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Education

Naval Research Lab	Postdoc	1983
Brown University	Ph.D.	1981
Clark University	B.A.	1976

Professional Experience

Professor Hunter College 1983 to Present

Honors

Fulbright Scholar, Weizmann Institute of Science (1991); U.S. Army Summer Research Fellow, Army Research Laboratory (1992); NASA/NRC Senior Research Fellow, Jet Propulsion Laboratory (1998); Recipient of Roosevelt Gold Medal for Science, United States Navy League (2001); Recipient of Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (2002).

Research Interest

Experimental Materials Science, Magnetic Resonance, Ionic Conduction in Solids, Energy Storage and Conversion Materials.

Selected Publications (over 150 publications)

- *Morphology of PI-PEO Block Copolymers for Lithium Batteries*, S. Greenbaum, C. Xue, M. Meador, V. Cubon, Lei Zhu, J. Ge, S. Cheng, R. K. Eby, A. Khalfan, and G. Bennett, *Polymer*, 47, 6149 (2006).
- *Multinuclear NMR Studies Of Mass Transport Of Phosphoric Acid In Water*, S. Greenbaum, J. Jayakody, E. Mananga, A. Khalfan, S. Chung, and R. Lopato, proceedings of the 10th Asian Conference on Solid State Ionics (World Scientific Publishers, Singapore), pp 19-28 (2006).
- *Ormosil/SPEEK Based Hybrid Composite Proton Conducting Membranes*, S. Greenbaum, S. Licoccia, M. Di Vona, A. D'Epifanio, D. Marani, M. Vittadello, and J. Jayakody, *Journal of the Electrochemical Society*, 153 A1226-A1231 (2006).
- *Polymeric d-MgCl₂ nanoribbons*, S. Greenbaum, M. Vittadello, P. Stallworth, F. Alamgir, S. Suarez, S. Abbrent, C. Drain, and V. Di Noto, *Inorganica Chimica Acta*, 359, 2513 (2006).

- *Pyrite-induced hydroxyl radical formation and its effect on nucleic acids*, S. Greenbaum, C. Cohn, S. Mueller, E. Wimmer, N. Leifer, D. Strongin, and M. Schoonen, *Geochemical Transactions* 7, 3 (2006).
- *Effect of calixpyrrole in PEO–LiBF₄ polymer electrolytes*, S. Greenbaum, M. Kalita, M. Bukat, M. Ciosek, M. Siekierski, S. Chung, T. Rodriguez, R. Kovarsky, D. Golodnitsky, E. Peled, D. Zane, B. Scrosati, and W. Wieczorek, *Electrochimica Acta* 50, 3942 (2005).
- *Two new siloxanic proton conducting membranes: Part II. Proton conductivity mechanism and NMR study*, S. Greenbaum, V. Di Noto, M. Vittadello, J. Jayakody, and A. Khalfan. *Electrochimica Acta* 50, 4007 (2005).
- *The Effect of Electrolyte Type upon the High Temperature Resilience of Lithium Ion Cells*, S. Greenbaum, M. C. Smart, B. Ratnakumar, J. Whitacre, L. Whitcanack, K. Chin, M. Rodriguez, D. Zhao, and S. Surampudi, *Journal of the Electrochemical Society*, 152, A1096 (2005).
- *A Lithium Z-lope Based on PEG600, (CH₃)₂SnCl₂, and Li₃Fe(CN)₆*, S. Greenbaum, M. Vittadello, S. Gustave, K. Fujimoto, V. Di Noto, and T. Furukawa, *Journal of the Electrochemical Society*, 152, A956 (2005).
- *LiCoO₂ thin-film batteries: Structural changes and charge compensation*, S. Greenbaum, F.M. Alamgir, E. Strauss, J.F. Whitacre, M. Denboer, S. Neih, and C. Kao, *Journal of the Electrochemical Society*, 152, A845 (2005).
- *A New Class of Lithium Hybrid Gel Electrolyte (HE) Systems*, S. Greenbaum, M. Vittadello, S. Suarez, K. Kano, V. Di Noto, and T. Furukawa, *Journal of Physical Chemistry B*, 108, 18832 (2004).
- *New Generation of Ordered Polymer Electrolytes For Lithium Batteries*, S. Greenbaum, D. Golodnitsky, E. Livshits, R. Kovarsky, E. Peled, S. Chung, and S. Suarez, *Electrochemical and Solid State Letters*, 7, A412-A415 (2004).
- *X-ray Absorption Spectroscopy Investigation of the Sub-Nanoscale Strain in Thin-Film Lithium Ion Battery Cathodes*, S. Greenbaum, F. Alamgir, J. VanSluytman, D. Carter, J. Whitacre, C.-C. Kao, and M. denBoer, *Materials Research Society Symposium Proceedings*, vol .822, S2.3.1 (2004).
- *High Pressure NMR Study of Water Self-Diffusion in NAFION-117 Membrane*, S. Greenbaum, J. R.P. Jayakody, P.E. Stallworth, E. Mananga, J. Zapata-Farrington, *Journal of Physical Chemistry B* 108, 4260 (2004).
- *X-ray diffraction and ⁷Li nuclear magnetic resonance studies of iron and cobalt substituted LiNiO₂ prepared from inorganic transition metal nitrates*, S. Greenbaum, X. Guo, F. Ronci, and B. Scrosati, *Solid State Ionics*, 168 pp. 37-49 (2004).