SUPPORTING INFORMATION

General synthesis of $LiLn(MO_4)_2:Eu^{3+}$ (Ln=La, Eu, Gd, Y; M=W, Mo) nanophosphors for near UV-type LEDs

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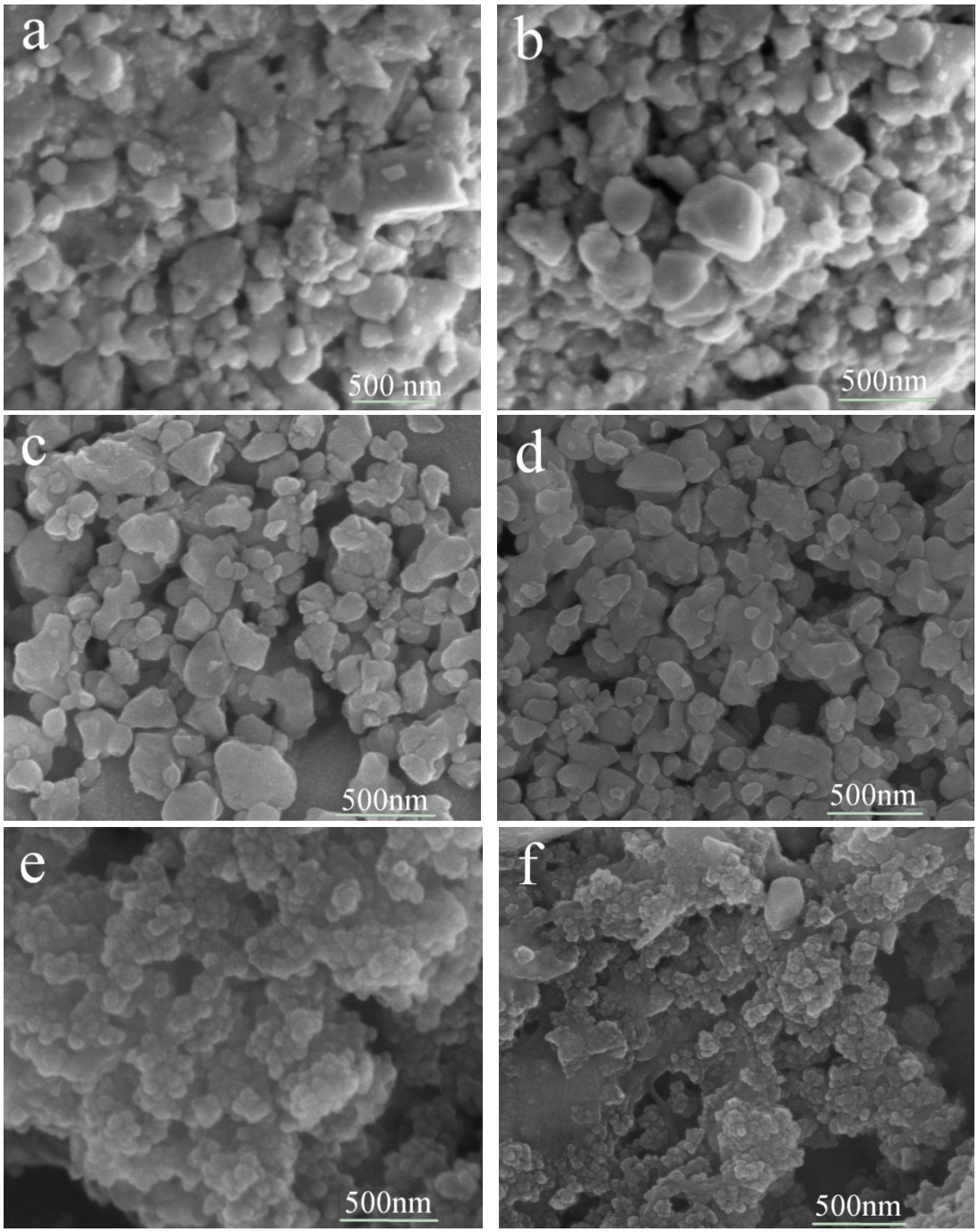

Fig. S1 SEM images of $LiLn(MoO_4)_2$ products: (a) $LiLa_{0.95}Eu_{0.05}(WO_4)_2$; (b) $LiLa_{0.95}Eu_{0.05}(MoO_4)_2$; (c) $LiEu(MoO_4)_2$; (d) $LiGd_{0.95}Eu_{0.05}(MoO_4)_2$; (e) $LiY_{0.95}Eu_{0.05}(MoO_4)_2$; (f) $LiY_{0.95}Eu_{0.05}(MoO_4)_2$.

Fig. S1 presents the SEM images of other $LiLn(MO_4)_2:Eu^{3+}$ samples. $LiLn(MO_4)_2:Eu^{3+}$ phosphors are very similar in morphology and are composed of the

pretty regular nanoparticles because of the same synthesis parameters, except for the difference of particle size. The difference of particle size of $LiLn(MO_4)_2:Eu^{3+}$ is related to the grinding of gel before being annealed, if grinding is very fully, the as-obtained sample is very small. However, no matter what the particle size is, the $LiLn(MO_4)_2:Eu^{3+}$ phosphors consist of pretty regular nanoparticles with size ranging from 20 to 200 nm.