

Supporting Information

for

Lamellar Micelles as Templates for the Preparation of Silica Nanodisks

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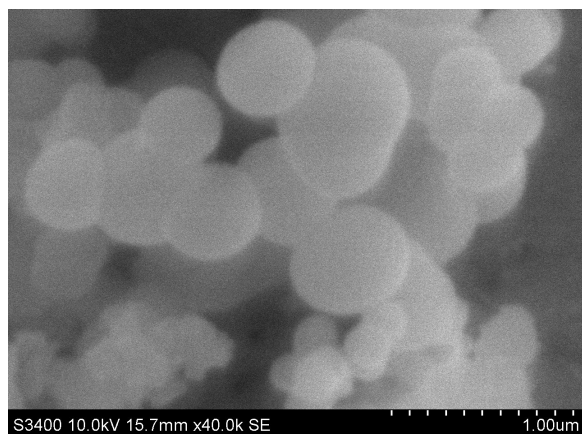
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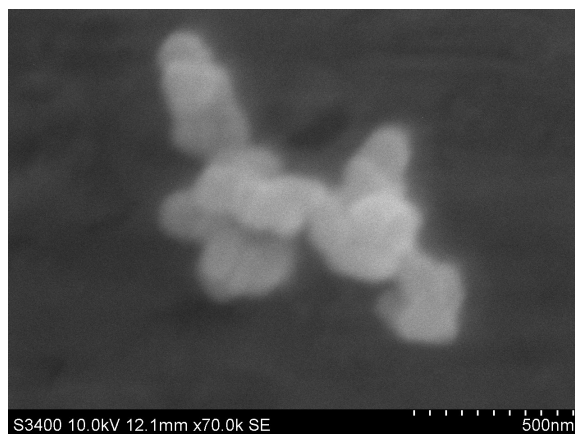
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TITLE RUNNING HEAD: Origin of Silica Nanodisks

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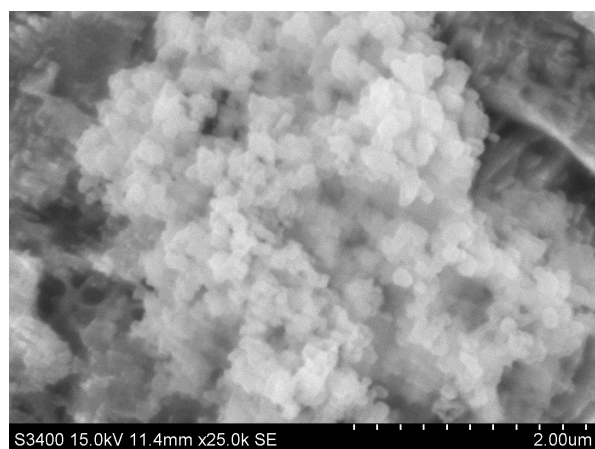


(A)

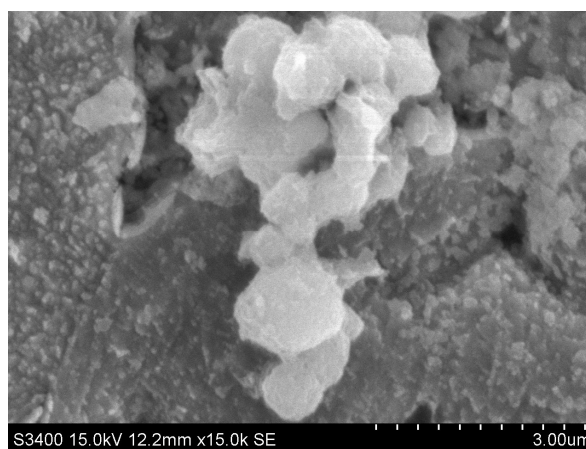


(B)

Figure S1. Scanning electron micrographs (SEM) of silica nanostructures prepared in the AOT microemulsion in $w_0=22$ in presence of 17M FeCl_3 . Here image of the product obtained from the upper layer is shown in the panel (A), product from the interface shown in panel (B).

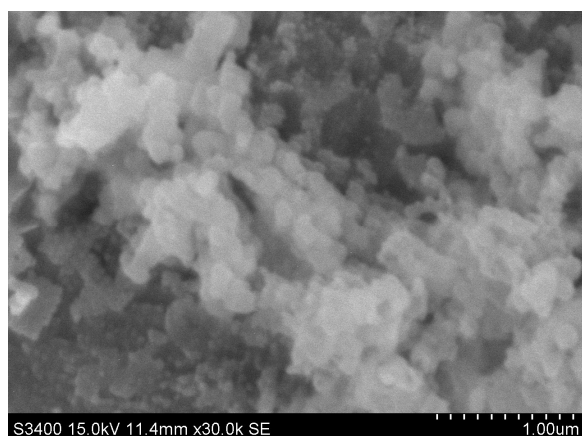


(A)

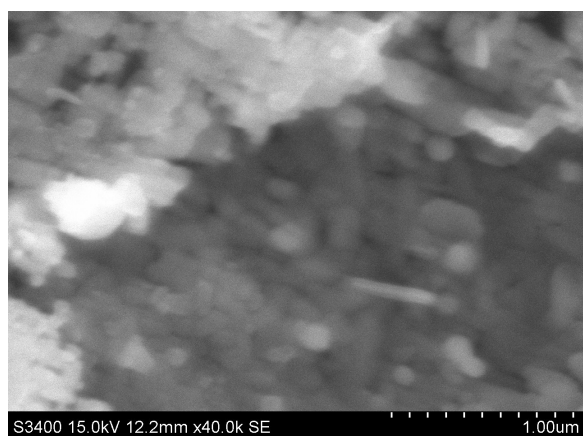


(B)

Figure S2. Scanning electron micrographs (SEM) of silica nanostructures prepared in the AOT microemulsion in $w_0=100$ in absence of FeCl_3 . Here image of the product obtained from the upper layer is shown in the panel (A), product from the interface shown in panel (B).

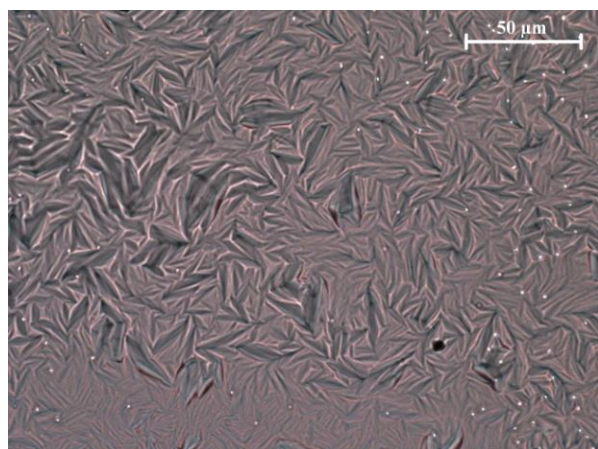


(A)



(B)

Figure S3. Scanning electron micrographs (SEM) of silica nanostructures prepared in the AOT microemulsion in $w_0=200$ in absence of FeCl_3 . Here image of the product obtained from the upper layer is shown in the panel (A), product from the interface shown in panel (B).

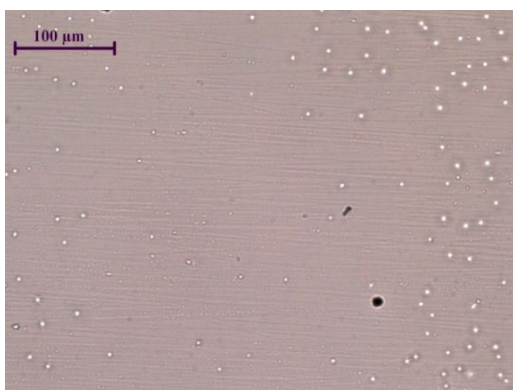


(A)

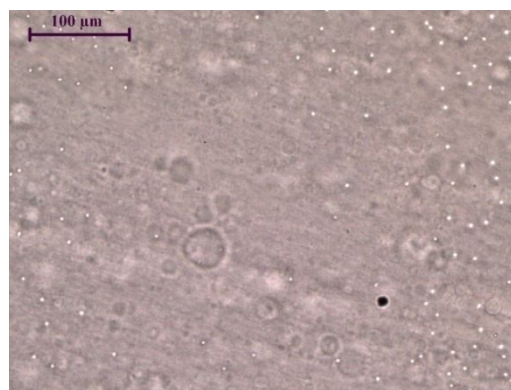


(B)

Figure S4. Crossed polarized optical micrographs (POM) a portion of aqueous solution 60 wt% ($w_0 = 41$). AOT; (A) when polarizers are at 0° and (B) when polarized are cross at 90° .



(A)



(B)

Figure S5. Polarized optical micrographs (POM) of (A) upper layer of microemulsion at $w_0=200$; (B) an aqueous solution of AOT containing 5wt% ($w_0=494$) AOT.

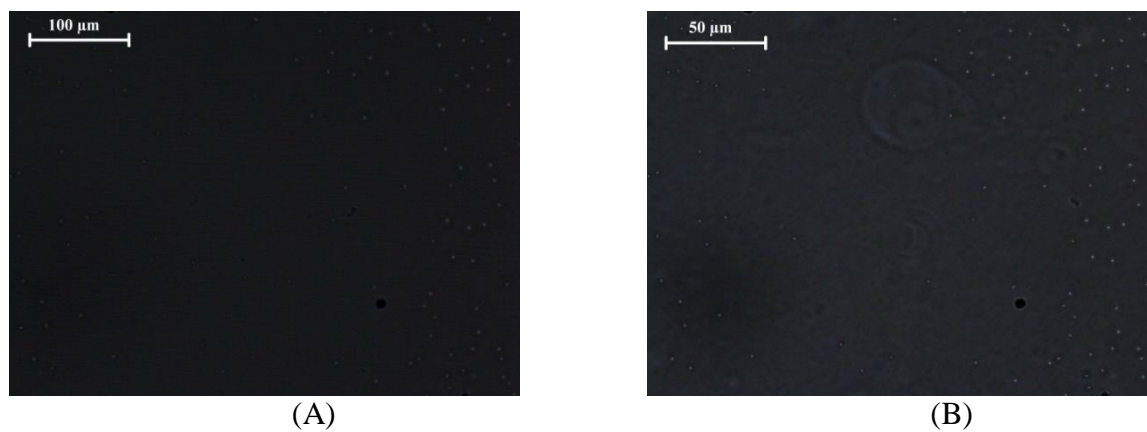


Figure S6. Crossed polarized optical micrographs (POM) of (A) upper layer of microemulsion at $w_0=200$; (B) an aqueous solution of AOT containing 5wt% ($w_0 = 494$) AOT. Here polarizers are crossed at 90° .

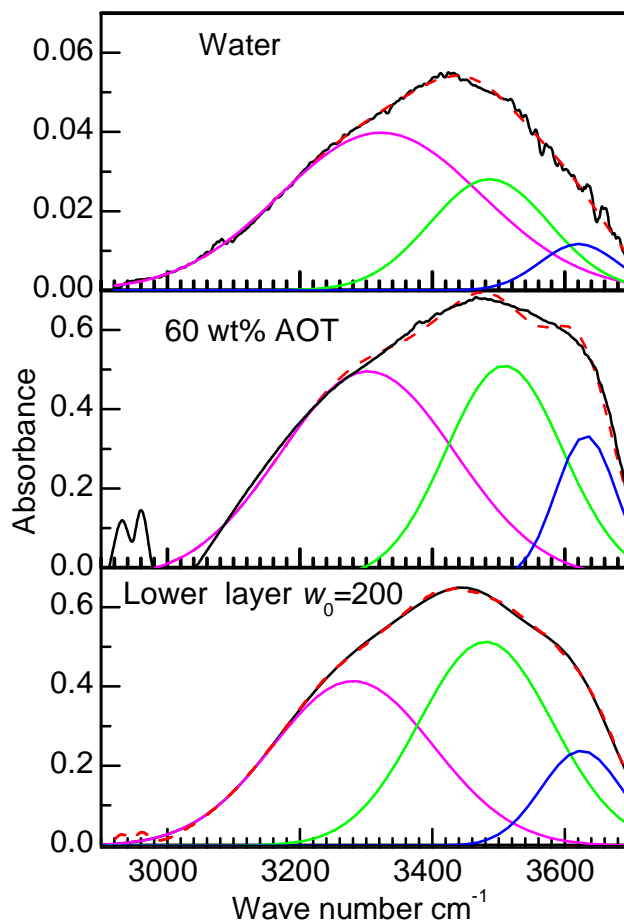


Figure S7. Comparison of the OH stretching mode (solid black line) of bulk water, 60 wt% ($w_0 = 41$) AOT and the lower layer of the microemulsion at $w_0=200$. Here the fitted data (red dashed line) is obtained by the addition of three single Gaussian functions for NW (magenta line), IW (green line), MW (blue line).