

Accepted Manuscript

Title: Enhanced thermoelectric properties of cement-based composites with expanded graphite for climate adaptation and large-scale energy harvesting

Authors: Jian Wei, Lili Zhao, Qian Zhang, Zhengbo Nie, Lei Hao



PII: S0378-7788(17)30694-1
DOI: <https://doi.org/10.1016/j.enbuild.2017.10.032>
Reference: ENB 8051

To appear in: *ENB*

Received date: 26-2-2017
Revised date: 29-9-2017
Accepted date: 6-10-2017

Please cite this article as: Jian Wei, Lili Zhao, Qian Zhang, Zhengbo Nie, Lei Hao, Enhanced thermoelectric properties of cement-based composites with expanded graphite for climate adaptation and large-scale energy harvesting, Energy and Buildings <https://doi.org/10.1016/j.enbuild.2017.10.032>

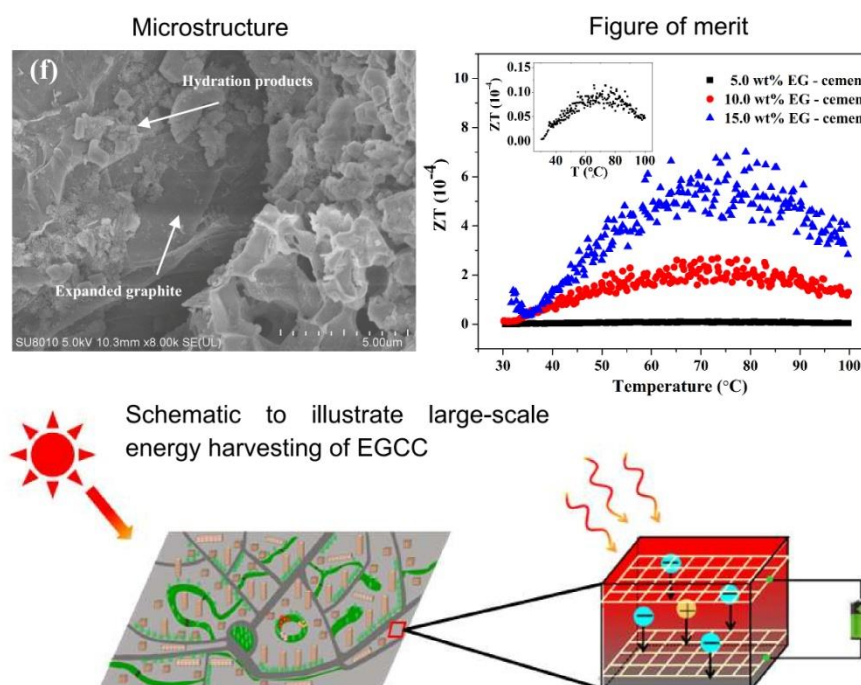
This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Enhanced thermoelectric properties of cement-based composites with expanded graphite for climate adaptation and large-scale energy harvesting

Jian Wei*, Lili Zhao, Qian Zhang, Zhengbo Nie, Lei Hao

(College of Materials and Mineral Resources, Xi'an University of Architecture and Technology, Xi'an 710055, China)

Graphical abstract:



The excellent thermoelectric property of expanded graphite/cement-based composites (EGCC) has promising prospects for converting the thermal energy of solar radiation into electric energy directly for large-scale energy harvesting, reducing the total thermal energy discharged into the urban environment in summer by pavements and buildings. We investigated the thermoelectric properties of EGCC and achieved high power factor and thermoelectric figure of

*Corresponding author: Jian Wei, (College of Materials and Mineral Resources, Xi'an University of Architecture and Technology, Xi'an 710055, China), Tel: 029-82205245, Fax:029-82205245, E-mail: weijian@xauat.edu.cn

Download English Version:

<https://daneshyari.com/en/article/6729087>

Download Persian Version:

<https://daneshyari.com/article/6729087>

[Daneshyari.com](https://daneshyari.com)