



## Support Information for

# Sustainable Cellulose Nanofibers-Mediated Synthesis of Uniform Spinel Zn-ferrites Nanocorals for High Performances in Supercapacitors

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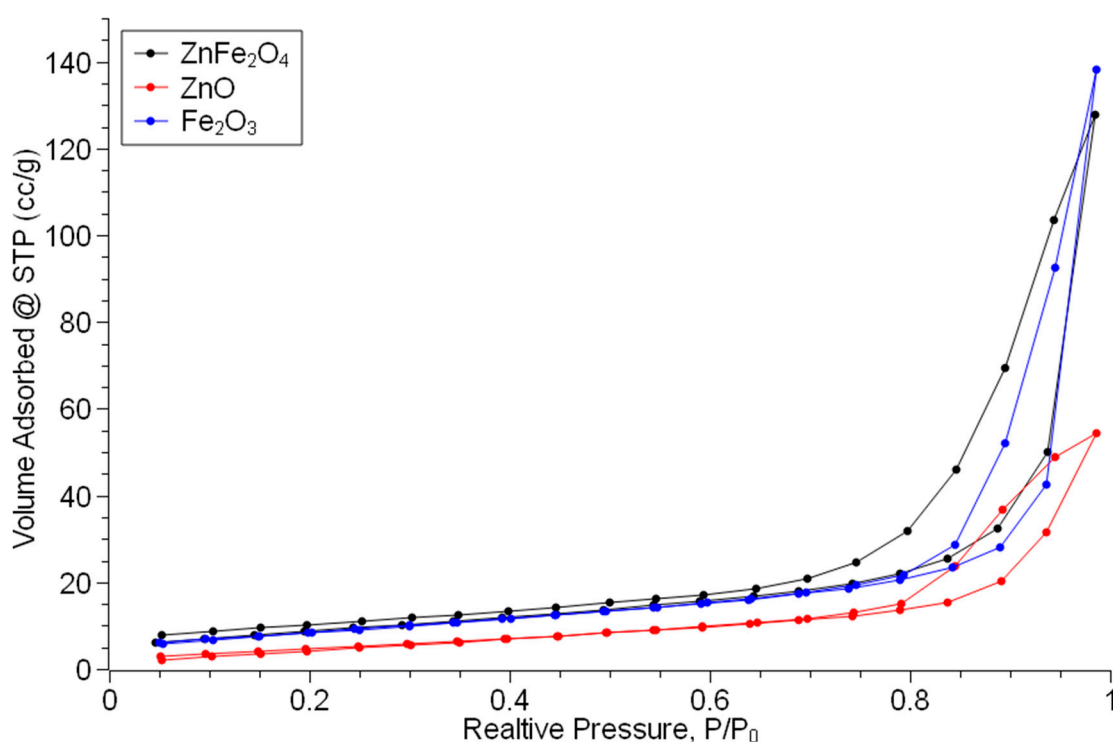
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**Table S1.** Textural properties measured by N<sub>2</sub>-physisorption for the Zn-ferrite spinel, Fe<sub>2</sub>O<sub>3</sub> and ZnO samples.

Sample	Specific Surface Area (m <sup>2</sup> /g)	Total Pore Volume (cc/g)	Average Pore Diameter (nm)
Zn-ferrite spinel	33	0.19	24
Fe <sub>2</sub> O <sub>3</sub>	31	0.21	27
ZnO	20	0.08	17



**Figure S1.** N<sub>2</sub> adsorption and desorption for Zn-ferrite (ZnFe<sub>2</sub>O<sub>4</sub>), Fe<sub>2</sub>O<sub>3</sub>, and ZnO nanocorals.

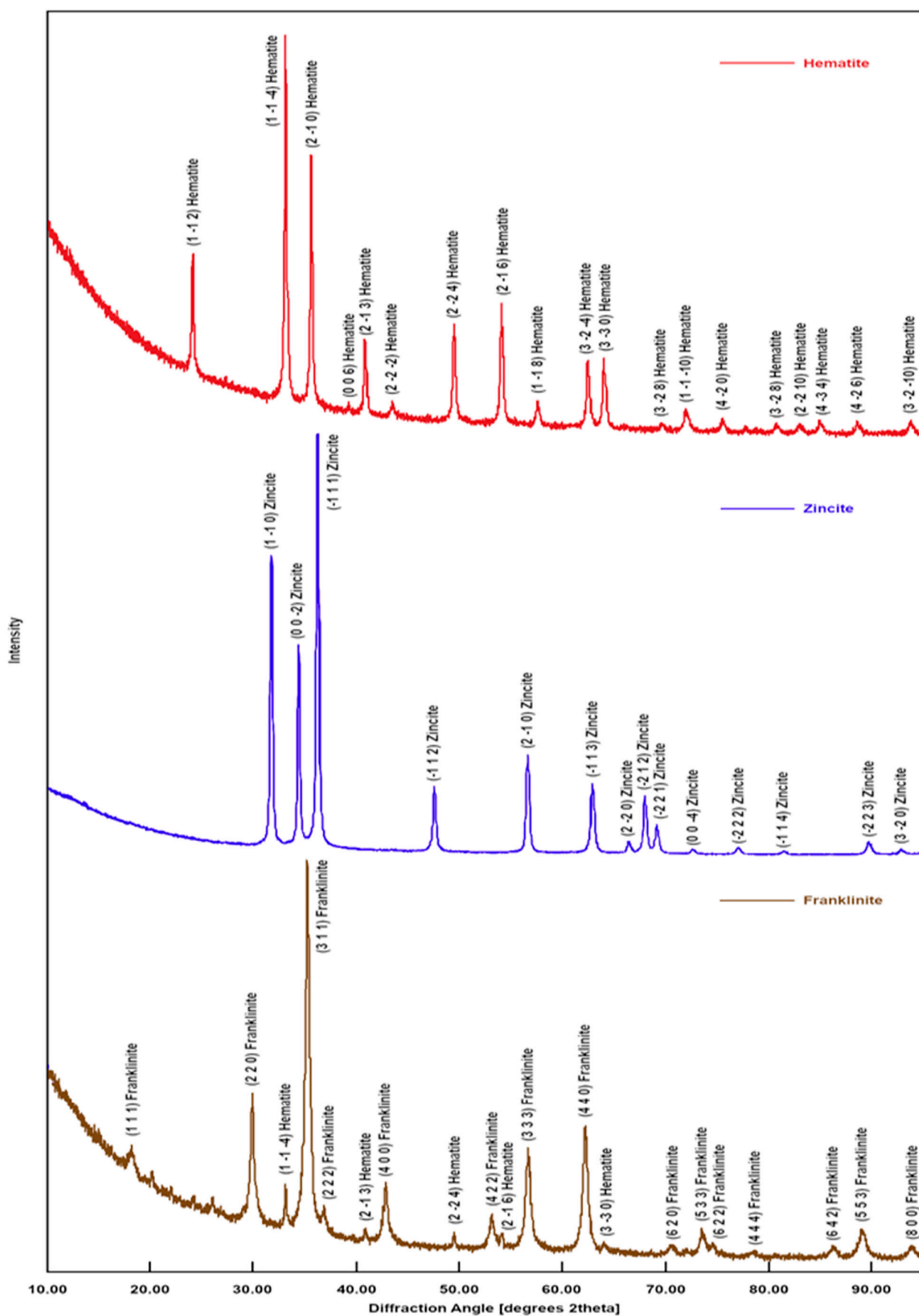


Figure S2. XRD and main diffraction peaks of Zn-ferrite, ZnO, and Fe<sub>2</sub>O<sub>3</sub> samples.

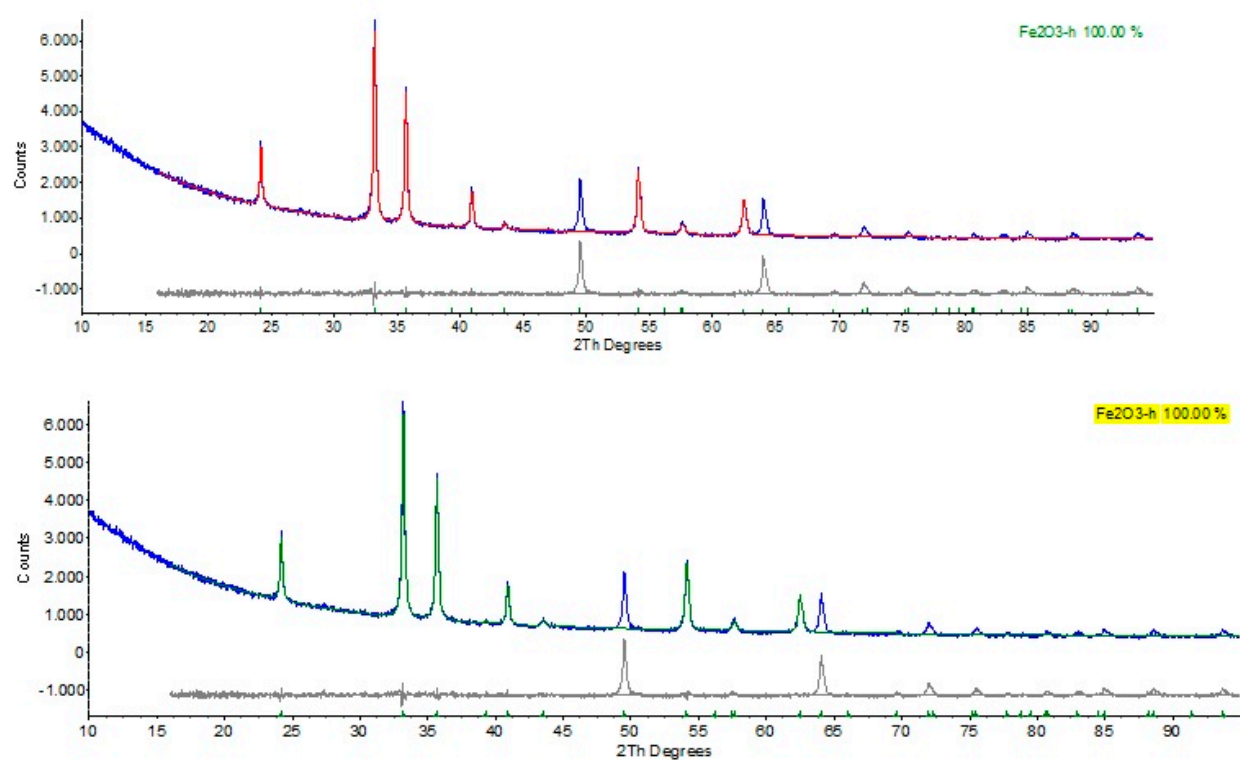


Figure S3. Rietveld refinement results for the Fe<sub>2</sub>O<sub>3</sub> sample.

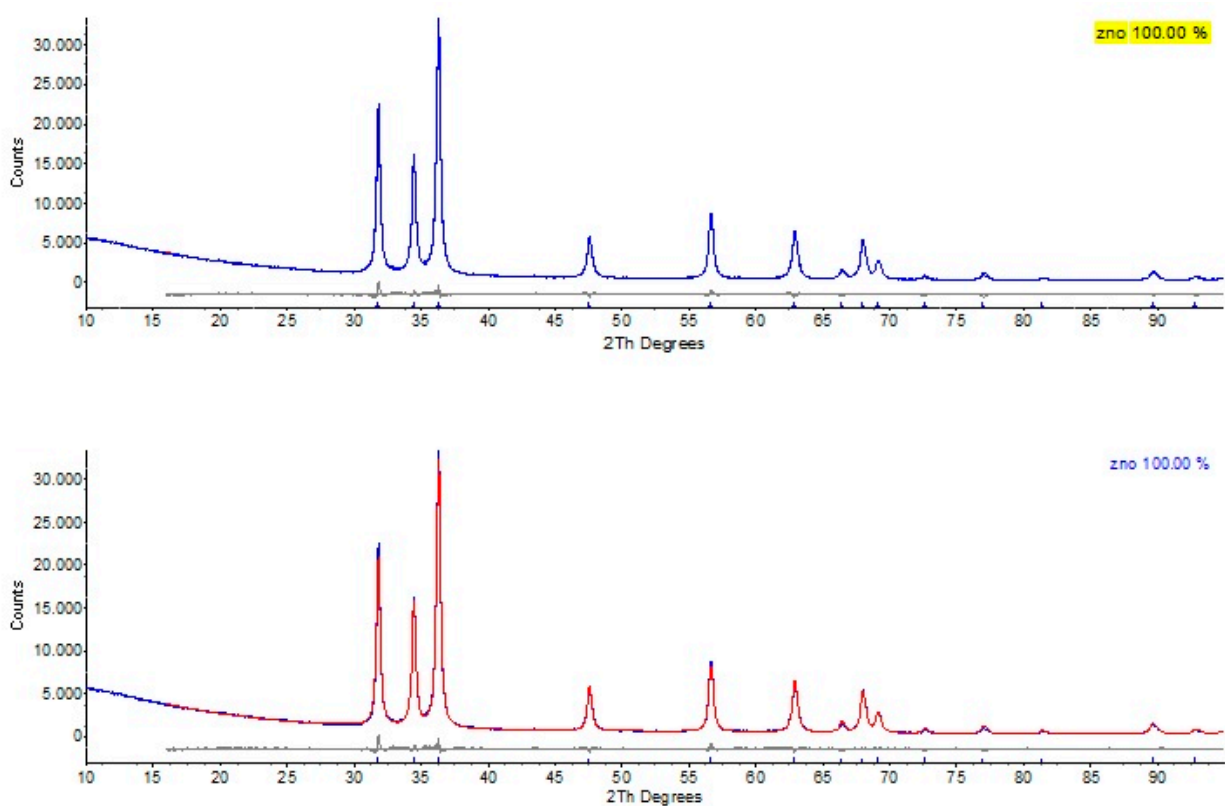
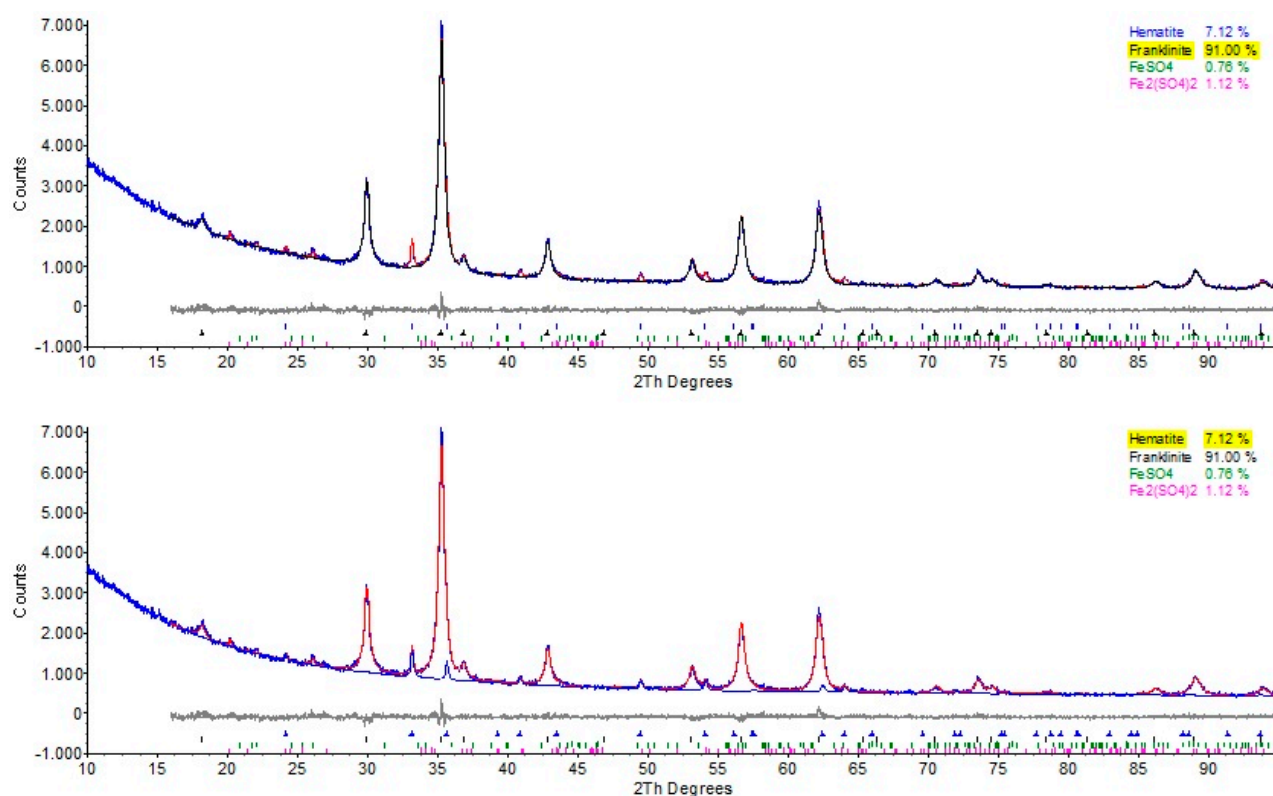


Figure S4. Rietveld refinement results for the ZnO sample.



**Figure S5.** Rietveld refinement results for the Franklinite sample.

**Table S2.** Lattice parameters and mean crystallite sizes after Rietveld refinement for franklinite, zincite and hematite crystalline phases.

Phase	Mean Crystallite Sizes (nm)	Refined Lattice Parameters (Angstrom)	Literature Lattice Parameters (Angstrom)
$\alpha$ -hematite (R3ch)	45.3	a=5.035; c=13.052	a=5.032; c=13.764 [49]
Zincite (P63mc)	26.3	a=3.250; c=5.207	a=3.252; c=5.212 [50]
Zn-ferrite (Fd3m)	52.8	a = 8.442	a=8.444 [51]

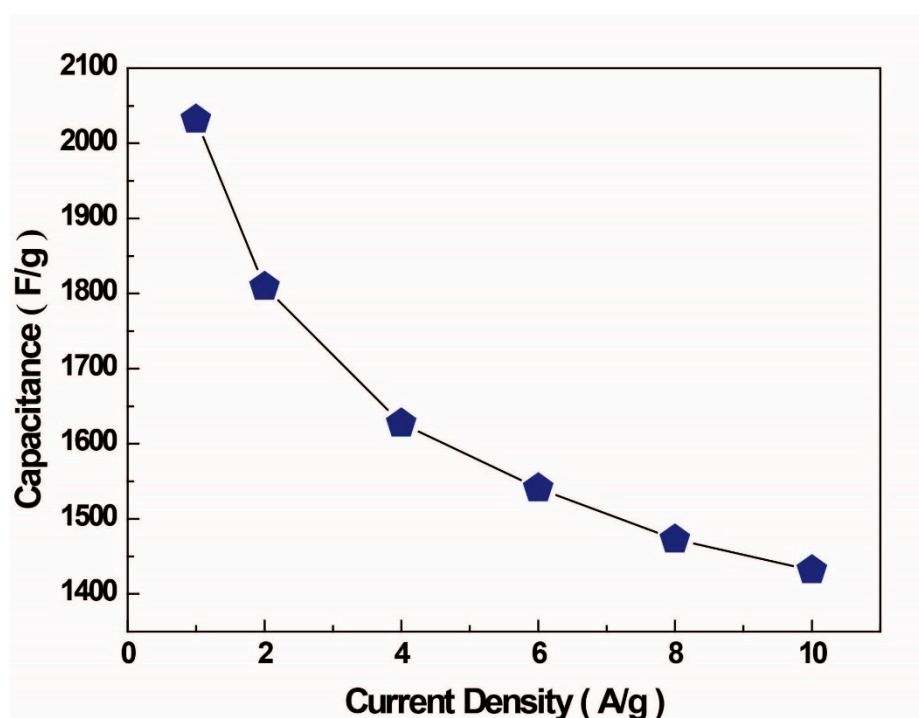


Figure S6. Capacitance vs. current density for the Zn-ferrite nanocorals.