Electronic Supplementary Material (ESI) for Polymer Chemistry

Supplementary Information

SYNTHESIS OF RANDOM COPOLYMER BASED PH-RESPONSIVE NANOPARTICLES AS DRUG CARRIERS FOR CANCER THERAPEUTICS

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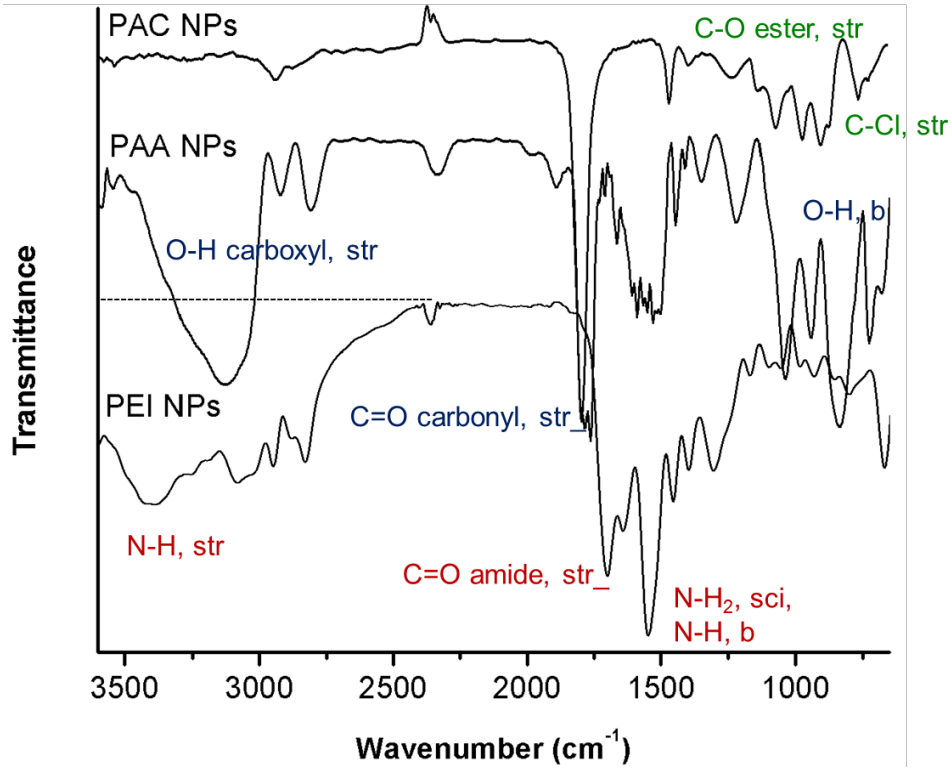

Figure S1. FT-IR spectra of different nanoparticles: PAC NPs, PAA NPs and PEI NPs.

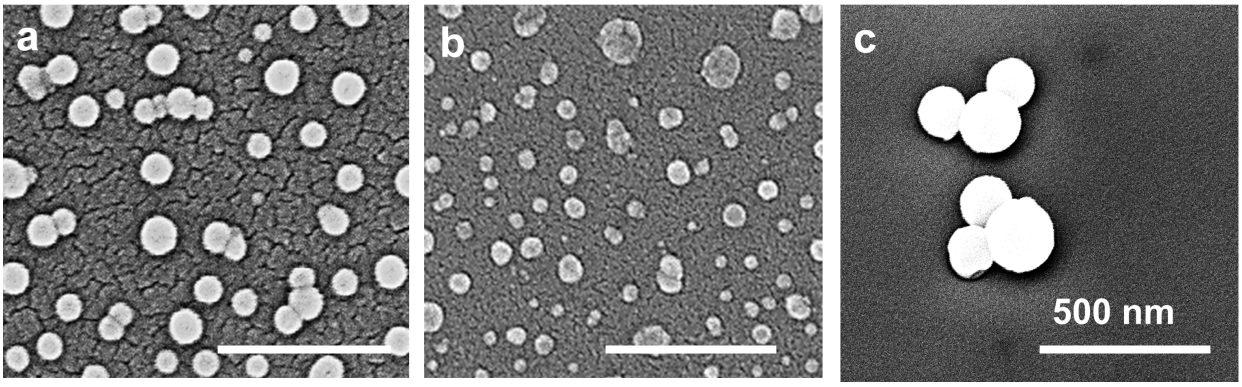

Figure S2. SEM images of particles modified at different states: PAC NPs (a), PAA NPs (b), and PEI NPs (c).

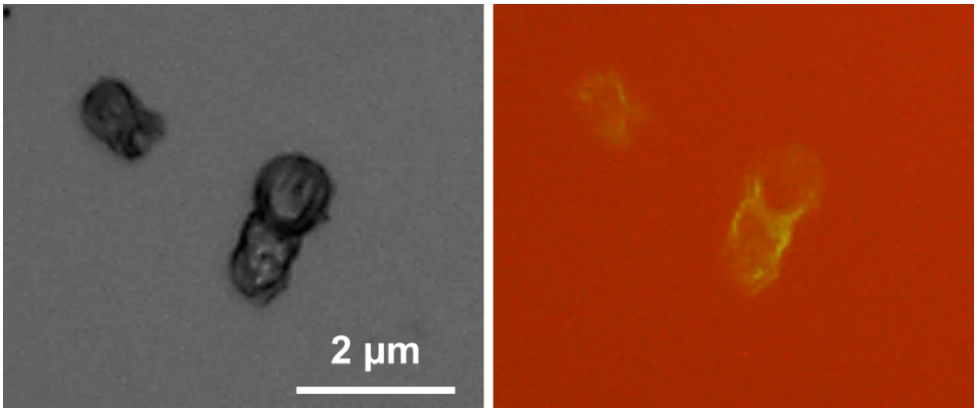

Figure S3. Optical (left) and fluorescent (right) images of FITC tagged PEI NPs drop-cast onto a clean Si-wafer at a particle concentration of ~ 1 mg/mL in aqueous solution. Large particles were synthesized at high UV dosage of 4,000 mJ/cm^2 prior to surface modification with FITC tagged PEI (MW 10,000) at a ratio of FITC to PEI = 3:1 (molar).

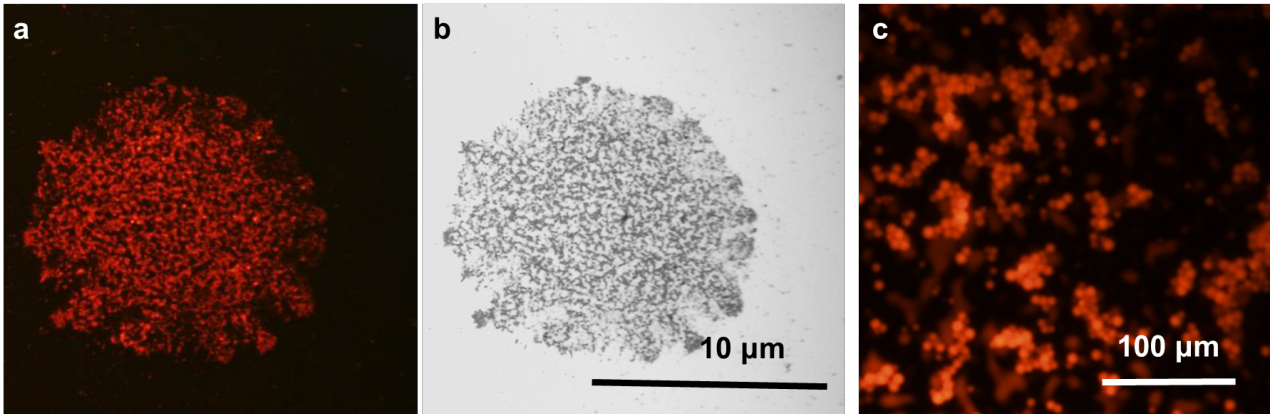

Figure 4S. Fluorescent (a) and corresponding optical (b) images of Dox/PEI NP aggregates. (c) Fluorescent image of Dox loaded PEI microparticles from ranPAC synthesized at a high UV dosage of 4,000 mJ/cm^2 (strategy 1). The Dox loaded particles were deposited on a Si-wafer and imaged using a Leica SP5 confocal microscope.