Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B. This journal is © The Royal Society of Chemistry 2016

| 1 | Supporting Information |
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| 3 | White Light-Activated Antimicrobial Surfaces |
| 4 | ; Effect of Nanoparticles Type on Activity |
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| 6 | Gi Byoung Hwang ^a , Sacha Noimark ^a , Kristopher Page ^a , Sandeep, Sehmi ^a , |
| 7 | Alexander J. Macrobert ^b , Elaine Allan ^c and Ivan P. Parkin ^a * |
| 8 | ^a Materials Chemistry Research Centre, Department of Chemistry, University College London, 20 |
| 9 | Gordon Street, London, WC1H 0AJ, United Kingdom |
| 10 | ^b National Medical Laser Centre, UCL Division of Surgery and Interventional Science, 67-73 |
| 11 | Riding House Street, London, W1 W7EJ, United Kingdom |
| 12 | ^c Division of Microbial Diseases, UCL Eastman Dental Institute, University College London, 256 |
| 13 | Grays Inn Road, London WC1X 8LD, United Kingdom |
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| 23 | * To whom correspondence should be addressed. |

24 E-mail: <u>i.p.parkin@ucl.ac.uk</u> Tel: 44(0)207 679 4669



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4 Figure S1. Size distributions of (a) Ag NPs, (b) Au NPs, and (c) Mix Ag-Au NPs. In order to confirm

5 the size of NPs, 20 TEM images of each NP sample were analyzed using imageJ software.





Figure S2. UV-vis absorption spectra of Ag NPs, Au NPs, and Mix Ag-Au NPs suspension. 3 ml of
NPs suspension at each condition was used to confirm UV-vis absorbance spectra, and it was
measured within the wavelengths 350–950 nm.







Figure S3. UV-vis absorption of Ag NPs, Au NPs, and Mix Ag-Au NPs suspension before and after
swell-encapsulation-shrink process using UV-vis spectrometer. Polyurethane sample was immersed
in a mixture of acetone (9 mL), and DI water or NPs (1 mL) for 24 h. Absorbance reductions of Ag
and Au NPs suspension were measured at 409 nm and 526 nm, respectively. The reduction of Mix
Ag-Au NPs suspension was measured at both 409 nm and 526 nm.





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Figure S5. (a) Preparation of light activated antimicrobial surfaces and (b) antimicrobial testing



