



Materials Technology

Advanced Performance Materials

ISSN: 1066-7857 (Print) 1753-5557 (Online) Journal homepage: <http://www.tandfonline.com/loi/ymte20>

Hybrid electrode materials for energy storage

Hui Xia

To cite this article: Hui Xia (2016) Hybrid electrode materials for energy storage, Materials Technology, 31:9, 491-491, DOI: [10.1080/10667857.2016.1208343](https://doi.org/10.1080/10667857.2016.1208343)

To link to this article: <http://dx.doi.org/10.1080/10667857.2016.1208343>



Published online: 25 Jul 2016.



Submit your article to this journal [↗](#)



Article views: 113



View related articles [↗](#)



View Crossmark data [↗](#)

Full Terms & Conditions of access and use can be found at
<http://www.tandfonline.com/action/journalInformation?journalCode=ymte20>

Hybrid electrode materials for energy storage

Hui Xia*

Rapid economic growth requires more and more energy supply, posing a huge burden on the current energy infrastructure and the environment. The traditional fossil fuel tends to dry up the energy sources and at the same time causes severe environmental problems. Sustainable and renewable energy sources, such as hydropower, solar energy and wind power, in conjunction with energy storage systems, such as rechargeable batteries and supercapacitors, are one of the key solutions to release the heavy burden on the current energy infrastructure and the environment. Electrode materials are the key to develop high-performance energy storage devices. Single electrode material, however, is difficult to satisfy all requirements for efficient charge storage capability. Hybrid electrode design is an effective strategy to combine the advantages of different electrode materials and achieve significantly enhanced electrochemical performance. This special issue aims at communicating some of the most recent advances and aspects of novel energy storage materials with a focus on the development of hybrid electrode materials.

This special issue collects nine original research works and one review on the recent development of electrode materials and R&D activities in developing hybrid electrode materials for groundbreaking applications in energy storage. The ten articles provide the progress on design, synthesis, characterization and applications of hybrid electrode materials in energy storage. We truly believe that this special issue will promote further investigation on advanced hybrid electrode materials to develop next generation energy storage techniques to realize a sustainable future.

Acknowledgements

The editor would like to express his sincere appreciation to all authors for their contributions and to all reviewers for their time and constructive comments for this special issue.

Hui Xia
Editor

School of Materials Science and Engineering, Herbert Gleiter Institute of Nanoscience, Nanjing University of Science and Technology, Nanjing 210094, China.

*email: xiahui@njjust.edu.cn