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"face-lifting" and "make-up" for microorganisms: Layer-by-layer polyelectrolyte nanocoating

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Abstract

Figure Presented: Layer-by-layer encapsulation of living biological cells and other microorganisms via sequential adsorption of oppositely charged functional nanoscale components is a promising instrument for engineering cells with enhanced properties and artificial microorganisms. Such nanoarchitectural shells assembled in mild aqueous conditions provide cells with additional abilities, widening their functionality and applications in artificial spore formation, whole-cell biosensors, and fabrication of three-dimensional multicellular clusters. © 2012 American Chemical Society.

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