A dual-emitting core—shell carbon dot—silica—phosphor composite for LED plant grow light

Li Wang, Haoran Zhang, Xiaohua Zhou, Yingliang Liu* and Bingfu Lei*

Guangzhou Provincial Engineering Technology Research Center for Optical Agriculture, College of Materials and Energy, South China Agricultural University, Guangzhou 510642, China

Email: tleibf@scau.edu.cn; tliuyl@scau.edu.cn

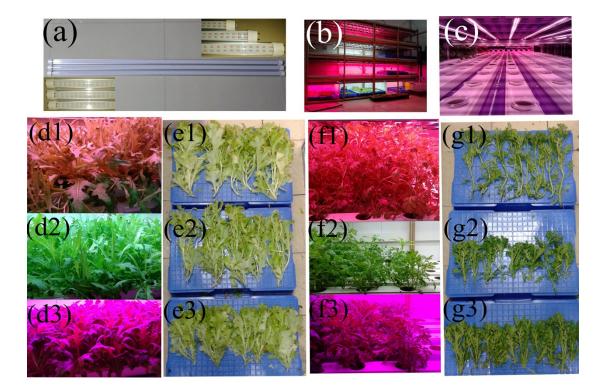


Figure S1. (a) The photograph of lamp plate on which lamp beads were integrated and fixed. (b and c) The picture of indoor grower. (d1and e1) Lettuce grow in LED grow light (R/B 3.515). (d2 and e2) Lettuce grow in white LED. (d3 and e3) Lettuce grow in LED grow light (R/B 0.637. (f1 and g1) Garland chrysanthemum grow in LED grow light (R/B 3.515). (f2 and g2) Garland chrysanthemum grow in white LED. (f3 and g3) Garland chrysanthemum grow in LED grow light (R/B 0.637). (after 21 days, R/B represents integral ratio of red-emitting light/blue-emitting light).