

Supplementary Materials

Ultrasound-Assisted Synthesis of Luminescent Micro- and Nanocrystalline Eu-based MOFs as Luminescent Probes for Heavy Metal Ions

Stefaniia S. Kolesnik¹, Viktor G. Nosov¹, Ilya E. Kolesnikov¹, Evgenia M. Khairullina¹, Ilya I. Tumkin¹, Aleksandra A. Vidyakina¹, Alevtina A. Sysoeva², Mikhail N. Ryazantsev^{1,3}, Maxim S. Panov¹, Vasiliy D. Khripur¹, Nikita A. Bogachev¹, Mikhail Yu. Skripkin¹, Andrey S. Mereshchenko^{1,2,*}

¹ Saint-Petersburg State University, 7/9 Universitetskaya emb., St. Petersburg 199034, Russia; staphylinus-caesareus@gmail.com (S.S.K.); nosoff.vitia2018@yandex.ru (V.G.N.); ilya.kolesnikov@spbu.ru (I.E.K.); iskint@mail.ru (E.M.K.); i.i.tumkin@spbu.ru (I.I.T.); vidyakina.aleksandra@mail.ru (A.A.V.); mikhaill.n.ryazantsev@gmail.com (M.N.R.); m.s.panov@spbu.ru (M.S.P.); v.khripur@spbu.ru (V.D.K.); allanfrack@yahoo.ru (N.A.B.); skripkin1965@yandex.ru (M.Y.U.S.); a.mereshchenko@spbu.ru (A.S.M)

² Sirius University of Science and Technology, 1 Olympic Ave, 354340, Sochi, Russia; sysoevaaa_04@mail.ru (A.A.S)

³ Saint Petersburg Academic University, ul. Khlopina 8/3, 194021, St. Petersburg, Russia

* Correspondence: a.mereshchenko@spbu.ru; Tel.: +7-951-677-5465

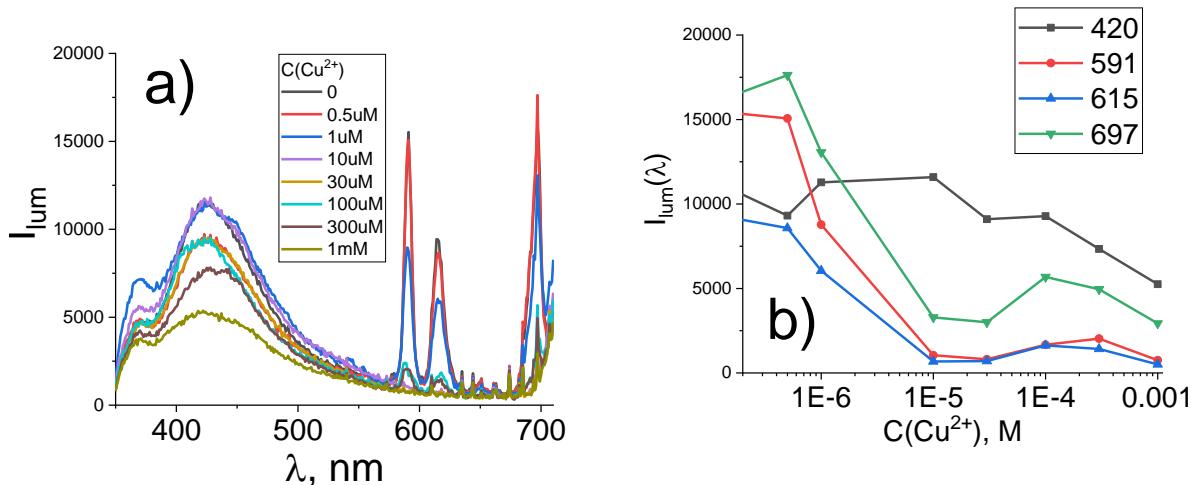


Figure S1. (a) Emission spectra of aqueous solution of nanocrystalline 3 in the absence and presence of various concentrations of Cu^{2+} upon 250-nm excitation; (b) Cu^{2+} concentration dependence of 420, 591, 615, and 697-nm emission intensities of 3.

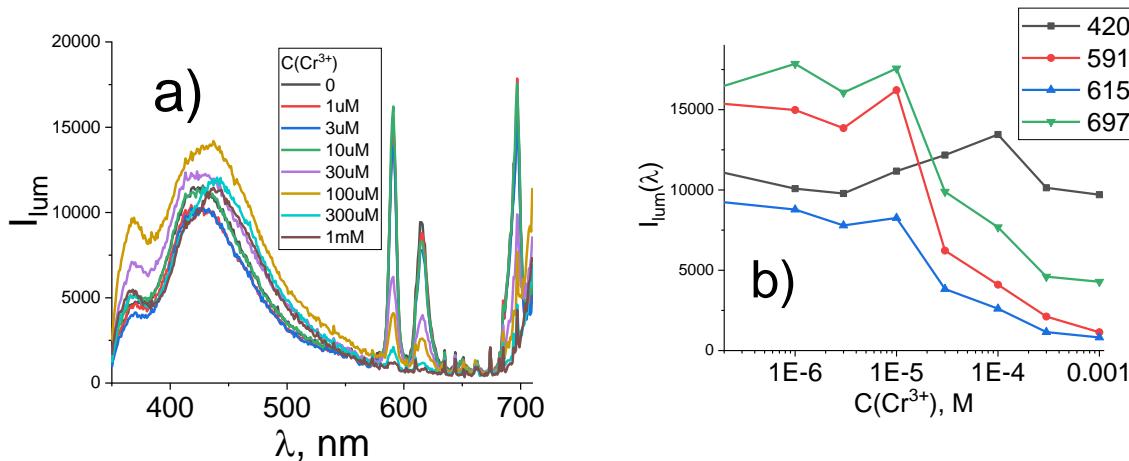


Figure S2. (a) Emission spectra of aqueous solution of nanocrystalline **3** in the absence and presence of various concentrations of Cr³⁺ upon 250-nm excitation; (b) Cr³⁺ concentration dependence of 420, 591, 615, and 697-nm emission intensities of **3**.

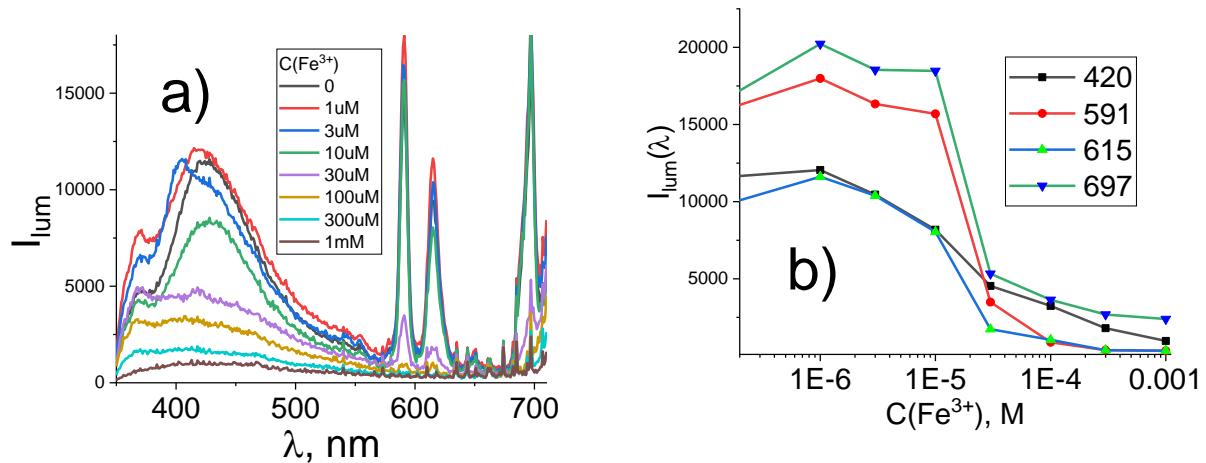


Figure S3. (a) Emission spectra of aqueous solution of nanocrystalline **3** in the absence and presence of various concentrations of Fe³⁺ upon 250-nm excitation; (b) Fe³⁺ concentration dependence of 420, 591, 615, and 697-nm emission intensities of **3**.