A Special Issue on

Heterostructured semiconductor nanophotocatalyst: design, synthesis, and applications

ENERGY AND ENVIRONMENT FOCUS (EEF)

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Call for Papers

Over the last few years, many efforts have been paid on synthesis and application of heterostructured nanomaterials for photocatalysis applications. As a universal approach to getting enhanced photocatalytic property of semiconductors, nanohereostructure provides a platform for design and synthesis of hybrid semciconductor photocatalysts by assembling two or more kinds of semconducotor to be one system. By using heterostructures, enhanced photocatalytic property of hybrid semiconductors can be realized by improving opto-electric conversion ability through increasing photoactive facets, broadening light absorption band, and decreasing the recombination of photo-induced carriers. Recently, special emphasis is given on design, synthesis, simulation, mechanism, and applications of heterostructured semiconductor nanophotocatalyst , which will accelerate the research in photocatalysis field.

The special issue on the “Heterostructured semiconductor nanophotocatalyst: design, synthesis, and applications” aims to provide a platform for exhibition of all works related to heterostructured semiconductor nanophotocatalysts. Review articles and original research full papers/communications covering the following topics and scopes (but not limited to) are invited for submission:

- Review on heterostructured semiconductor nanophotocatalysts
- Design principle and numerical simulation for heterostructured semiconductor nanophotocatalysts
- Synthesis and characterization of heterostructured semiconductor nanophotocatalysts
- Photodegradation property of heterostructured semiconductor nanophotocatalysts
- Enhancement of photocatalytic hydrogen generation property of heterostructured semiconductor nanophotocatalysts
- Charge transport at interface of heterostructured semiconductor nanophotocatalysts
- Band structure and physical property simulation and measurement on heterostructured semiconductors
- Photocatalysis device related to heterostructured semiconductor nanophotocatalysts
- Applications of heterostructured semiconductor nanomaterials in other fields, such as, solar cell, gas sensor, bio-sensor, supercapacitor, Li-battery

Manuscript Submission Manuscripts must be prepared according to Journal’s guidelines, available at http://www.aspbs.com/efocus/inst‐auth_efocus.htm. Submit your manuscripts in MS word or PDF format directly to the Guest Editors by email. Please include an indication of your intention to publish within the special issue to be entitled " Heterostructured semiconductor nanophotocatalyst: design, synthesis, and applications".

All papers submitted to this issue will be subject to a strict peer review process to ensure high quality articles. Please make sure in the cover letter that the submitted paper has not been

published previously and is not currently submitted for review to any other journal and will not be submitted elsewhere before a decision is made by this journal. Please notify well in advance for your intension to submit a research paper. Submission of novel, and informative results on "Heterostructured semiconductor nanophotocatalyst: design, synthesis, and applications" will be highly appreciated.

KEY TIMETABLE DATES

Manuscript due: 30th November, 2013
Author's notification: 30th December, 2013
Publication Date: March, 2014

If you are agree, kindly provide us the following information at your earliest convenience,
(1) Tentative Title of your Article
(2) 5-10 Keywords related to your proposed Article
(3) Mailing address, phone, fax and E-mail address
We sincerely hope for your positive response and kind participation to this forthcoming thematic issue.

Submission email address:

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About the journal

ENERGY AND ENVIRONMENT FOCUS is a multidisciplinary peer-reviewed international research journal consolidating research activities in all experimental and theoretical aspects of energy and environment with an interdisciplinary approach. Journal offers a very broad readership with an interdisciplinary approach in the fields of materials science, chemistry, physics, surface science,

medical sciences and all disciplines of engineering, electrochemistry, biotechnology, nanoscience and nanotechnology for scientists, researchers and professionals working in industry and academia.

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