Tufts UNIVERSITY | School of Engineering

Nanobiofabrication: Exploiting Programmable Properties and Interactions for Fabrication of High Capacity Biosensing Platforms toward Rapid Bioprocess Monitoring

Hyunmin Yi

Associate Professor,
Department of Chemical and Biological Engineering, Tufts University

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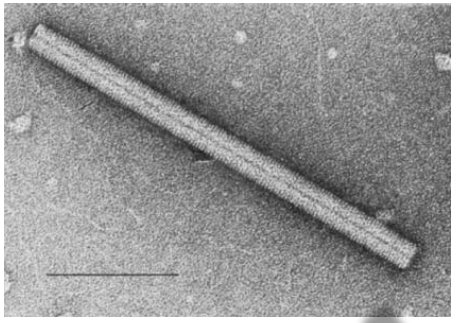
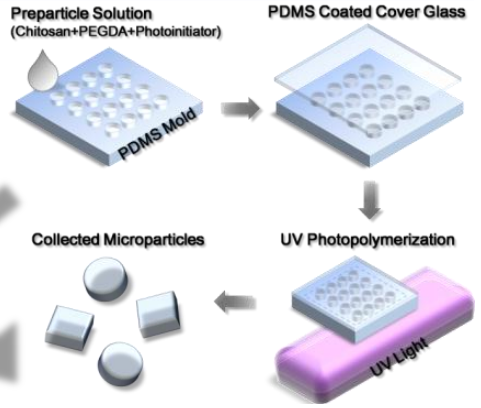
Research Themes: Nanobiofabrication

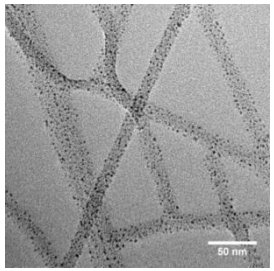
Viral Nanotemplates

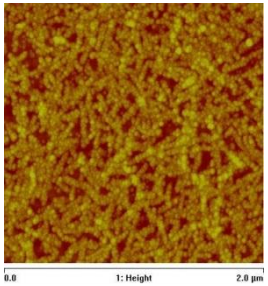


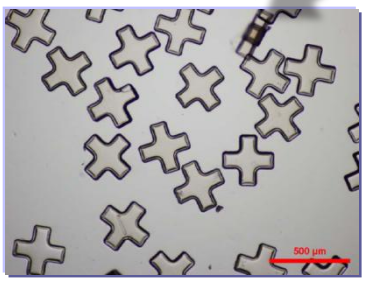
Soft Lithography



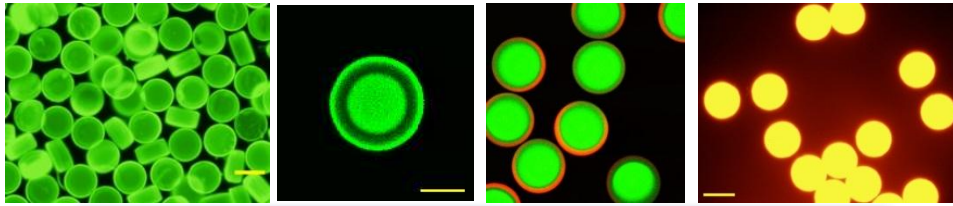
Catalytic Nanoparticles



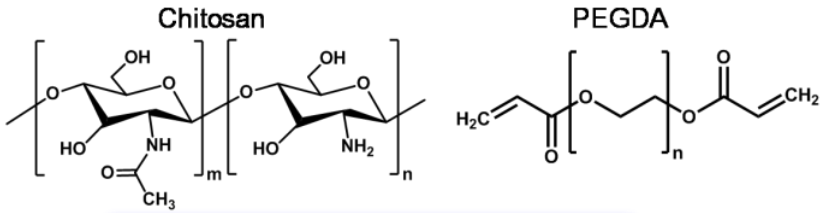




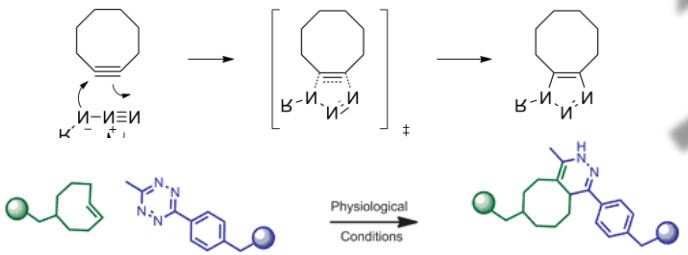
Functional Hybrid Microparticles



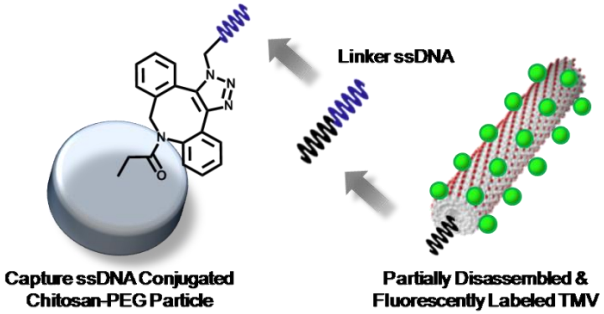
Smart Biomaterials

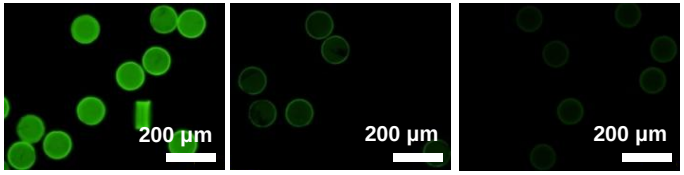


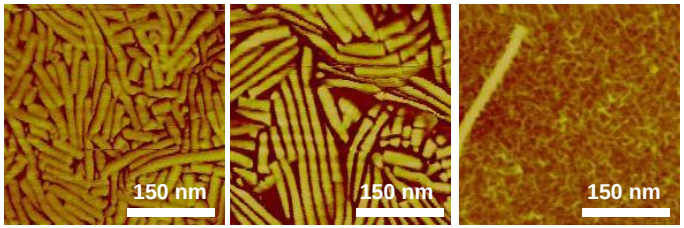
Bioorthogonal Chemistry

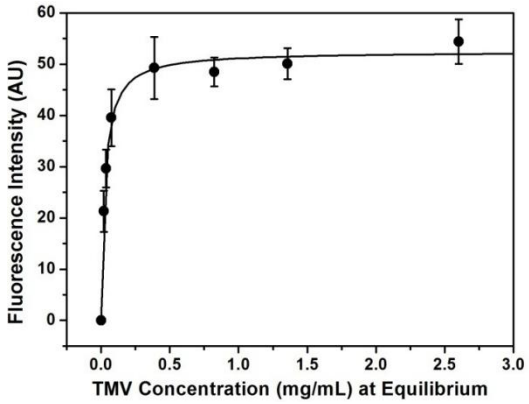


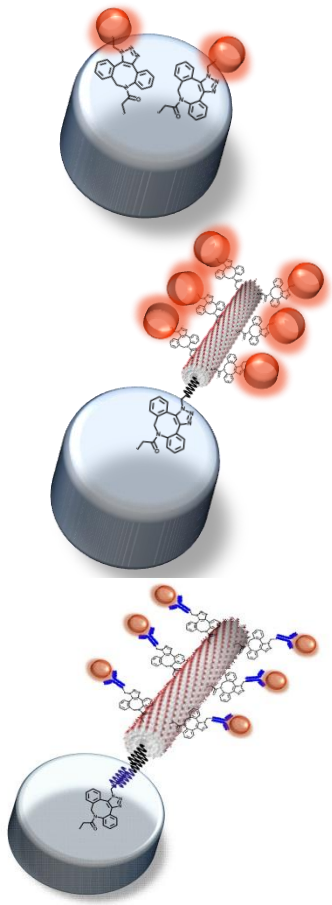
TMV-Templated High Capacity Protein Conjugation on Microparticles

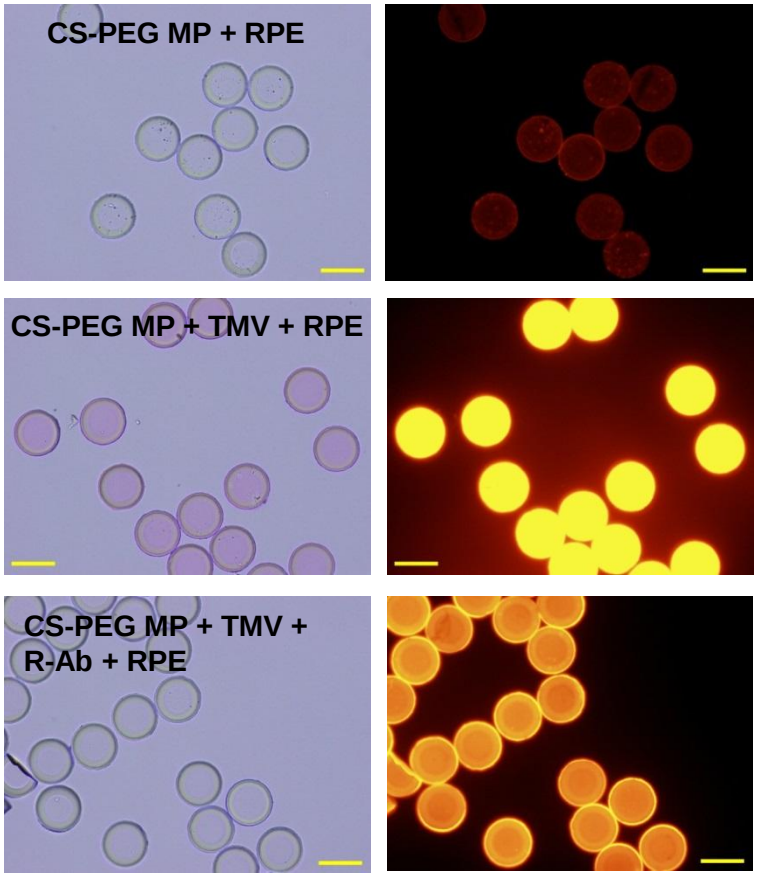












50x Higher protein conjugation capacity over chitosan-PEG platform, 2000x over planar substrates