

Support Material – Title page

Selenium nanoparticles: influence of reduction agents on particle stability and antibacterial activity at biogenic concentrations

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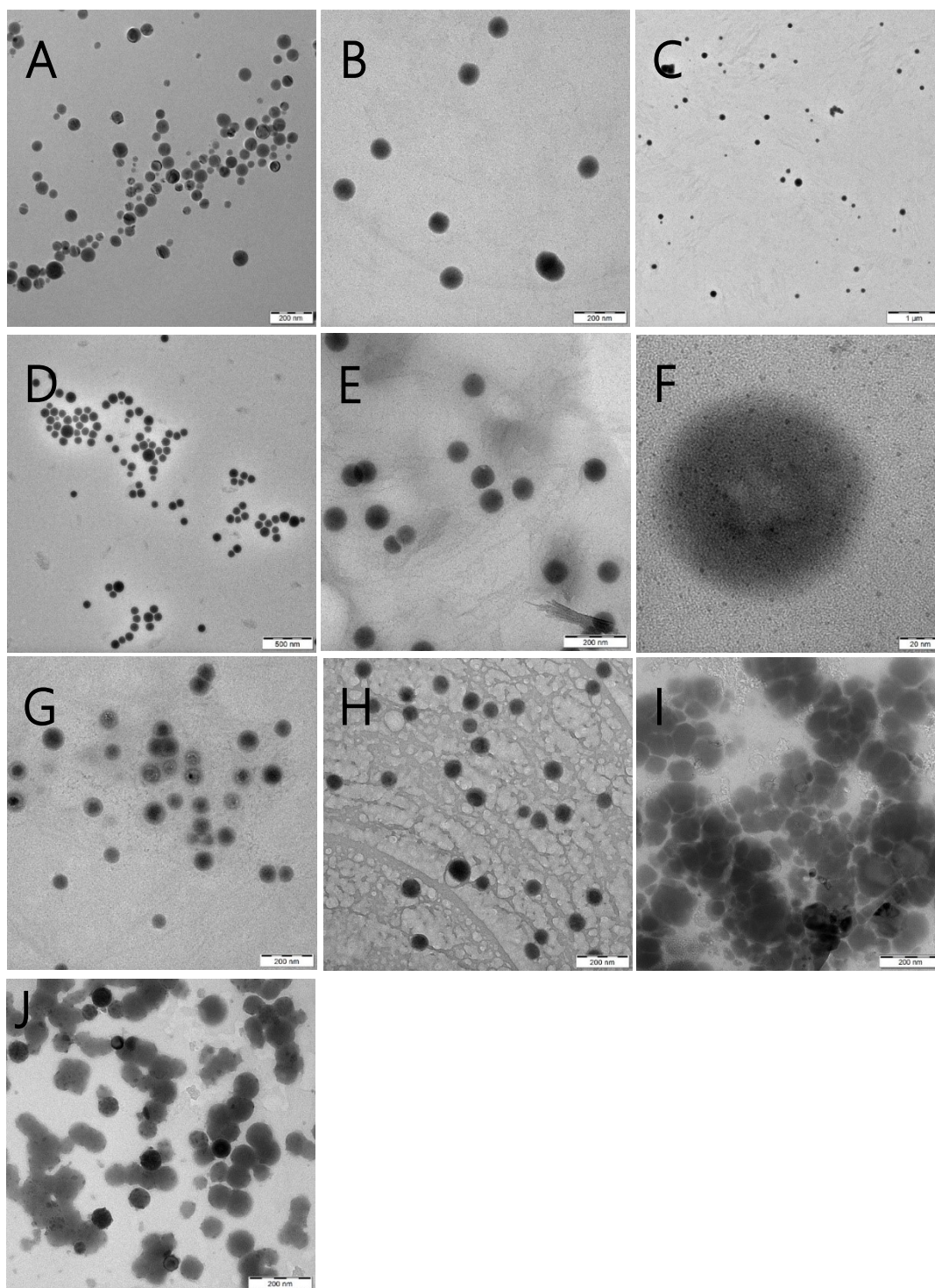


Fig. S1: TEM images of SeNPs synthesized using **A)** sodium borohydride and stabilized by 0.02 % PDDA; **B)** ascorbic acid and stabilized by 0.04 % PDDA; **C)** sodium borohydride and stabilized by 0.08 % PEI; **D)** ascorbic acid and stabilized by 0.08 % PEI; **E and F)** sodium borohydride and stabilized by 0.02 % quercetin; **G)** sodium borohydride and stabilized by 0.02 % gelatine; **H)** ascorbic acid and stabilized by 0.02 % gelatine; **I)** sodium borohydride and stabilized by 0.02 % sodium oleate; **J)** ascorbic acid and stabilized by 0.02 % sodium oleate.

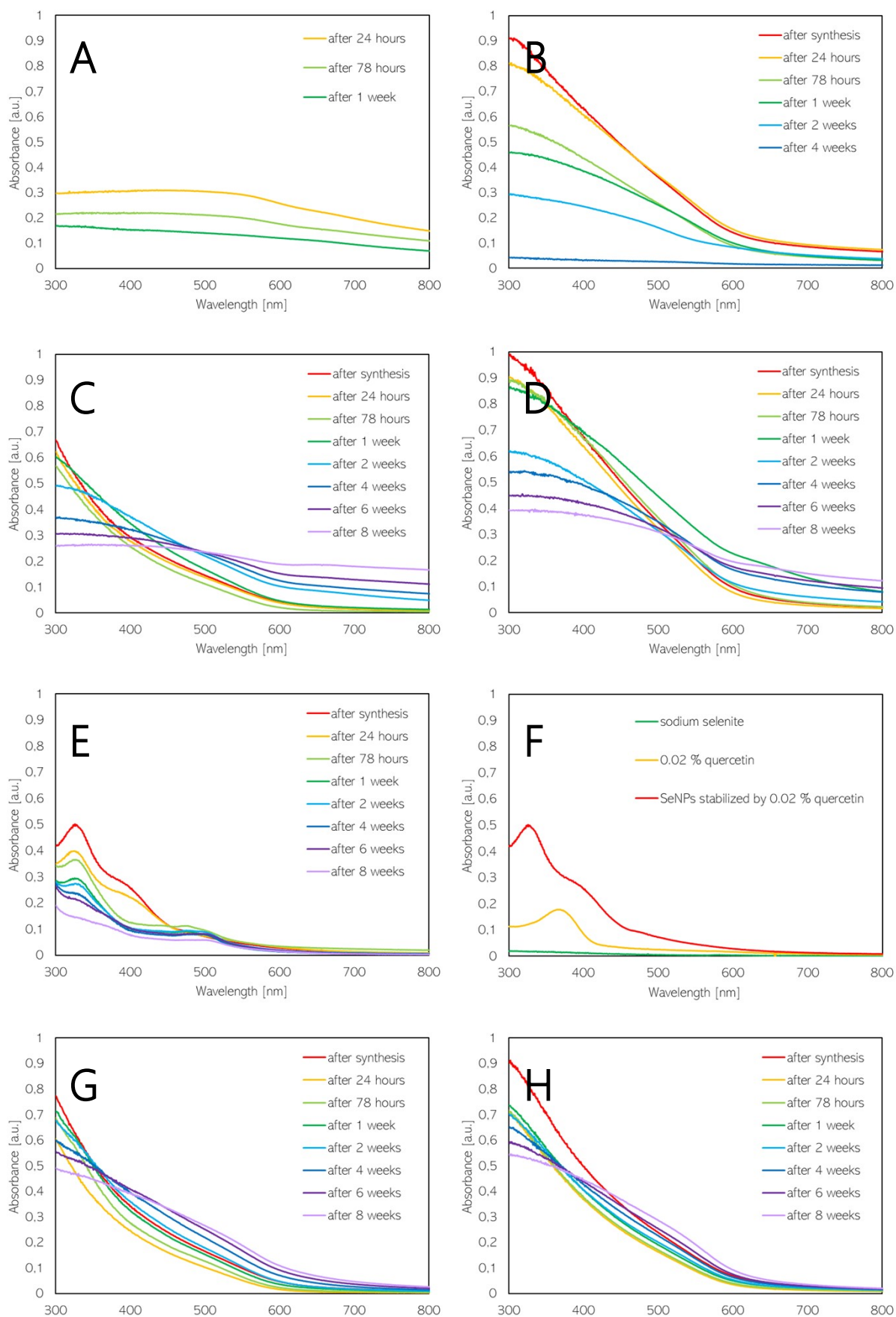


Fig. S2: UV-Vis spectra of SeNPs dispersions synthesized using sodium borohydride **A)** at temperature of 25 °C, **B)** at temperature of 90 °C, **C)** stabilized by 0.02 % PDDA, **D)** stabilized by 0.08 % PEI, **E)** stabilized by 0.02 % quercetin, **F)** spectrum of 0.02 % quercetin, **G)** stabilized by 0.02 % gelatine and **H)** stabilized by 0.02 % sodium oleate.

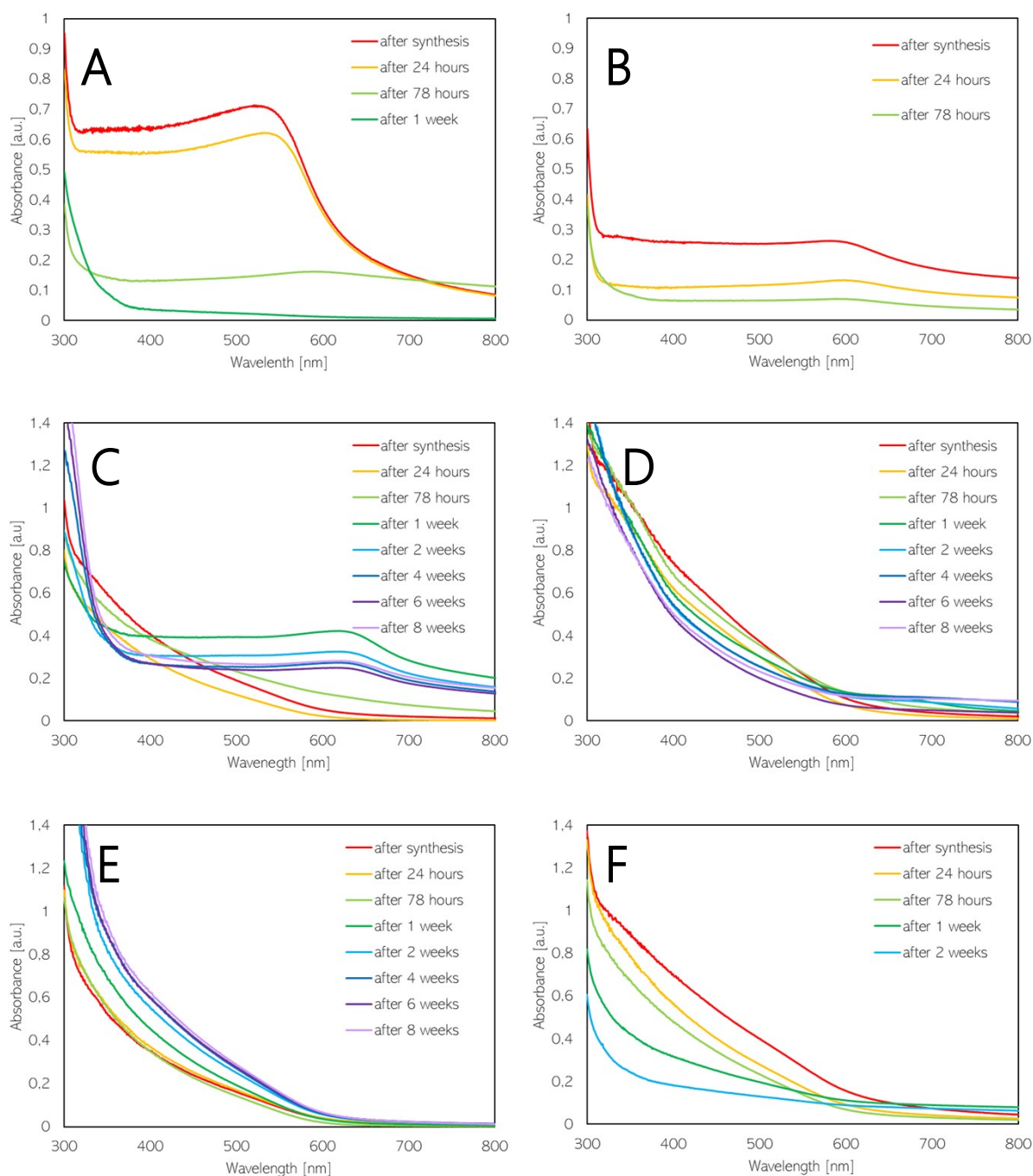


Fig. S3: UV-Vis spectra of SeNPs dispersions synthesized using ascorbic acid **A)** at temperature of 25 °C, **B)** at temperature of 90 °C, **C)** stabilized by 0.04 % PDDA, **D)** stabilized by 0.08 % PEI, **E)** stabilized by 0.02 % gelatine and **F)** stabilized by 0.02 % sodium oleate.

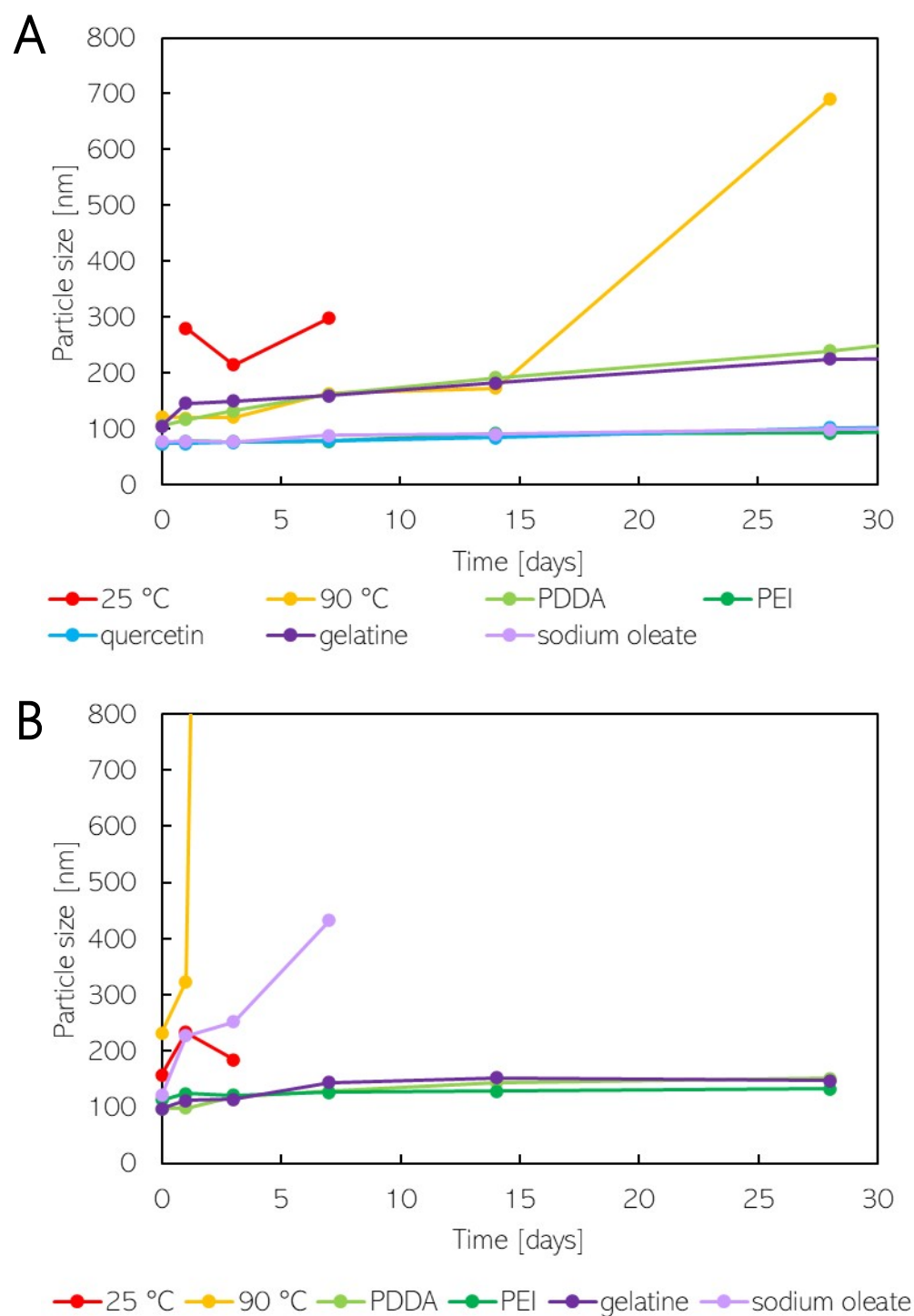


Fig. S4: The size change of SeNPs synthesized **A)** by sodium borohydride, and **B)** by ascorbic acid.

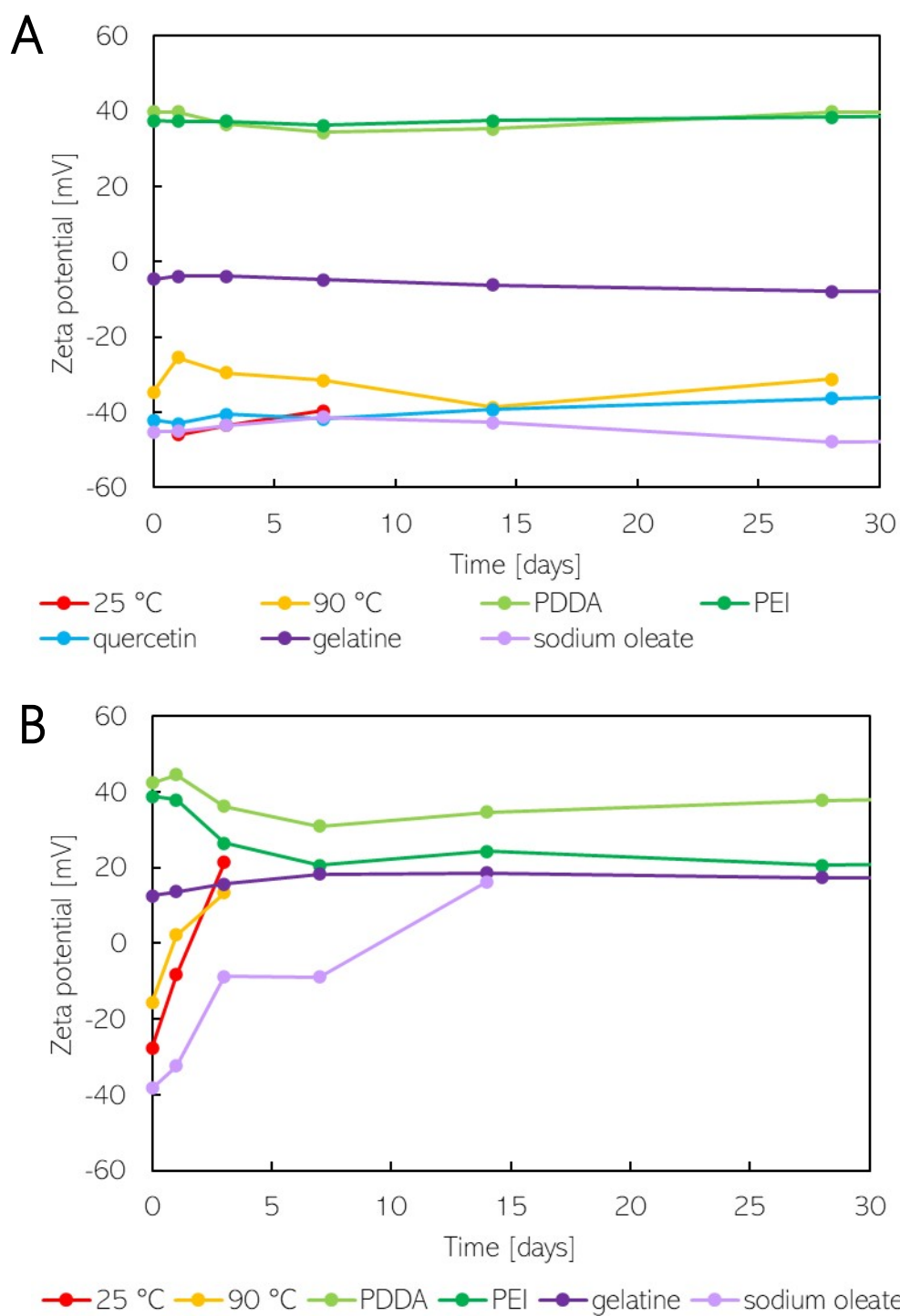


Fig. S5: The zeta potential change of SeNPs synthesized **A)** by sodium borohydride, and **B)** by ascorbic acid.