



Technical Data Sheet

ACS Material Copper Nanowire (50-200nm)

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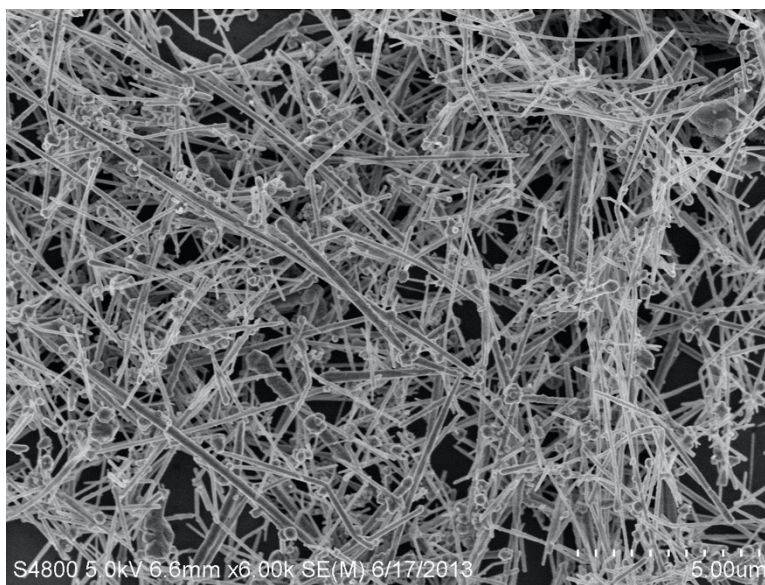
1. Preparation Method

Hydrothermal Method

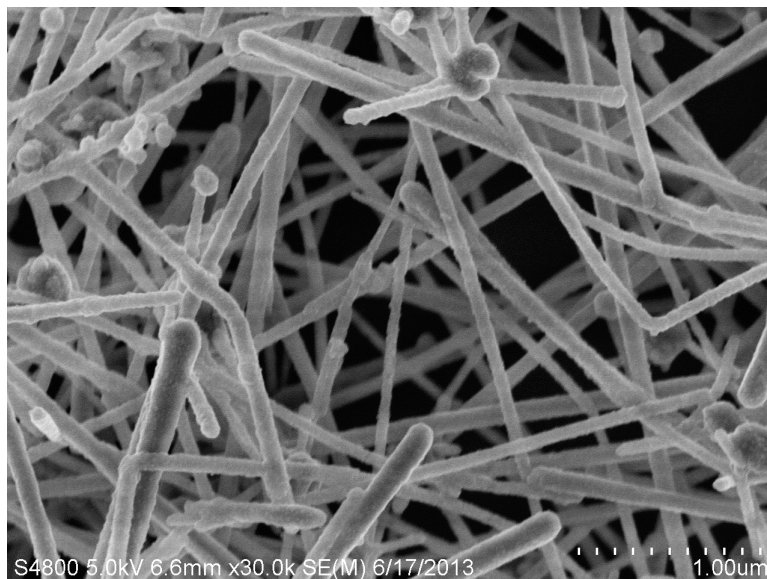
2. Characterizations

Product Name:	Copper Nanowire
Appearance:	Red suspension
Diameter:	50-200 nm
Length:	10-30 μm
Concentration:	~ 10 mg/ml
Solution:	Ethanol/Water*
Purity:	$\sim 99\%$

*ACS can also provide it in water dispersion. Contact us for more information.



SEM Image (1) of ACS Material Copper Nanowire



SEM Image (2) of ACS Material Copper Nanowire



TEM Image (3) of ACS Material Copper Nanowire

3. Application Fields

Optical Applications: Solar; Medical imaging; Surface enhanced spectroscopy; Optical limiters

Conductive Applications: High-intensity LEDs, Touch screens, Conductive adhesives, Sensors

Anti-microbial Applications: Air & water purification, Bandages, Films, Food preservation, Clothing

Chemical & Thermal: Catalysts, Pastes, Conductive adhesives, Polymers; Chemical vapor sensors

4. Storage

Sealed and keep refrigerated at 4°C. Shelf Life is one month under proper storage and recommend using it as soon as possible.

5. Instruction

It's normal that copper nanowire may precipitate in the bottle. Please sonicate it at 300W for a maximum of 3mins before use. If you use 600-800W, please keep the sonication time under 1mins. Gently stirring it may also help.

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