Electronic Supplementary Material (ESI) for RSC Advances.

Enhanced response of titanium doped iron(II) oxalate under electric field

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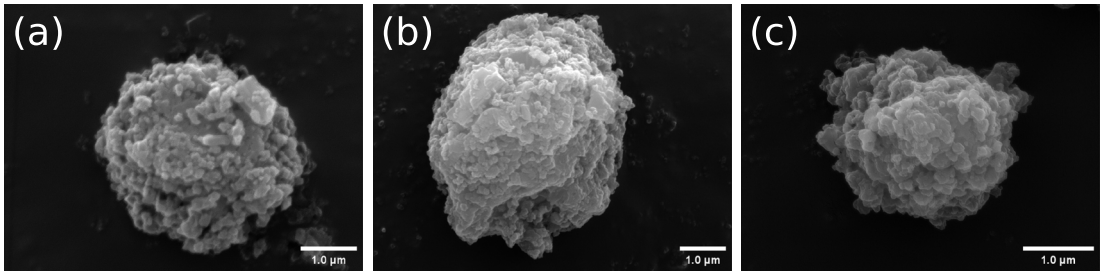

Fig S1: The SEM morphology of the particle dried at temperatures, **(a)** 50 ℃, **(b)** 60 ℃, and **(c)** 80 ℃, respectively.

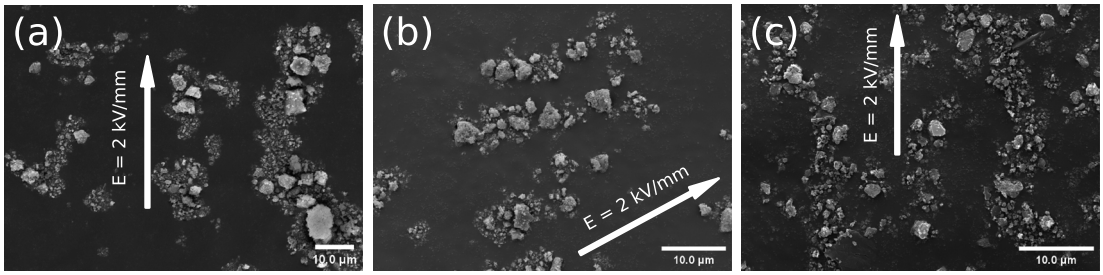

Fig S2: The SEM observation of the chain-like structure in the ER fluids with 2 wt %, mixing the particles dried at temperatures, **(a)** 50 ℃, **(b)** 60 ℃, and **(c)** 70 ℃, respectively, in the N-butyl alcohol, under 2 kV/mm.

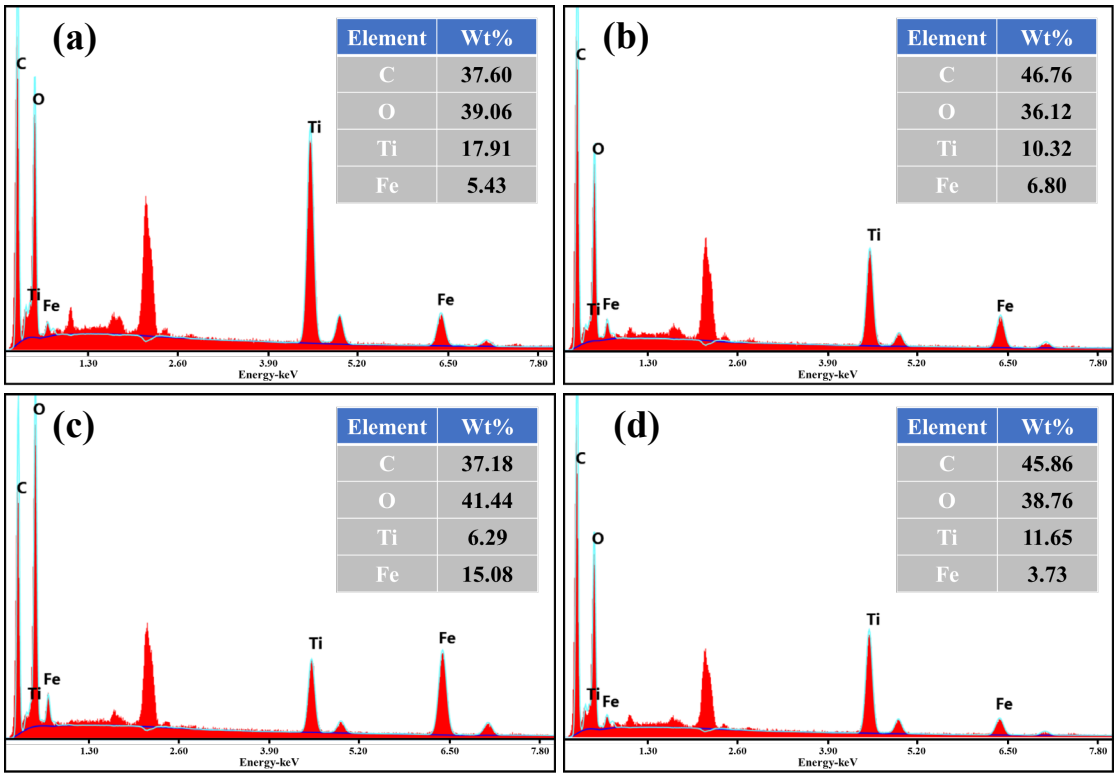

Fig S3: The EDS spectra of the particles dried at temperatures, **(a)** 50 ℃, **(b)** 60 ℃, **(c)** 70 ℃, and **(d)** 80 ℃, respectively.

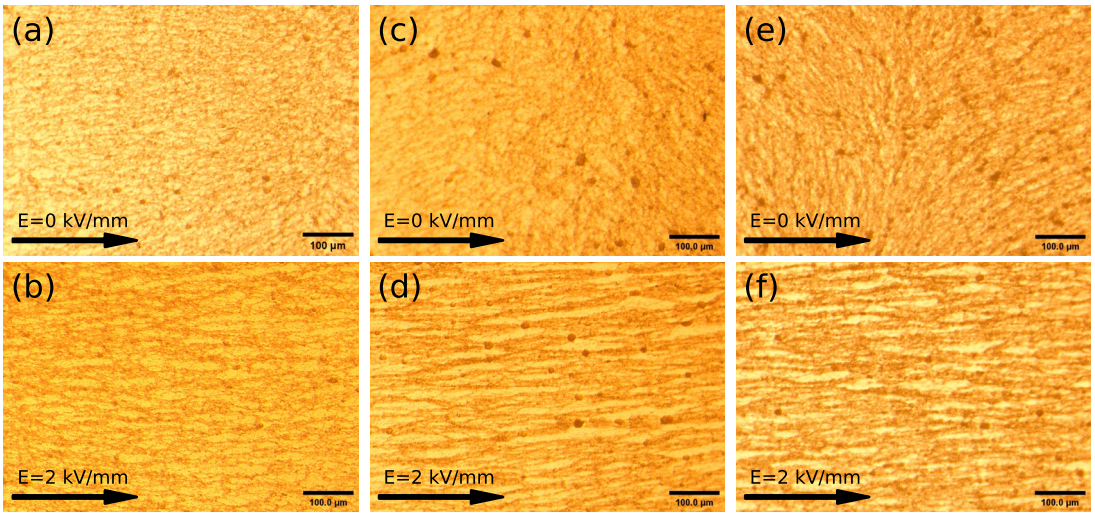

Fig S4: The optical image of the ER fluids with 5 wt %, consisting the particles dried at temperatures, **(a)(b)** 60 ℃, **(c)(d)** 70 ℃, and **(e)(f)** 80 ℃, respectively, in silicone oil, under defecting the external electric field **(a) (c) (e)**and existing the field **(b) (d) (f)** with 2 kV/mm.

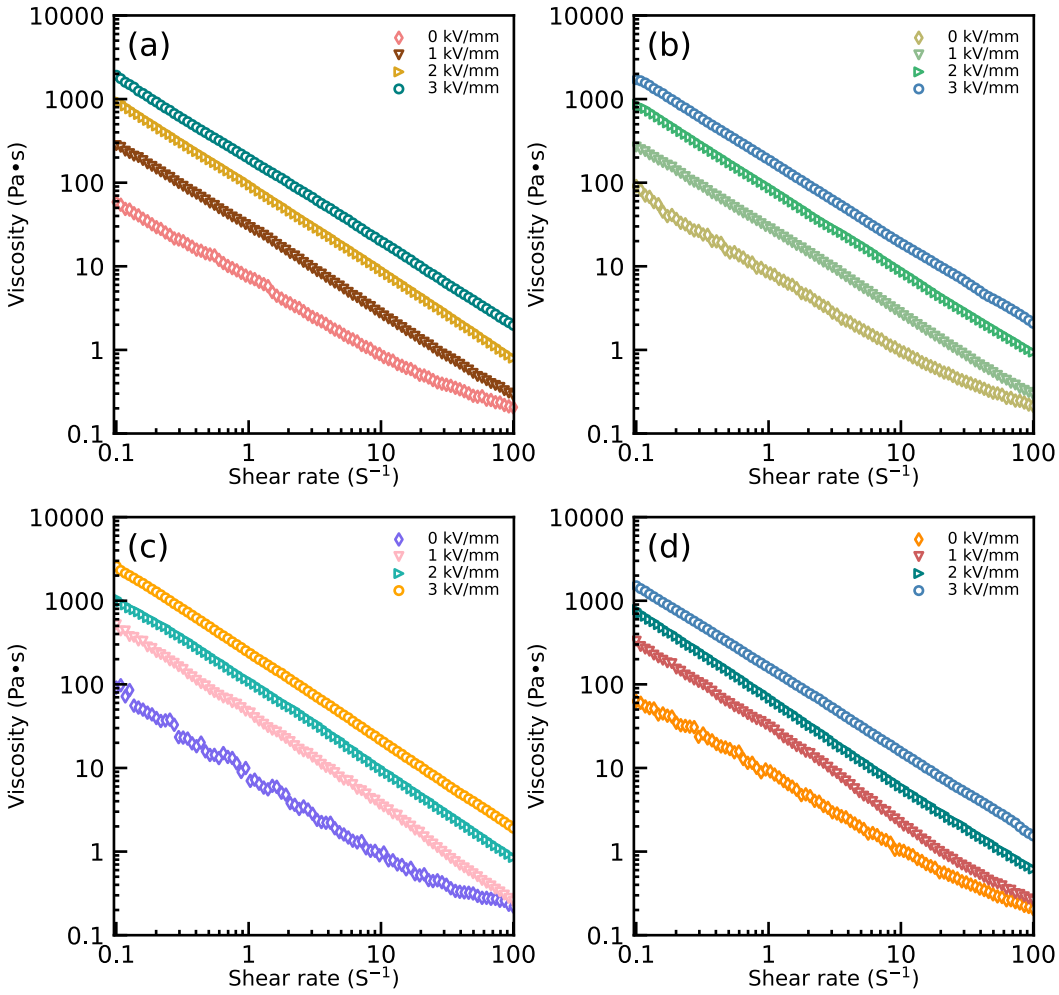

Fig S5: Dependences of the viscosity on the shear rate for the ER fluids with 20 wt %, mixing the different particles dried at temperatures, **(a)** 50 ℃, **(b)** 60 ℃, **(c)** 70℃, and **(d)** 80 ℃, respectively, in silicone oil, under the various electric fields (0 – 3 kV/mm).