

Ag

Au



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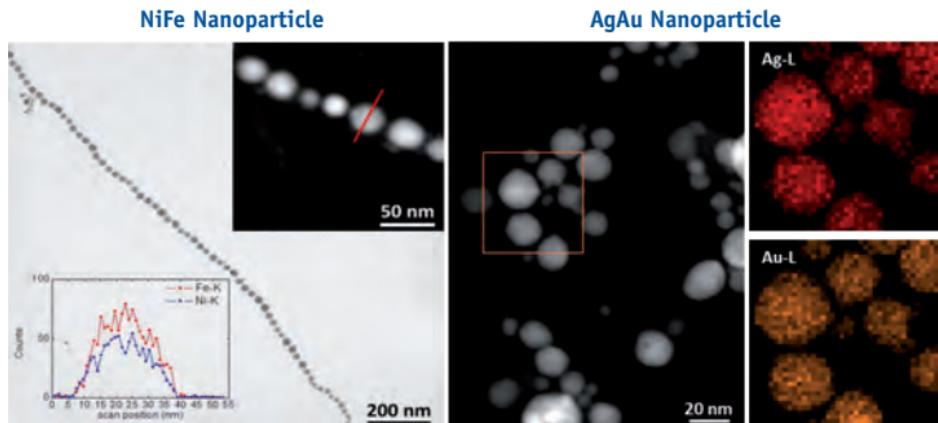
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TECHNICAL CHEMISTRY I
BARCIKOWSKI GROUP

*Laser-generated colloidal
alloy nanoparticles*

Laser-generated colloidal alloy nanoparticles



Pulsed Laser Ablation in Liquids (PLAL) is a versatile process for the fabrication of nanoparticles dispersed in carrier solvents. In comparison to the most common synthesis methods for nanoparticle production, PLAL enables generation of alloy nanocrystals that are difficult to fabricate or even non-accessible. These nanoparticles can combine optical, electronic, catalytic, and biologically active properties. Based on the PLAL synthesis route we investigate alloy nanoparticle colloids for biomedical and energy storage, or energy conversion.

The team offers

- Alloy nanoparticle synthesis made of e. g. AgAu, PtIr, FeNi, ...
- Nanoparticle generation from custom alloy targets
- Tailored nanoparticle solvent, e. g. polymer solution, acetone, ...

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