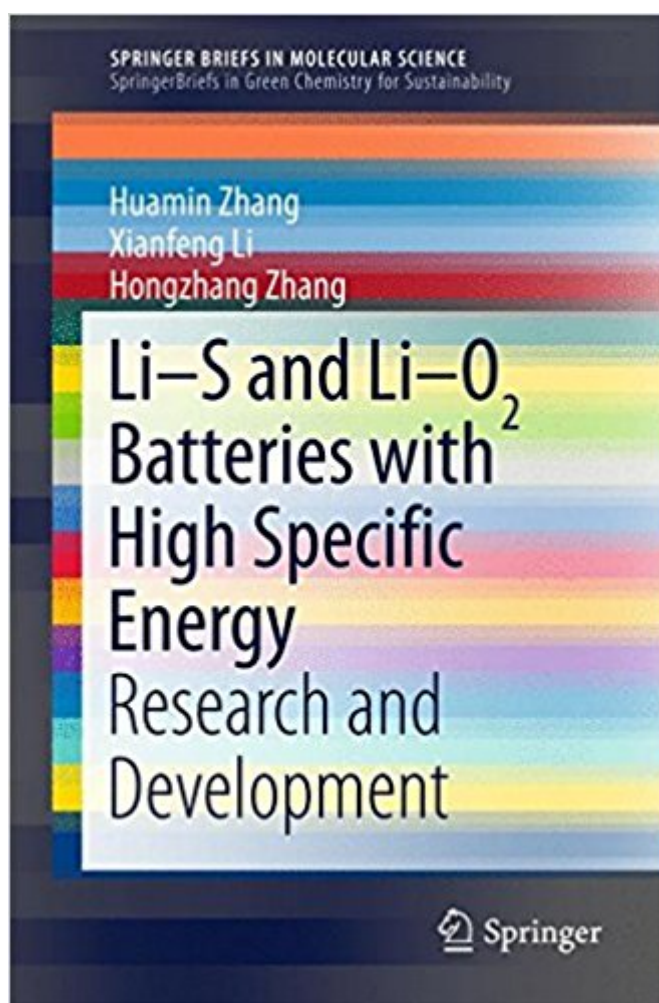


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# Li-S And Li-O<sub>2</sub> Batteries With High Specific Energy: Research And Development (SpringerBriefs In Molecular Science)



## Synopsis

This brief reviews the fundamentals, recent developments, challenges and prospects of Li-S and Li-O<sub>2</sub> batteries, including fundamental research and potential applications. It starts with a brief overview encompassing the current state of Li-S and Li-O<sub>2</sub> battery technology. It then provides general information on Li-S and Li-O<sub>2</sub> batteries, including the electrochemical processes and battery components. The following sections focus on the historical and recent development of Li-S and Li-O<sub>2</sub> batteries respectively, offering detailed insights into the key material development, cell assembly, diagnostic test and mechanism of electrolyte decomposition. Lastly, it focuses on the main promising applications of Li-S and Li-O<sub>2</sub> batteries together with their challenges and potential

## Book Information

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This brief reviews the functions, recent developments, challenges and prospects of the Li/S and Li/O<sub>2</sub> batteries, including the fundamental knowledge, research status, potential applications etc. It starts with a brief overview and encompasses the current state of Li/S and Li/O<sub>2</sub> battery technology. Then it provides the basic knowledge about Li/S and Li/O<sub>2</sub> batteries, including the electrochemical processes and the battery components. The following chapters focus on the historical and recent development of the Li/S and Li/O<sub>2</sub> batteries respectively, giving detailed information about the key materials development, cell assembly, testing diagnosis and degradation mechanism. Finally, the main potential applications of Li/S and Li/O<sub>2</sub> batteries together with their challenge and perspectives

are discussed.

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