## **Electronic Supplementary Information (ESI)**

## Highly Stable Electrical Manipulation of Reflective Colors in Colloidal Crystals of Sulfate Iron Oxide Particles in Organic Media

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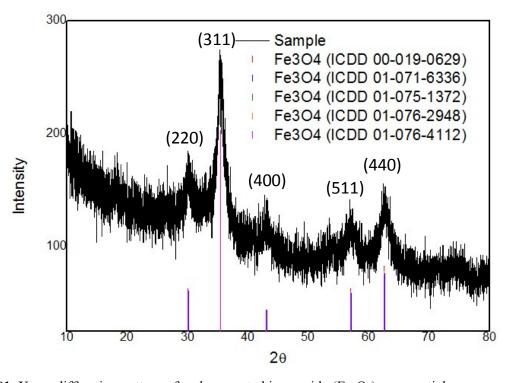
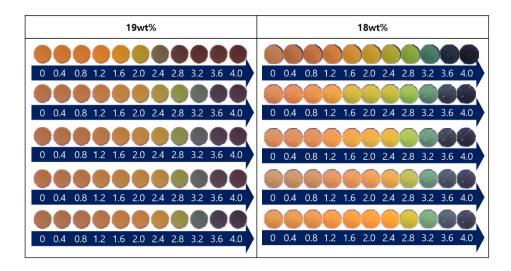
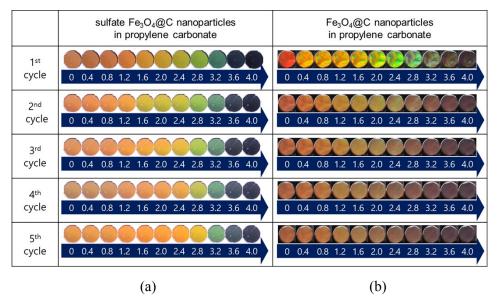


Figure S1. X-ray diffraction pattern of carbon-coated iron oxide (Fe<sub>3</sub>O<sub>4</sub>) nanoparticles.



**Figure S2.** Highly concentrated suspension of sulfate iron oxide nanoparticles in propylene carbonate (18, 19 wt%) show reflective colors with shorter wavelengths under same external electric field.



**Figure S3.** The photographic images of reflected color of colloidal crystals of (a) carbon-coated iron oxide nanoparticles and (b) sulfate carbon-coated iron oxide nanoparticles under electric field ranging from 0 to 4V.