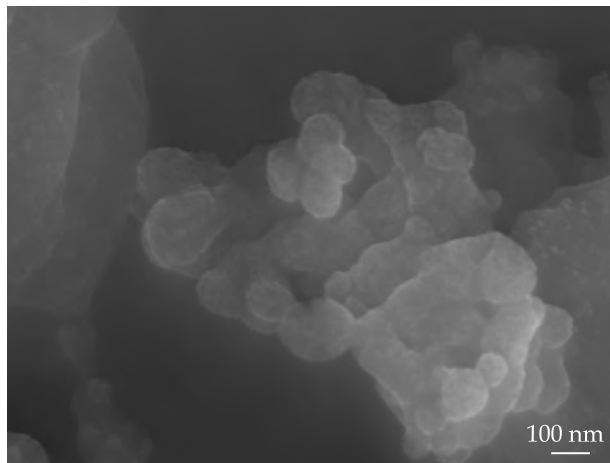


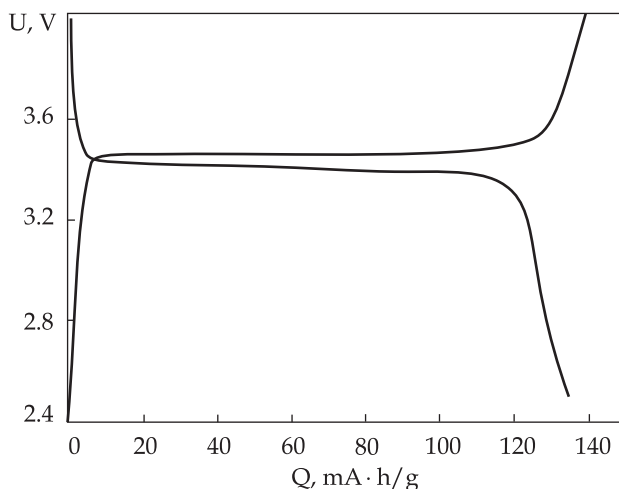
NANOCOMPOSITE LiFePO_4/C FOR HIGH-RATE BATTERY APPLICATIONS

Advantages

LiFePO_4 is one of the cheapest cathode materials for lithium-ion batteries. It can sustain almost twice as much current load (8500 mA/g or 60 C) as compared with the commercial counterpart (7000 mA/g or 40 C)



SEM micrograph of LiFePO_4/C



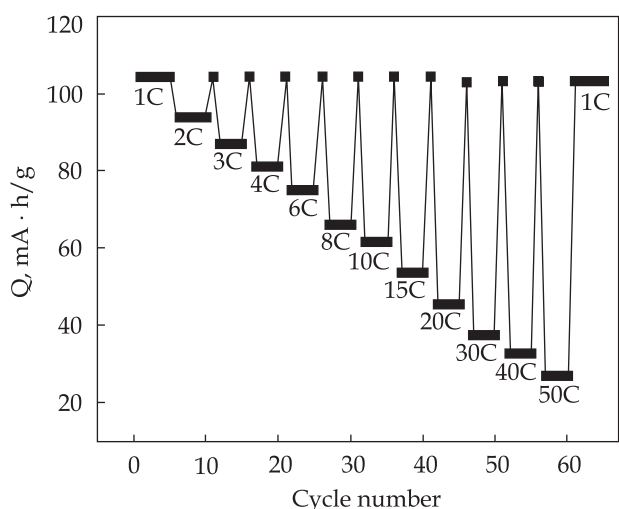
Charge/discharge curves for LiFePO_4/C at a current load of 17 mA/g (0.1 C)

Areas of Application

Cathode material for lithium-ion batteries used in renewable energy

Specification

| | |
|---|---------|
| Operating voltage range, V | 2.5–4.0 |
| Nominal capacity at 1.5 C discharge current, mA · h/g | 135 |
| Maximal current load, mA/g | 8500 |
| Particle size, nm | 100–200 |
| Crystallite size, nm | 20 |



Dependence of discharge capacity at current loads from 1 to 50 C on the cycle number LiFePO_4/C

Stage of Development. Suggestions for Commercialization

IRL5, TRL4
The electrode material is proposed

IPR Protection

IPR2, IPR3

Contact Information

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