

Corresponding Information for

Sequential Infiltration Synthesis for the Design of Low Refractive Index Surface Coatings with Controllable Thickness

Diana Berman,^{*,§} Supratik Guha,^{‡||} Byeongdu Lee,[⊥] Jeffrey W. Elam,[†] Seth B. Darling,^{‡||} and Elena V. Shevchenko^{*,‡}

[‡]Center for Nanoscale Materials, [†]Energy Systems Division, and [⊥]Advanced Photon Source, Argonne National Laboratory, Argonne, Illinois 60439 United States

[§]Materials Science and Engineering Department, University of North Texas, Denton, Texas 76203 United States

^{||}Institute for Molecular Engineering, University of Chicago, Chicago, Illinois 60637 United States

Corresponding authors: Diana Berman (Diana.Berman@unt.edu), Elena Shevchenko (eshevchenko@anl.gov).

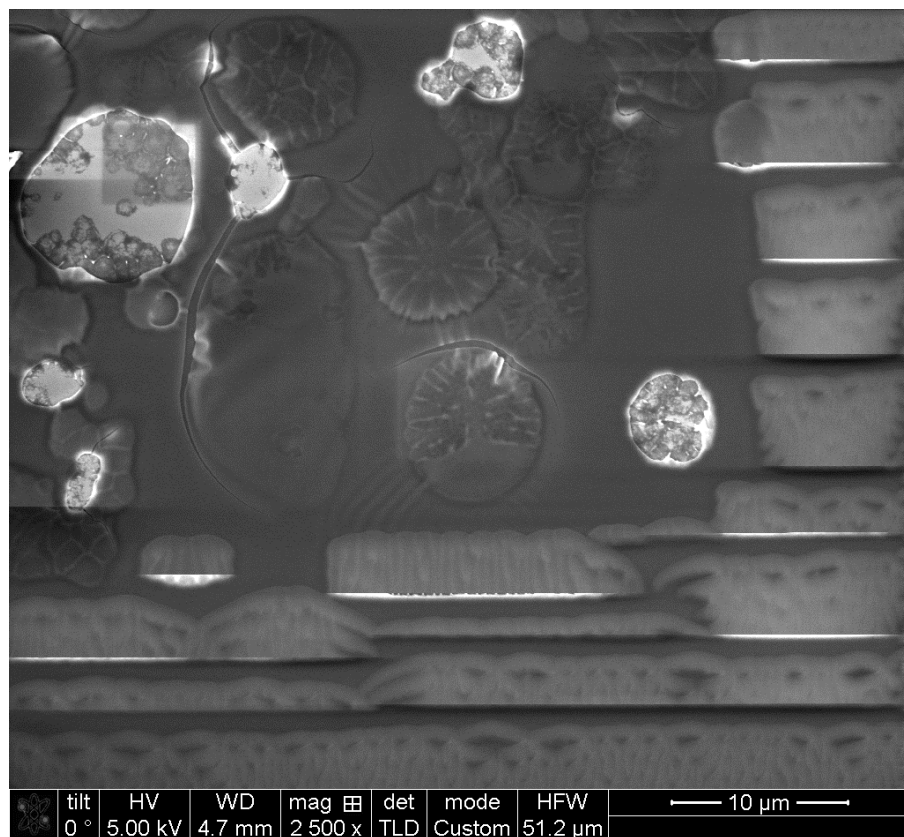


Figure S1. SEM image demonstrating the rupture of aluminum oxide films during oxygen plasma assisted polymer removal.

Table S1. Summary of the SAXS and GISAXS data.

Sample	e-density	Porosity(%)	Size(H)	Size(V)	Film thickness
3	0.243	74	24.6(9.9)	5.0nm	~45 nm
5	0.214	80	27.0(11.7)	4.3nm	-
8	0.403	65	24.5(9.9)	6.1nm	-
10	~0.7	40	8.5	8.2nm	-

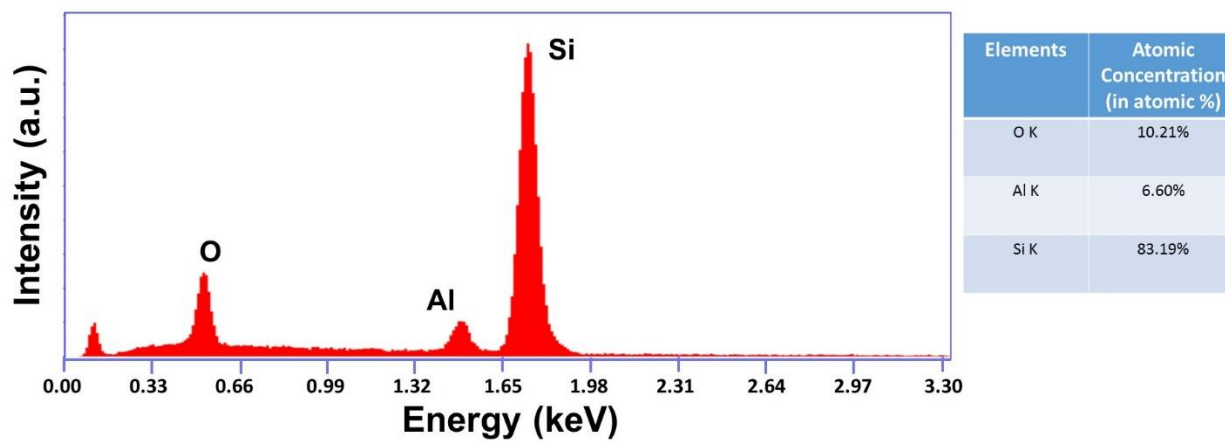


Figure S2. Representative EDS data on aluminum oxide films obtained by SIS. These data were obtained for samples prepared using PS-B-P4VP template exposed to 5 SIS cycles. No peak at 0.277 keV indicates no carbon in the sample.