

## Supporting Information

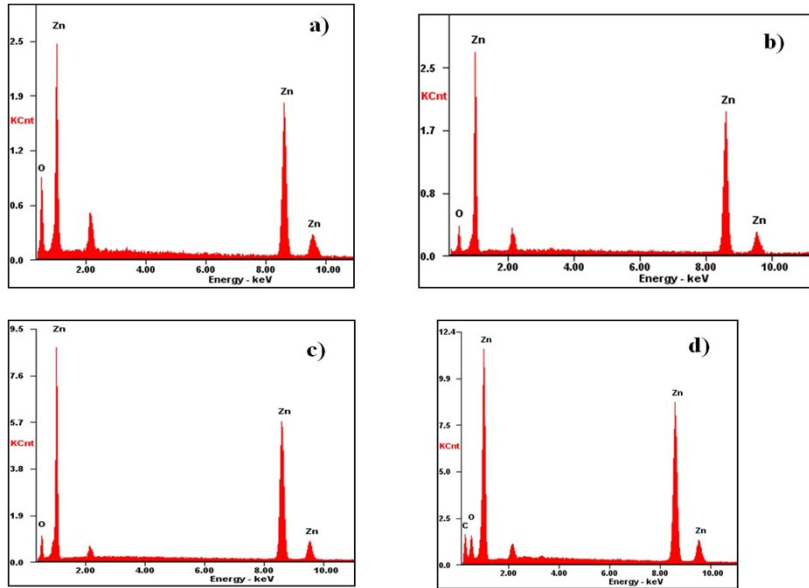
### **Ecofriendly Synthesis of ZnO Nano Pencils in Aqueous Medium: A Study of Photocatalytic Degradation of Methylene Blue under Direct Sunlight**

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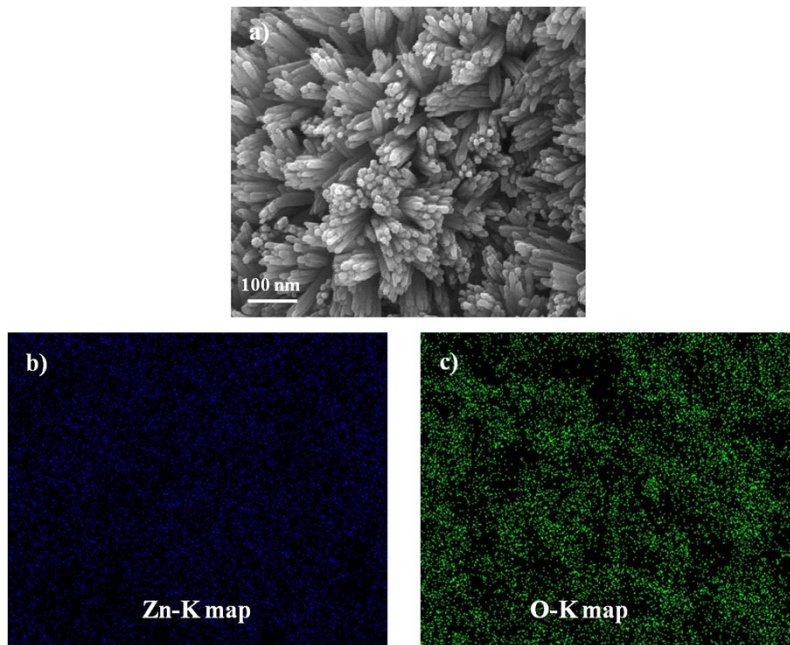
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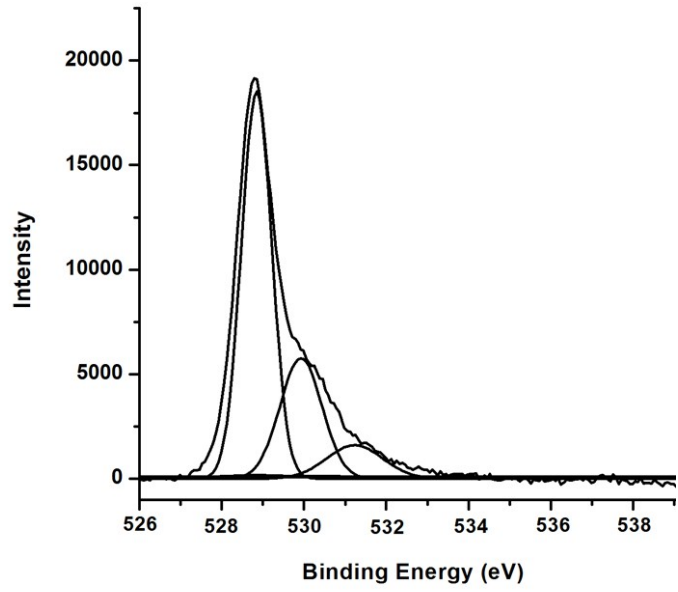
1. Fig. S1: EDAX pattern of as-synthesized and calcined ZnO nano structures.
2. Fig. S2: SEM image and elemental mapping of ZnO nano pencils.
3. Fig. S3: O<sub>1s</sub> deconvoluted XPS spectra of ZnO nano pencil.
4. Fig. S4: SEM image of ZnO nano pencil taken after fifth cycle of reuse for the photocatalytic degradation of methylene blue under sunlight irradiation.



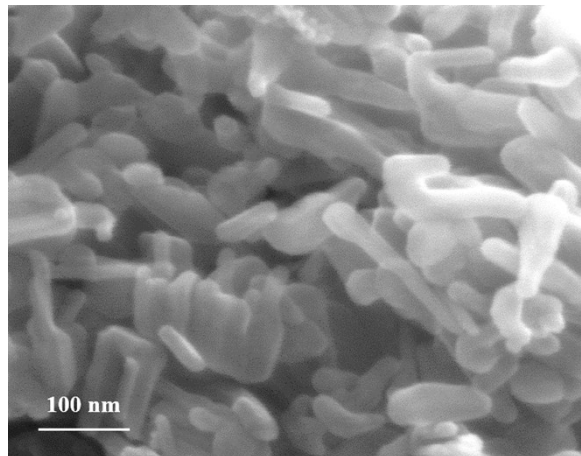
**Fig. S1** EDAX pattern of a) as-synthesized and calcined ZnO nano structures at b) 300 °C, c) 450 °C and d) 600 °C.



**Fig. S2** a) SEM image of ZnO nano pencil, elemental mapping shows the presence of b) Zn and c) O in the sample.



**Fig. S3** O1s deconvoluted XPS spectra of ZnO nano pencil.



**Fig. S4** SEM image of ZnO nano pencil taken after fifth cycle of reuse for the photocatalytic degradation of methylene blue under sunlight irradiation.