

Supporting Information

Preparation of Copper Nitride (Cu₃N) Nanoparticles in Long-Chain Alcohols at 130–200 °C and Nitridation Mechanism

Takashi Nakamura,^{*a} Hiromichi Hayashi,^a Taka-aki Hanaoka,^a and Takeo Ebina^a

Research Center for Compact Chemical System, National Institute of Advanced Industrial Science and Technology (AIST), Nigatake 4-2-1, Miyagino-ku, Sendai, 983-8551, Japan.

Fax: +81-22-237-3057;

Tel: +81-29-861-2272;

E-mail: nakamura-mw@aist.go.jp

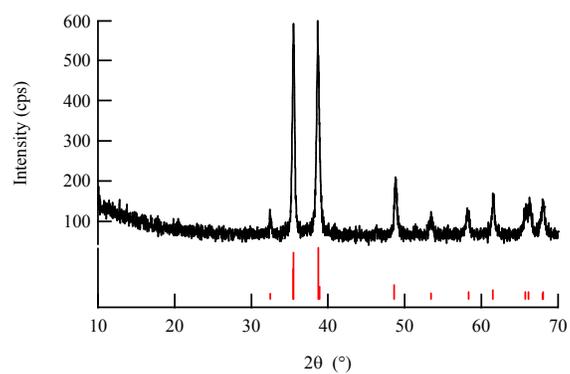


Figure 1S. XRD pattern of the sample after heated by using TG-DTA under argon atmosphere up to 500 °C. Vertical bars at the bottom of the figure are a reference of CuO pattern (JCPDS No.1-80-1916).

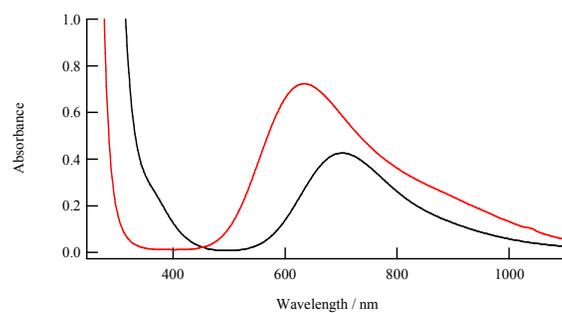


Figure 2S. UV-visible spectra of copper(II) acetate monohydrate solved in 1-nonanol (black) before ammonia bubbling and (red) after.

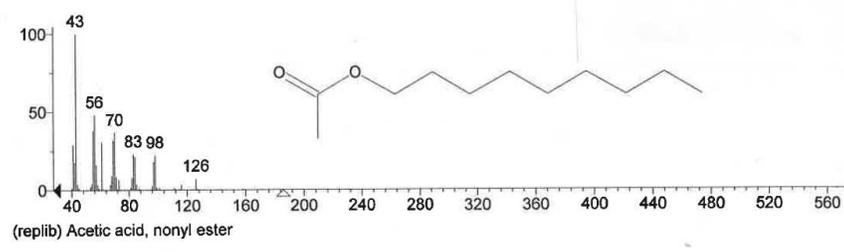
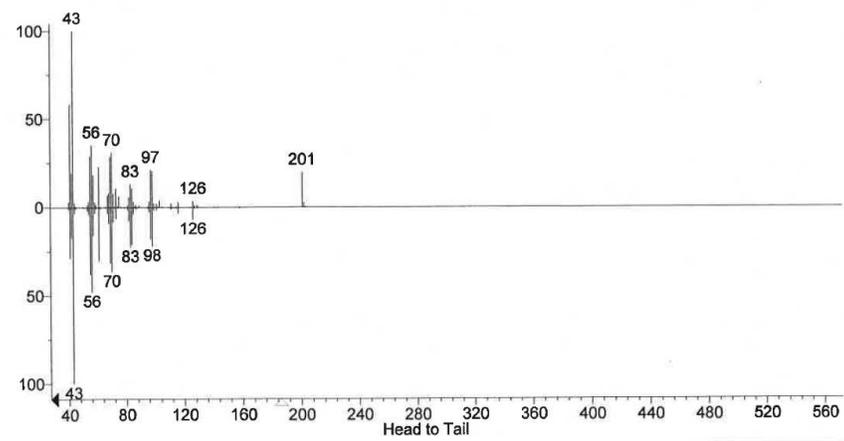
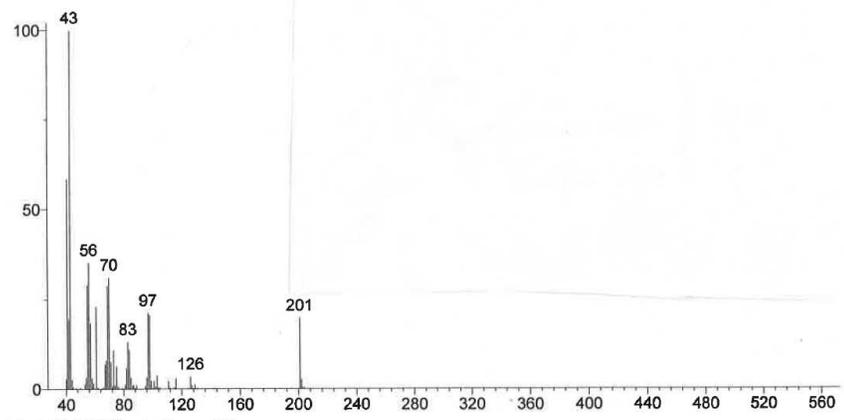


Figure 3S. MS spectrum of a GC peak at 5.98 min of retention time.

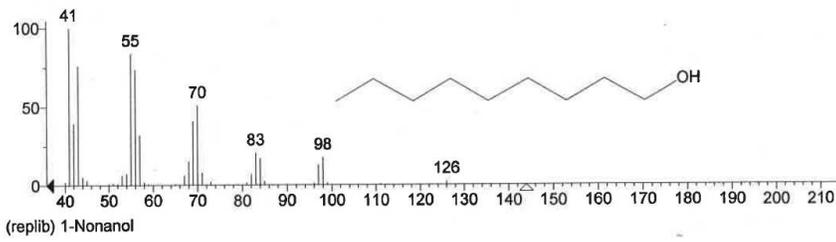
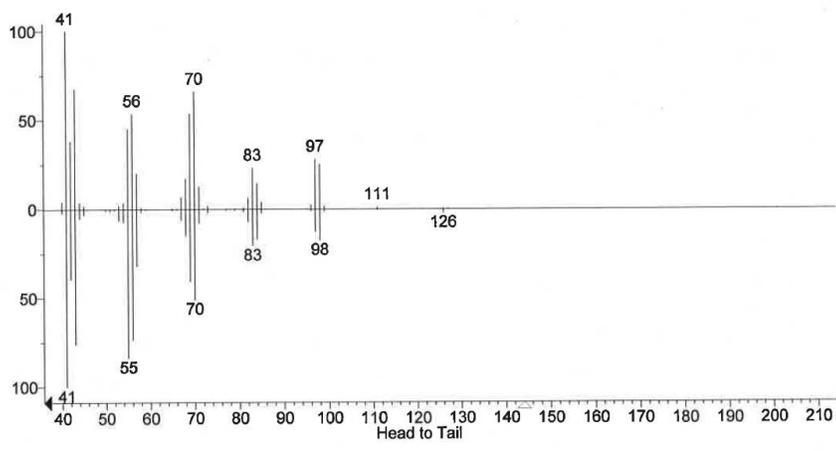
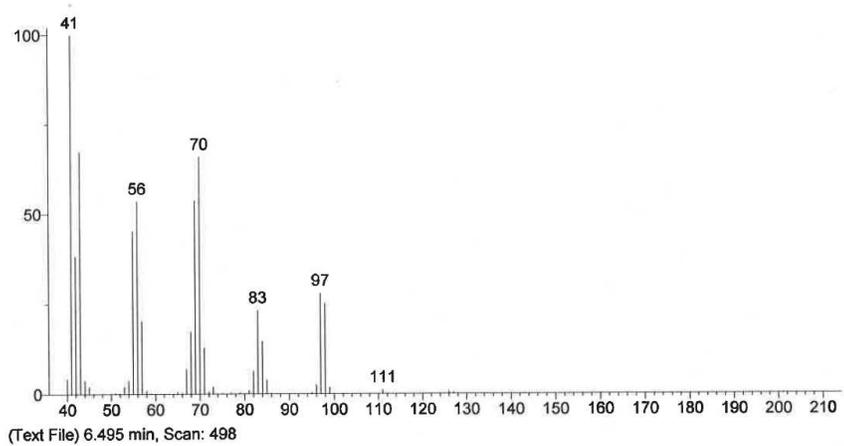


Figure 4S. MS spectrum of a GC peak at 6.50 min of retention time.

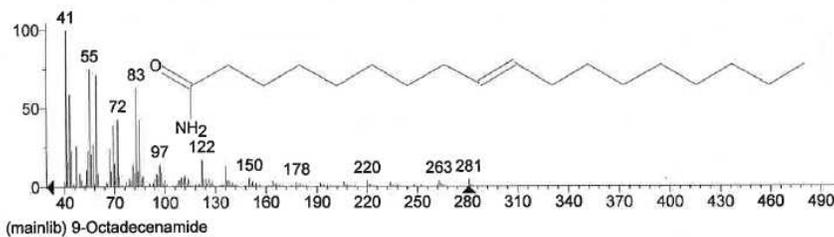
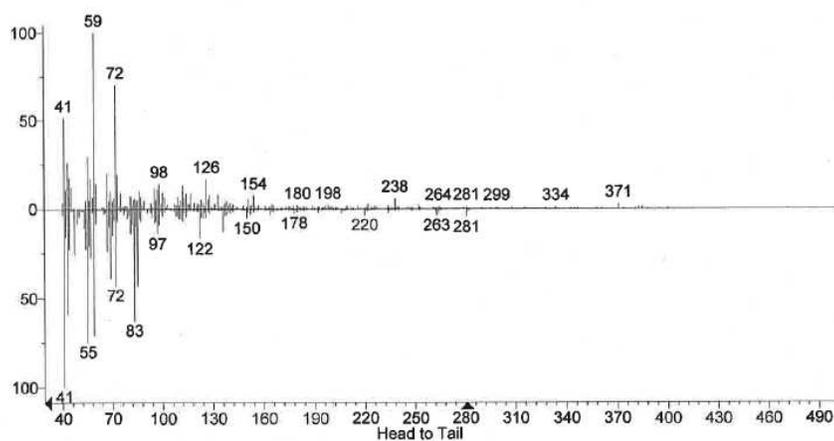
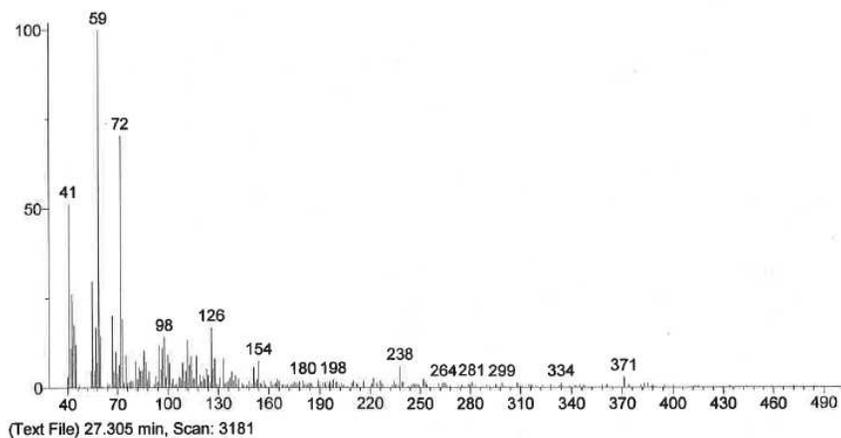


Figure 5S. MS spectrum of a GC peak at 27.31 min of retention time.

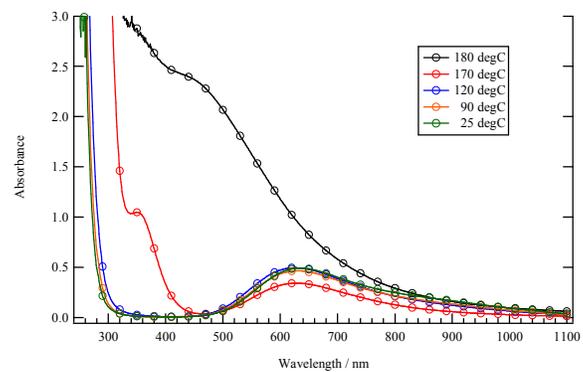


Figure 6S. UV-visible spectra of samples aliquoted from the reaction solution (diluted at 5 times by *n*-hexane) at each temperature.