Supporting Information

Heterogeneous Growth Mechanism of ZnO Nanostructures and their Morphology Effect on Optical and Photocatalytic Properties

Abdo Hezam [a], K. Namratha [a], Q.A. Drmosh [b], Bananakere Nanjegowda Chandrashekar [c], Kishor Kumar Sadasivuni [d], Zain Yemani [b], Chun Cheng [c], and K. Byrappa [a,*]

[a] Centre for Materials Science and Technology, University of Mysore, Vijana Bhavana, P.B.No.21,Manasagangothiri, Mysuru-570006, India.
[b] Center of Research Excellence in Nanotechnology and Physics Department, King Fahd University of Petroleum and Minerals, Dhahran 31261, Saudi Arabia.
[c] Department of Materials Science and Engineering and Shenzhen Key Laboratory of Nanoimprint Technology, Southern University of Science and Technology, Shenzhen 518055, P. R. China.
[d] Department of Mechanical & industrial Engineering, Qatar University, P.O. Box 2713, Doha, Qatar.

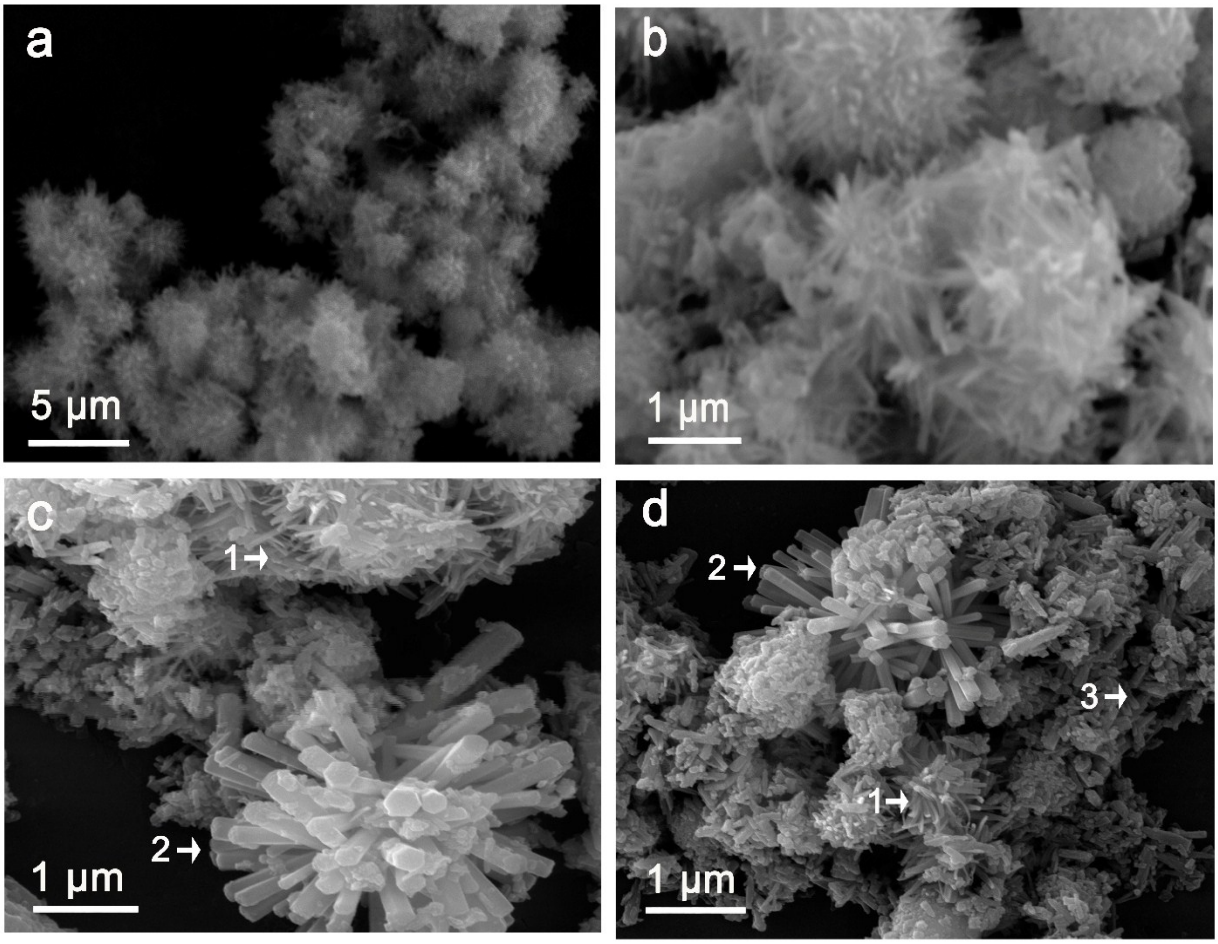

Figure S1 SEM images of ZnO flowers hydrothermally prepared in the presence of DEA at 190 ^{0}C for (a) and (b) 15 min, (c) 30 min, and (d) 45 min.

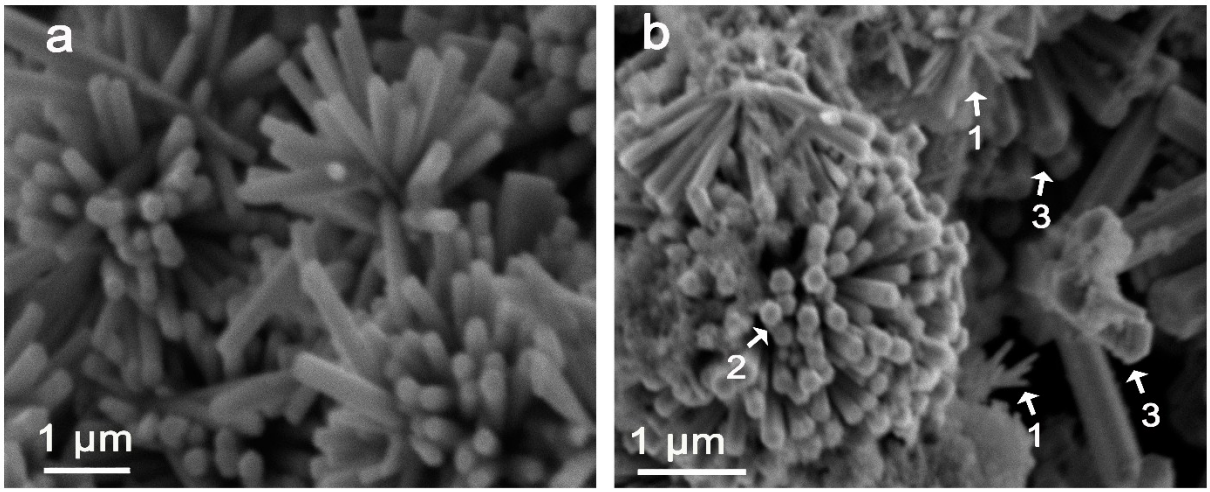

Figure S2 SEM images of ZnO flowers hydrothermally prepared in the presence of gluconic acid at 190 ^{0}C for (a), 15 min and (b)30 min.

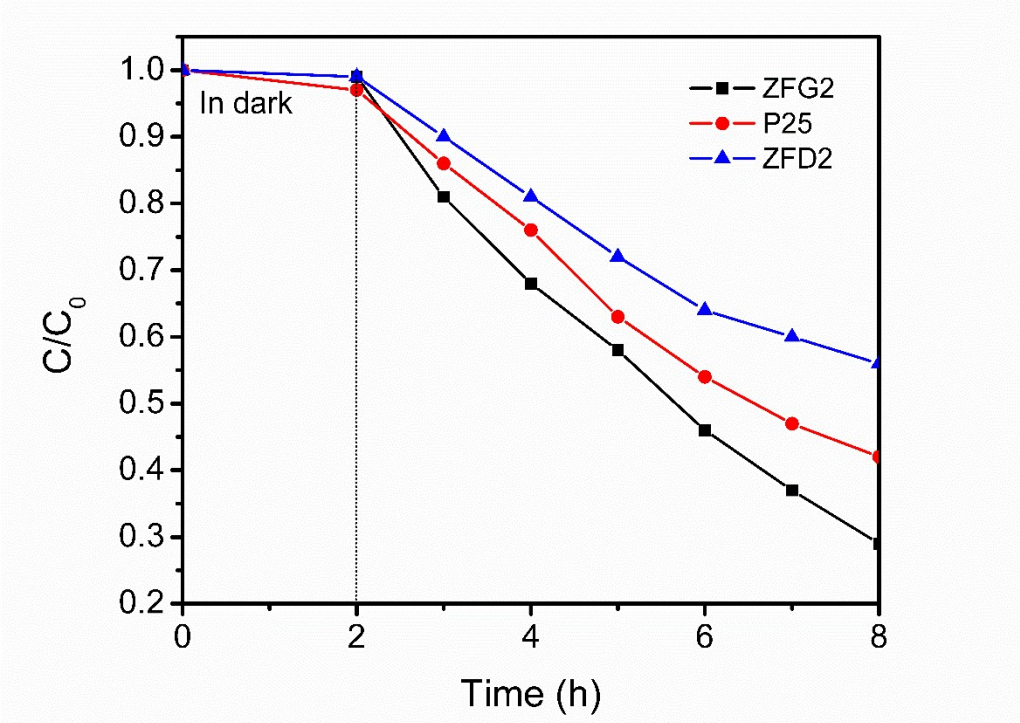

Fig. S3. The adsorption and degradation efficiency of 4-CP (1 mg L-1, 50 mL, pH = 6.5) versus the exposure time under sunlight irradiation in the presence of 30 mg of ZFG2, TiO_2-P25, and ZFD2.