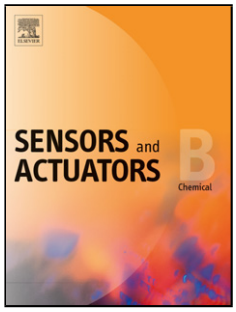

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Authors: Youming Shen, Xiangyang Zhang, Youyu Zhang, Yanyang Wu, Chunxiang Zhang, Yuandao Chen, Junling Jin, Haitao Li

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A mitochondria-targeted colorimetric and ratiometric fluorescent probe for hydrogen peroxide with a large emission shift and bio-imaging in living cells

Youming Shen,[ab] Xiangyang Zhang, *[a] Youyu Zhang, *[b] Yanyang Wu, *[c] Chunxiang Zhang, [a] Yuandao Chen,[a] Junling Jin,[a] Haitao Li[b]

[a] Hunan Province Cooperative Innovation Center for The Construction & Development of Dongting Lake Ecological Economic Zone, College of Chemistry and Materials Engineering, Hunan University of Arts and Science, Changde, 415000, PR China E-mail:zhangxiangy06@163.com

[b] Key Laboratory of Chemical Biology and Traditional Chinese Medicine Research (Ministry of Education), College of Chemistry and Chemical Engineering, Hunan Normal University, Changsha 410081, PR China E-mail: zhangyy@hunnu.edu.cn

[c] Food Science and Technology College, Hunan Agricultural University, Changsha 410000, Hunan, China

The highlights of this paper are as follows:

a) A novel mitochondria-targeted fluorescent probe based on a coumarin as the fluorophore and a boronate moiety as the reaction site was designed and synthesized.

b) Our designed compound can be used as a colorimetric and ratiometric fluorescence dual-channel sensor for detection of H_2O_2 through modulating ICT process. The probe showed quantitative, highly selective and sensitive for H_2O_2 with a large emission change with 105 nm shifted.