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电动汽车无线充电技术专辑

电动自行车无线充电的发展现状及技术剖析（上）

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Development and Technology Profiling of Wireless Charging for E-bike: Part 1

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History

摘要

环保和代步的便利性使得电动自行车在人们的出行交通工具中所占比例越来越高,然而充电的安全性和便利性却成为电动自行车广泛应用的瓶颈,电动自行车无线充电成为未来可供选择的发展方向。首先简述了电动自行车有线充电的现状,进而引出电动自行车的无线充电技术,并从国内外的研究现状进行综述;然后介绍了电动自行车无线充电的相关标准及产业现状;最后探讨了电动自行车无线电能传输技术亟待解决的关键问题和发展趋势,从而为电动自行车无线充电的研究和发展提供技术参考。

Abstract

Owing to environmental protection and transportation convenience, the proportion of electric bicycles（E-bikes） is increasing. However, the safety and convenience of charging has become a bottleneck for the wide applications of E-bike. Therefore, the wireless charging for E-bike has become an alternative development direction in the future. The current status of wired charging of E-bike is briefly described, the wireless charging technology for E-bike is introduced, and the research status both at home and abroad is reviewed. Then, the relevant standards and industrial status of wireless charging for E-bike are presented. Finally, the key problems and development trend of wireless power transmission technology for E-bike are discussed, thus providing technical reference for the research and development of E-bike wireless charging.

关键词

无线充电 / 电动自行车 / 标准 / 产业现状

Key words

wireless charging / electric bicycle（E-bike） / standard / industrial status

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上一篇 下一篇

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