

Supporting Information

Continuous mesoporous aluminum oxide film with perpendicularly -oriented mesopore channels

Yuuta Shibuya,[†] Kazuya Katayama,[‡] Kazuhiro Akutsu-Suyama,[§] and Akira Yamaguchi^{*‡}

[†]New Industry Creation Hatchery Center, Tohoku University, 2-1-1, Katahira, Aoba-ku, Sendai, Miyagi 980-8577, Japan.

[‡]Institute of Quantum Beam Science, Ibaraki University, 2-1-1 Bunkyo, Mito, Ibaraki 310-8512, Japan.

[§]Research Center for Neutron Science and Technology, Comprehensive Research Organization for Science and Society (CROSS), Tokai, Ibaraki 319-1106, Japan.

^{*} To whom correspondence should be addressed. E-mail: akira.yamaguchi.sci@vc.ibaraki.ac.jp

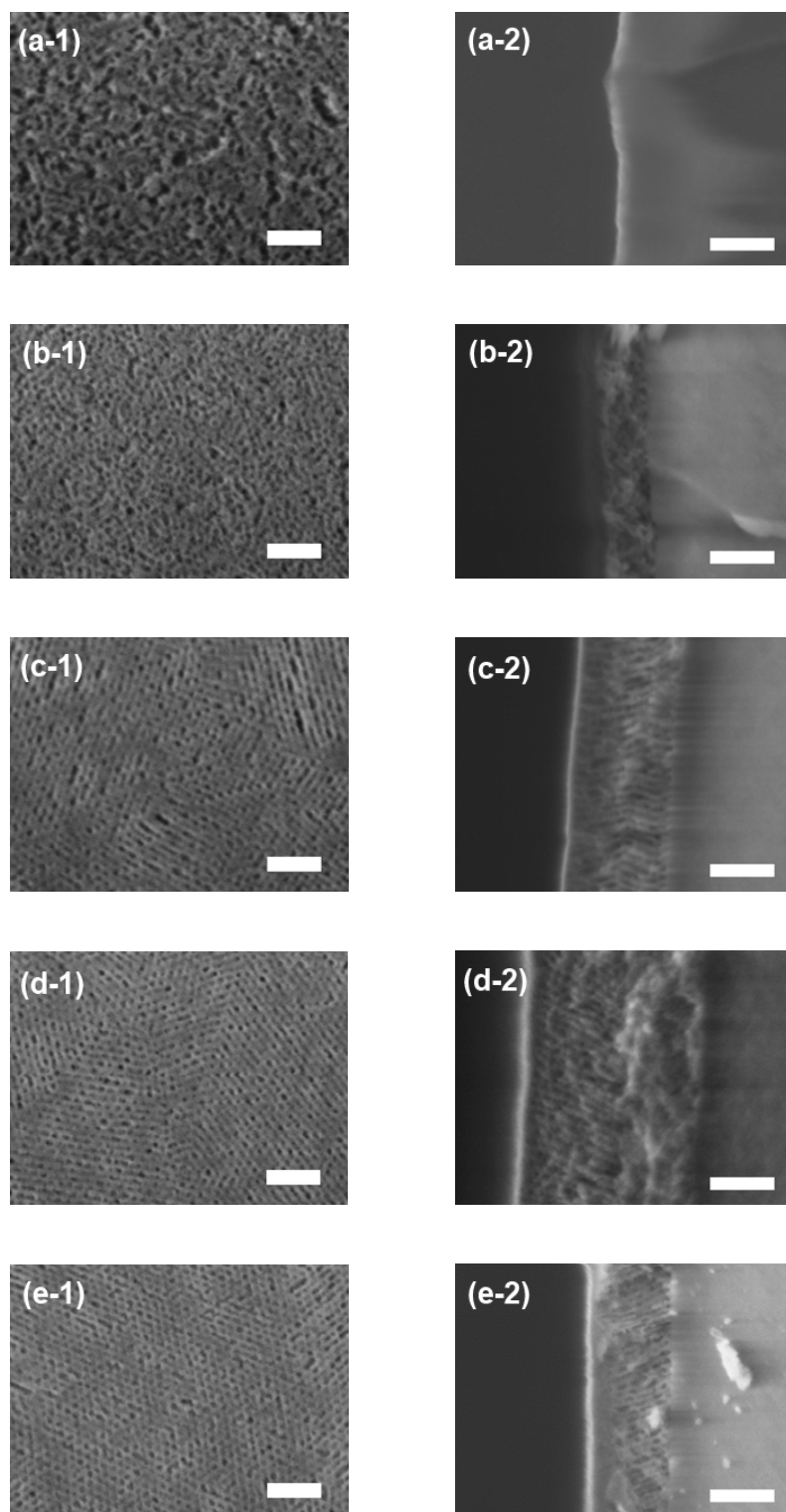


Figure S1. SEM images of MAO films prepared with precursor solutions containing different amount of ammonium nitrate: (a) 0.1 M, (b) 0.3 M (c) 0.5 M, (d) 0.7 M, and (e) 1.0 M, respectively. Left and right images are respectively top views and cross-sectional views. Scale bar is 100 nm.

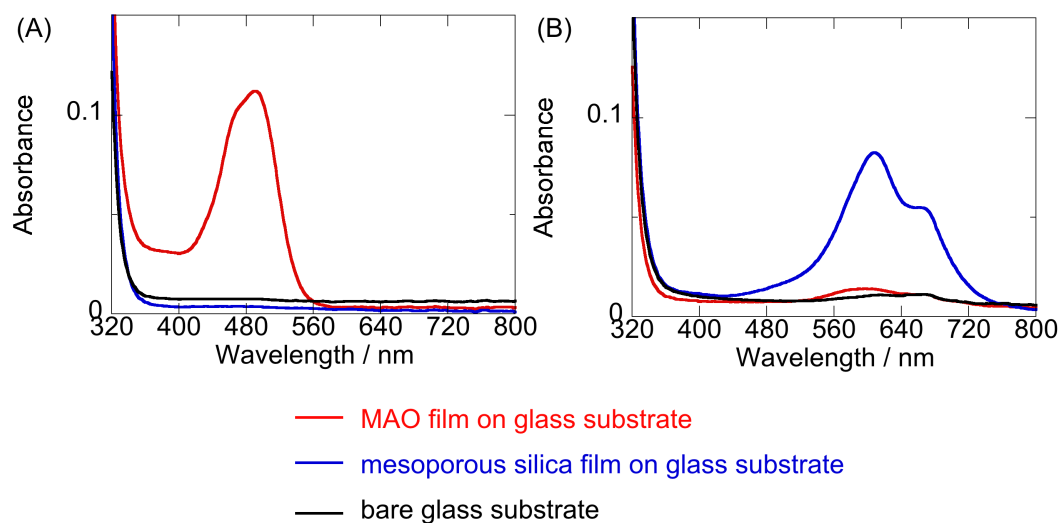


Figure S2. Transmission absorption spectra of sample substrates after immersion in (A) fluorescein and (B) methylene blue solutions.

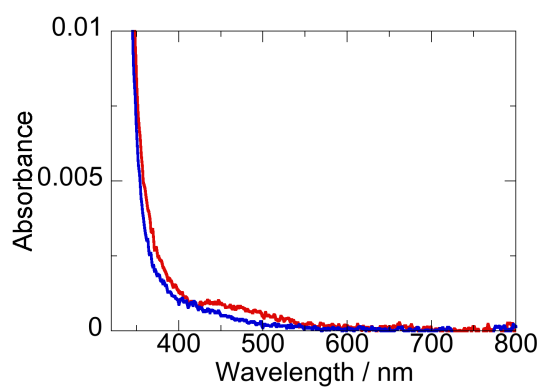


Figure S3. Transmission absorption spectra of MAO film before (blue line) and after (red line) adsorption of GOD.