Energy and Sustainability

MRS Advances Volume 8, Issue 15

Held Various Dates and Locations

ISBN: 978-1-7138-8170-4

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2023) by Springer Nature All rights reserved.

Printed with permission by Curran Associates, Inc. (2024)

For permission requests, please contact Springer Nature at the address below.

Springer Nature The Campus 4 Crinan St. London N1 9XW United Kingdom

www.springernature.com

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400

Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

TABLE OF CONTENTS

Sticky Thermoelectric Materials Collaborate with Ultra-Thin High Performance Foam for Hierarchically Designed Flexible Peltier Sheets	781
How Highly Efficient Power Electronics Transfers High Electrocaloric Material Performance to Heat Pump Systems	787
Liquid Crystals as Additives in Solid Polymer Electrolytes for Lithium Metal Batteries	797
Applying Life Cycle Analysis for Materials Selection in Li-O ₂ Batteries	803
High Thermal Stability 1D Borophosphate Proton Conducting Polyelectrolytes	811
Synthesis of Activated Carbon Monolith from Lignocellulosic Material: Evaluation of Product Quality	816
Modeling of Degradation Ability for Starch-Based Biodegradable Polymer Film Using ANFIS	823
A Study of Fabrication and Characterization of Na _x MnO ₂ as a Cathode Material for Sodium-Ion Battery Zia Uddin Mahmud, Subrata Karmakar, Kartik C. Ghosh	828
Microwave-Assisted Single Step Green Synthesis of NiO Nanoparticles Using Coleus Scutellariodes Leaf Extract for the Photocatalytic Degradation of Rufloxacin	835
Fabrication of Ternary Composite ZnFe ₂ O ₄ /Co ₃ O ₄ /G for High Performance Supercapacitor	843
The Effect of Lanthanides (Er, Gd and La) on the Adsorption and Photocatalytic Performance of Bismuth Ferrite	849
Predicting and Understanding Corrosion in Molten Chloride Salts	855
Characterization and Energy Storage Performance Assessment of Repurposed 18650 Cylindrical Lithium-Ion Cells for Second Life Application in Battery Energy Storage Systems	860

Author Index