

Large Area Controlled Assembly of Transparent Conducting Networks

Disclosure Number

200902245

Technology Summary

Assembly of metal nanoparticles into microwire networks is accomplished in an improved process. Vakarelski, et al. reported, in PRL 102, 058303 (2009) that such structures were made by drying a suspension of gold nanoparticles and surfactant that has formed a network of liquid bridges in the interstices between a 2D crystalline layer of latex particles and a substrate. The submitters have proposed an improvement wherein a specially prepared substrate surface is used instead of latex particles, resulting in a transparent structure.

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