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## Non-toxic ternary quantum dots AgInS<sub>2</sub> and AgInS<sub>2</sub>/ZnS: synthesis and optical properties\*

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Colloidal ternary quantum dots of AgInS<sub>2</sub> and AgInS<sub>2</sub>/ZnS were synthesized in water in the presence of mercapto alkyl carboxylic acid. Selective size separation of AIS and AIS/ZnS hydrophilic nanoparticles was performed as well as the ligand exchange by thiolated methoxypolyethylene glycol molecules having an amphiphilic nature. The influence of nanocrystal size, composition and surface molecules on the optical properties of QDs was studied.

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