Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Facile synthesis of single crystalline n- / p- type ZnO nanorods by lithium substitution and their photoluminescence, electrochemical and photocatalytic properties

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Supplementary Information

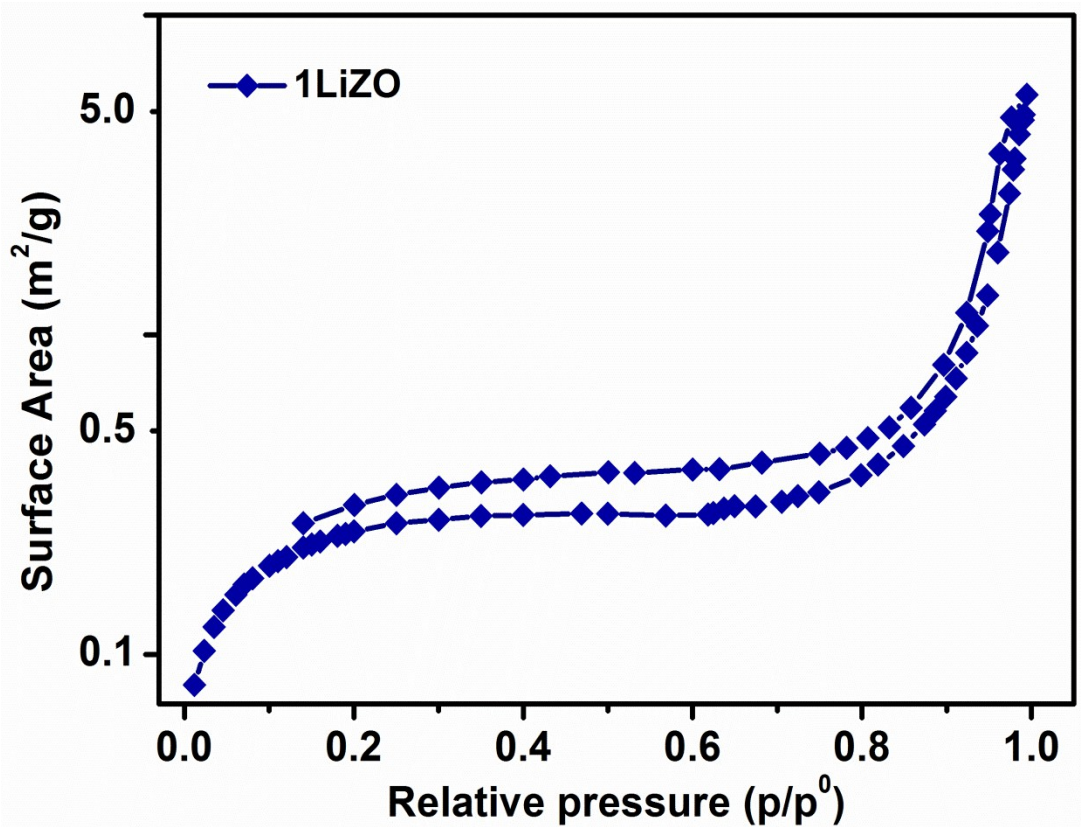

Figure S1. Nitrogen adsorption-desorption isotherm of the undoped and Li doped ZnO NRs.

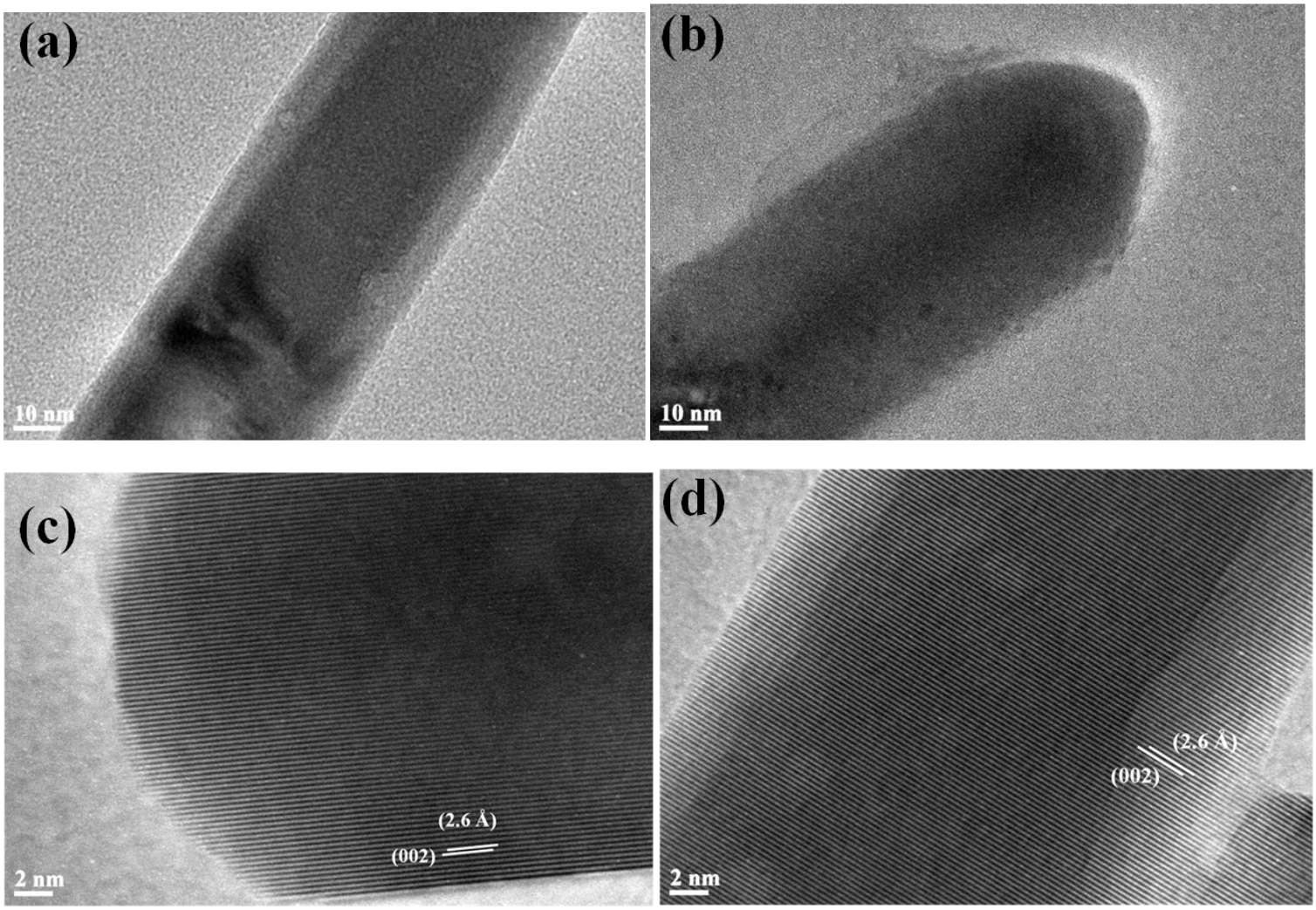

Figure S2. TEM images showing the formation of well defined nanorods of a) 2LiZO and b) 5LiZO. HRTEM images of c) 2LiZO and d) 5LiZO

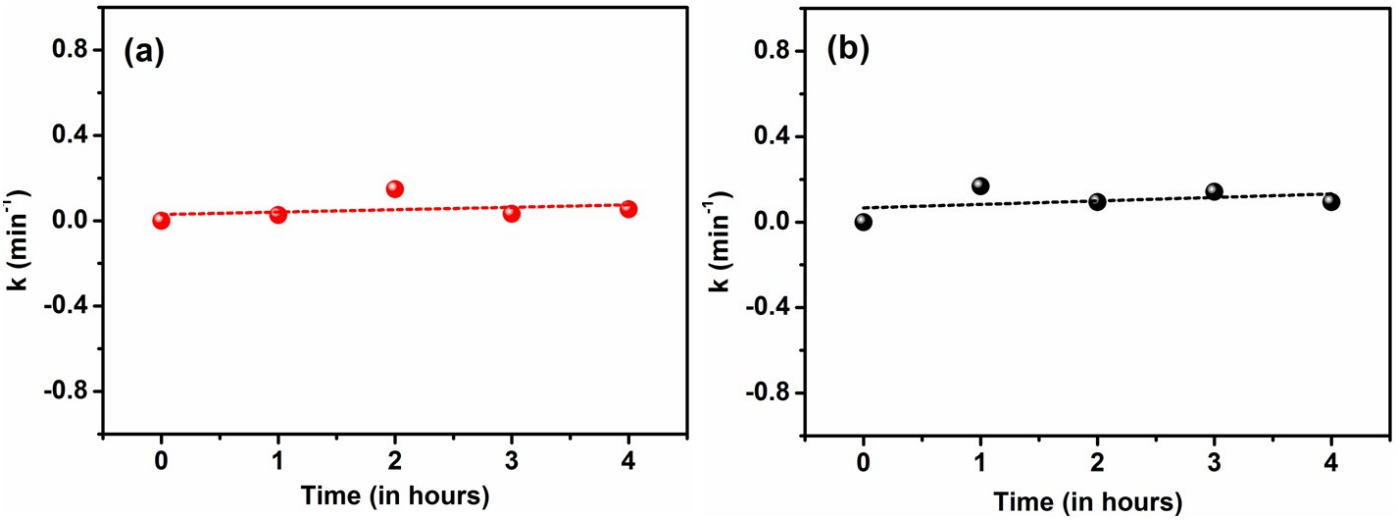

Figure S3. Control experiments carried out taking 10^{-6} M RhB solution a) on being exposed to UV irradiation but without the NR samples b) in presence of the NR samples but without UV irradiation.

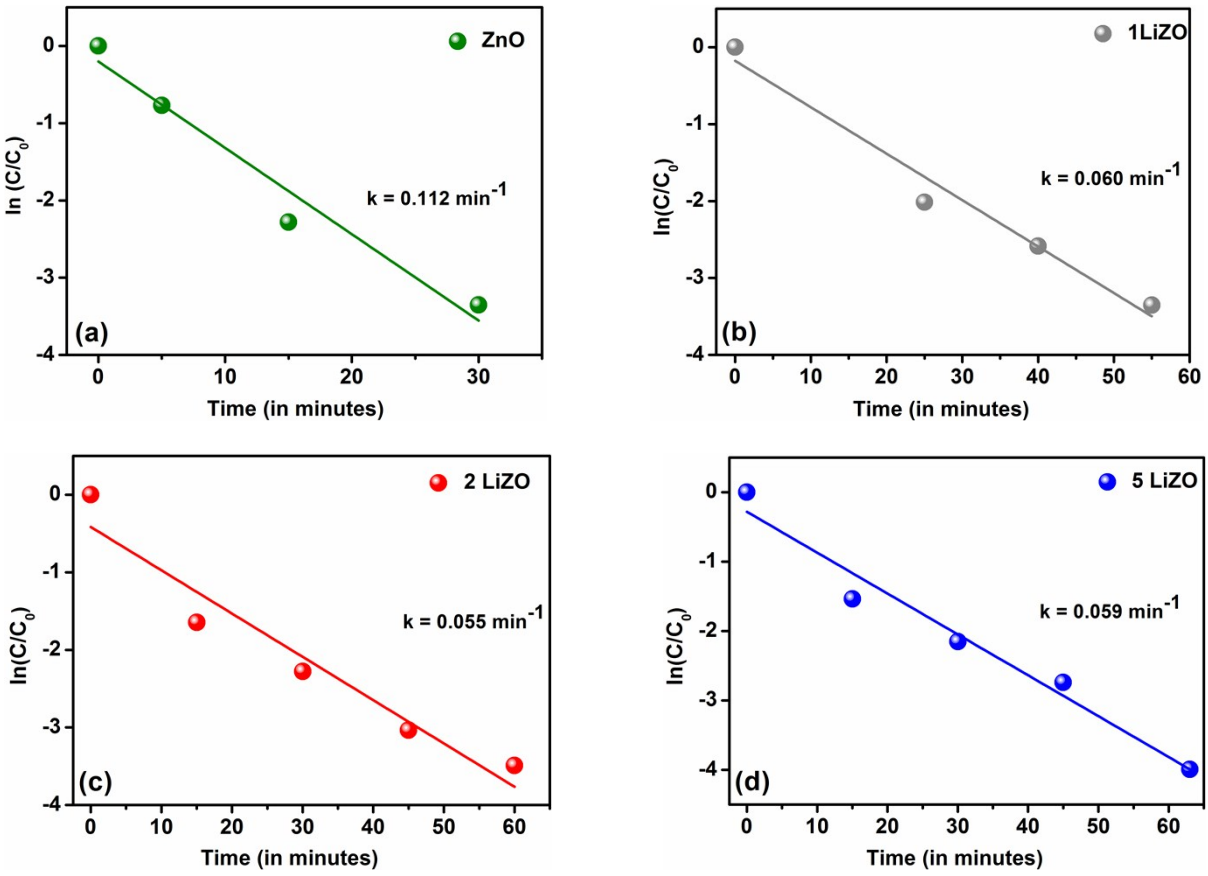

Figure S4. Plot of ln(C/C_0) vs. time for unsubstituted ZnO nanorod (green), 1 at% Li substituted ZnO nanorod (grey), 2 at% Li substituted ZnO nanorod (red), and 5 at% Li substituted ZnO nanorod (blue) where C/C_0= normalized absorption. The corresponding rate constants are also shown in respective graphs.