



# Editorial: Energy Storage Systems Beyond Li-Ion Intercalation Chemistry

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## Editorial on the Research Topic

### Energy Storage Systems Beyond Li-Ion Intercalation Chemistry

Ecological and energy issues brought green energy production and low/zero-emission transportation to the front of emerging and rapidly developing areas of industry. Booming development and miniaturization of consumer electronics and communication devices are the critical paths of the recent technological progress supporting our social sustainability. The technologies in these crucial areas of sustainable development rely on the availability of high-performance energy storage/power source devices, and rechargeable batteries are the best options available now. Although the current leader of the market, lithium-ion batteries, provide the most advanced operation among other batteries, they cannot satisfy the ever-growing performance requirements of the emerging technologies in terms of safety, cost, and stable performance. Therefore, alternative battery technologies—“beyond lithium-ion” batteries were proposed and are rapidly developed. This Research Topic covers some areas of such emerging systems. The works published in the Research Topic includes technical and review papers in the areas of advanced electrode and electrolytes and the development of special interlayers to enhance the performance of the batteries, operating with both organic and aqueous electrolytes. Along with this, the Topic includes a paper that discusses the compromise between technology sustainability and maximization of electric performance, which the Editors considered as an essential topic to discuss when choosing the best option to power advanced and growing applications.

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