

Mapping the nuclear spin back onto the electronic spin allows production of a spin memory with a storage time exceeding 100s, which should prove useful for future practical applications. Abstract Electron spins are ...

The redistribution of electron density between π -conjugated conductors and PB effectively promotes the participation of low-spin Fe sites in sodium storage. Consequently, ...

A conversion between spin and charge (spin conversion) induced by spin-orbit coupling (SOC) provides a cornerstone for a novel type of Spintronic devices, so-called Spin-orbitronics 22

storage and spin-mediated energy harvesting in relation to ... with electronic conduction depending on the electron spin state. Digital ... distribution and reproduction in any ...

The electrocatalysis reactions involving oxygen, such as oxygen evolution reaction (OER) and oxygen reduction reaction (ORR), play a critical role in energy storage/conversion applications, ...

In such "itinerant ferromagnets" both the 4s and 3d electron bands participate to the Fermi level E_F . Because of the strong exchange interaction favouring parallel orientation of electron spins, ...

This review delves into the theoretical underpinnings of ESP and its intricate connection to the performance of rechargeable batteries, elucidating its potential to augment ...

A detailed exposition on the origin and buildup of polarization in high-energy electron storage rings is presented. Fundamental, but not clearly understood, theoretical results are rederived ...

By utilizing the electron transfer from Cu to Co, the t_{2g} -symmetry t_{2g} of Co is fully occupied to decrease the spin polarization. The resultant electron repulsion between Co ...

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