The effect of nanoparticle and mesoporous TiO2 additions on the electronic characteristics of reduced graphene oxide nanocomposites with zinc oxide under UV irradiation

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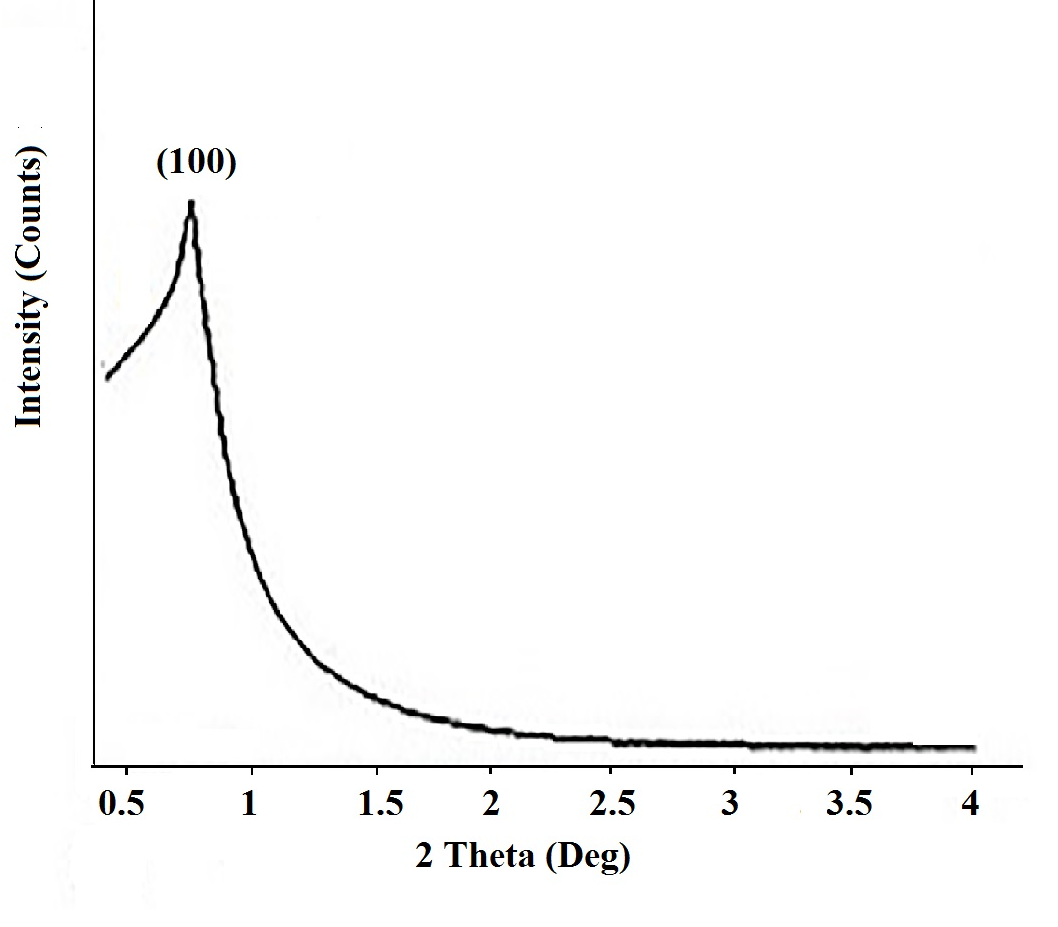


Figure S1. low-angle XRD pattern of mesoporous TiO2

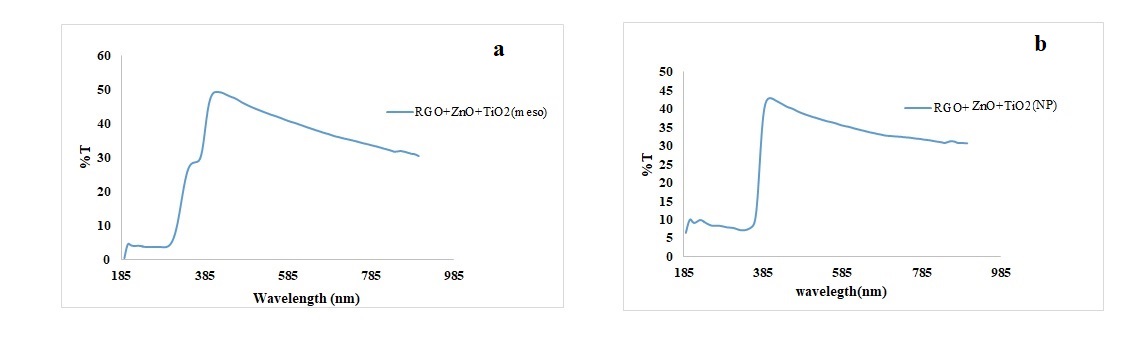


Figure S2.Transmittance versus wavelength a) RGO-Zno-TiO2 (Meso), b) RGO-ZnO-TiO2 (Nano)

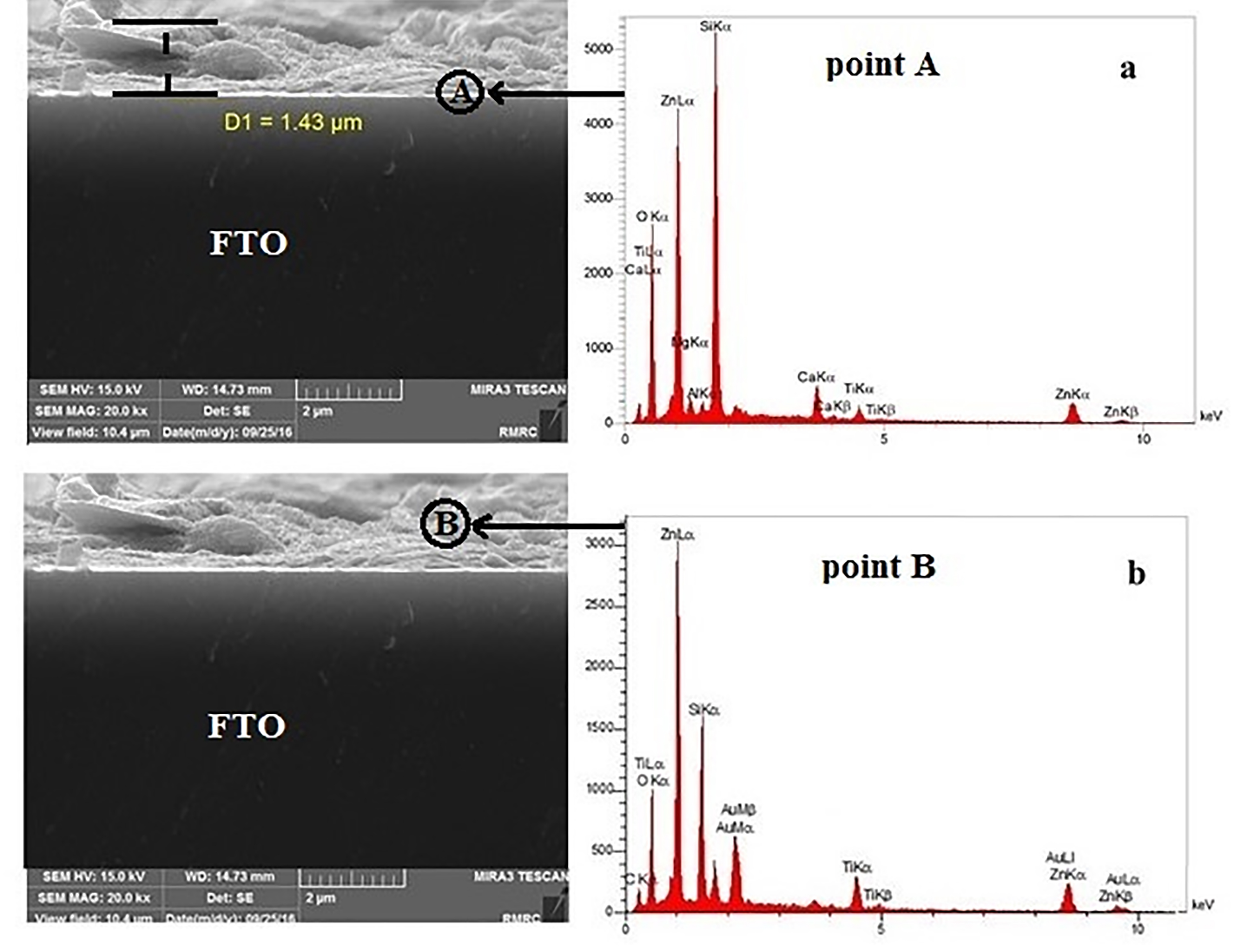


Figure S3. FE-SEM image and EDS spot analysis of the cross-section of the FTO-RGO-ZnO-(nanoparticle) composite at the FTO interface (a) and within the deposited layer (b).

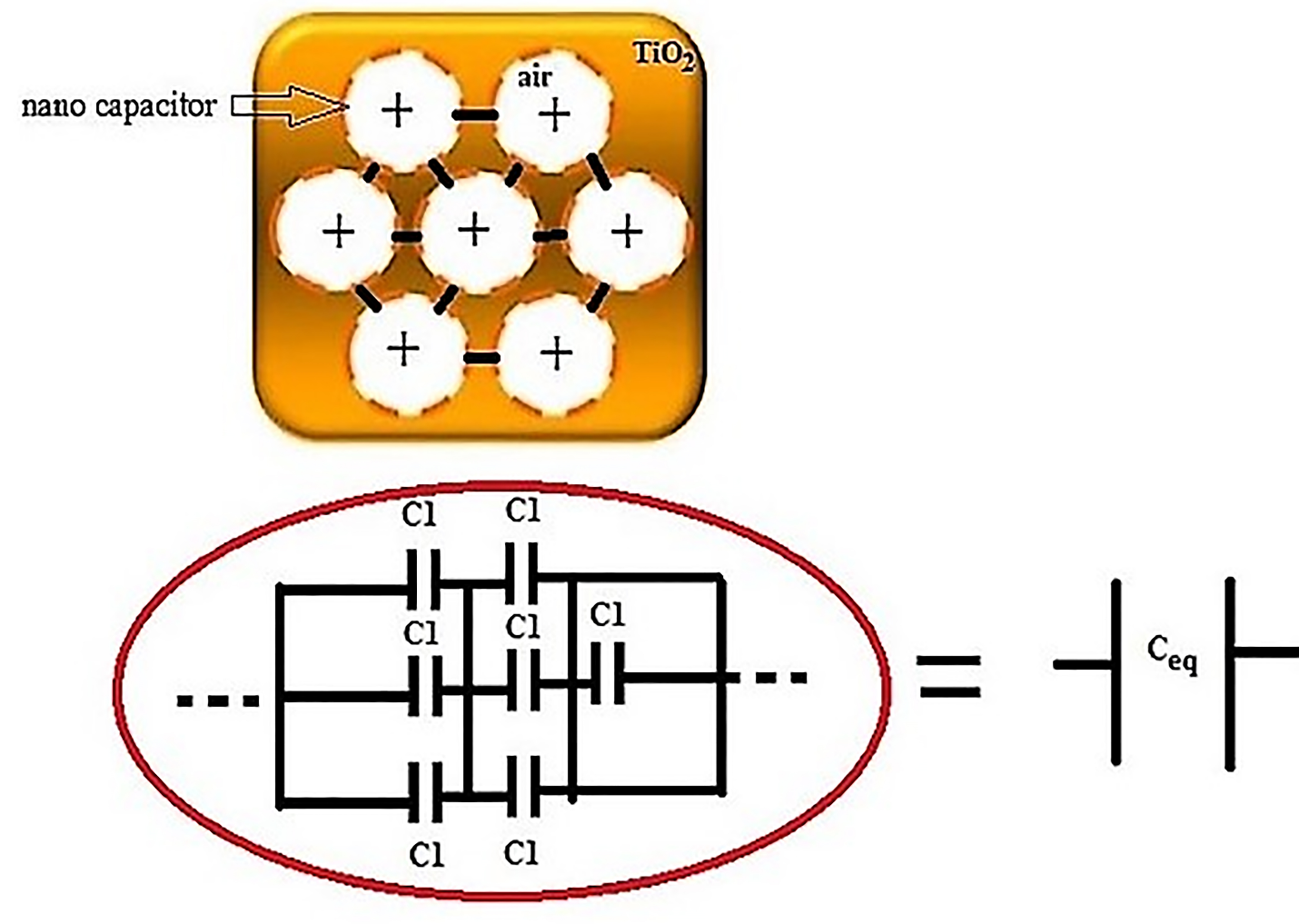


Figure S4. Schematic diagram of the nano capacitor formed within the mesoporous TiO2 structure

Table S1. Thickness of the sample layer determined by SEM. Sample designations as in Table 1.

|  |  |
| --- | --- |
| Thickness (µm) | Sample |
| 1.41 | 1 |
| 1.43 | 2 |
| 1.45 | 3 |
| 1.42 | 4 |