

## Supplementary Material

# Strategy for Conjugating Oligopeptides to Mesoporous Silica Nanoparticles Using Diazirine-Based Heterobifunctional Linkers

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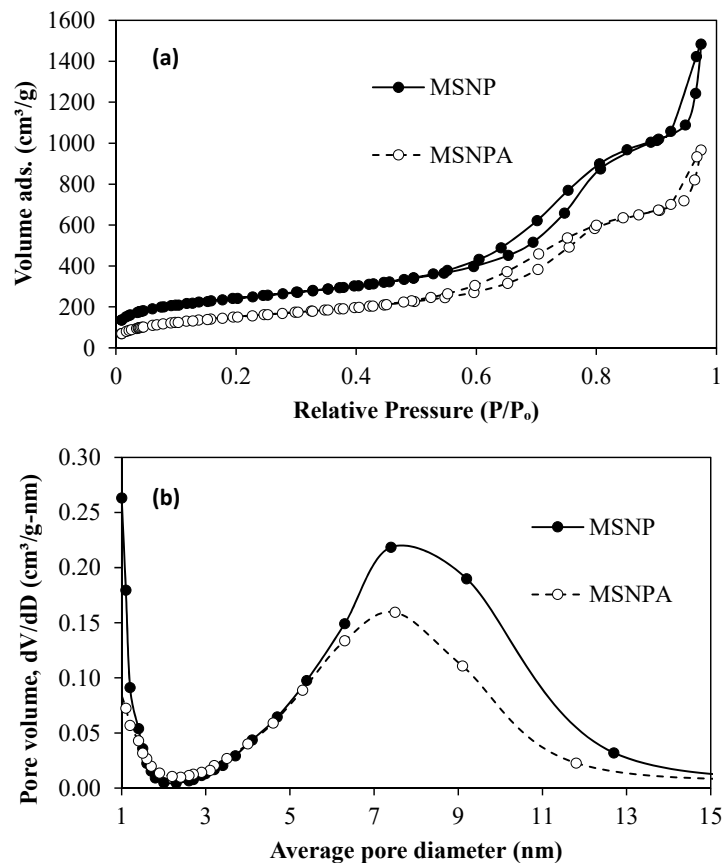
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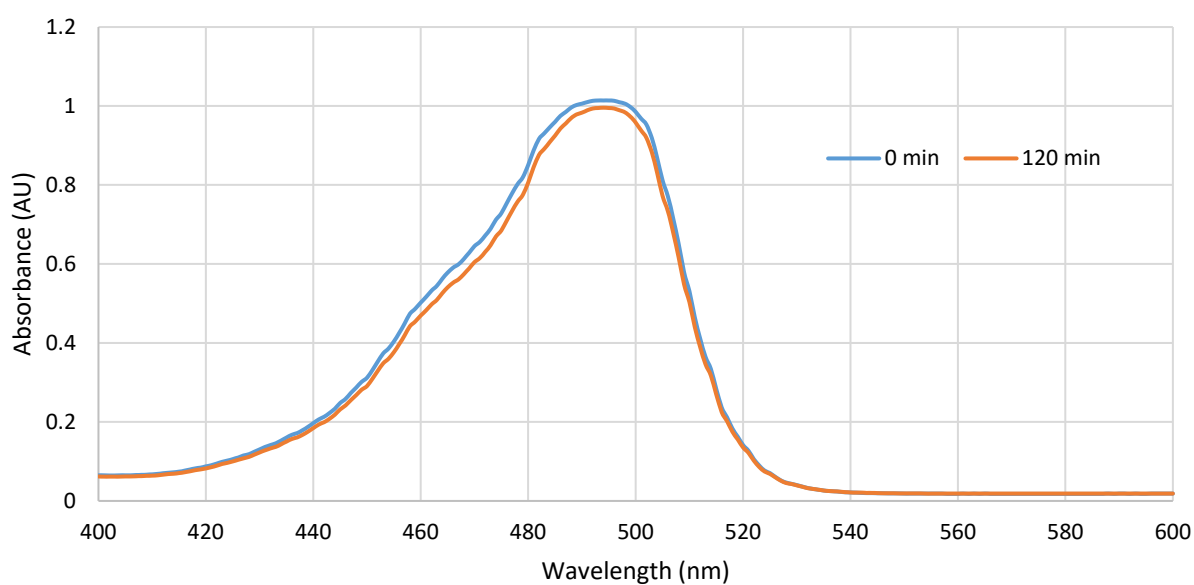
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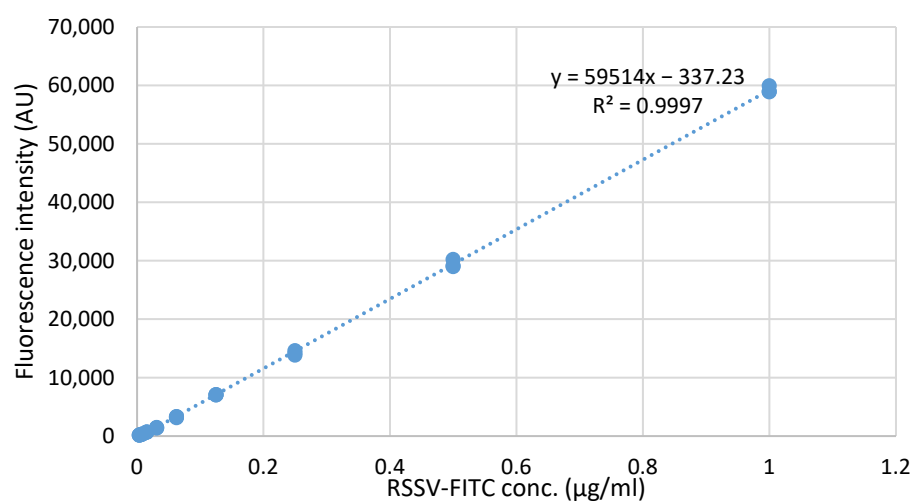
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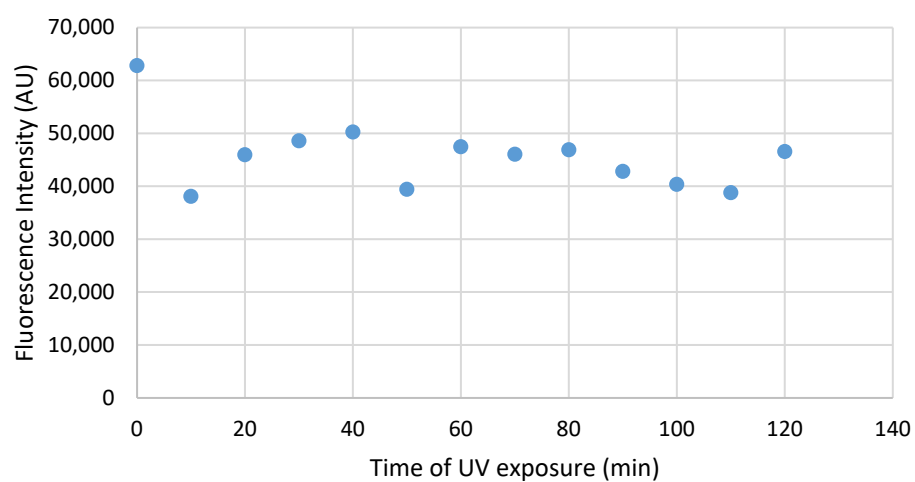
**Figure S1.** Surface property characterization of non-functionalized and amine functionalized MSNPs: (a) nitrogen sorption isotherms and (b) BJH pore size distribution.



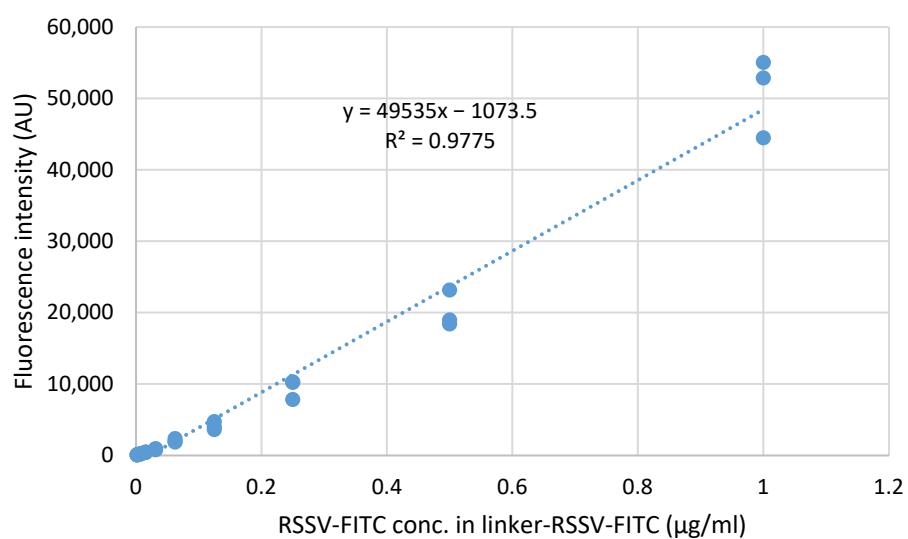
**Figure S2.** Absorbance spectra of RSSV-FITC (peak 495 nm) before and after UV exposure for 120 min.



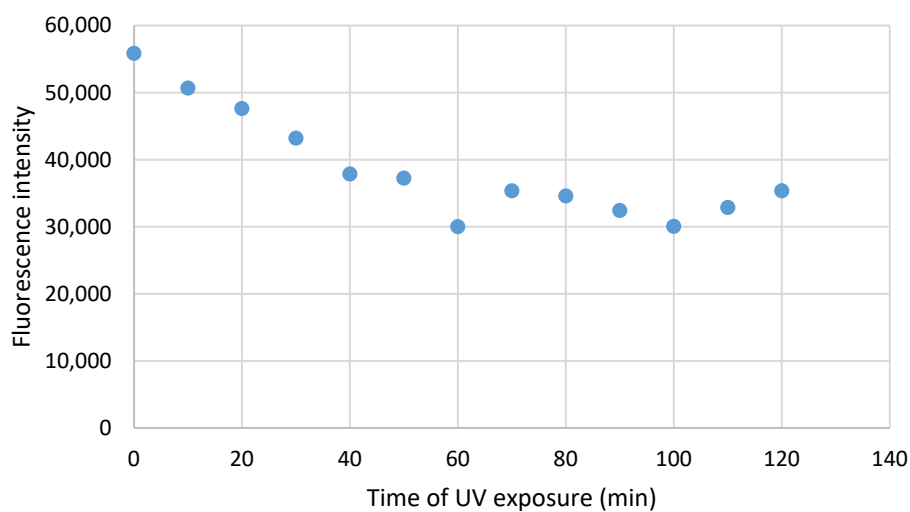
**Figure S3.** Calibration curve for the concentration of RSSV-FITC in solution.



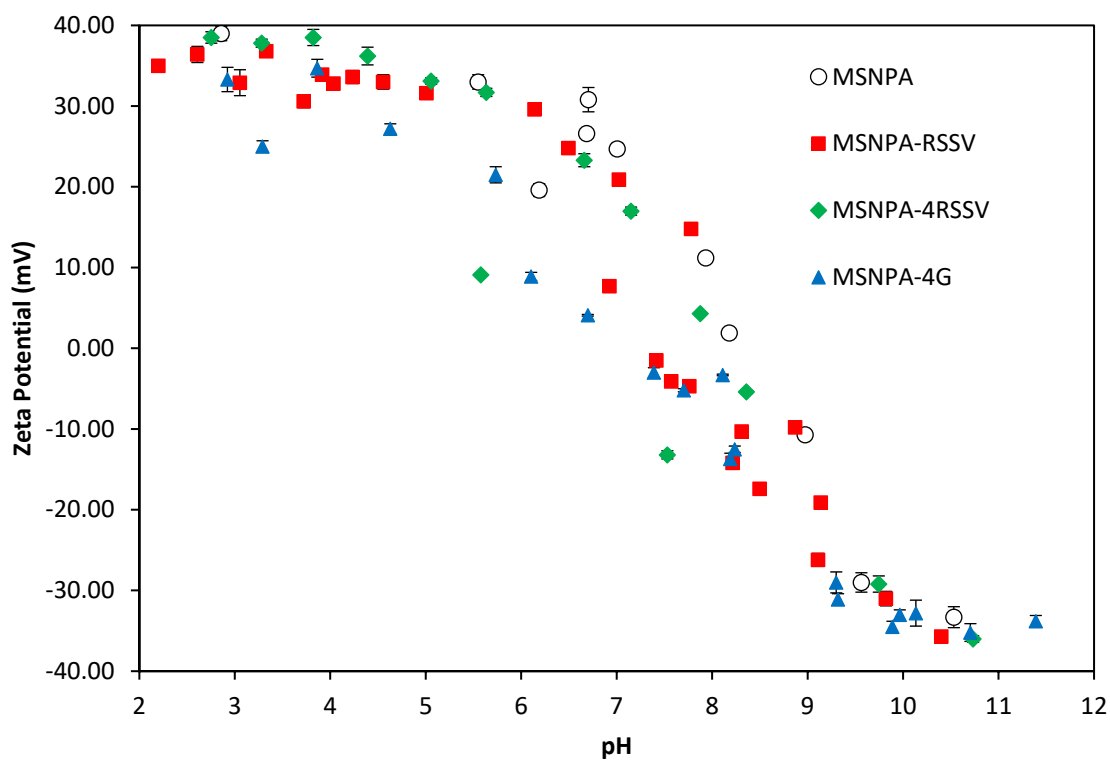
**Figure S4.** Fluorescence intensity decrease due to photo-bleaching for RSSV-FITC solution. There is a ~25% intensity decrease even after 5 min of UV treatment. After the initial drop in intensity, there is no further photo-bleaching.



**Figure S5.** Calibration curve for fluorescence intensities of SNLD-RSSV-FITC solutions before UV treatment.



**Figure S6.** Fluorescence intensity decrease due to photo-bleaching for SNLD-RSSV-FITC solution. There is a ~35% intensity decrease gradually up to 60 min of UV treatment. After that drop in intensity, there is no further photo-bleaching.



**Figure S7.** Comparison of zeta potential of MSNPA-RSSV, MSNPA-4RSSV and MSNPA-4G with bare MSNPAs measured over a wide range of pH.