

# 锂离子电池阻燃添加剂研究

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**摘要:** 综述了锂离子电池电解液阻燃添加剂的研究现状, 阐述了阻燃添加剂对电解液的阻燃机制。将阻燃添加剂分为磷系阻燃添加剂、卤代阻燃添加剂和复合阻燃添加剂 3 类, 比较了不同阻燃添加剂的结构特征、阻燃效果以及对电池性能的影响, 展望了阻燃添加剂在锂离子电池未来发展的前景。

**关键词:** 锂离子电池; 电解液; 阻燃剂; 添加剂

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## Research on flame-retardant additives for Li-ion batteries

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**Abstract:** The current statuses of flame-retardant additives used in electrolytes of Li-ion batteries were reviewed. The mechanism maintaining non-flammability of organic solvent was discussed. The flame-retardant additives were assorted into organophosphorus compounds, halogenated compounds and composite compounds. Structural characteristics, flame-retardation efficiency and impacts on electrolyte properties of different flame-retardant additives were compared. The prospect of flame-retardant additives in Li-ion batteries in the near future was predicted.

**Key words:** Li-ion battery; electrolyte; flame-retardant; additives