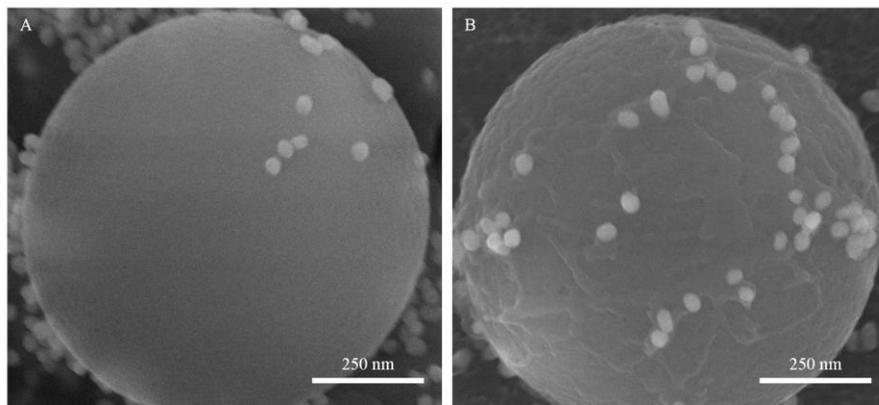
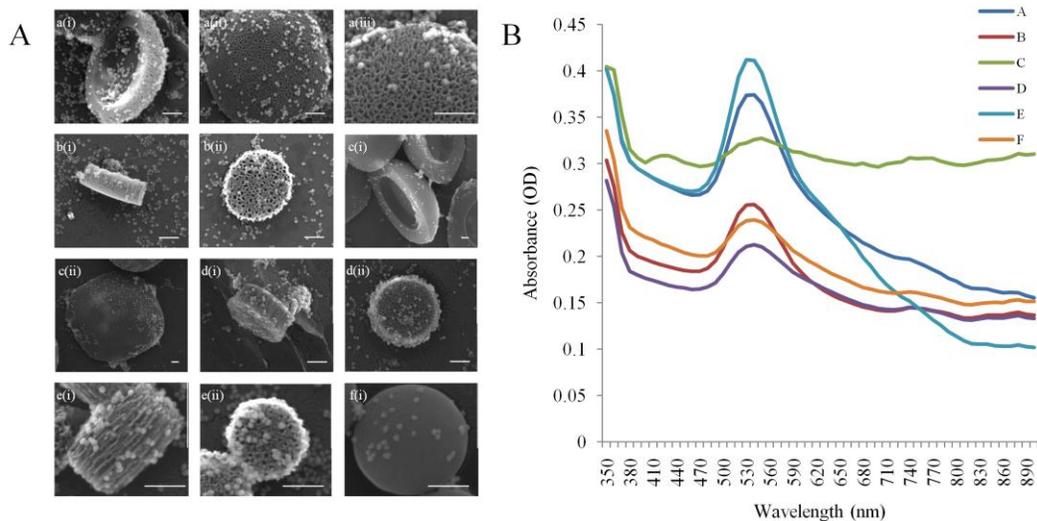


Supplemental figure 1: Photographs showing the assembly of BASP with different concentrations of the components. The red color is due to the presence of AuNP. (A) BASP formed with lower concentration of silica beads ($10^6/\mu\text{L}$) (B) BASP formed with higher concentrations of silica beads ($10^7/\mu\text{L}$). Note the condensation and the color change in the solution (highlighted in the blue box) at bacteriophage concentrations of $3.5 \cdot 10^6$, $1.75 \cdot 10^6$ and $8 \cdot 10^5$ TU/μL in A as opposed to the absence of such changes in B.



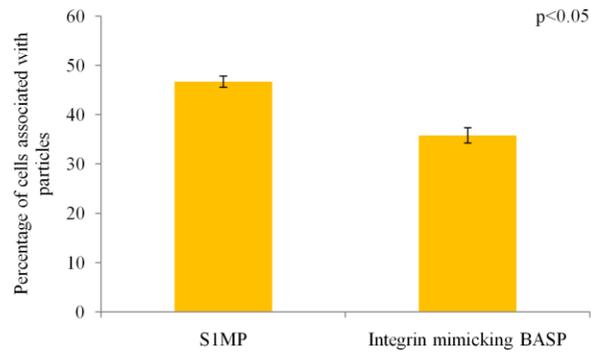
Supplemental figure 2: SEM micrographs of BASP with silica beads. (A) BASP formation when bacteriophage was added to a mixture of silica beads and AuNP. (B) BASP formation when AuNP-bacteriophage networks were added to silica beads. Note the significant increase in the number of AuNP (white dots) and the presence of fibrous coating on the silica beads (bacteriophage) in B.



Supplemental figure 3: BASP design- effect of S1MP geometry and porosity. (A) SEM images of BASP formed in the presence of S1MP(-) with different geometries and porosities. The images show the association of S1MP with AuNP. (B) UV-Vis spectra of the above tested BASP (10 fold dilution) showing the broadening of the spectra with comparative increase in NIR absorbance by c and f NA with respect to the other systems.

The systems are as follows: (a) 1.6 μm in diameter quasi-hemispherical HP (b) 1 μm in diameter and 0.4 μm in height discoidal GP (c) 3.2 μm in diameter quasi-hemispherical HP (d) 1 μm in diameter and 0.4 μm in height discoidal HP (e) 0.6 μm in diameter and 0.4 μm in height discoidal HP (f) 1 μm in diameter spherical solid silica beads.

GP – pore size 40 – 60nm, HP – pore size 20 – 30nm, Scale bar - 300 μm .



Supplemental figure 4: Quantitative flow cytometry analysis of J774A macrophages showing reduced uptake of integrin mimicking BASP in comparison to S1MP.