Supplementary materials

The Fabrication of Lithium Niobate Nanostructures by Solvothermal Method for Photocatalysis Applications: A Comparative Study of the Effects of Solvents on Nanoparticle Properties

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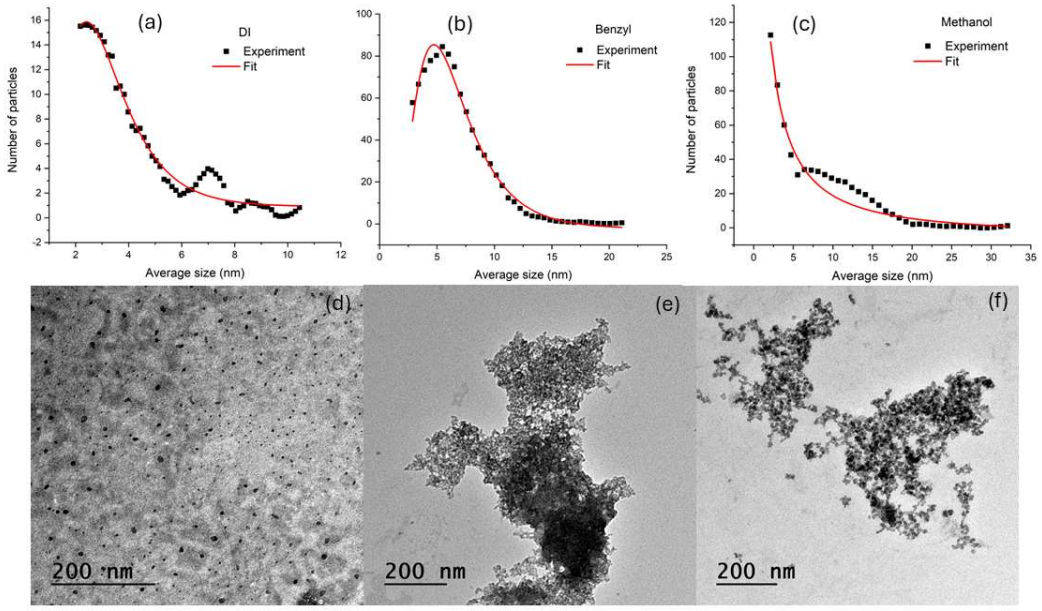


Figure S1. (a-c) statistical size distribution of LN fabricated using the three solvents DI, benzyl, and methanol, The data extracted from the TEM images (d-f) are fitted with a Lognormal function where the average size of particles μ=2.95,5.97, and 4.65 nm and the standard deviation σ=0.42, 0.48, and 2.12 nm for DI, benzyl, and methanol, respectively.

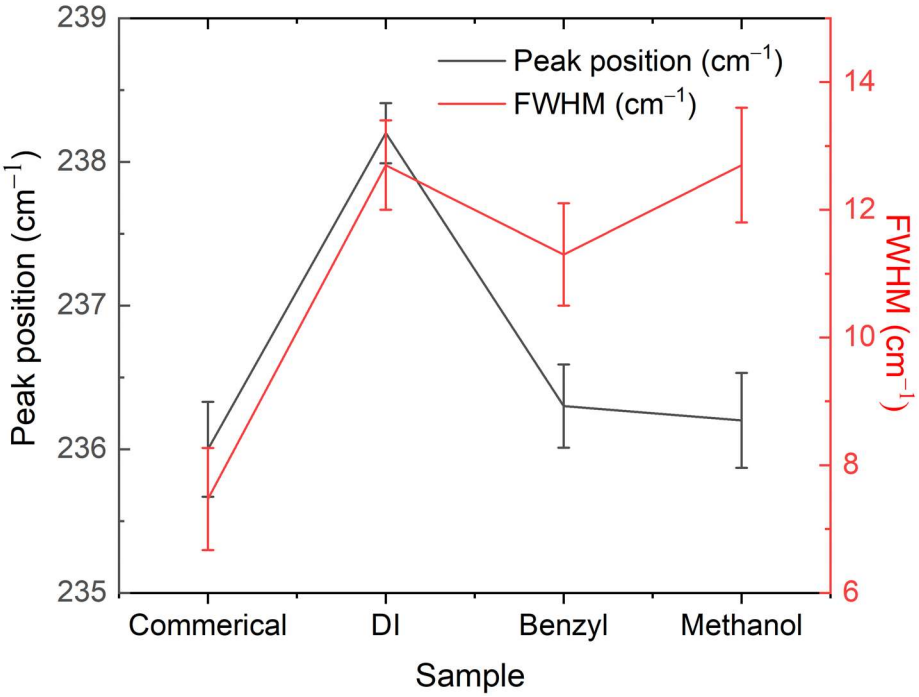


Figure S2. Raman shift and FWHM of Raman peak located at 236 cm^{-1} versus the samples.

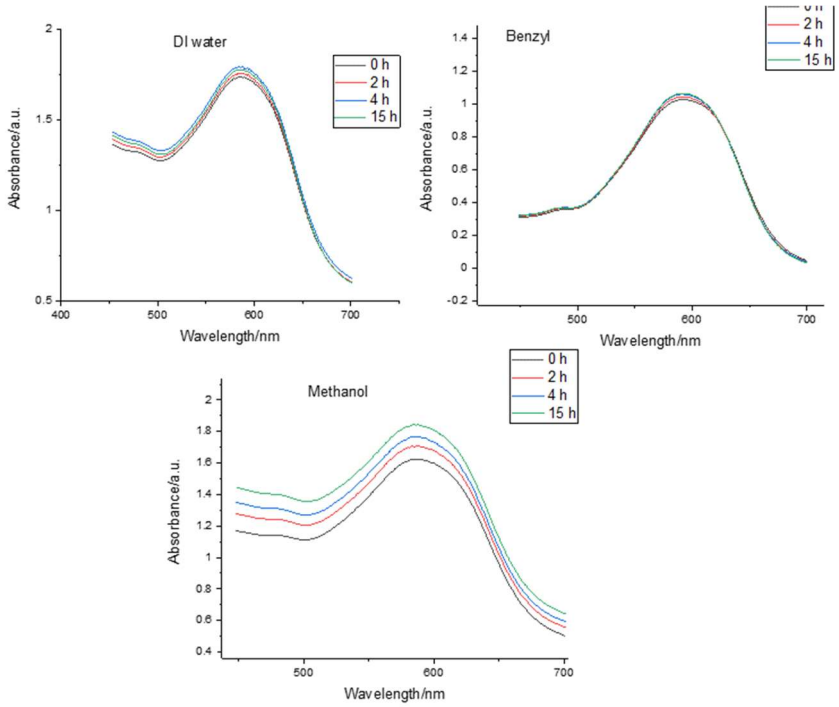


Figure S3. Absorbance spectra of reactive black dye in dark condition using the three solvents DI, benzyl, and methanol for 0, 2, 4, and 15 h.

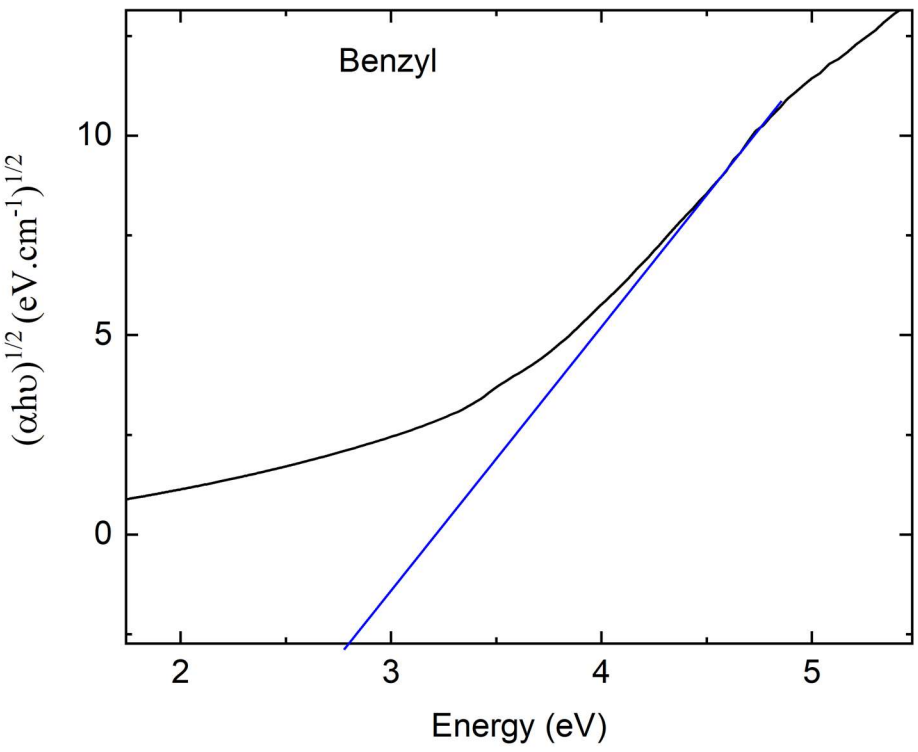


Figure S4. Tauc plot for benzyl sample using n=2 as an indirect band gap, E_g=2.8 eV.