

## Particle morphology control on the copper powder with different experimental conditions via a planetary ball mill

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### Abstract

This study investigates particle morphology control of copper powder with various experimental conditions using a planetary ball mill. A scanning electron microscope was used to control the particle size and morphology of the copper powder. The experimental results suggest that morphology of copper particles can easily be controlled by experimental conditions during the ball milling process. Spherical types of copper obtained using a small ball size than a large ball size with different experimental conditions. The relationship between impact energy and particle morphology change were analysed with experimental conditions by calculating the impact energy through DEM simulation.

**Keywords:** Particle morphology control, DEM simulation, a planetary ball mill