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ECS Publishes First in Series of cres^{3}t Critical Reviews

This issue contains the first in a new series of articles in the *Journal of The Electrochemical Society* titled Critical Reviews in Electrochemistry and Solid-State Science and Technology, CRES^{3}T for short. CRES^{3}T articles seek to provide authoritative status reports in areas experiencing rapid development in electrochemistry and solid-state science and technology.

The first article in this series, "A Critical Review of Thermal Issues in Lithium-Ion Batteries," is by T. Bandhauer, S. Garimella, and T. Fuller, from Georgia Institute of Technology, USA. In the article, the authors survey the literature covering the effects of temperature and thermal management on capacity/power fade, thermal runaway, and pack electrical imbalance; and the performance of lithium-ion cells at low temperatures. The article may be downloaded for free from the ECS Digital Library (http://dx.doi.org/10.1149/1.3515880).

In addition to invited articles, authors interested in preparing CRES^{3}T contributions should contact me and submit a brief proposal for consideration. If the proposal is accepted, the authors will be asked to organize their article in four sections along the following guidelines:

Section I. Introduction – Summary of salient aspects of the topic to be reviewed that includes the timeliness and significance of the topic.

Section II. Background – A brief survey of the most relevant literature in the field.

Section III. Critical Issues in the Field – A clear identification of each of the experimental and theoretical areas regarded as key to the scientific understanding and technological demands in this field.

Section IV. Future Perspectives – An analysis of opportunities and challenges toward advancing knowledge in the area.

Unlike regular papers in the *Journal*, names of the expert reviewers selected for evaluating the manuscript will be acknowledged in the published CRES^{3}T articles.

Upcoming CRES^{3}T articles include:

- "Selecting Conversion Phosphors for White Light-Emitting Diodes," by P. F. Smet, A. B. Parmentier, and D. Poelman from Ghent University, Belgium
- "High Doping Density/High Electric Field, Stress and Heterojunction Effects on the Characteristics of CMOS Compatible p-n Junctions," by E. Simoen, G. Eneman, M. Bargallo Gonzalez, D. Kobayashi, A. Luque Rodríguez, J.-A. Jiménez Tejada, and C. Claeys, a collaborative contribution from IMEC and the Katholieke Universiteit, Belgium.

We expect CRES^{3}T articles to provide a much needed addition to the literature and look forward to receiving your contributions and suggestions.

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