

## Advanced Titanium Dioxide fluidizable nanowire photocatalysts

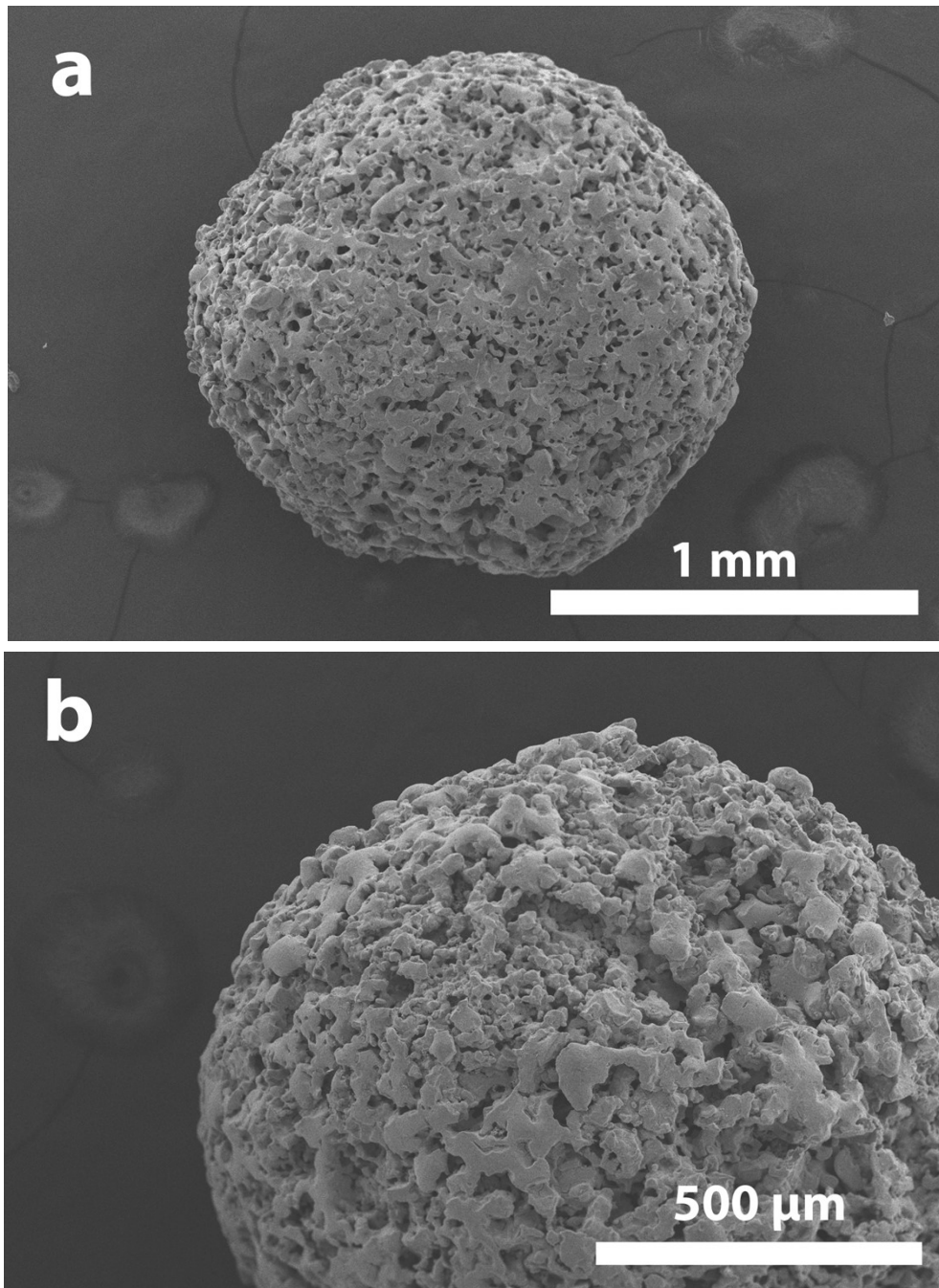
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**Figure S1: SEM images of the porous Siran glass particles with various magnifications.**

**Table S1: Summary of hydrothermal growth conditions and resulting nanorod dimensions**

Sample #	Initial Hydrothermal Reactor Conditions						$R_q$	Resulting Nanorod Dimensions		
	$V_{H_2O}$ (ml)	$V_{HCl}$ (ml)	$V_{TTIP}$ (ml)	$M_{KCl}$ (g)	$M_{cat}$ (g)	Time (hours)		Growth Quality	Width (nm)	Length ( $\mu m$ )
HTV-1	100	100	3.3	0	0.5	7	0.3	Good	257	1.72
HTV-2	100	100	3.3	0	5	17	2.6	Moderate	129	1.30
HTV-3	100	100	3.3	0	10	17	5.3	Poor	274	2.51
HTV-4	100	100	3.3	0	15	17	7.9	Poor	152	1.40
HTV-5	100	100	3.3	5	10	17	5.3	Poor	146	1.65
HTV-6	100	100	3.3	5	15	17	7.9	Poor	115	1.41
HTV-7	100	100	3.3	0	20	7	10.5	Poor	127	1.10
HTV-8	100	100	3.3	0	20	17	10.5	Poor	76	1.14
HTV-9	100	100	6.6	0	20	7	5.2	Poor	143	1.29
HTV-10	100	100	6.6	5	20	8.5	5.1	Poor	85	1.15
HTV-11	100	100	6.6	5	20	12	5.2	Poor	166	1.62
HTV-12	100	100	10	0	20	7	3.4	Moderate	322	1.18
HTV-13	100	100	10	5	20	7	3.4	Moderate	223	1.10
HTV-14	100	100	12	5	20	7	2.8	Good	302	1.13
HTV-15	100	100	12	8	20	7	2.8	Good	223	1.16
HTV-16	100	100	12	12	20	7	2.8	Good	228	1.15
HTV-17	100	100	12	5	25	7	3.5	Moderate	226	0.97
HTV-18	50	150	20	0	20	7	2.4	Good	257	2.83
HTV-19	50	150	20	3.5	20	7	2.4	Good	182	2.14
HTV-20 <sup>a</sup>	45	45	1.5	0	1	7	1.2	Good	240	1.65

<sup>a</sup> grown in 180 ml hydrothermal vessel at 150 °C