

Potential role of Borophene as radiosensitizer in Boron Neutron

Capture Therapy (BNCT) and Particle Therapy (PT)

Pengyuan Qi*, **Qianyuan Chen***, **Dong Tu**, **Songhuan Yao**, **Yupeng Zhang**, **Jike Wang**, **Conghua Xie⁺**, **Chunxu Pan⁺**, **Hao Peng⁺**

*The two authors contributed equally to this work.

⁺Corresponding Authors:

Conghua Xie, PhD, Department of Radiation and Medical Oncology, Zhongnan Hospital of Wuhan University, 169 Donghu Road, Wuhan, Hubei 430071, China; email: chxie_65@whu.edu.cn.

Chunxu Pan, PhD, School of Physics and Technology, Wuhan University, 299 Bayi Rd, Wuhan 430072, China. Tel: 86-27-68752481-8031. E-mail: cxpan@whu.edu.cn.

Hao Peng, PhD, Department of Medical Physics, Wuhan University, Luojiashan Rd, China 430072. Tel: 86-27-68752161. E-mail: penghao@whu.edu.cn.

Supporting Information

Fig. S2 has been updated on the 16/03/2021.

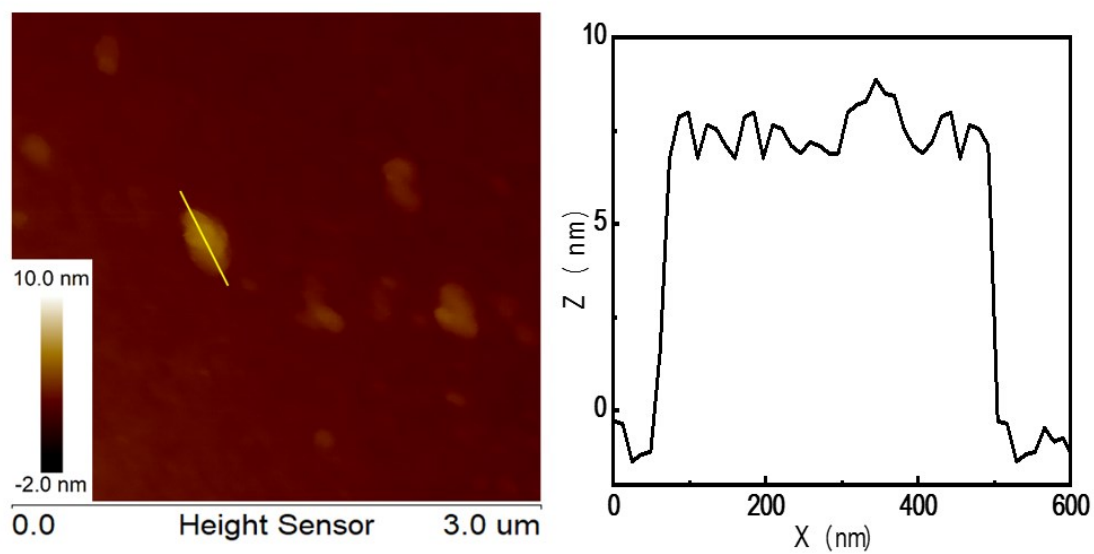


Fig. S1. AFM characterization of the borophene obtained by ball milling-assisted sonochemical exfoliation.

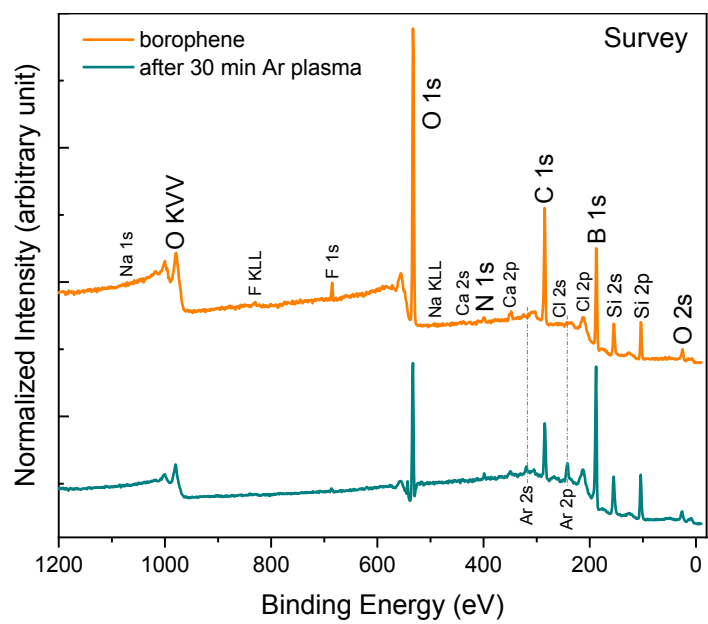


Fig. S2. XPS characterization of the borophene obtained by ball milling-assisted sonochemical exfoliation.

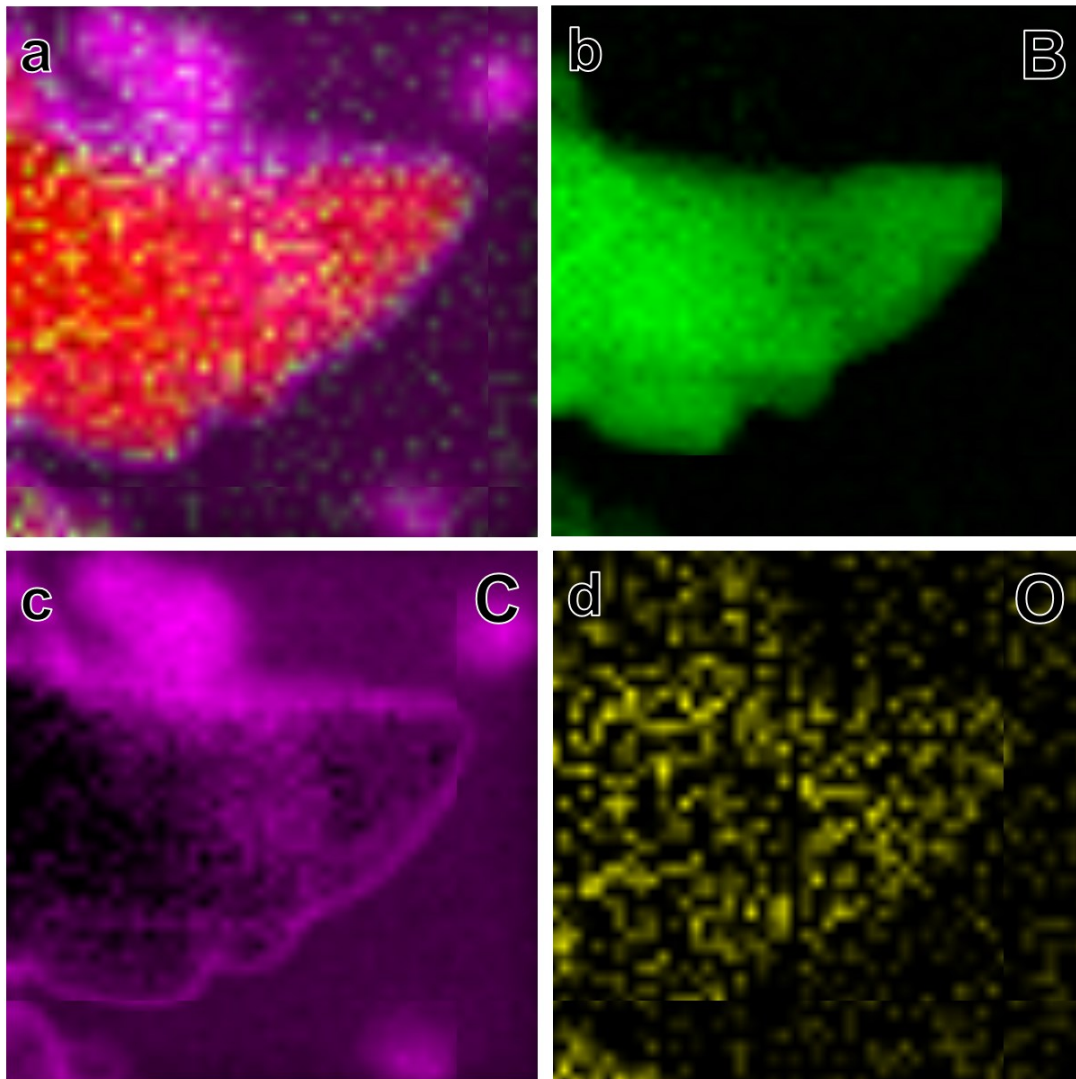


Fig. S3. EELS mapping of borophene.