

Supporting Information

Dual Functional Oyster Shell-derived Ag/ZnO/CaCO₃ Nanocomposites with Enhanced Catalytic and Antibacterial Activities for Water Purification

Lin Chang^{a,b,§}, **Yan Feng**^{a,b,§}, **Xiaoyu Huang**^{a,b}, **Youguang Lu**^{a,b*}, **Da-Peng Yang**^{c*}

^a Department of Preventive Dentistry, School and Hospital of Stomatology, Fujian Medical University, Fuzhou 350002, Fujian Province, PR China.

^b Key Laboratory of Stomatology & Fujian Provincial Engineering Research Center of Oral Biomaterial, School and Hospital of Stomatology, Fujian Medical University, Fuzhou 350004, Fujian Province, PR China.

^c College of Chemical Engineering and Materials Science, Quanzhou Normal University, Quanzhou 362000, Fujian Province, PR China.

§ Equal contribution

* Corresponding Authors:

Dr. Youguang Lu

Phone: +86-591-83736429; Fax: +86-591-83720599

Email address: fjlyg63@163.com

Dr. Da-Peng Yang

Tel.: +86-595-22199816; fax: +86-595-22199816

E-mail address: yangdp@qztc.edu.cn

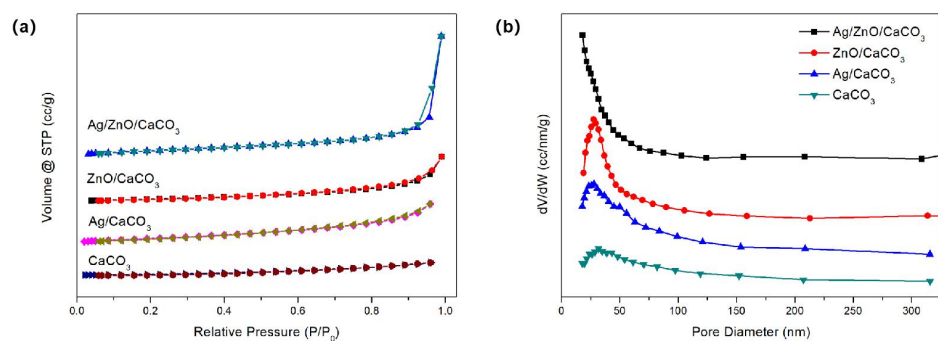


Fig. S1. N₂ adsorption-desorption isotherms (a) and pore size distribution (b) of CaCO₃, Ag/CaCO₃, ZnO/CaCO₃, and Ag/ZnO/CaCO₃ nanocomposites.

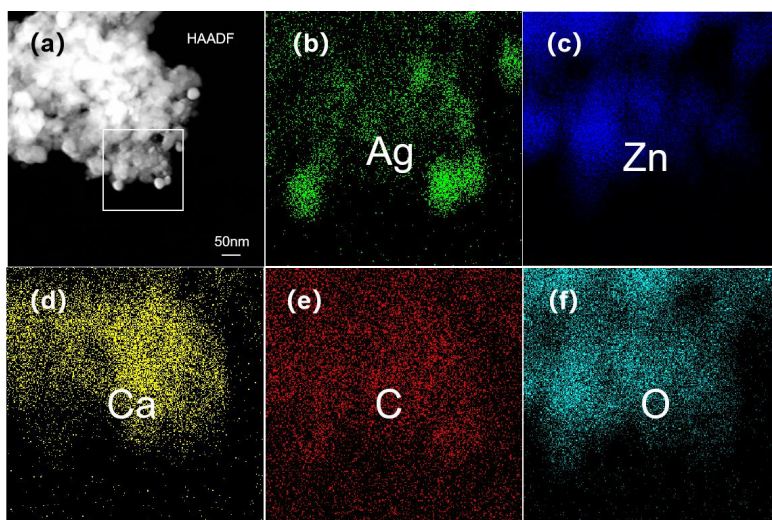


Fig. S2. TEM images of Ag/ZnO/CaCO₃ and corresponding elemental mapping images showing Ag, Zn, Ca, C and O in the selected area.