications-an overview (**Review Article**)
R.C. Agrawal, G. P. Pandey
J. Phys. D: Appl. Phys., 41 (2008) 223001.
(Content of this paper appeared in Chapter 1).
7. Experimental investigations on ionic liquid based magnesium ion conducting polymer gel electrolyte.
G. P. Pandey, S. A. Hashmi
J. Power sources, 187 (2009) 627.
(Content of this paper appeared in Chapter 5)
8. Magnesium ion-conducting gel polymer electrolytes dispersed with nanosized magnesium oxide.
G.P. Pandey, R.C. Agrawal, S.A. Hashmi
J. Power sources, 190 (2009) 563.
(Content of this paper appeared in Chapter 4)
9. Multiwalled carbon nanotube electrodes for all solid state electrical double layer capacitors with ionic liquid based gel polymer electrolyte.
G.P. Pandey, S.A. Hashmi, Yogesh Kumar
J. Electrochem. Soc., Communicated.

10. Chemically activated charcoal electrodes for all solid state electrical double layer capacitors with ionic liquid based gel polymer electrolyte.
G.P. Pandey, S.A. Hashmi, Yogesh Kumar
J. Power Sources, Communicated.
11. Magnesium ion conducting composite gel polymer electrolyte for solid state magnesium battery application.
G.P. Pandey, R.C. Agrawal, S.A. Hashmi
Under Preparation.
12. Solid-state rechargeable magnesium cell with PVdF-HFP based magnesium ion conducting gel polymer electrolyte
G.P. Pandey, R.C. Agrawal, S.A. Hashmi
Under Preparation.

Papers in Conference Proceedings

1. Investigation on electrical and electrochemical properties of nano composite polymer electrolyte films.
R.C. Agrawal, G.P. Pandey
Proc. Int. Conf. on Nanomaterials (NANO 2005), Sivakasi (India), p.291.
2. Study of ionic polaret/electret type effects in some ion conducting polymer.
R.C. Agrawal, G.P. Pandey, M.L. Verma, S.L. Agrawal
Electroactive Polymer-Materials and Devices Vol 1, Series Ed. Suresh Chandra (Allied Publishers, New Delhi, 2006) p.206.
3. Investigations on ion conducting behaviour in solid polymer electrolyte membranes: (PEO:MgCl₂) synthesized by a novel hot-press technique
R.C. Agrawal, S. A. Hashmi, G. P. Pandey
Electroactive Polymer - Materials and Devices” Vol 2, Series Ed. Suresh Chandra (Allied Publishers, New Delhi, 2007) p.309.
4. Experimental studies on magnesium containing PVdF-HFP based composite polymeric gel electrolytes
D.K. Rai, S.A. Hashmi, Yogesh Kumar, G.P. Pandey
Electroactive Polymer - Materials and Devices” Vol 2, Series Ed. Suresh Chandra (Allied Publishers, New Delhi, 2007) p.407.
5. Ionic liquid based magnesium ion conducting gel polymer electrolyte for battery application
G. P. Pandey, S. A. Hashmi
Electroactive Polymer - Materials and Devices” Vol 3, Series Ed. Suresh Chandra (Macmillan Publication, New Delhi, 2009) In press.