

Electronic supplementary information (ESI) for Journal of Materials Chemistry

A new one-pot method for the synthesis of Cu nanoparticles for low temperature bonding

Toshitaka Ishizaki* and Ryota Watanabe

Toyota Central R&D Labs., Inc., 41-1, Yokomichi, Nagakute, Aichi, 480-1192, Japan.

Fax: +81 561 63 5328

Tel: +81 561 71 7654

E-mail: ishizaki@mosk.tytlabs.co.jp

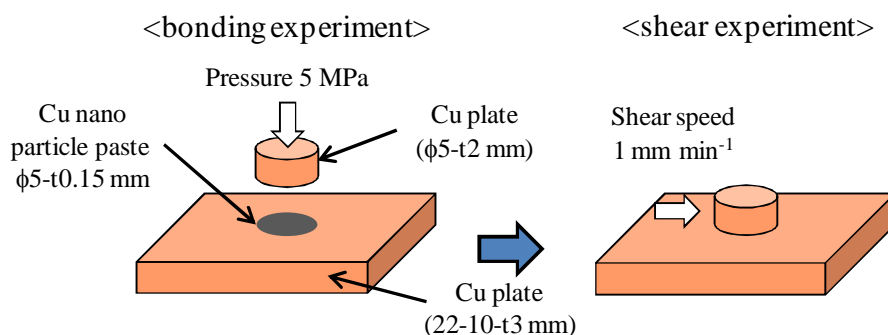


Fig. S1 Sizes of Cu plates bonded by the Cu nanoparticle paste and experiments to study a shear strength of bonded Cu plates.



(a) Ethylene glycol

- Cu sulfate



(b) Ethylene glycol

-Cu hydroxide



(c) Ethylene glycol

- Cu carbonate

Fig. S2 Photographs of ethylene glycol – (a) Cu sulfate, (b) Cu hydroxide and (c) Cu carbonate solutions, respectively.