Special Issue

Solid Looping Process for Low Carbon Energy

Message from the Guest Editors

The solid looping process has been extensively researched in areas concerned with low-carbon energy, such as CO2 capture, H2 production, thermochemical energy storage and environmental protection at different temperatures. In addition, the design of reactors for solid looping processes is crucial to realize efficient CO2 capture, H2 production, energy storage, etc. This Special Issue intends to elaborate upon the latest research and stimulate the further development of solid looping technologies for the realization of low-carbon energy, with an emphasis on advanced solid materials and reactors. For this purpose, I am inviting the submission of high-quality research and review papers for this Special Issue. Topics of interest include, but are not limited to:

- Chemical looping/calcium looping for CO2 capture and H2 production;
- Alkali carbonates/Li-based materials/solid amines looping for CO2 capture;
- CaCO3/CaO, Ca(OH)2/CaO, Mg(OH)2/MgO, metallic oxide redox (e.g. Cu2O/CuO, Co3O4/CoO) cycles for energy storage;
- Reaction–regeneration cycles for environmental protection;
- Design of reactors for solid looping process.

Guest Editors

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Deadline for manuscript submissions

closed (25 July 2023)

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

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