

Plasmon Driven Nanocrystal Transformation by Aluminum Nano-Islands with an Alumina Layer

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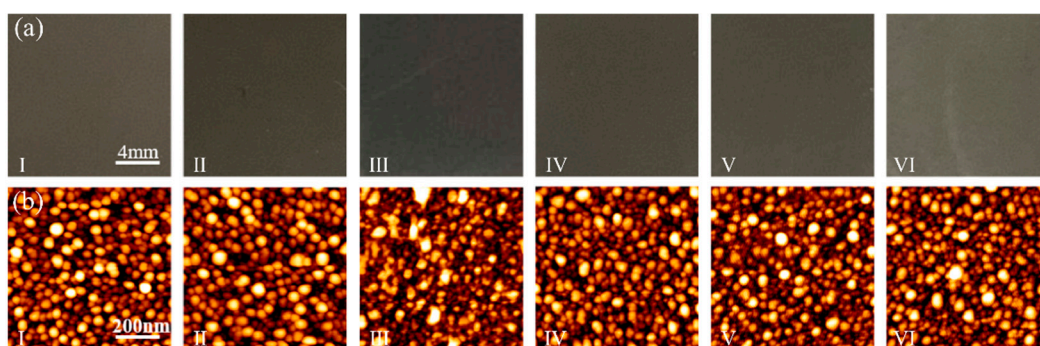


Figure S1. (a) Optical and (b) AFM images of the Al film without annealing (corresponding to I) and with annealing at 100 °C, 200 °C, 300 °C, 400 °C, 500 °C (corresponding to II-VI), respectively.

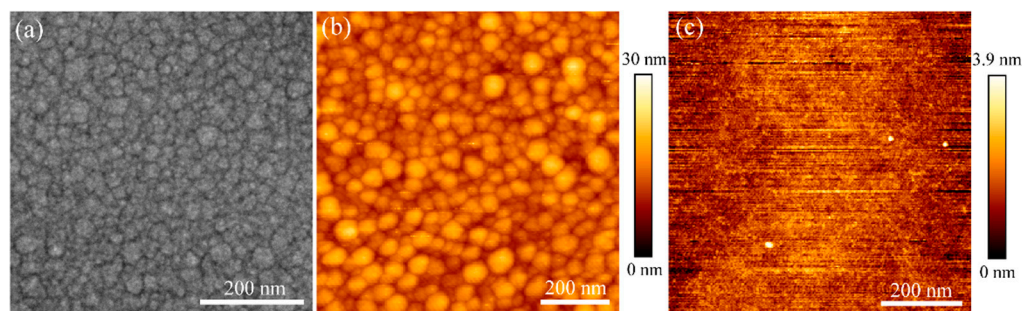


Figure S2. (a) SEM image and (b) AFM image of the Al/Al₂O₃ structure. (c) AFM image of 50 nm Al₂O₃ later.

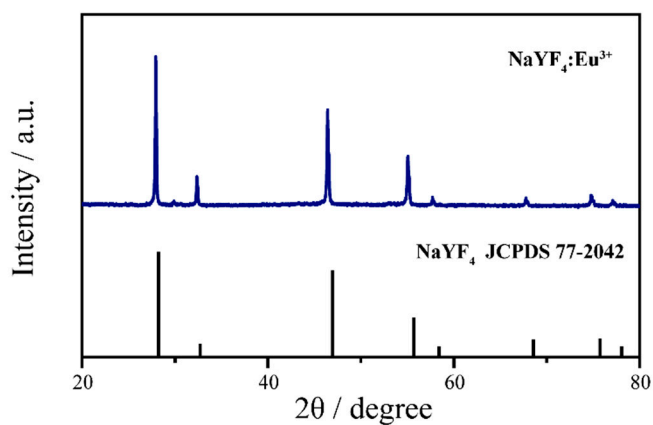


Figure S3. XRD pattern of the as-synthesized $\text{NaYF}_4:\text{Eu}^{3+}$ nanoflower and the standard pattern of cubic-phase NaYF_4 (JCPDS No.77-2042).

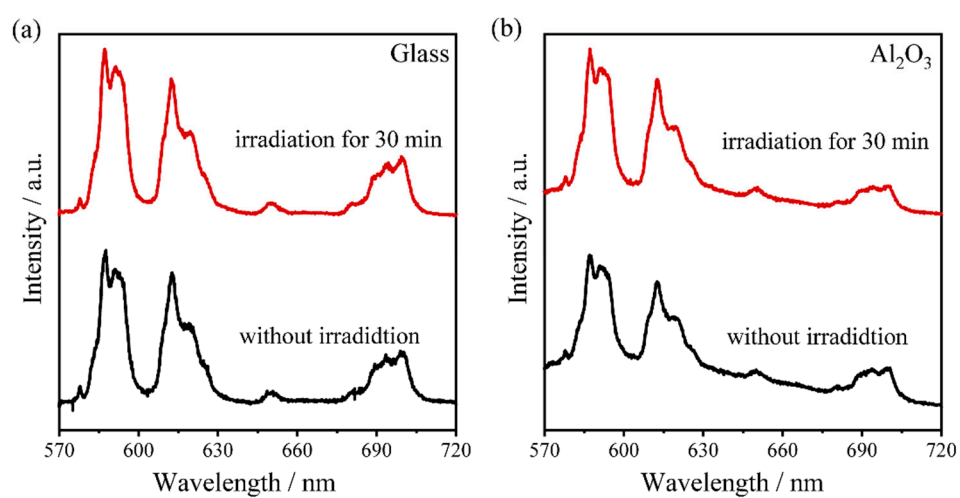


Figure S4. Luminescence spectra of $\text{NaYF}_4:\text{Eu}^{3+}$ (a) on a glass substrate without Al NIs and (b) with 50 nm Al_2O_3 deposited on a glass substrate before and after 976 nm (23 mW) laser irradiation for 30 min.