

• 科研论文 •

## D 型 MH/Ni 动力电池性能研究

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**摘要:** 研究了自制的 D 型 MH/Ni 动力电池的电化学性能。结果表明: 电池组的比能量 58 Wh/kg, 能量密度 199 Wh/L(2.6 A 放电), 能进行 7.5 A(1 C)快速充电。7.5 A(1 C)、15 A(2 C)和 37.5 A(5 C)放电容量分别达到 1.5 A(0.2 C)时的 97.1%、96.9% 和 76.4%。单体电池比功率 488 W/kg。5 A、100% DOD 循环 650 次, 容量减少 6%。

**关键词:** MH/Ni 动力电池; 快速充电; 循环寿命

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## Study on performance of D size Ni/MH power battery

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**Abstract:** The electrochemistry performance of self-made D size Ni/MH power battery was investigated. The results showed that the specific energy of battery stack was 58 Wh/kg and 199 Wh/L at 2.6 A discharge. It could be charged rapidly at 7.5 A (1 C) and its discharge capacity at 7.5 A(1 C), 15 A(2 C) and 37.5 A(5 C) was up to 97.1%, 96.9% and 76.4% of that at 1.5 A (0.2 C). The specific power of single battery was 488 W/kg. The decay of discharge capacity was 6% after 650 cycles of 100% DOD at 5 A.

**Key words:** Ni/MH power battery; quick charge; cycle life

电池杂志

BATTERY BIMONTHLY