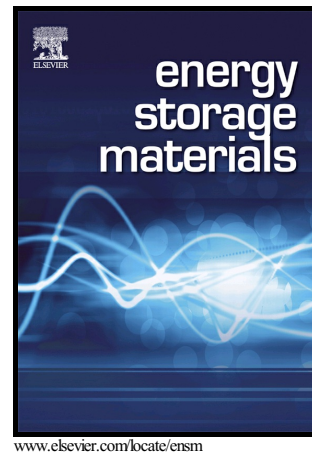


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## Research progresses on materials and electrode design towards key challenges of Li-air batteries

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### Abstract:

Li-O<sub>2</sub> battery possesses simple structure and high specific energy, and thus is one of the promising battery systems for future application in energy storage. In order to overcome the performance deficiencies and realize the practical utilization of Li-O<sub>2</sub> battery, substantial efforts and significant progress has been made in recent years. In this review, we will mainly focus on the key problems that may result in the performance deficiency of Li-O<sub>2</sub> battery and survey the studies reported in the literature that provide solutions to these problems. The development trend and prospect of Li-O<sub>2</sub> battery are also discussed.

### Keywords:

Li-air battery, Li metal anode, Catalyst, Air electrode, Electrolyte

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