

A green chemistry approach for synthesizing thermostable antimicrobial peptide-coated gold nanoparticles immobilized in alginate biohydrogel

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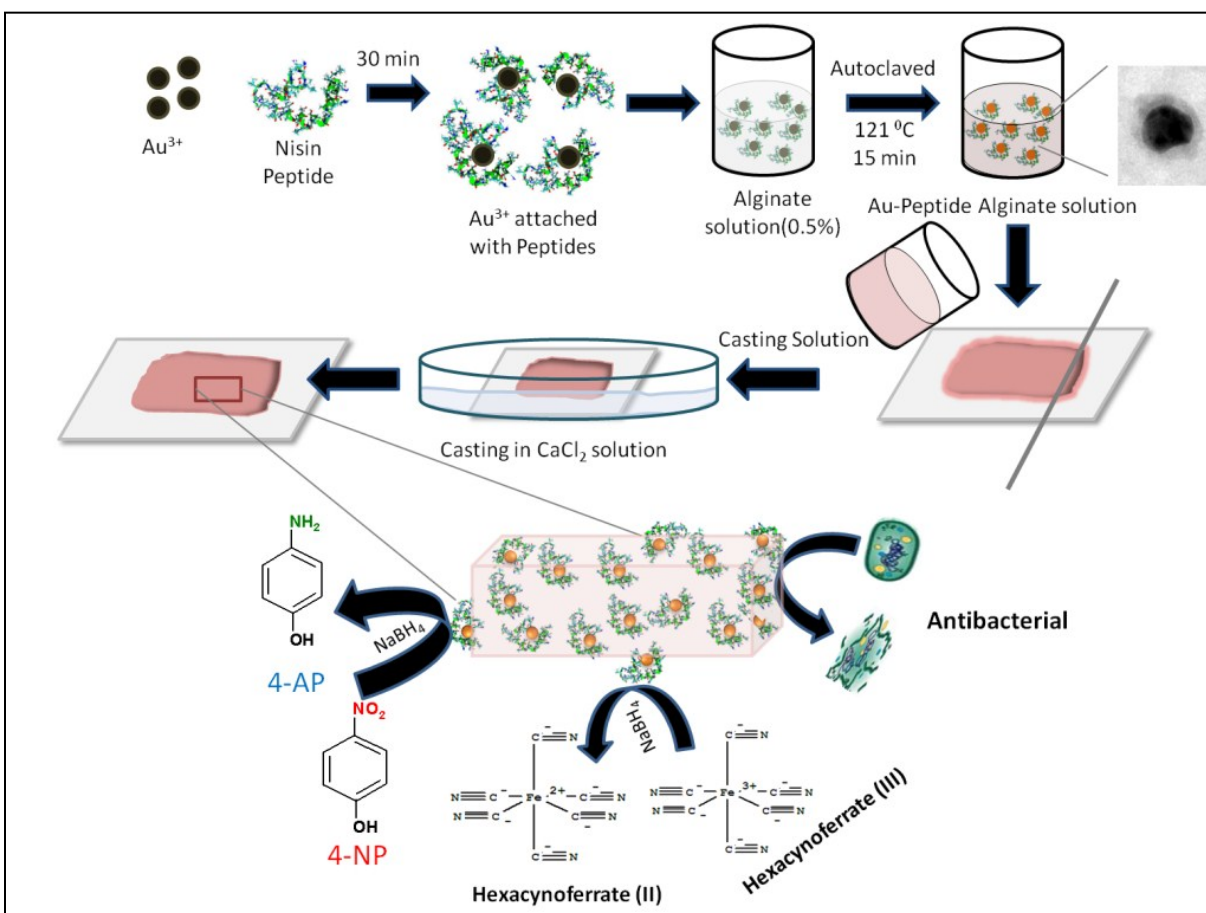


Fig. S1: Schematic representation of the fabrication procedure of Aupeptide-alginate biohydrogel based thermostable nisin peptide and its applications

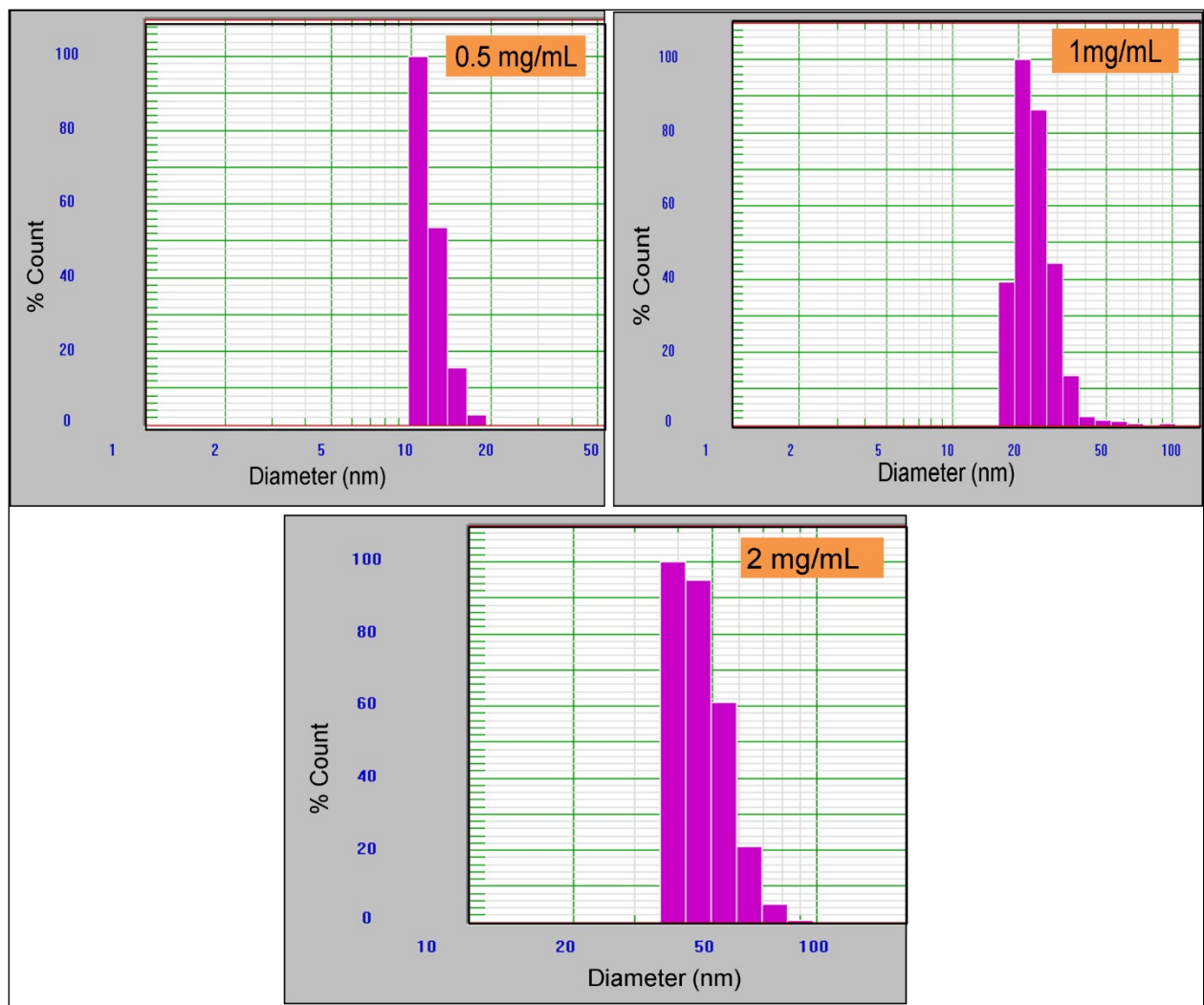


Fig. S2: Hydrodynamic diameter of the AuNPs formed using nisin peptides at 0.5, 1, and 2 mg/mL concentration

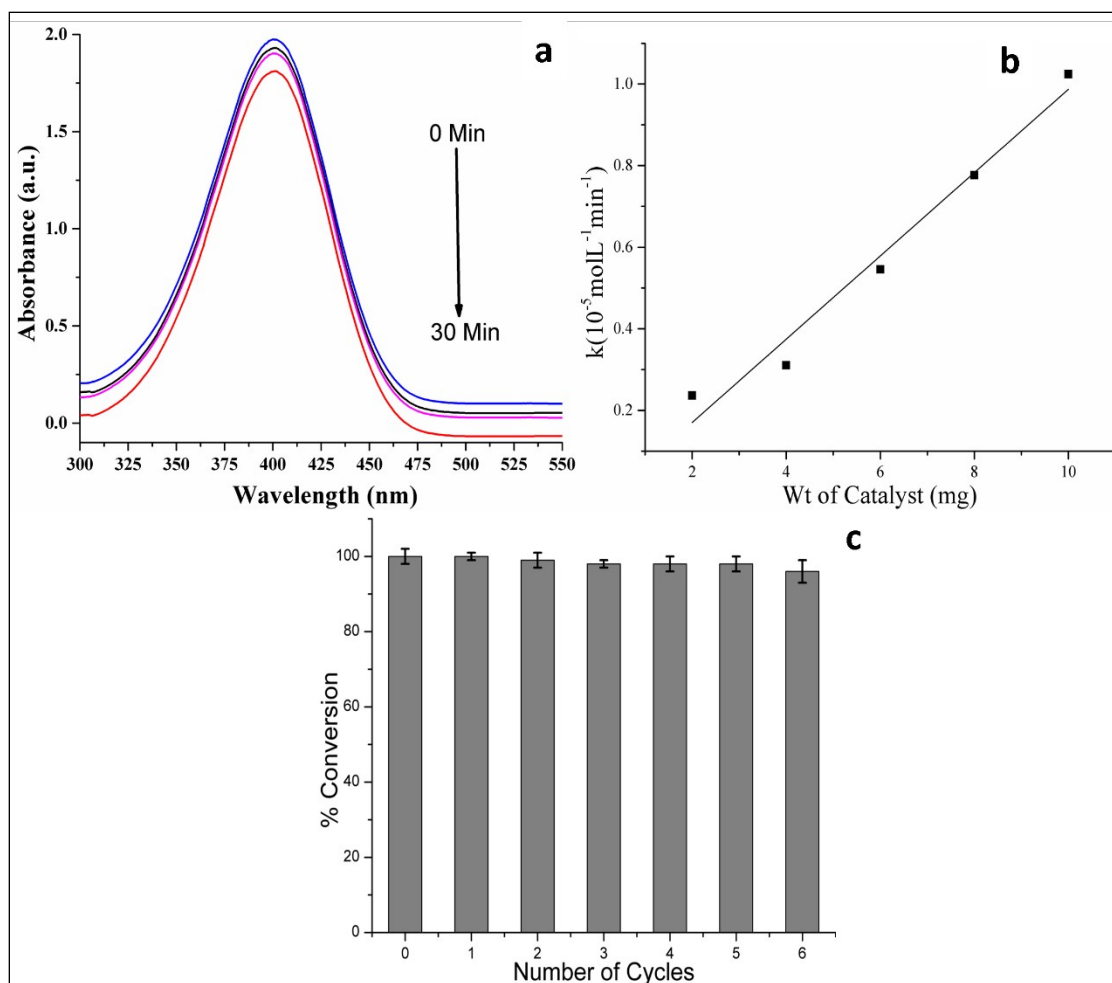


Fig. S3: (a) A time dependent series of UV-Vis absorption spectra taken during the reduction of 4-NP, (b) Plot of the rate constant (k) versus catalyst dose for reduction of 4-NP in the presence of different concentration of Aupeptide-alginate biohydrogel by NaBH_4 , and (c) Percent conversion of 4-NP for consecutive 7 cycles

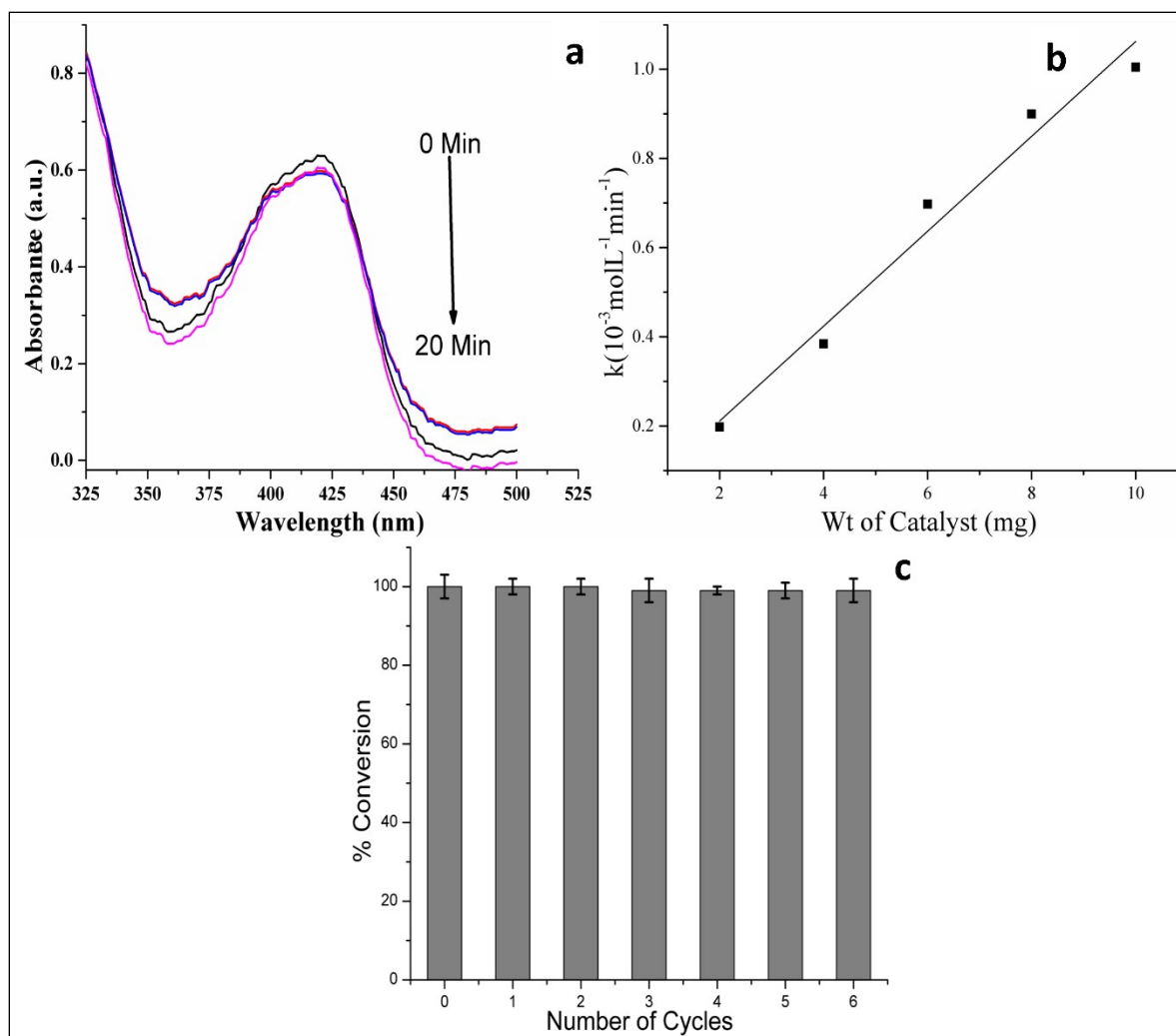


Fig. S4:(a) A time dependent series of UV-Vis absorption spectra taken during the reduction of Hexaferricynaide, (b) Plot of the rate constant (k) versus catalyst dose for reduction of Hexaferricynaide in the presence of different concentration of Aupeptide-alginate biohydrogel by NaBH_4 , and (c) Percent conversion of Hexaferricynaide for consecutive 7 cycles