

Electronic Supplementary Information

One-step preparation of UV transparent highly ordered mesoporous zirconia thin films.

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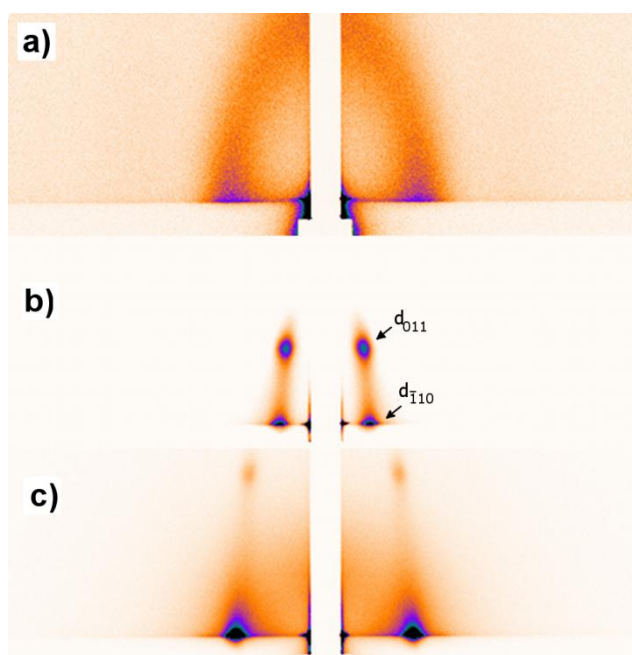


Fig. S1 GISAXS of a) ZC (200°C), b) ZF (350°C) and c) ZB (350°C)

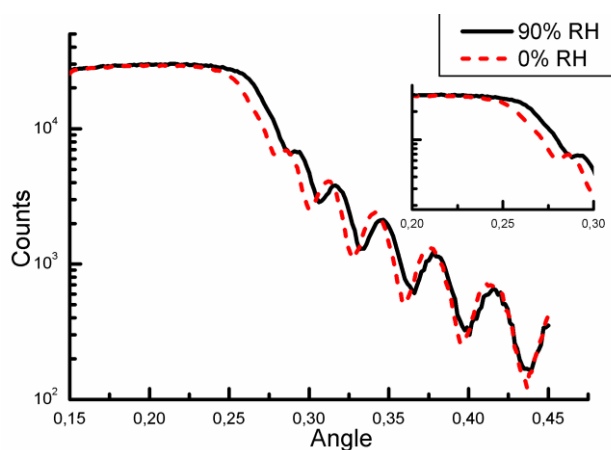


Fig. S2 Change in the critical angle due to capillary condensation of water in the mesopores of a F127 templated film

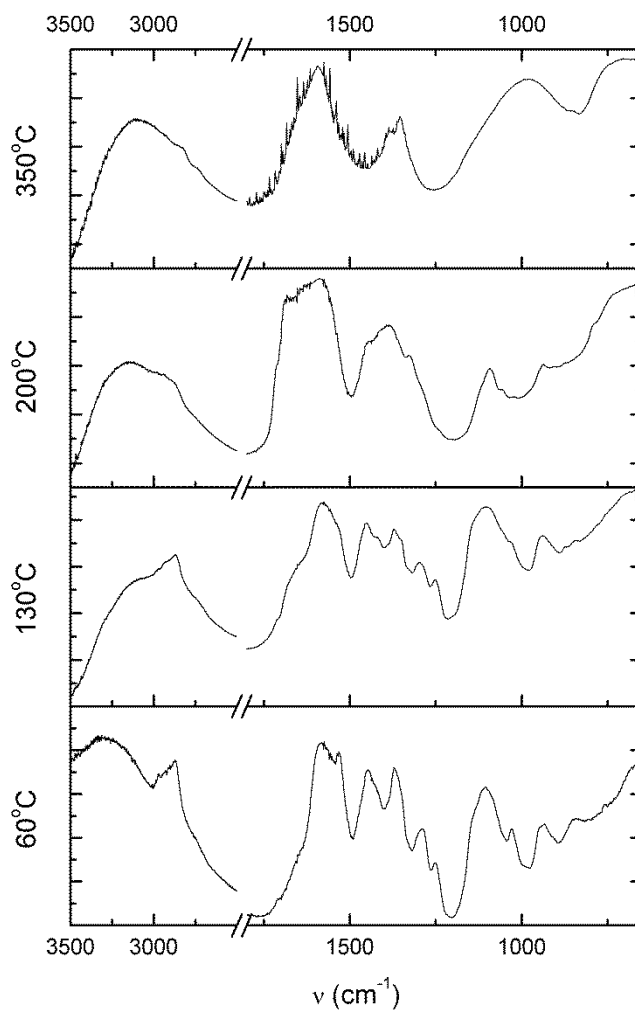


Fig. S3 : Infrared spectra of F127 templated films treated at different temperatures. The signals around 2830 cm^{-1} in the sample treated at 350°C correspond to adventitious organic gases.

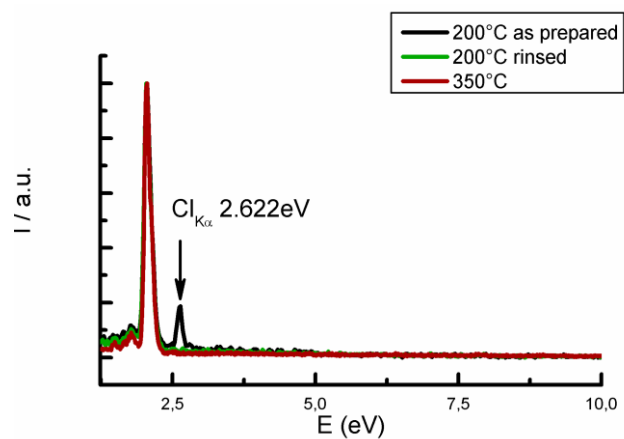


Fig. S4 : EDS spectra of ZF samples treated at 200°C (as prepared and rinsed) and 350°C.

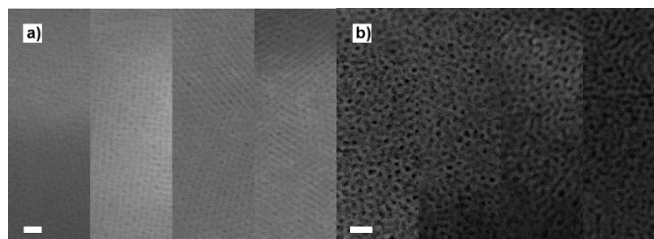


Fig. S5 : Evolution of a) F127 templated films on heating from 350°C up to 650°C and b) P123 templated films on heating from 350 to 600°C. Scale bars represent 40nm.

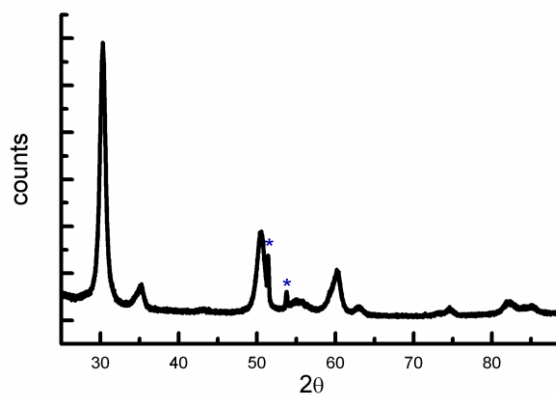


Fig. S6 : X-ray diffraction pattern of a ZP film treated at 600°C. Peaks marked with an asterisk correspond to the silicon substrate.

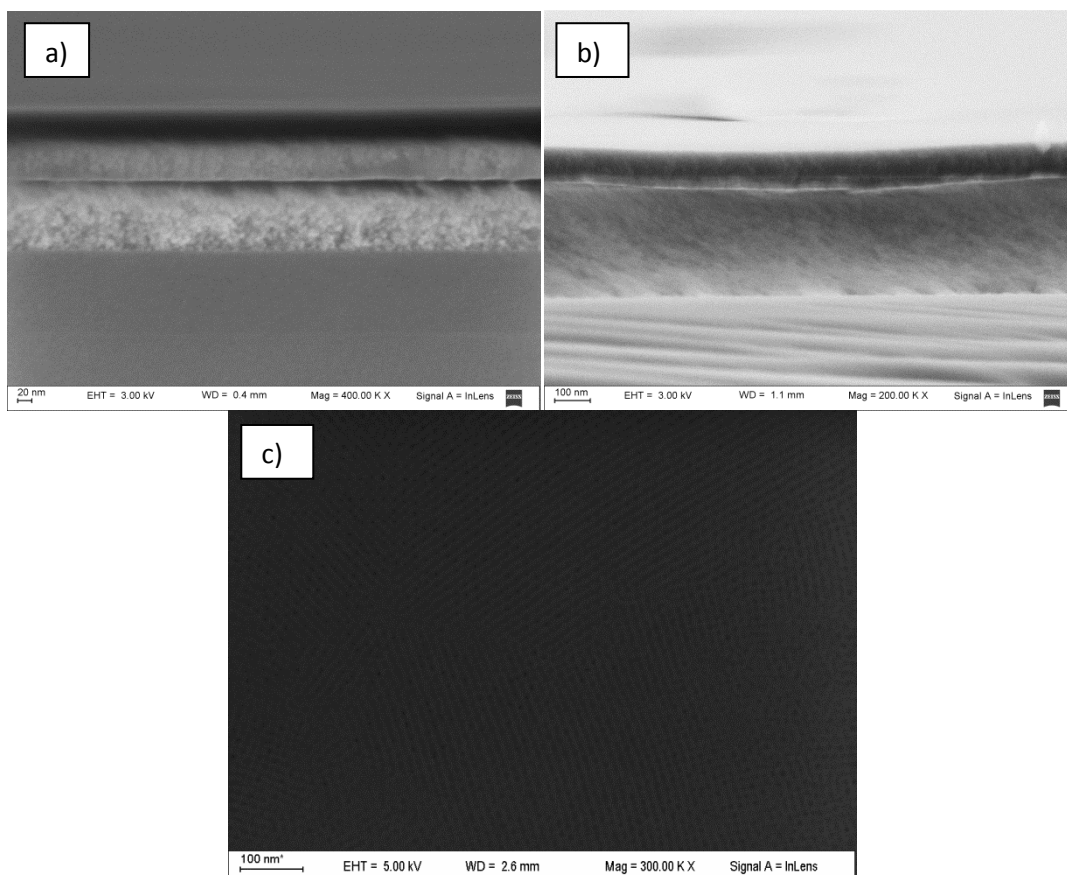


Fig. S7 : Side view of a)CTAB-templated SiO₂ on top of ZF and b) ZF on top of CTAB-templated SiO₂. And c) top view of ZF on top of CTAB-templated SiO₂.

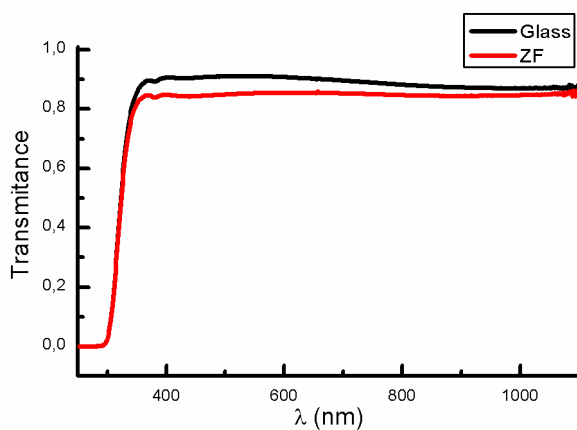


Fig. S8 : UV-Vis transmission spectra of Glass-supported ZF film and of Glass support. The spectra is not corrected for reflection losses.

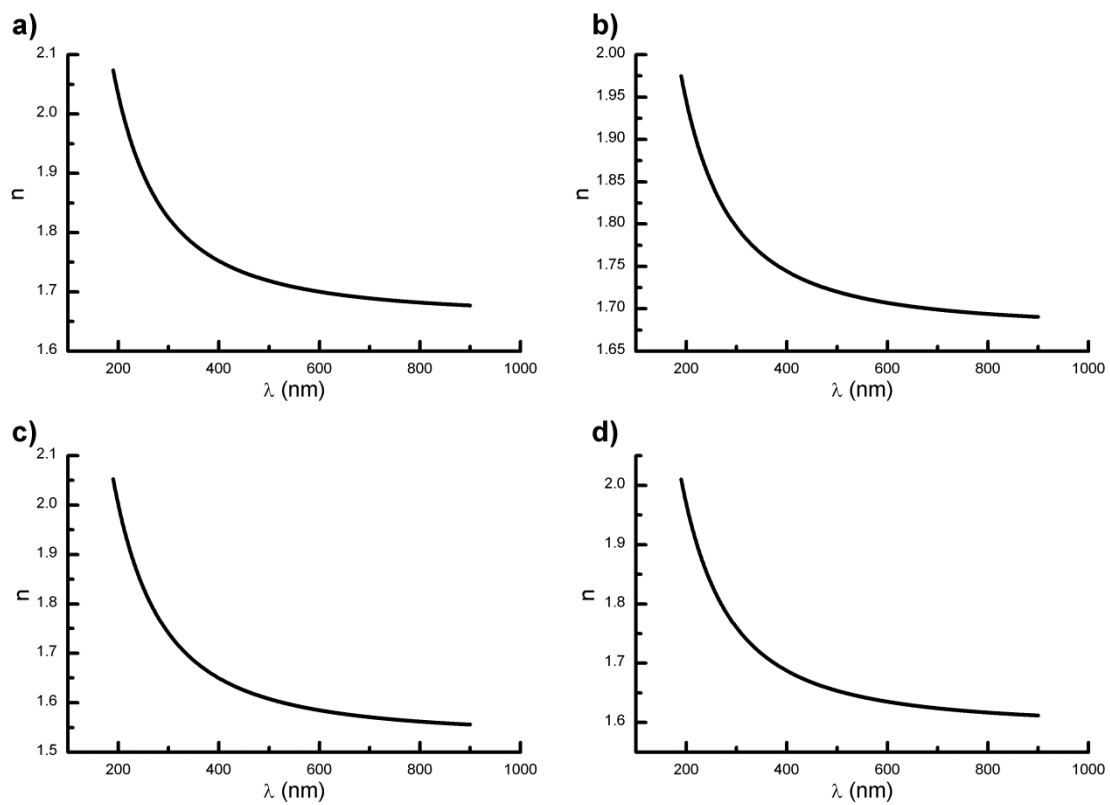


Fig. S9 : Refractive index dispersion of a) ZF, b) ZB, c) ZP and d) ZC films prepared at 1.0 mm s^{-1} .