

铅酸蓄电池板栅材料的研究进展

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摘要: 综述了近年来国内外铅酸蓄电池板栅材料的研究热点,主要集中在低锑的铅锑合金和铅钙合金两个系列。分别对锡、银、镉、铋和稀土等添加剂对板栅合金机械性能和耐腐蚀性能的影响进行了系统的阐述。对稀土作为添加剂掺入合金的可能性和实际应用性进行了阐述,并对其他板栅合金类型也作了简述,对今后板栅材料可能发展的方向发表了看法。

关键词: 板栅材料; 稀土; 铅酸蓄电池; 添加剂

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Recent development of lead-acid battery grid materials

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Abstract: The recent trends on grid materials of the lead-acid battery were introduced, mainly on the lead-antimony alloy with low antimony and the lead-calcium alloy without antimony. The influence of the additives (tin, silver, rare earth elements and bismuth etc.) on the lead-antimony alloy with low antimony or the lead-calcium alloy expatiated systematically. In addition, other types of alloys were described. The development direction for grid materials in the future was pointed out.

Key words: grid materials; rare earth; lead-acid battery; additive

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