无线传感器网络**LEACH**协议能耗均衡改进

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摘　要：

LEACH (low energy adaptive clustering hierarchy)路由协议是无线传感器网络中被广泛应用的分层协议，但它存在簇头选择不合理和节点能耗不均衡的缺点。通过对LEACH协议节点能耗建模和分析，提出了一种均衡节点能耗的改进协议LEACH-B。最后用NS2对改进后的协议进行仿真，仿真结果表明，改进后的协议能均衡节点的能耗，有效地延长了整个网络的生存期。

关键词：无线传感器网络；能耗均衡；仿真；LEACH

An energy consumption balance improvement of LEACH of WSN

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Abstract:

LEACH (low-energy adaptive clustering hierarchy) routing protocol is widely used in wireless sensor network. But it has the disadvantage of irrationality of choosing clu head and of unbalanced energy consumption of nodes. By modeling and analyzing the energy consumption of nodes in LEACH routing protocol, an improved energy consumption balanced protocol LEACH-B is proposed. Finally the improved protocol is simulated on NS2. The results of simulation show that the improved routing prot can balance energy consumption of nodes and prolong the lifetime of the whole networks.

Keywords: wireless sensor network; balanced energy consumption; simulation; LEACH