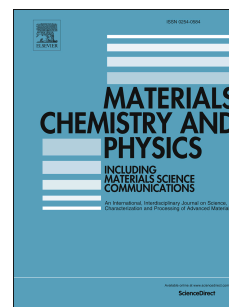


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Crystallographic characterization of laser-generated, polymer-stabilized 4 nm silver-gold alloyed nanoparticles

Oleg Prymak,¹ Jurij Jakobi,² Christoph Rehbock,² Matthias Epple,^{1,*} and Stephan Barcikowski^{2,*}

- Silver-gold nanoalloys can be prepared by chemical synthesis and by laser ablation.
- The preparation by laser ablation leads to homogenous nanoparticles without gradients in elemental composition.
- Silver and gold occur in a solid solution without a deviation from Vegard's rule.
- X-ray powder diffraction is well suited to characterize small nanoparticles (4 nm).
- The composition of nanoparticles from laser ablation is the same as that of the laser target.

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