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Microwave-Assisted Polyol Synthesis of CuInTe₂ and CuInSe₂ Nanoparticles. —

Nanoparticles of the title compounds are synthesized during 1 h by the microwave-assisted polyol method from CuCl, In, and Se or Te dissolved in triethylene glycol or tetraethylene glycol. The polyol is used both as the solvent and the reducing agent. The samples are characterized by powder XRD, TEM, XPS, and photoacoustic spectroscopy. The nanoparticles exhibit a body-centered tetragonal structure with average diameters of approximately 94 nm for the Te-containing samples and 83 nm for the Se-containing particles. — (GRISARU, H.; PALCHIK, O.; GEDANKEN*, A.; PALCHIK, V.; SLIFKIN, M. A.; WEISS, A. M.; Inorg. Chem. 42 (2003) 22, 7148-7155; Dep. Chem., Bar-Ilan Univ., Ramat Gan 52900, Israel; Eng.) — W. Pewestorf