DNA-directed self-assembly of colloidal crystals

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With the development of new ways to coat colloidal particles with DNA [1,2], it has become possible coat a wide spectrum of colloidal materials with DNA and to follow the crystallization of DNA-coated colloids in real time [3]. Moreover, a whole host of new crystal structures is now possible, including binary colloidal crystals where the different sublattices can be formed from arbitrary different materials [1]. New sublattices are now possible, among them some that have long been sought for their robust photonic band gaps.

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