Supplementary Materials

A simple incorporation route of tris(8-hydroxyquinoline)aluminum(III) into transparent mesoporous silica films and their photofunctions

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Graphical Abstract of This Study

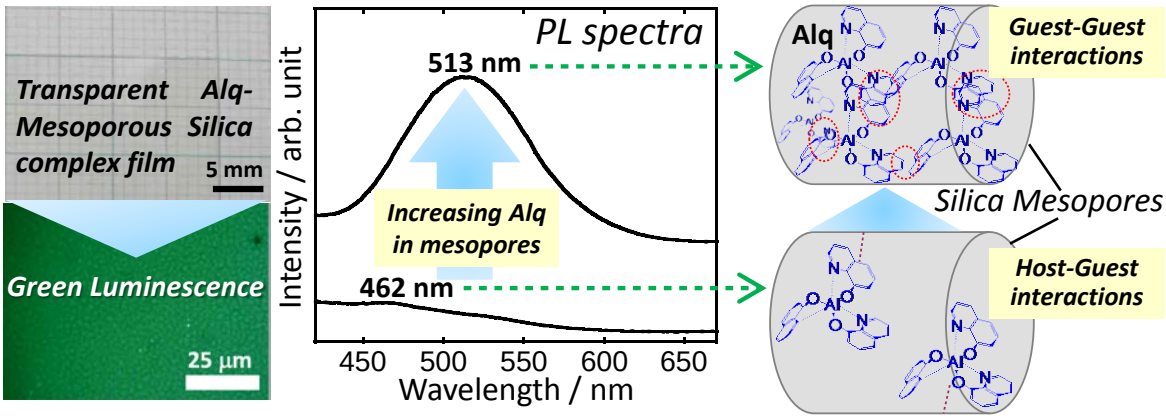

FIGURE S1

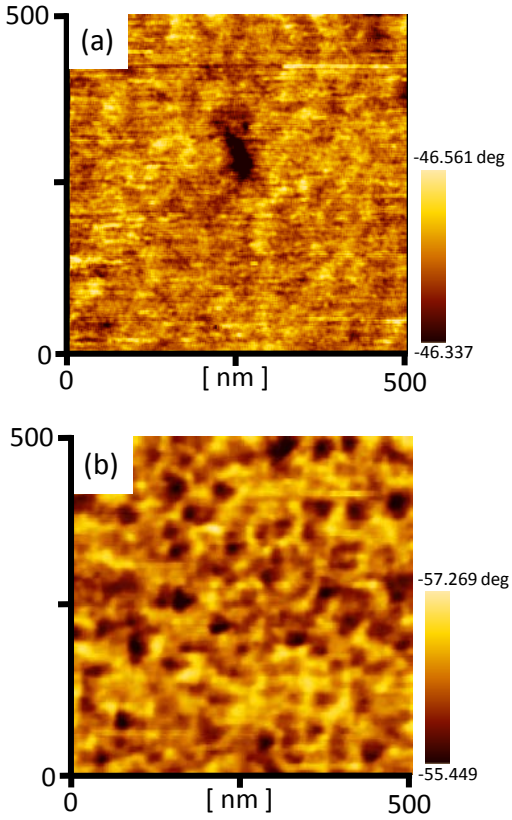

FIGURE S1: AFM phase-shift images (observation area: 500 nm^2) of (a) C18MPS-3.0 and (b) P123MPS-5.4 films, which are the same observation areas of the AFM topographic images of FIGURE 1 (a, b) in the main text.

FIGURE S2

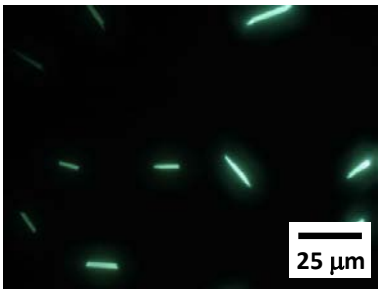

FIGURE S2: Fluorescent microscope images of the segregation Alq crystals grown on a glass substrate, which were prepared from the benzene with the higher Alq concentration of 1.2 mM.

FIGURE S3

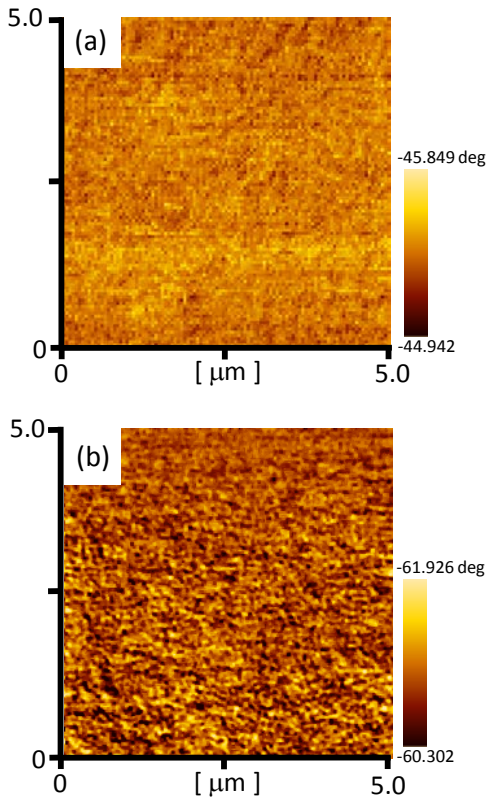

FIGURE S3: AFM phase-shift images (observation area: 5.0 μm^2) of (a) Alq/C18MPS-3.0 and (b) Alq/P123MPS-5.4 films with the adsorbed amount of Alq at 267 and 117 μmol/(g of MPS), respectively, which are the same observation areas to the AFM topographic images in Figure 4 (c, d) of the main text.

FIGURE S4

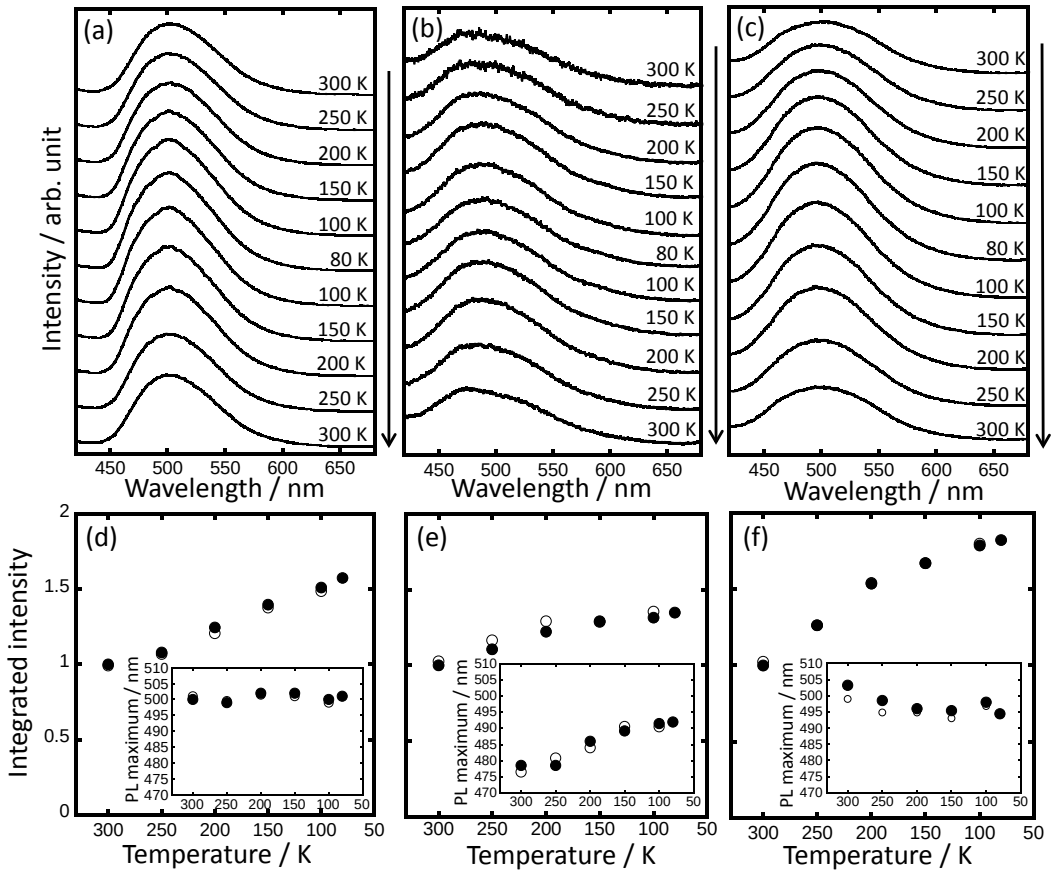

FIGURE S4: (a−c) Photoluminescence spectral changes, (d−f) integrated luminescence intensity and (Inset in (d−f)) luminescence maximum with the temperature between 80−300 K of (a, d) α-Alq powder, (b, e) Alq/C18MPS-3.0 and (c, f) Alq/P123MPS-5.4 films with the adsorbed amount of Alq at 131 and 91 μmol/(g of MPS), respectively.