

Abstract Submitted
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Synthesis and properties of virus-like particles BOGDAN DRAGNEA, Indiana University — The principles underlying self-assembly of virus-like particles (VLP), which are composed of an icosahedral virus protein coat encapsulating a nanoparticle core are discussed. Such VLPs have potential practical utility as biomedical imaging and sensing tools, as novel functional materials, and as experimental models for molecular self-assembly of quasi-spherical molecular cages. Moreover, we show that, as a consequence of their regular protein surface, VLPs readily form three-dimensional crystals having optical properties influenced by multipolar plasmonic coupling.

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