ELECTRONIC SUPPORTING INFORMATION

RSC Advances

SELECTIVE TOPOTECAN DELIVERY TO CANCER CELLS BY TARGETED pH-SENSITIVE MESOPOROUS SILICA NANOPARTICLES

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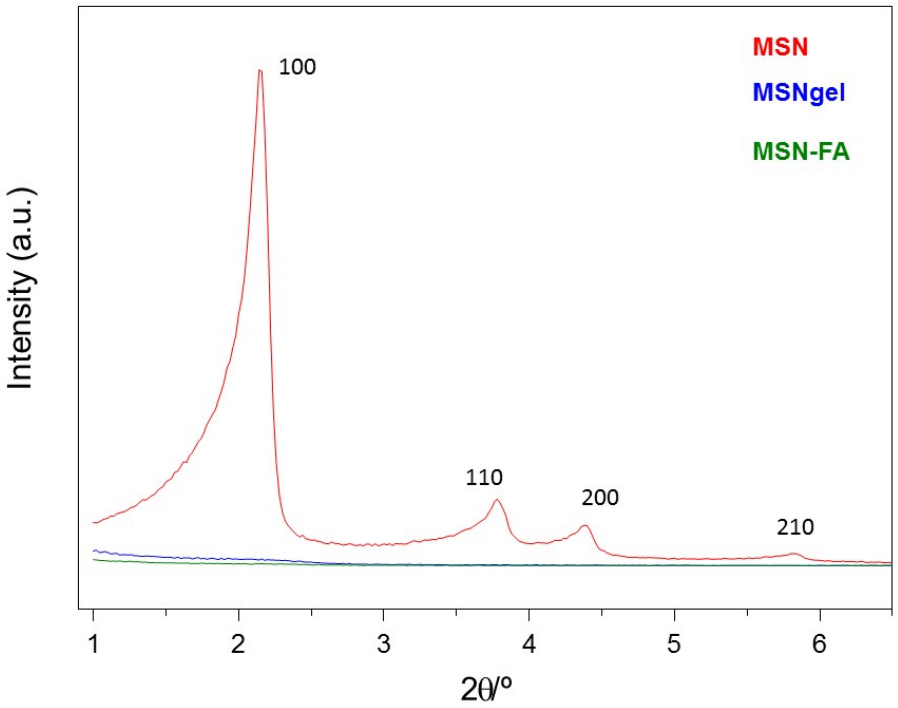

Figure S1. Low-angle XRD patters of the different nanomaterials synthetized in this work.

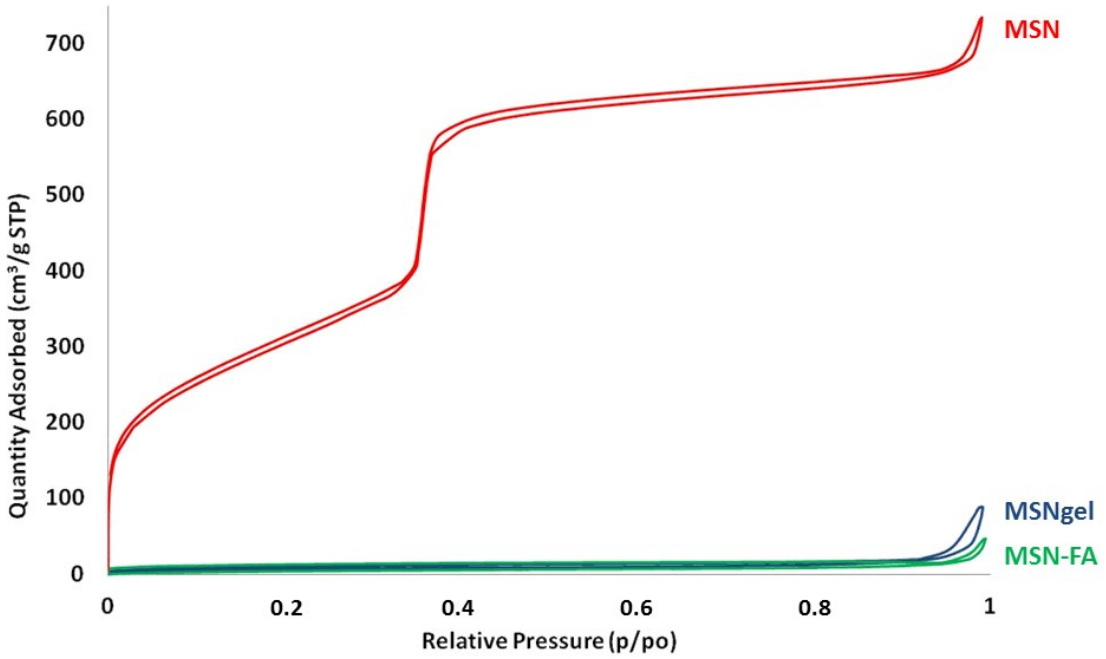

Figure S2. N_2 adsorption and desorption isotherms of the different nanomaterials synthetized in this work.

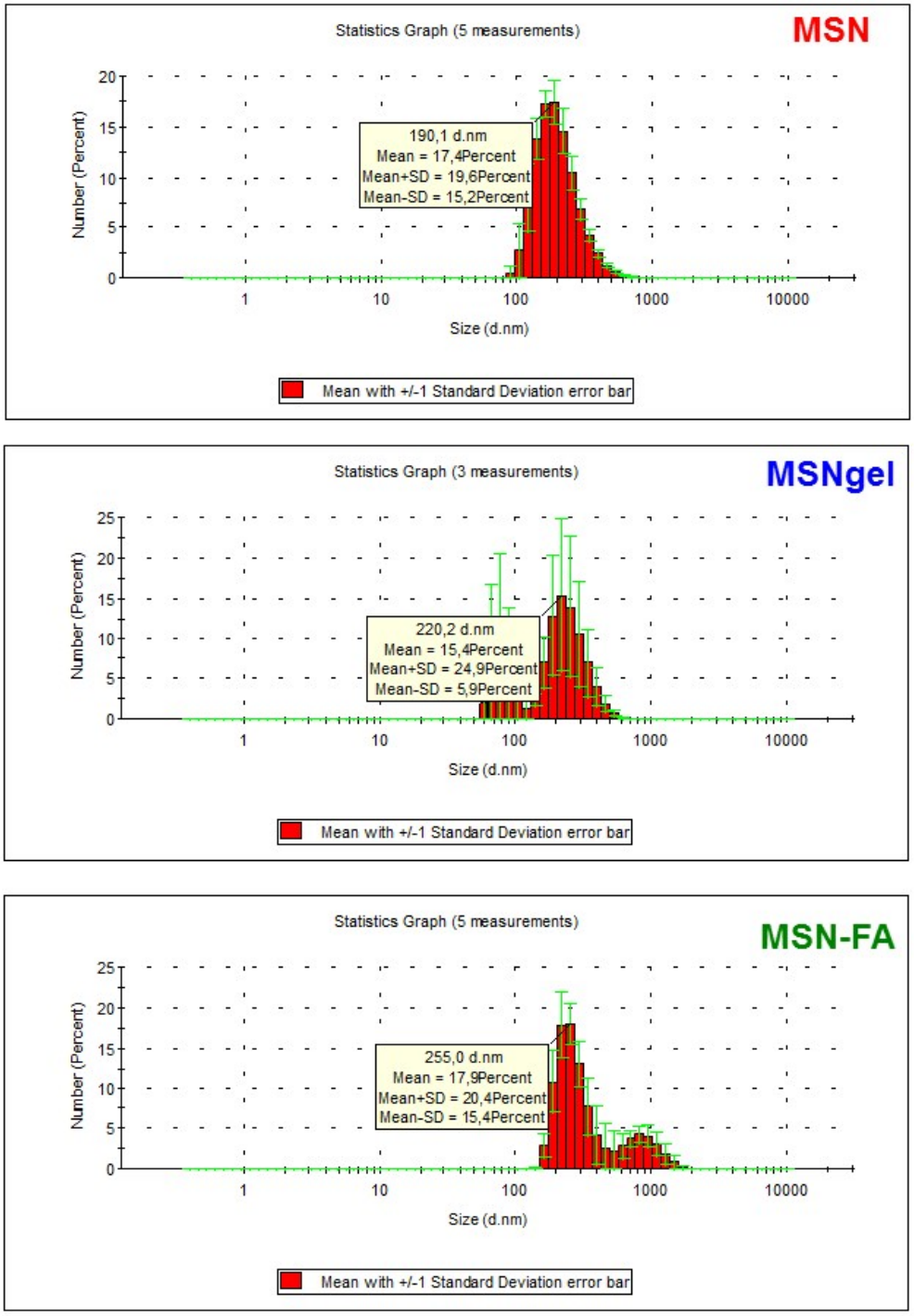

Figure S3. DLS measurements and mean hydrodynamic diameter for the different materials synthesized in this work.

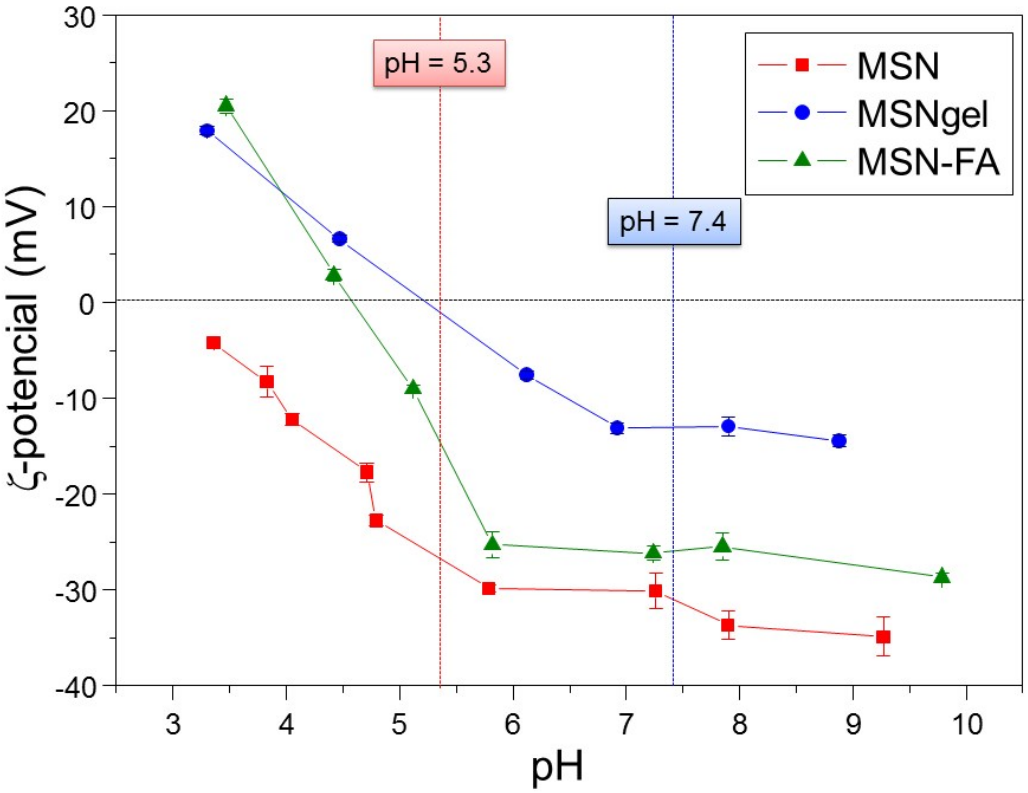

Figure S4. ζ-Potential vs pH plots of the different samples synthetized in this work.

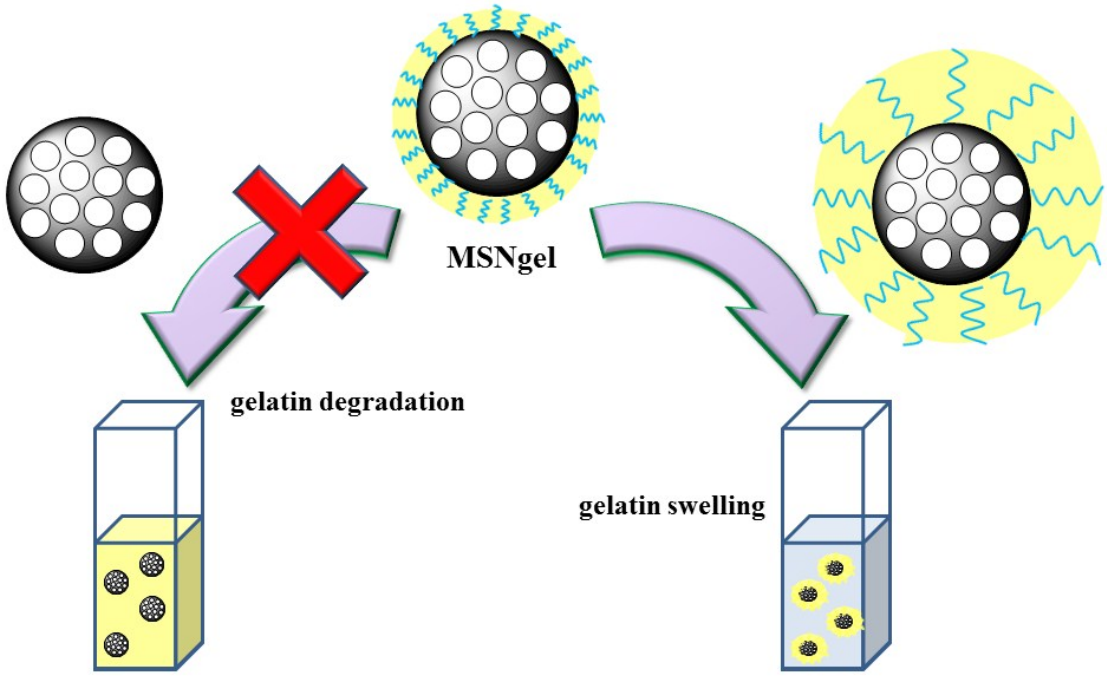

Figure S5. Schematic depiction of the possible performance of MSNgel nanosystems in aqueous media.

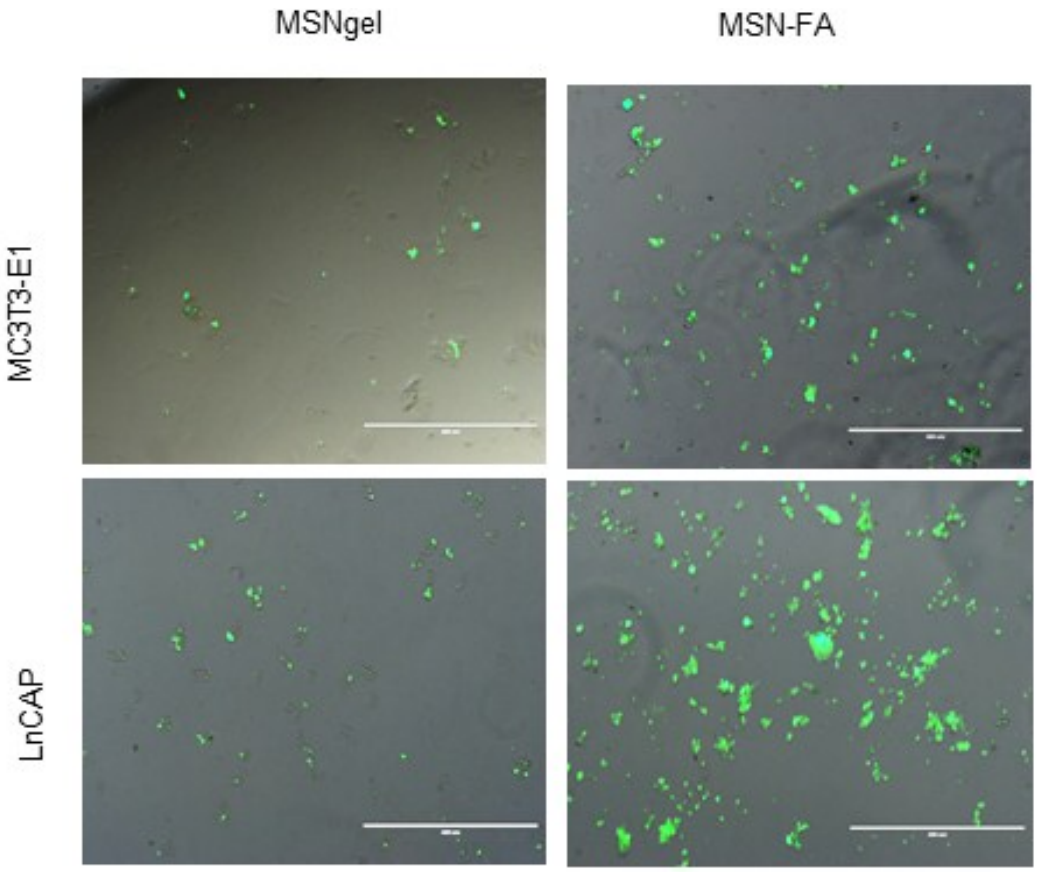

Figure S6. Fluorescence microscopy images of MC3T3-E1 and LNCaP cells in contact with 100 μg/ml of MSNgel and MSN-FA at 2 hours of cell culture.

Table S1. Kinetic parameters corresponding to TOP release from different matrices (MSN-FA and MSN) at two different pH values (5.3 and 7.4).

Material	pH	A(%)	k (h^{-1})	δ	R^2
MSN-FA	5.3	8.8 ± 0.2	0.07 ± 0.01	0.51 ± 0.03	0.998
MSN-FA	7.4	3.4 ± 0.4	0.03 ± 0.02	0.47 ± 0.06	0.993
MSN	5.3	70 ± 1	0.003 ± 0.004	0.76 ± 0.03	0.999
MSN	7.4	98 ± 1	0.025 ± 0.001	0.70 ± 0.03	0.998