Supporting Information

Large-scale Synthesis and Characterization of Very Long Silver Nanowires via Successive Multistep Growth

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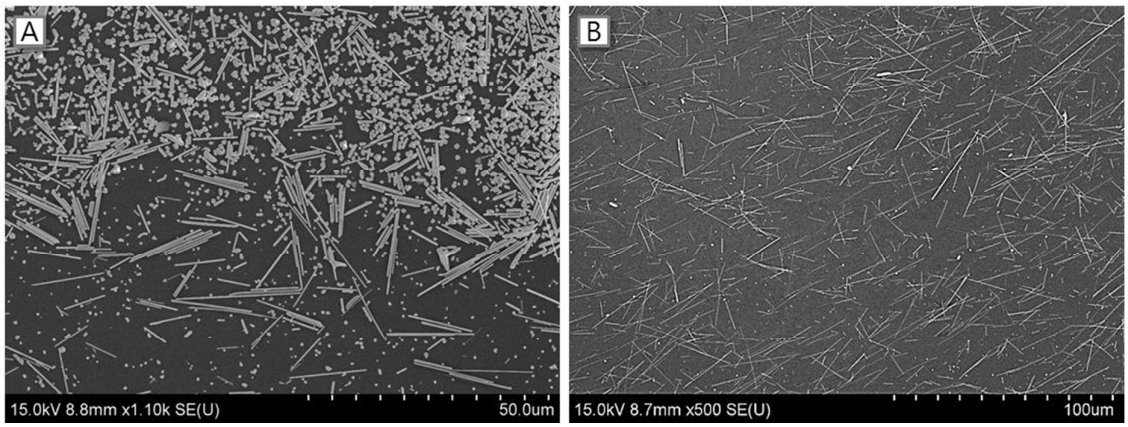

Figure S1. The effect of stir bar length used in oil bath and reaction flask: scanning electron microscopy (SEM) images of synthesized silver nanowires at different condition of #1 (A) and #3 (B). The scale bars indicate 100 μm.

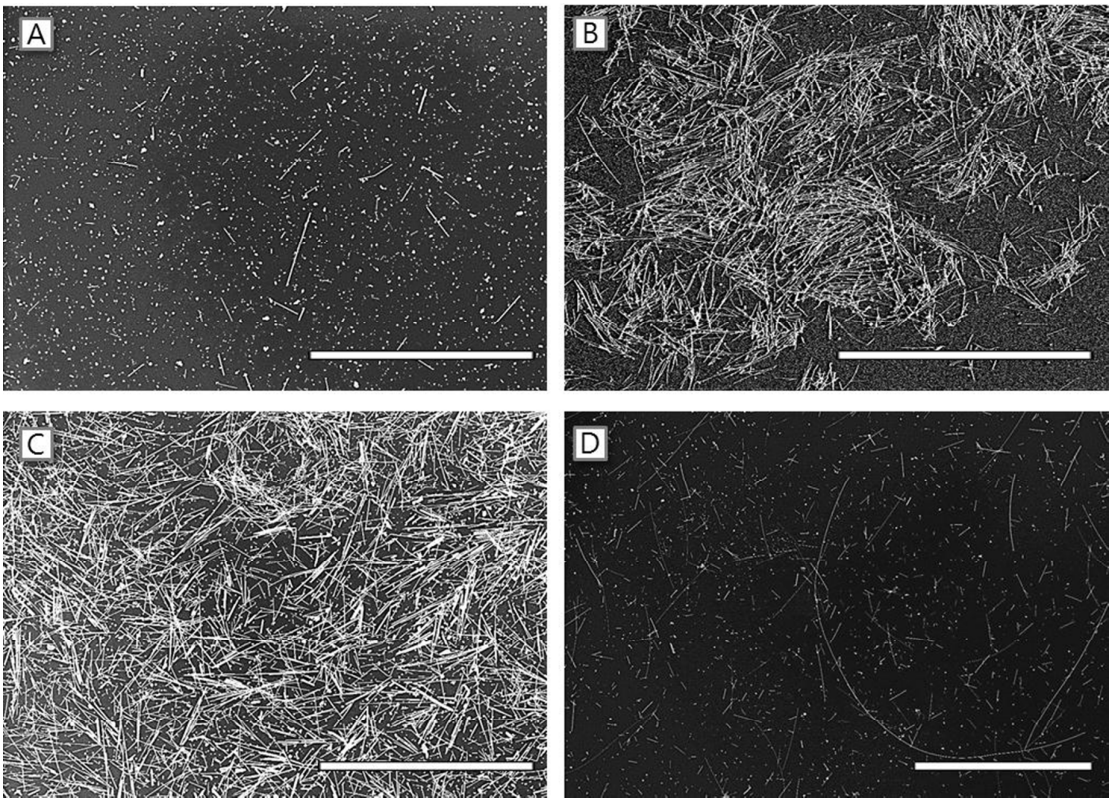

Figure S2. The result of synthesis at different stirring rates: SEM images of synthesized silver nanowires at different stirring rates of 600 (A), 400 (B), 300 (C), and 150 rpm (D). The scale bars are 100 μm

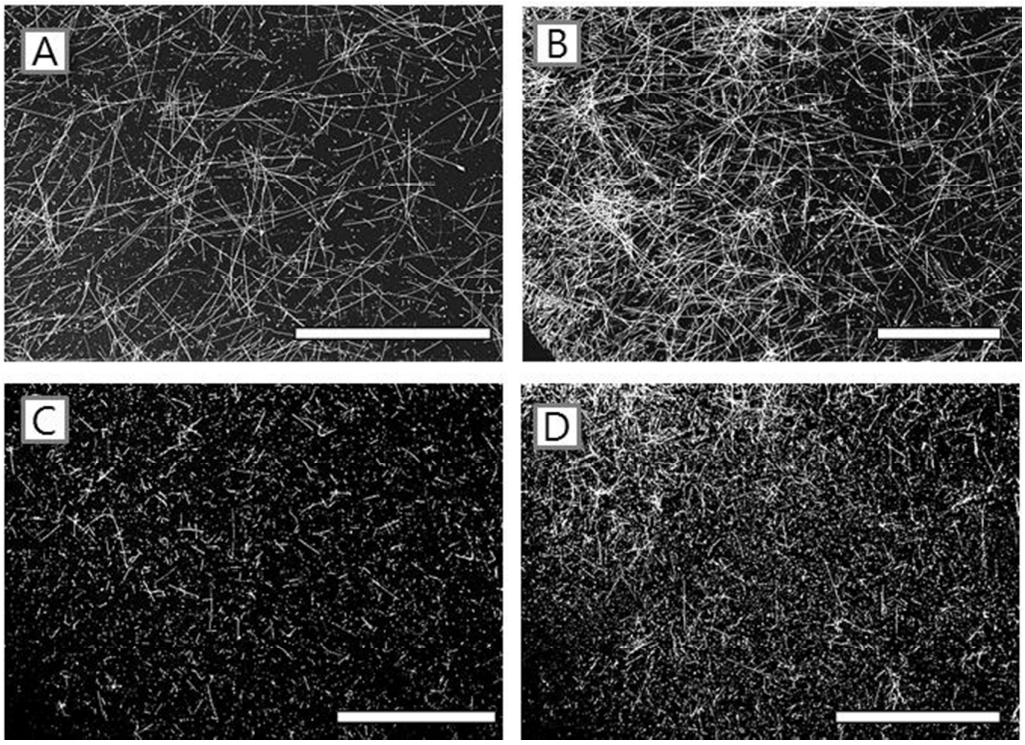

Figure S3. The effect of injection speed of $AgNO_3$ solution through syringe pump: SEM images of synthesized silver nanowires at injection rates of 0.5 (A), 1 (B), 15 (C), and 30 ml/min (D). The scale bar is 100 μm in A, B, and C, while the one in D is 50μm.

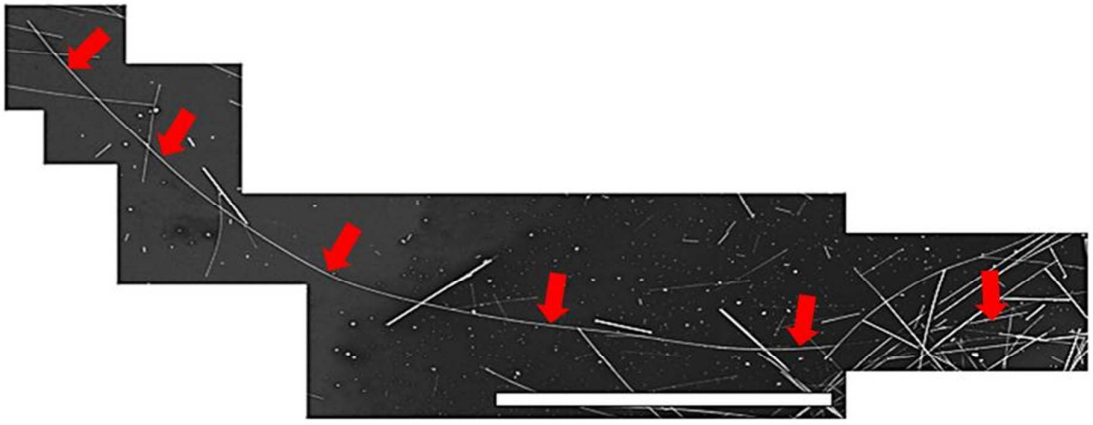

Figure S4. The longest AgNW synthesized through the SMG process (over 500 μm). The scale bar is 200 μm.

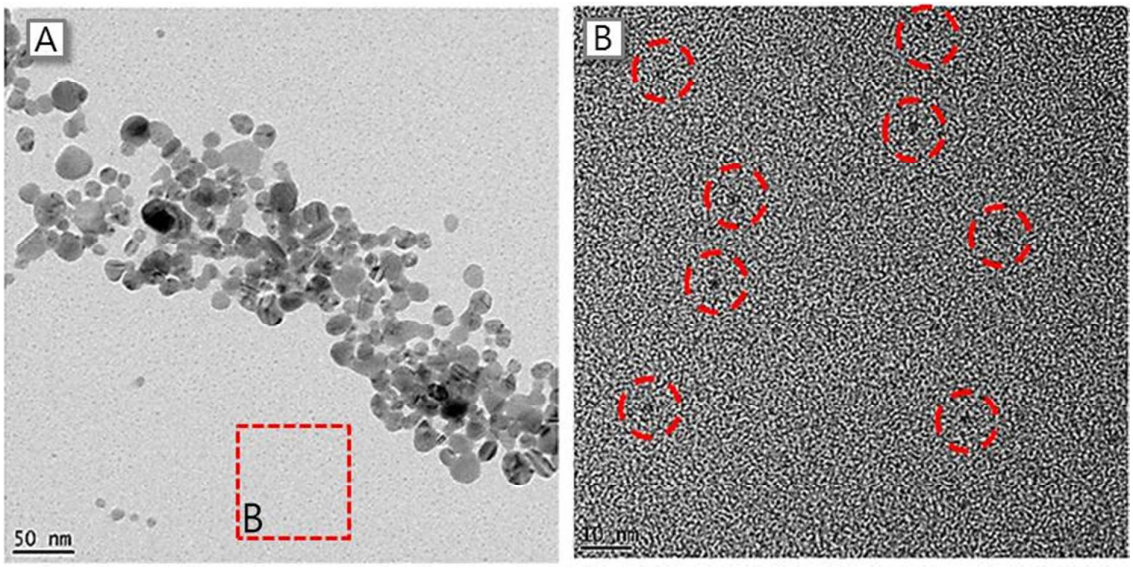

Figure S5. TEM images of sonicated $AgNO_3$ in EG

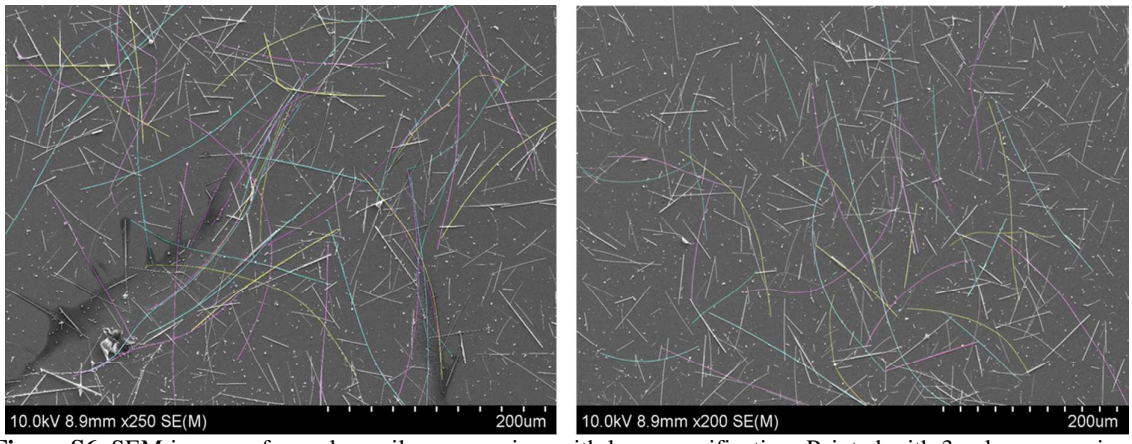

Figure S6. SEM images of very long silver nanowires with low magnification. Painted with 3 colors nanowire have almost 200 μm or longer length.

Table S1

Trial number	Stir bar length (mm)		Stirring rate (rpm)	State of $AgNO_3$		Max. length of AgNW (μm)
	In oil bath	In flask		Sonication (min)	Injection Speed (ml/min)	
1	50	25	300	3	3	48
2	38	38				53
3	50	15.8				87
4	50	10				168
5	38	25				83
6	50	15.8	400	3	3	58
7			300			83
8			260			105
9			200			33
10			150			281
11	50	15.8	260	-	3	-
12				2		
13				7		
14				10		
15				30		
16				30+heating		
17	50	15.8	260	7	0.5	80~90
18					1	70~80
19					3	~50
20					5	~60
21					15	~50
22					30	~40