Preparation and Characteristic of batter-using Ag powder by chemical-wet processing

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Abstract

In this study, batter-using silver powders were prepared by chemical-wet processing using AgNO₃ as a precursor and Ammonium formate as a reduction agent.

For controlling the morphology, particle size and agglomeration of silver particle, a mole ratio of reaction agents, reaction time, reaction temperature, etc. were considered as variables of reaction mechanism.

As a result, porous silver powder with above 100 m particle size was prepared under the condition which was AgNO₃/ Ammonium formate mole ratio of 4 and reaction time of 7 days