Special Issue

State of the Art and Progress in Metal–Hydrogen Systems, 2nd Edition

Message from the Guest Editors

Hydrogen is being heralded as a future global energy carrier. The National Hydrogen Strategy of Australia has set a target for a clean, innovative, safe, and competitive hydrogen industry, with the aim of becoming a major exporter in the hydrogen industry by 2030. Varieties of novel materials have been investigated in recent decades and have provided many novel compositions, fascinating structures, and functionalities. Today, metal hydrides are being explored for a range of applications from hydrogen exports to remote-area power systems, solid-state battery thermochemical energy storage, and hydrogen diffusion. **Keywords:**

- metal hydride
- hydrogen
- interstitial hydride
- ionic hydride
- complex hydride
- organic hydride
- hydrogen storage
- hydrogen diffusion
- thermochemical energy storage
- solid-state batteries
- solid-state electrolyte
- hydrogen production
- hydrogen purification

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Inorganic chemistry remains a lynchpin of modern chemistry, not only embracing the function and reactivity of combinations of most elements of the periodic table, but also providing a footing for studies of materials, catalysts, drugs, fuels and industrial chemicals. Arguably, the role and reach of inorganics in society have never been as great as today. Adventurous research at the heart and at the extremes of inorganic chemistry is vital to further advances and Inorganics offers authors the opportunity to publish exciting new research in an open access format.

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