

## Supporting Information

### **Boron Nitride Nanosheets Nanofluids for Enhanced Thermal Conductivity**

*Xiao Hou<sup>1,2</sup>, Mengjie Wang<sup>2</sup>, Li Fu<sup>3</sup>, Yapeng Chen<sup>2</sup>, Nan Jiang<sup>2</sup>, Cheng-Te Lin<sup>\*2</sup>, Zhongwei Wang<sup>\*1</sup>, Jinhong Yu<sup>\*2</sup>*

*<sup>1</sup>Shandong University of Science and Technology, College of Materials Science and Engineering, Qingdao, 266590, China.*

*<sup>2</sup>Key Laboratory of Marine Materials and Related Technologies, Zhejiang Key Laboratory of Marine Materials and Protective Technologies, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo 315201, China.*

*<sup>3</sup>College of Materials and Environmental Engineering, Hangzhou Dianzi University, Hangzhou, 310018, China.*

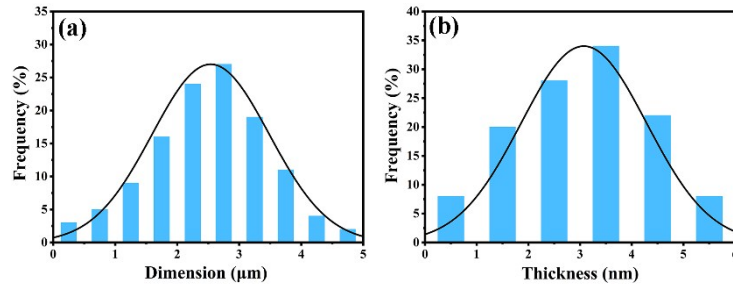
***\*Corresponding author, E-mail: [linzhengde@nimte.ac.cn](mailto:linzhengde@nimte.ac.cn); [wangzhongwei@fusilinchem.com](mailto:wangzhongwei@fusilinchem.com); [yujinhong@nimte.ac.cn](mailto:yujinhong@nimte.ac.cn).***



**Fig. S1** The sample holder used in “liquids” thermal conductivity test model.



**Fig. S2** LVDV-2 viscometer was used for viscosity measurement.

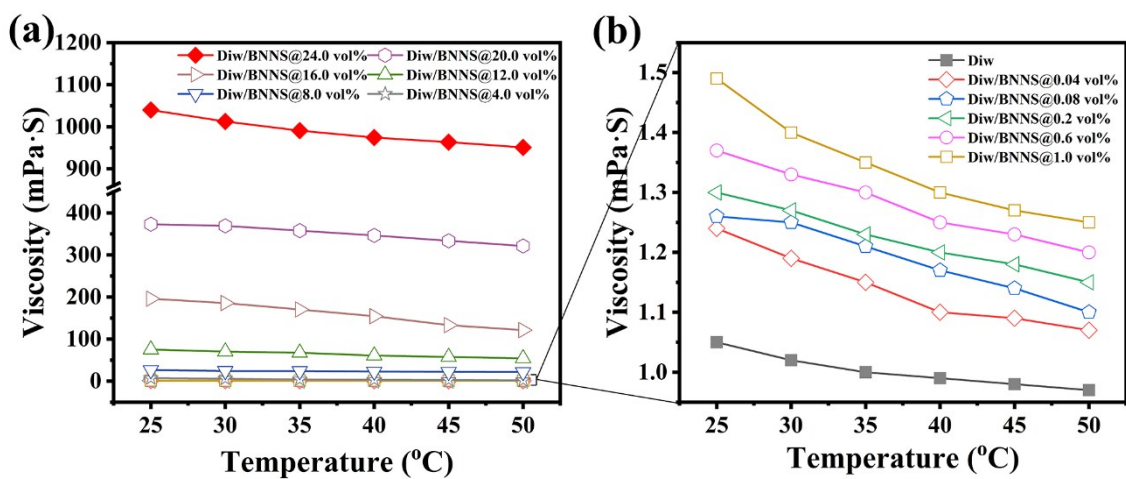


**Fig. S3** The distribution of the (a) dimension and (b) thickness of BNNS.

After the exfoliation process, the average dimension is 2.5  $\mu\text{m}$  (from 120 pieces), while the average thickness of BNNS was calculated to be 2.9 nm (from 120 pieces).



**Fig. S4** Digital photo of BNNS nanofluids (0.1 mg/ml).



**Fig. S5** Temperature-dependent viscosity variation of (a) nanofluids and (b) its local enlarged.

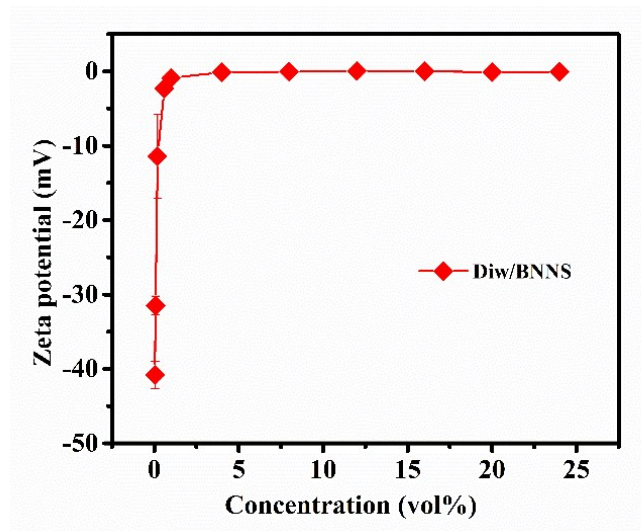


Fig. S6 Zeta potential results of BNNS nanofluids.