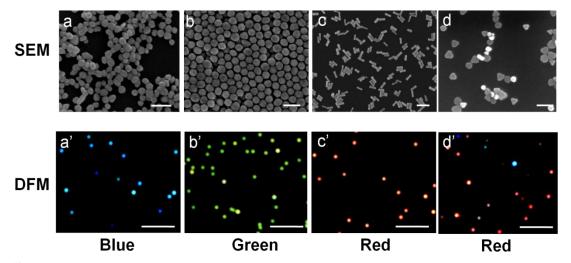
Supporting information

Tunable scattered colors over a wide spectrum from a single nanoparticle

Youju Huang, Ferhan Abdul Rahim and Dong-Hwan Kim*

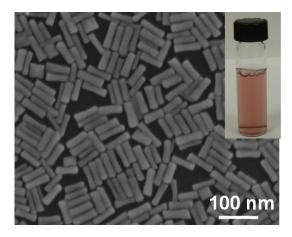
School of Chemical and Biomedical Engineering, Nanyang Technological University, 637457,

Singapore

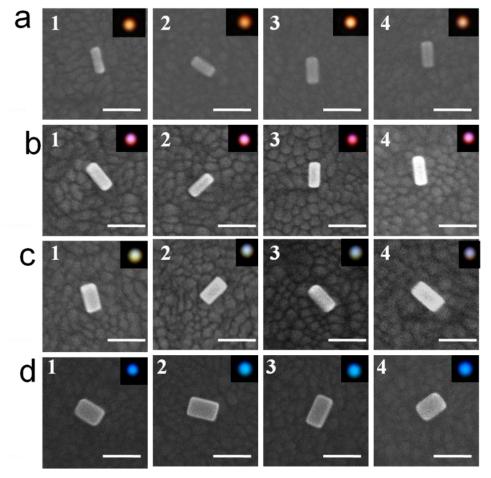


S-Figure 1. Scanning electron microscopic and dark field microscopic images of silver nanospheres (a and a'), gold nanospheres (b and b'), gold nanorods (c and c') and silver nanoplates (d and d'; the blue spots in d' are attributed to non-plate particles). The scale bars in a-d and a'-d' represent 100 nm and $5 \mu \text{m}$, respectively.

^{*} Corresponding author: e-mail: dhkim@ntu.edu.sg; Tel: 65-67904111; Fax: 65-67911761 (DH. Kim)



S-Figure 2. SEM image of AuNRs used as seeds for the growth of Au-Ag core-shell NRs.



S-Figure 3. SEM images of single Au-Ag core-shell NRs with various thicknesses of silver shell (a: 2 nm; b: 5 nm; c: 10 nm; d: 20 nm) on ITO glasses and their corresponding scattered optical images (insets). The scale bar represents 100 nm.