

Supporting Information:

**Facile Synthesis of Self-Assembled Spherical and mesoporous
Dandelion Capsules of ZnO: Efficient Carrier for DNA and Anti-
cancer Drugs**

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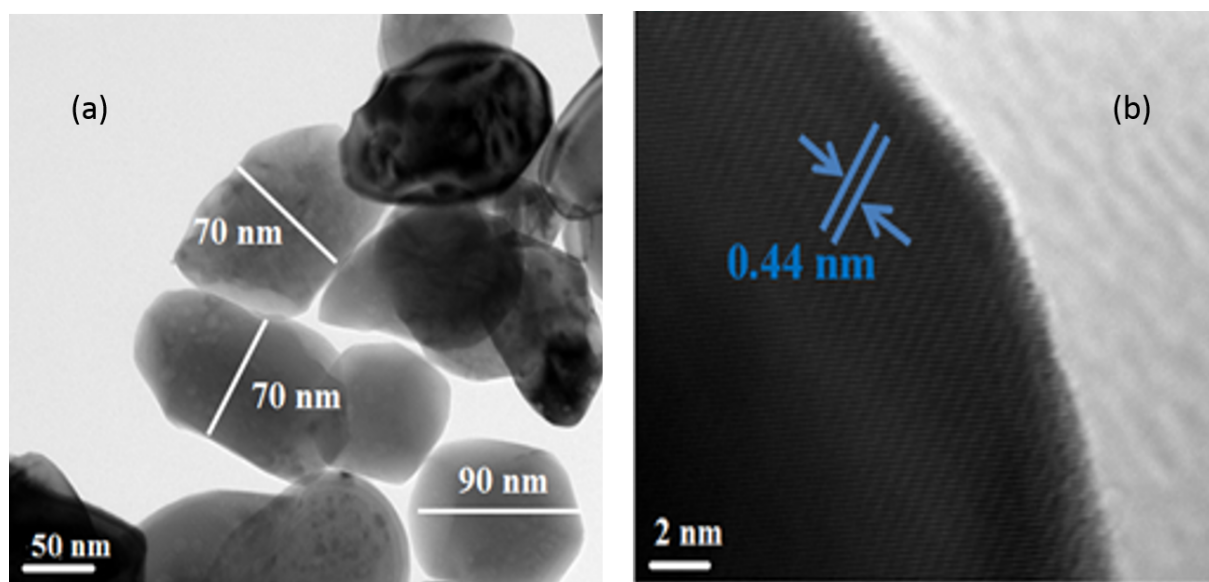


Figure S1. HRTEM image of ZnO polygonal NPs (a) and its SAED patterns (b)

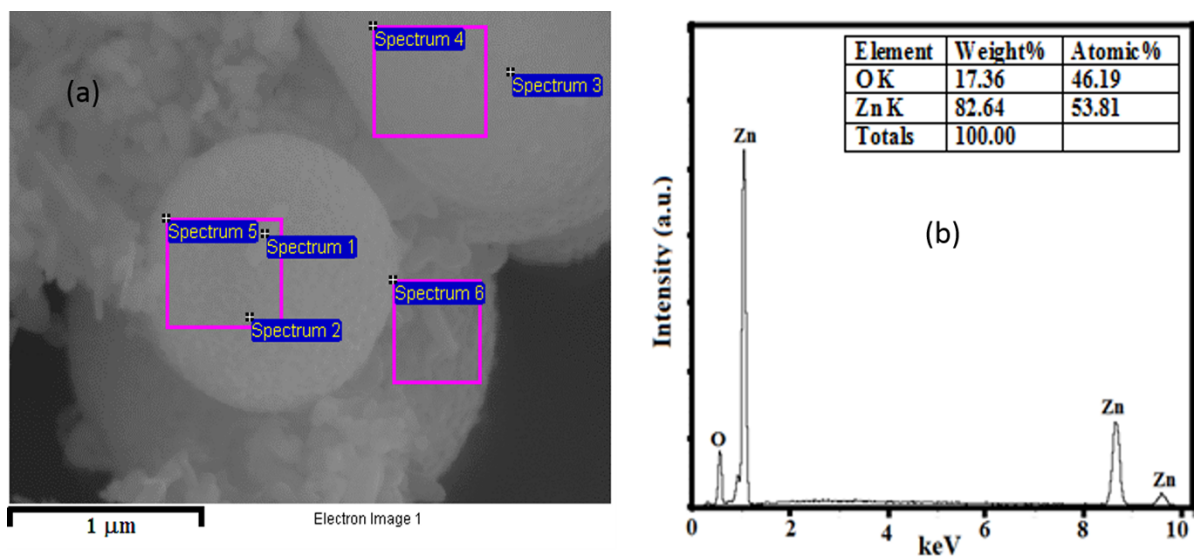


Figure S2. (a) FESEM Self assembled ZnO dandelions capsules at low magnification and (b) EDS spectra (free from any trace elements other than elemental zinc and oxygen)

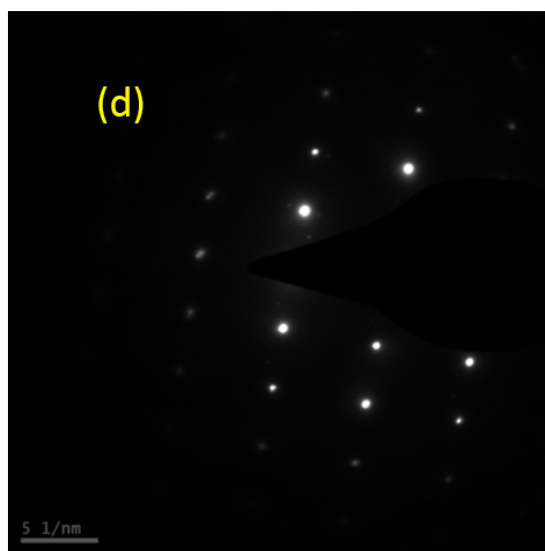
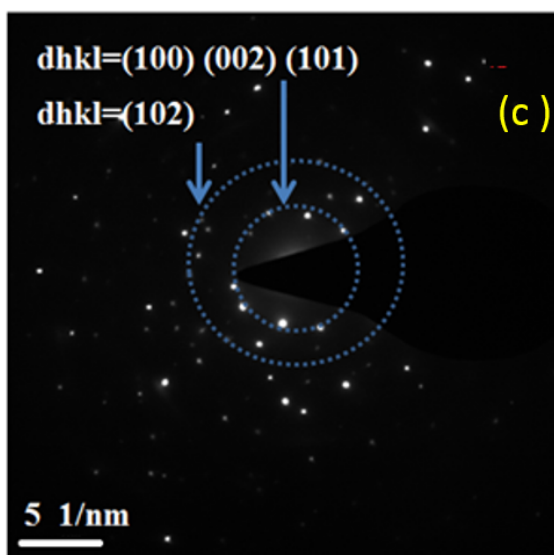
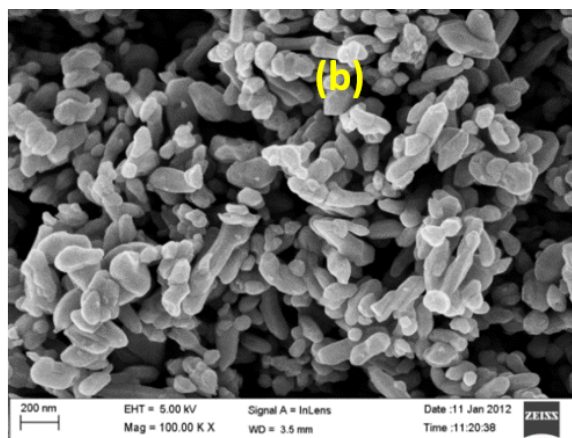
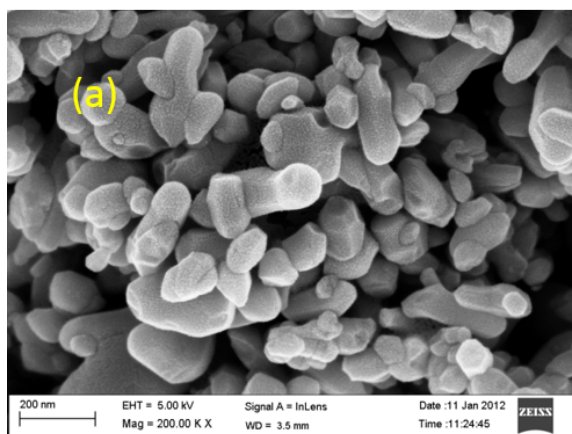


Figure S3. ZnO Nanoparticles synthesized at the Igepal CO-520 concentration of 0.25 ml (a) and 0.5 ml (b) and their diffraction patterns (c) and (d), respectively

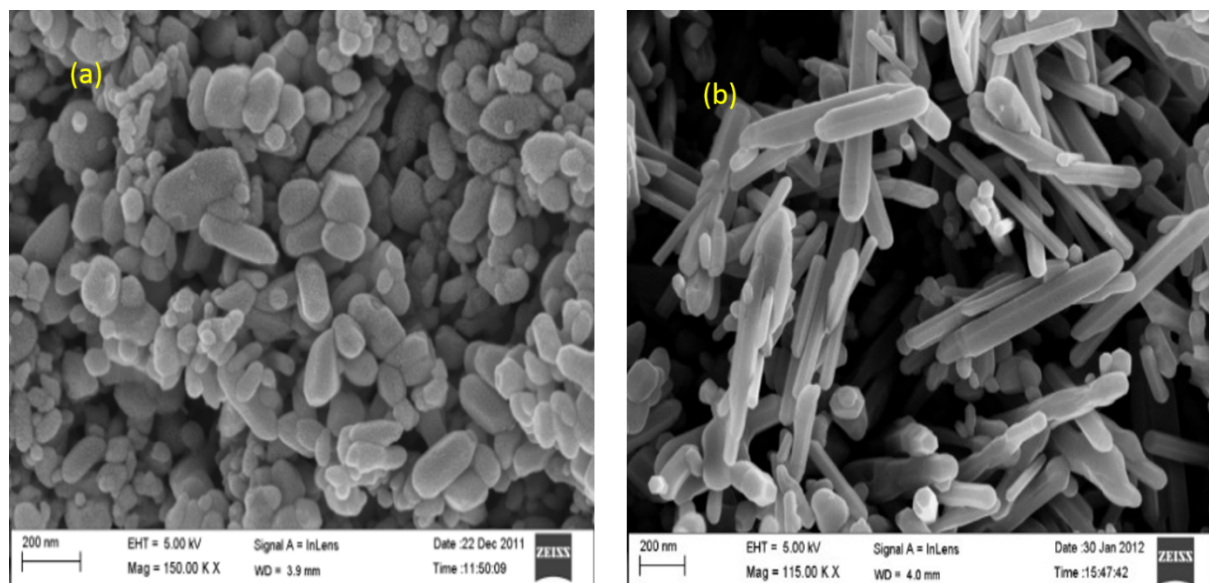


Figure S4. The XRD results compared with the ZnO nanoparticles (NPs) (a), and Nano rods (NRs) (b).

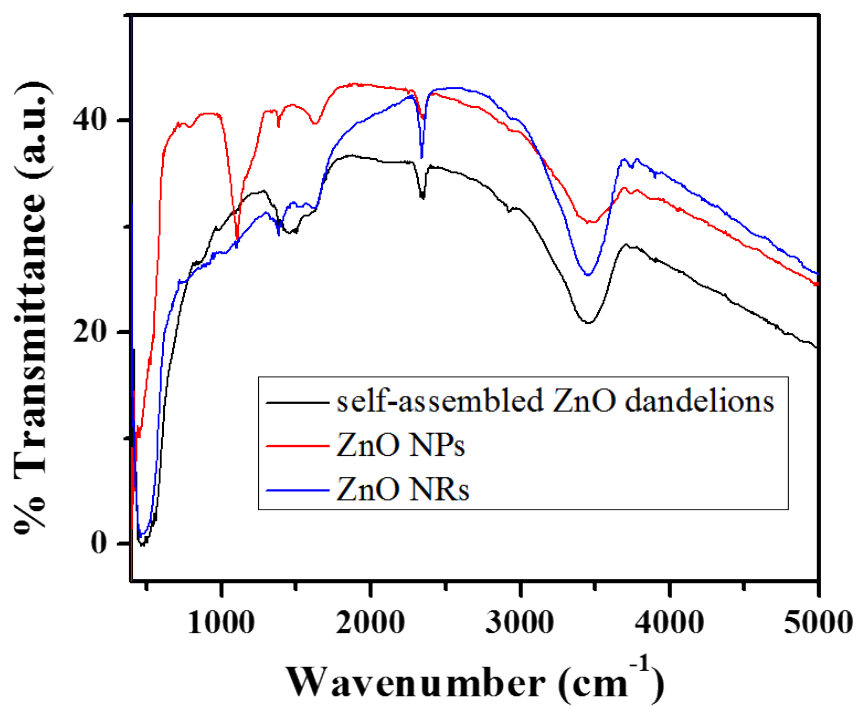


Figure S5 FTIR spectra for ZnO NPs, ZnO NRs and self-assembled ZnO dandelions

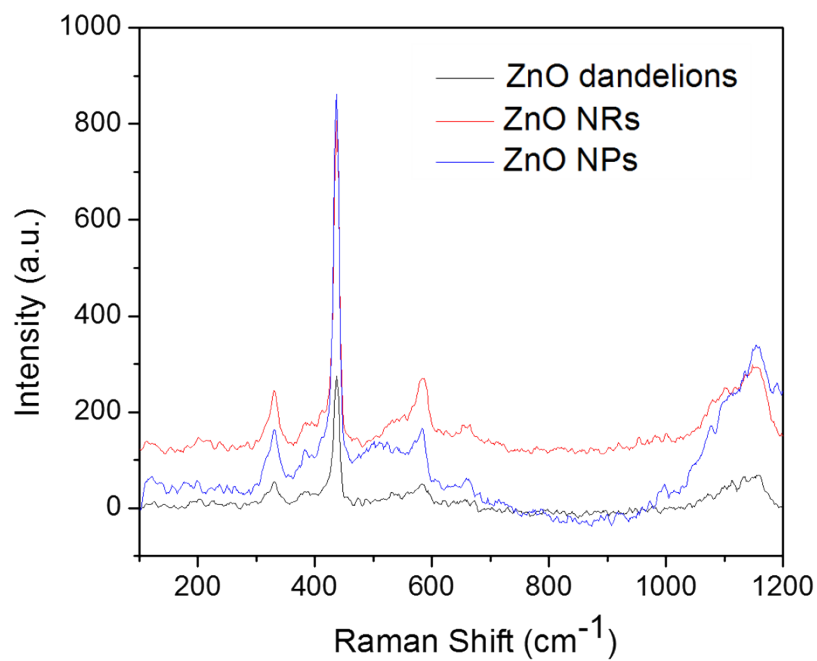


Figure S6 Raman spectra for ZnO NPs, ZnO NRs and self-assembled ZnO *dandelions*.

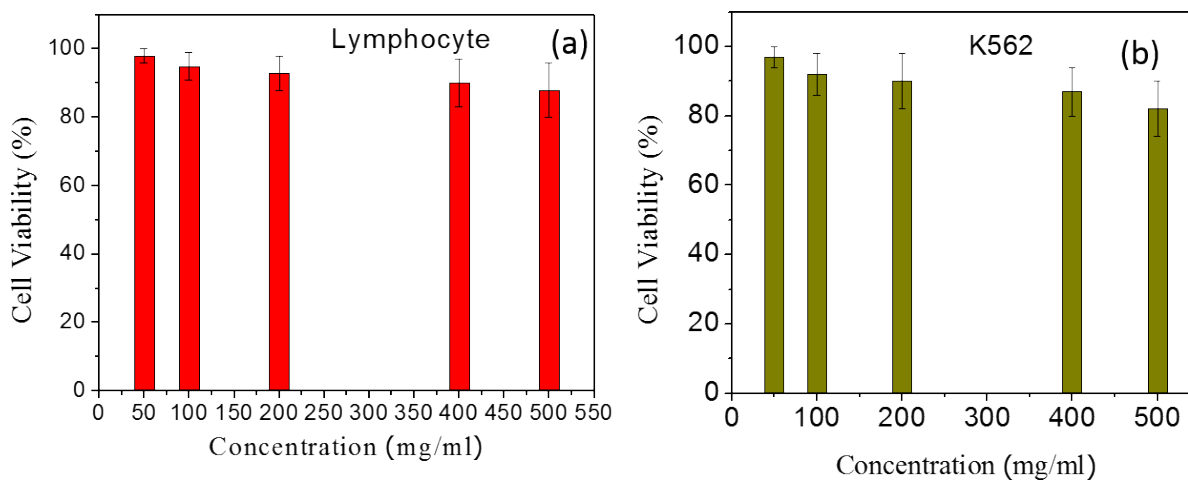


Figure S7. Cell viability of dandelions with (a) Lymphocyte cells and with (b) K562 (cancer cells)

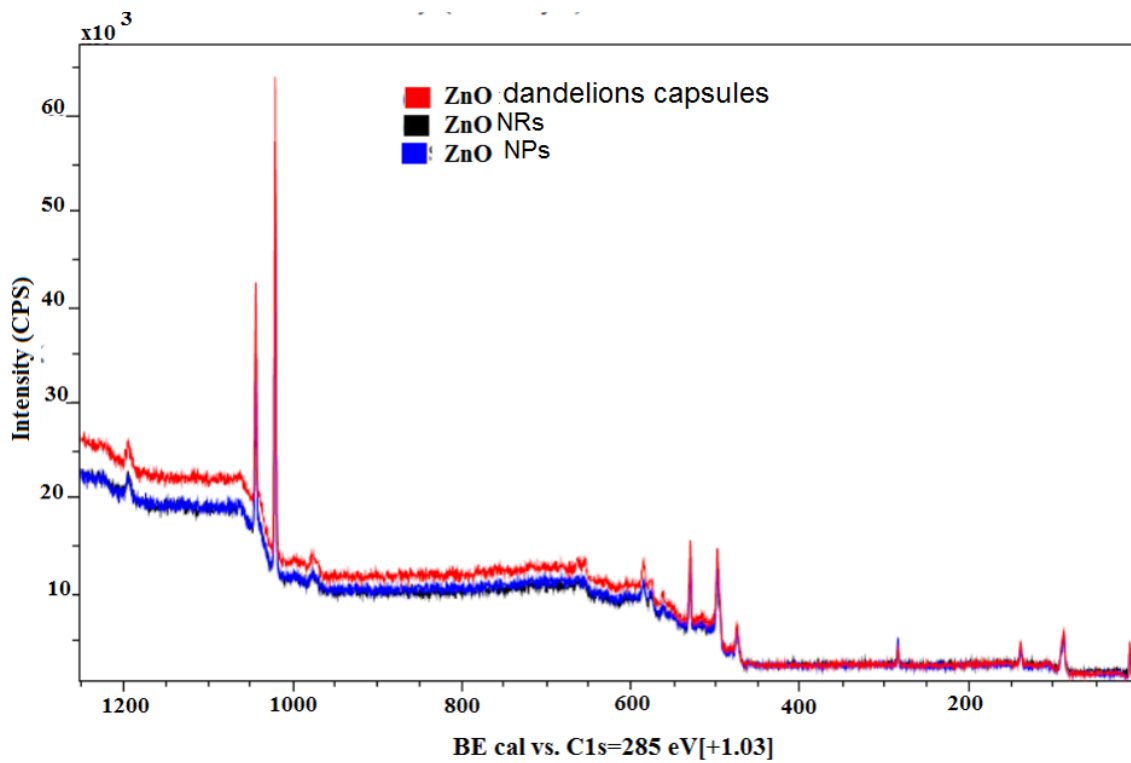


Figure S8(a) XPS for self-assembled ZnO dandelions, ZnO NRs and ZnO NPs

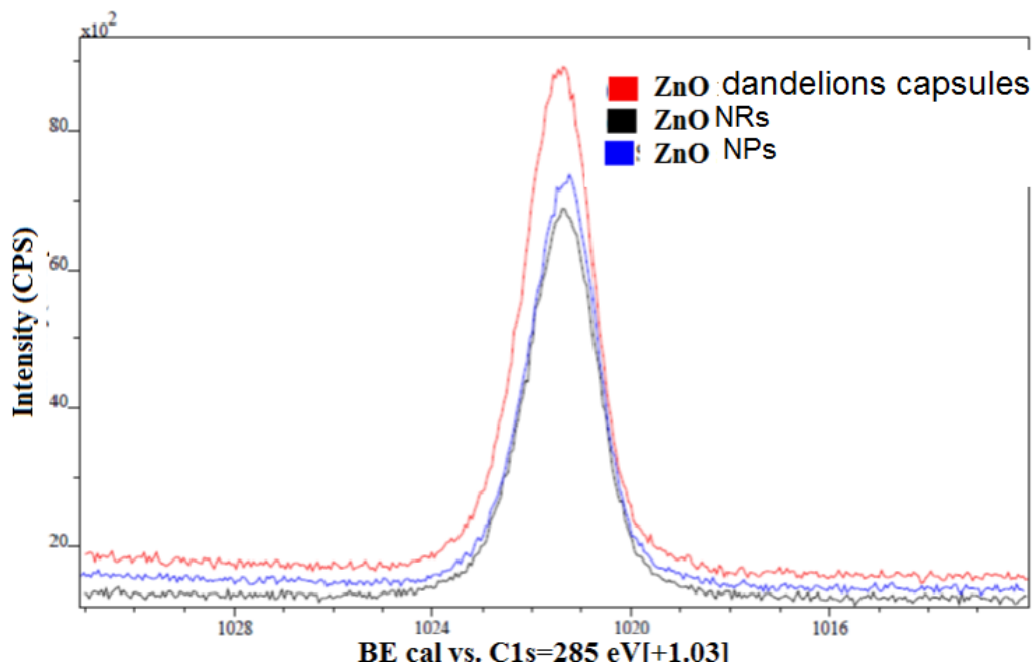


Figure S8(b) Zn 2p_{3/2} XPS spectra for self-assembled ZnO dandelions, ZnO NRs and ZnO NPs

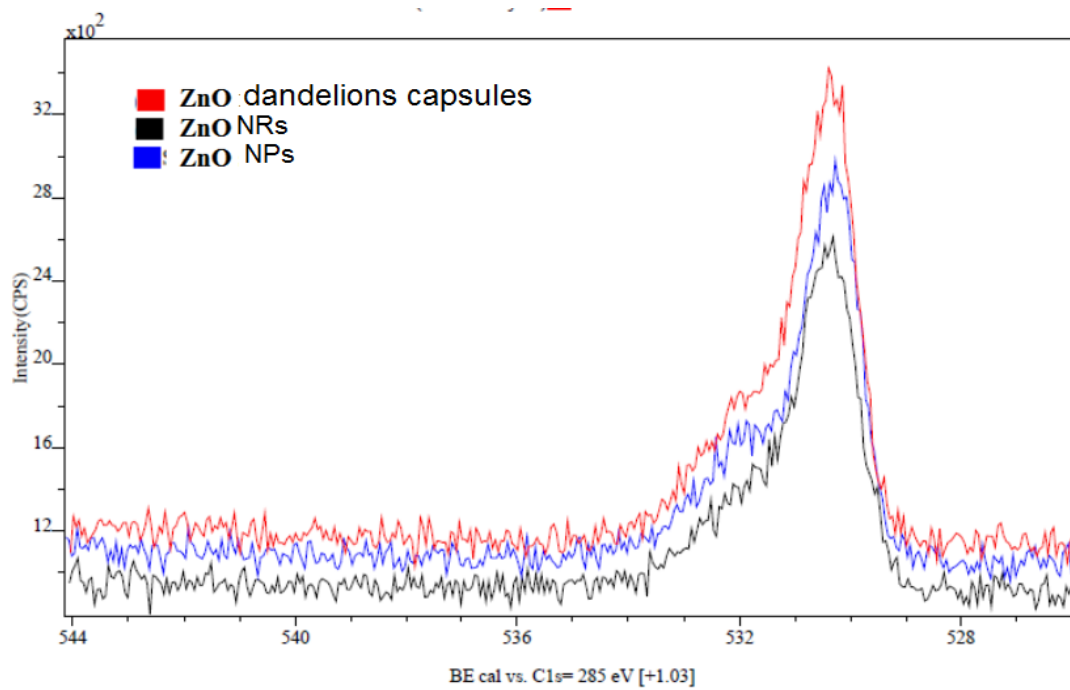


Figure S8(c) O 1s, XPS for self-assembled ZnO dandelions, ZnO NRs and ZnO NPs.

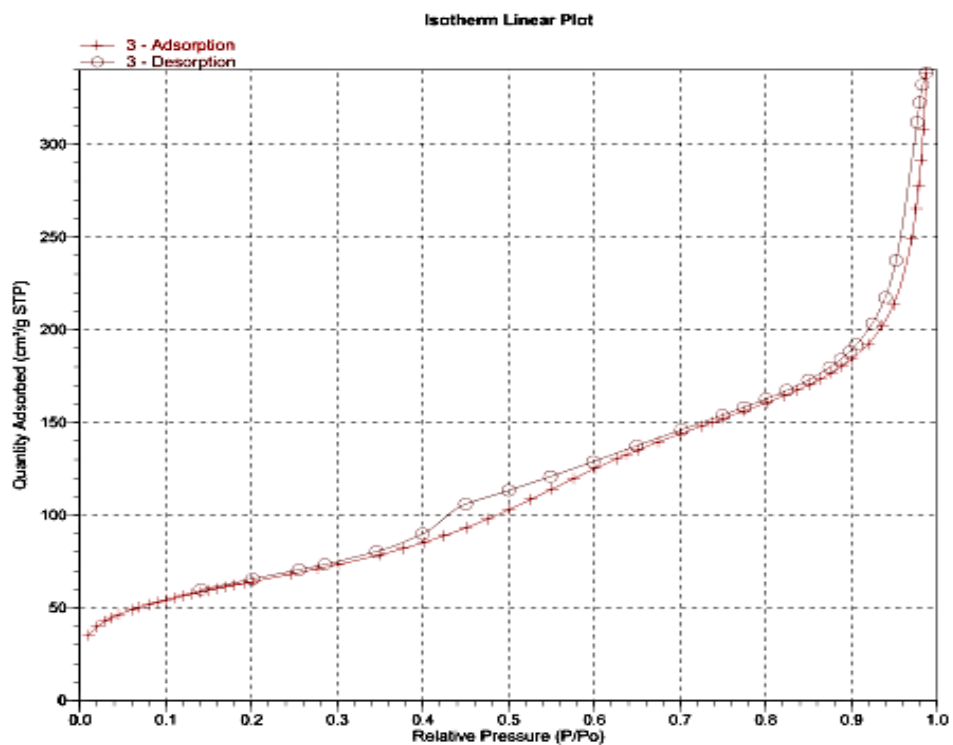


Figure S9(a) . N_2 Adsorption-desorption isotherm for ZnO *dandelions*

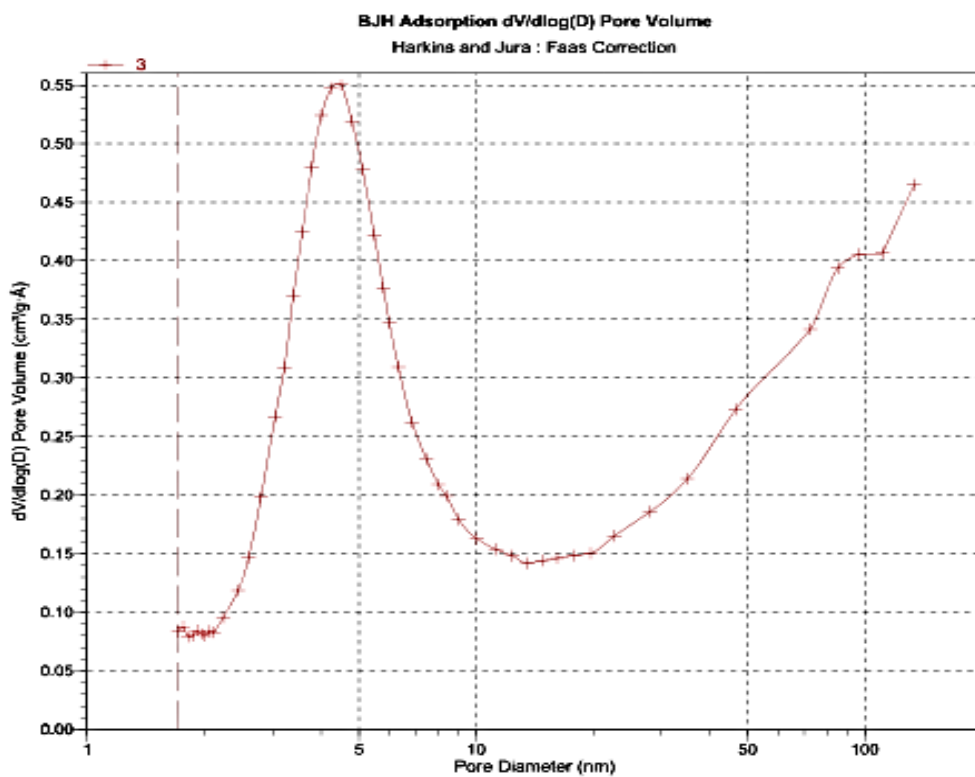


Figure S9(b). Pore size distribution for ZnO *dandelions* calculated from BET analysis