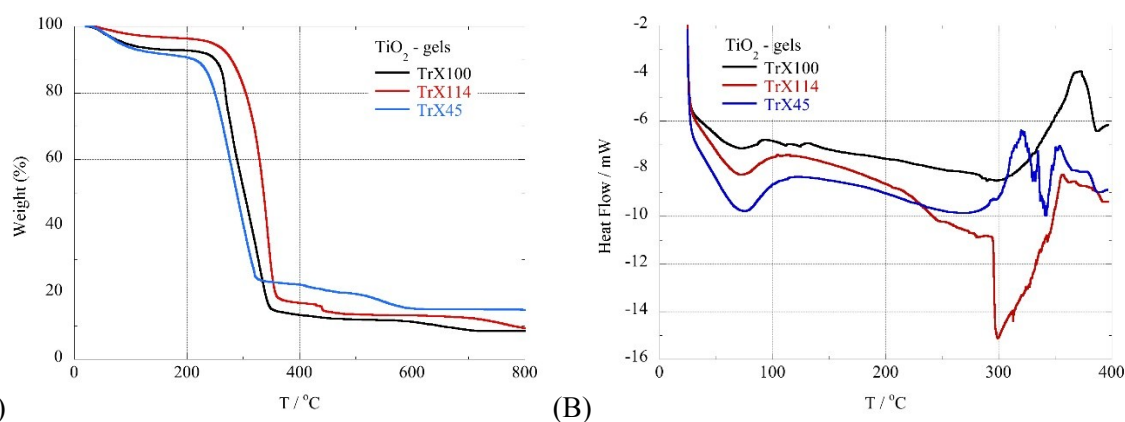


## Supplementary Information



**Figure 1S.** TGA (A) and DSC (B) profiles of the three different TiO<sub>2</sub>-Triton-X gels.

**Table 1S.** TGA (A) and DSC (B) data of the three different TiO<sub>2</sub> - Triton-X gels.

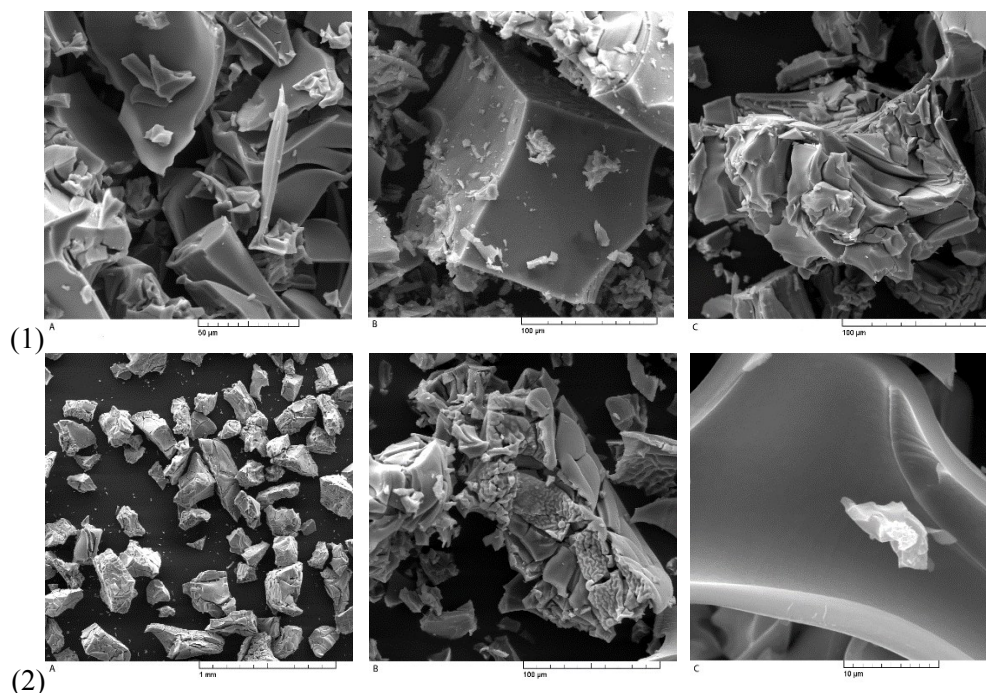
TGA sample TiO <sub>2</sub>	temperature range (°C)	weight loss (%)*	DSC sample TiO <sub>2</sub>	temperature range (°C)	temperature peak max (°C)	enthalpy (J/g)
gel Triton X-100	34.1 - 177.4	6.05	gel Triton X-100	28.9 - 93.9	63.4	endo: 32.4
	208.1 - 400	69.35		276.4 - 314	289.7	endo: 5.2
	562.9 - 721.5	3.03		315.2 - 387.4	367.6	exo: 94.7
gel Triton X-114	34.1 - 167.2	2.32	gel Triton X-114	28.3 - 96.9	66.4	endo: 57.2
	209.8 - 392.3	57.93		293.7 - 342	299.4	endo: 106.5
	397.4 - 481	2.32		343.2 - 392.7	356	exo: 57.2
gel Triton X-45	682.3 - 800	2.32	gel Triton X-45	30.7 - 102.3	70.5	endo: 64.1
	30.7 - 160.3	6.8		243 - 293.7	276.8	endo: 9.7
	194.5 - 339.4	56.59		296.7 - 336.7	320.2	exo: 42.8
	385.5 - 475.9	2.19		343.8 - 388.6	350.8	exo: 41.2
	486.1 - 593.6	3.89				

\*The values of weight losses are normalized.

**Table 2S.** Characteristic surface data of the titania solids obtained after calcination at 500 °C & 600 °C for 2 hours of the corresponding TiO<sub>2</sub>-Triton X gels.

δείγμα	SpA <sub>BET</sub> (m <sup>2</sup> /g)	V <sub>Sp</sub> (cm <sup>3</sup> /g)	d <sub>BJH</sub> (nm)	d <sub>DFT</sub> (nm)	% microporosity
TiO <sub>2</sub> TrX-100 500 °C 2h	67.5	0.097	3.97	6.36	7.3
TiO <sub>2</sub> TrX-114 500 °C 2h	46.1	0.064	3.63	6.24	11.8
TiO <sub>2</sub> TrX-45 500 °C 2h	47.2	0.062	3.55	5.93	9.3

δείγμα	SpA <sub>BET</sub> (m <sup>2</sup> /g)	V <sub>Sp</sub> (cm <sup>3</sup> /g)	d <sub>BJH</sub> (nm)	d <sub>DFT</sub> (nm)	% microporosity
TiO <sub>2</sub> TrX-100 600 °C 2h	31	0.06	4.85	9.29	3.3
TiO <sub>2</sub> TrX-114 600 °C 2h	4.6	0.006	3.31	8.6	14.7
TiO <sub>2</sub> TrX-45 600 °C 2h	0.7	0.000	2.64	-	-



**Figure 2S.** SEM micrographs of  $\text{TiO}_2$  solids from the three different reverse micelles: (1A) Triton X-100, (1B) Triton X-114, (1C) Triton X-45 calcined at 400 °C for 2 h in different magnifications. SEM images of titania samples from the reverse microemulsions (2A) Triton X-114 calcined at 600 °C for 2 h and (2B & C) Triton X-100 calcined at 800 °C for 2 h in two magnifications.