Controlling bacterial growth and inactivation using thin filmbased surface acoustic waves

Hui Ling Ong,¹ Bruna Martins Dell' Agnese,² Yunhong Jiang,² Yihao Guo,³ Jian Zhou,³ Jikai Zhang,¹, Jingting Luo,^{4,1,*} Ran Tao,^{4,1} Meng Zhang,² Lynn G. Dover,² Darren Smith,² Kunyapat Thummavichai,¹ Yogendra Kumar Mishra,⁵ Qiang Wu¹, Yong-Qing Fu^{1,*}

Supporting information

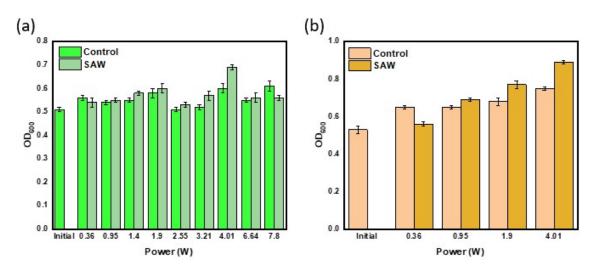


Figure S1: OD measurement results for (a) E. coli, (b) S. aureus

¹ Faculty of Engineering and Environment, Northumbria University, Newcastle upon Tyne, NE1 8ST, UK

² Hub of Biotechnology in the Building Environment, Department of Applied Science, Northumbria University, Newcastle upon Tyne, NE1 8ST, UK

³ College of Mechanical and Vehicle Engineering, Hunan University, Changsha 410082, China

⁴ Key Laboratory of Optoelectronic Devices and Systems of Ministry of Education and Guangdong Province, College of Physics and Optoelectronic Engineering, Shenzhen University, Shenzhen, 518060, China

⁵ Smart Materials, NanoSYD, Mads Clausen Institute, University of Southern Denmark Alison 2, DK-6400, Sønderborg, Denmark

^{*}Corresponding authors: Professor Jingting Luo, E-mail: luojt@szu.edu.cn Professor Richard Yong-Qing Fu, Email: <u>Richard.fu@northumbria.ac.uk</u>

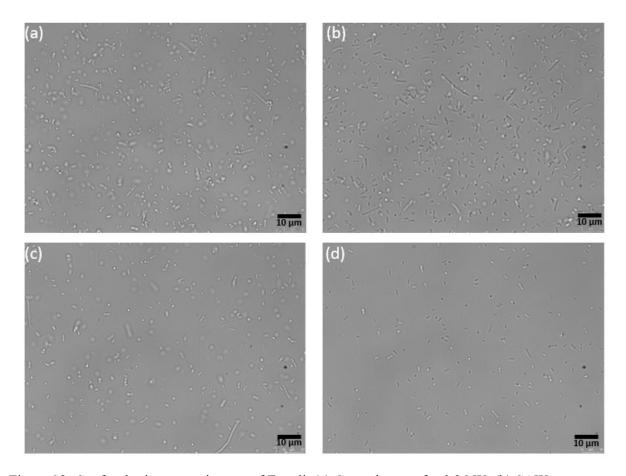


Figure S2: Confocal microscopy images of E. coli. (a) Control group for 0.36~W, (b) SAW test group at 0.36~W, (c) Control group for 7.8~W, and (d) SAW test group at 7.8~W