

Accepted Manuscript

Title: Electrical Conductivity of Hydrothermally Synthesized Sodium Lithium Magnesium Silicate

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PII: S0025-5408(17)32823-4
DOI: <http://dx.doi.org/10.1016/j.materresbull.2017.09.048>
Reference: MRB 9589

To appear in: *MRB*

Received date: 20-7-2017
Revised date: 18-9-2017
Accepted date: 21-9-2017

Please cite this article as: Chunxi Hai, Yuan Zhou, Masayoshi Fuji, Takashi Shirai, Xiufeng Ren, Jinbo Zeng, Xiang Li, Electrical Conductivity of Hydrothermally Synthesized Sodium Lithium Magnesium Silicate, Materials Research Bulletin <http://dx.doi.org/10.1016/j.materresbull.2017.09.048>

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Electrical Conductivity of Hydrothermally Synthesized Sodium Lithium Magnesium Silicate

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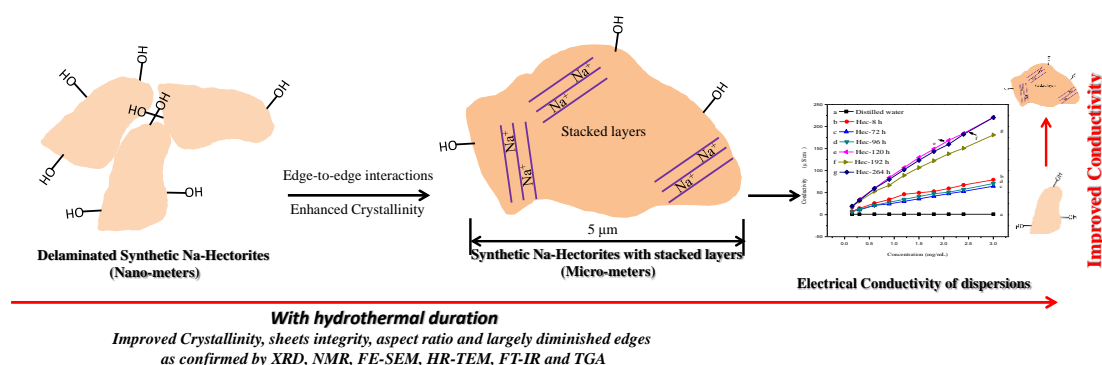
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Graphical abstract



Highlights

- High aspect ratio Na-hectorites nanoplates were synthesized by hydrothermal method employing salt lakes brine as magnesium and lithium resources.
- Comparing with other cations such as Li^+ , K^+ in brine, Na^+ is much more facilitated to be intercalated into the interlayer of hectorites, thus forming Na-hectorites.
- Crystal structure, morphology and thermal performances evolutions with hydrothermal duration were investigated in detail.
- The relationship between physic-chemical properties and electrical conductivity of Na-hectorites was carefully researched.

Abstract

This study is focused on the investigation of the electrical conductivity of sodium

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