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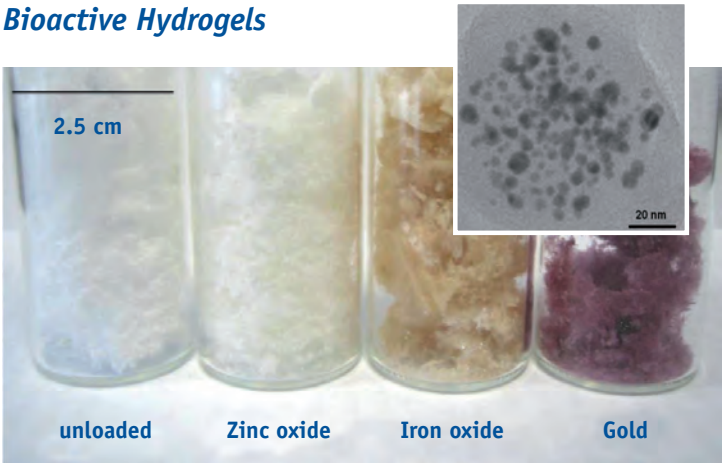
TECHNICAL CHEMISTRY I
BARCIKOWSKI GROUP

Bioactive Hydrogels

Bioactive Hydrogels



A laser-based in-situ conjugation method has been investigated to embed pure metal nanoparticles into hybrid microgels without matrix-coupling agents. Utilization of laser ablation technique allows a completely water-based process route and nearly free choice of nano-particle material. The produced gels serve as release systems emitting bioactive ions over time and are therefore highly interesting for the application in various medical fields.

The team offers

- Hydrogel encapsulated nanoparticles for ion release or cell adhesion
- Great variety of metal nanoparticles (e. g. Au, Pt, Ag, C, Zn, Fe)

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