

# David Zuckerbrod, Ph.D.

410-653-8654 (home)  
443-846-3846 (cell)

2705 Copperfield Court  
Baltimore, MD 21209  
dzuckerbrod@gmail.com

## Publications and Patents

19 publications, 9 patents issued.

### Publications

"Status of Electrode Technology for Ultracapacitors", Advanced Automotive Batteries Conference (2007)

"In-situ Detection of Hydrogen Peroxide in PEM Fuel Cells", *J. Electrochem. Soc.* **152**, A1165 (2005).

"How Dry I Am: Optimizing Cell Performance Through Proper Drying" 15<sup>th</sup> International Seminar on Double Layer Capacitors and Hybrid Energy Storage Devices (2005)

"Lower Cost EDLC Electrodes, Where We Are Today", Advanced Capacitor World Summit (2005)

"Performance of Carbon-PTFE Composite Electrodes and PTFE Separators in Electrochemical Double Layer Capacitors", 9<sup>th</sup> International Seminar of Electrochemical Double Layer Capacitors and Similar Energy Storage Devices (1999).

"Mathematical Modeling of Grace Lithium-Titanium Disulfide Cells", *Proc. - Electrochem. Soc.*, **91-10**, 88-95, (1991).

"Mathematical Modeling of Grace Li-TiS<sub>2</sub> Cells", *Ext. Abs., Meeting - Int. Soc. of Electrochem.*, **91-2**, 87-8, (1991).

"Life, Performance and Safety of Grace Rechargeable Lithium-Titanium Disulfide Cells", *Proc. Int. Power Sources Symp.*, **34**, pp 172-5, (1990).

"Program to Analyze the Failure Mode of Lead-Acid Batteries", Sandia National Labs. (1986).

"Hydrogen Production Employing High-Temperature Solid Oxide Cells", *Proc. Intersoc. Energy Convers. Eng. Conf.*, **19**, (3), 1415-20, (1984).

"Carbon Electrochemistry in Alkaline Systems", *Proc. Electrochem. Soc.*, **84-5**, 238-50, (1984).

"Prototype-Size Iron-Air Cell Performance", *J. Electrochem. Soc.*, **132** (8), C337, (1985).

"Iron-Air Cell Drive Cycle Performance", *J. Electrochem. Soc.*, **132** (8), C337, (1985).

"The Electrochemistry of Tungsten (V), -(IV) and -(III) in Molten Lithium Chloride-Potassium Chloride Eutectic", *Proc. - Electrochem Soc.*, **84-2**, 571-84, (1984).

"Automation of Electrochemical Perturbation-Relaxation Techniques", *J. Electrochem Soc.*, **130** (3), C339, (1983).

"The Electrochemistry of Tungsten (V), Tungsten (IV) and Tungsten (III) in Molten LiCl-KCl Eutectic", *J. Electrochem Soc.*, **130** (3), C130, (1983).

"Carbon Corrosion", *J. Electrochem Soc.*, **130** (3), C75, (1983).

"Storage Battery Aspects of Air Electrode Research", *Proc. Intersoc. Energy Convers. Eng. Conf.*, **18** (4), 1703-7, (1983).

"The Electrochemistry of Tungsten and Tungstate in Molten Lithium Chloride-Potassium Chloride Eutectic", *Diss. Abstr. Int. B.*, **43** (5), 1489 (1982)

## Patents

US 6,921,606 (April 16, 2002) "Composite Films for Electrochemical Devices"

US 5,580,654 (Dec. 3, 1996) "Insulated Electrical Conductor"

US 5,547,551 (Aug. 20, 1996) "Ultra-Thin Integral Composite Membrane"

US 5,336,573 (Aug. 9, 1994) "Battery Separator"

US 5,143,805 (Sept. 1, 1992) "Polymer Bonded Battery Cathodes"

US 4,923,579 (May 8, 1990) "Electrochemical Process for Zirconium Alloy Recycling"

US 4,822,698 (Apr. 18, 1989) "Seawater Battery"

US 4,888,256 (Dec. 19, 1989) "Separator"

US 4,448,856 (May 15, 1984) "Battery and Fuel Cell Electrodes Containing Stainless Steel Charging Additive"