

# Supporting information for the paper:

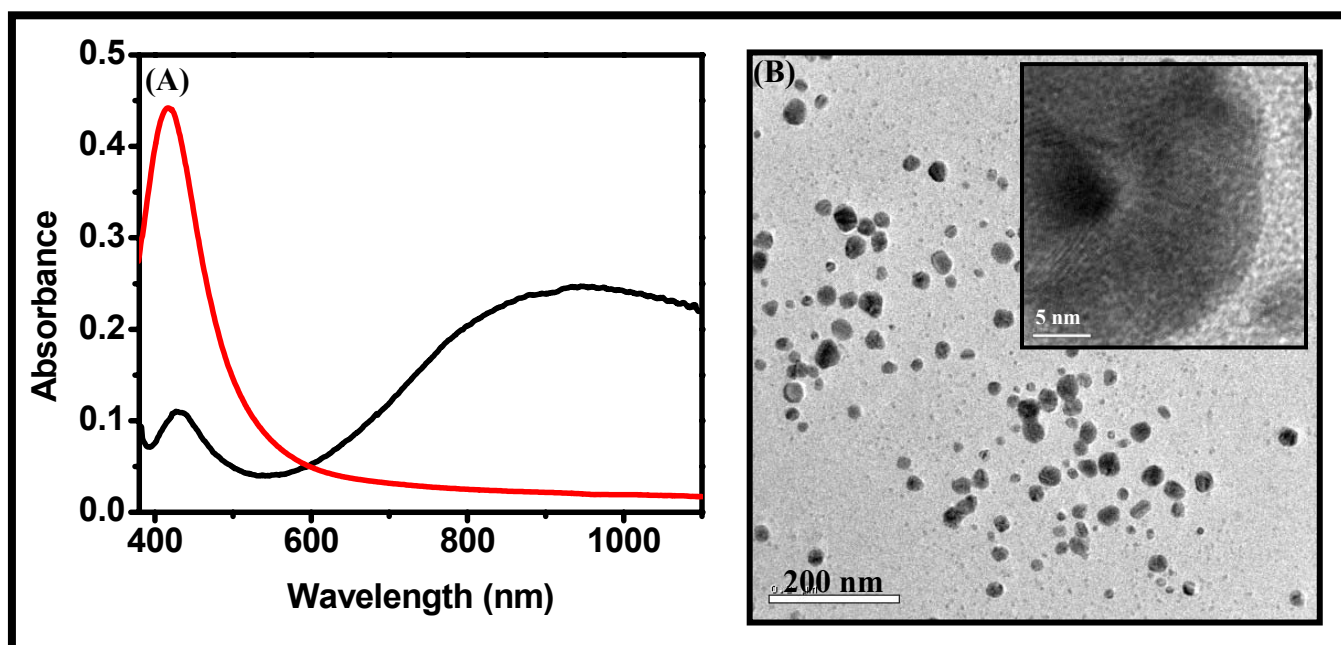
## Transverse electrokinetic effect: Experiments and theory

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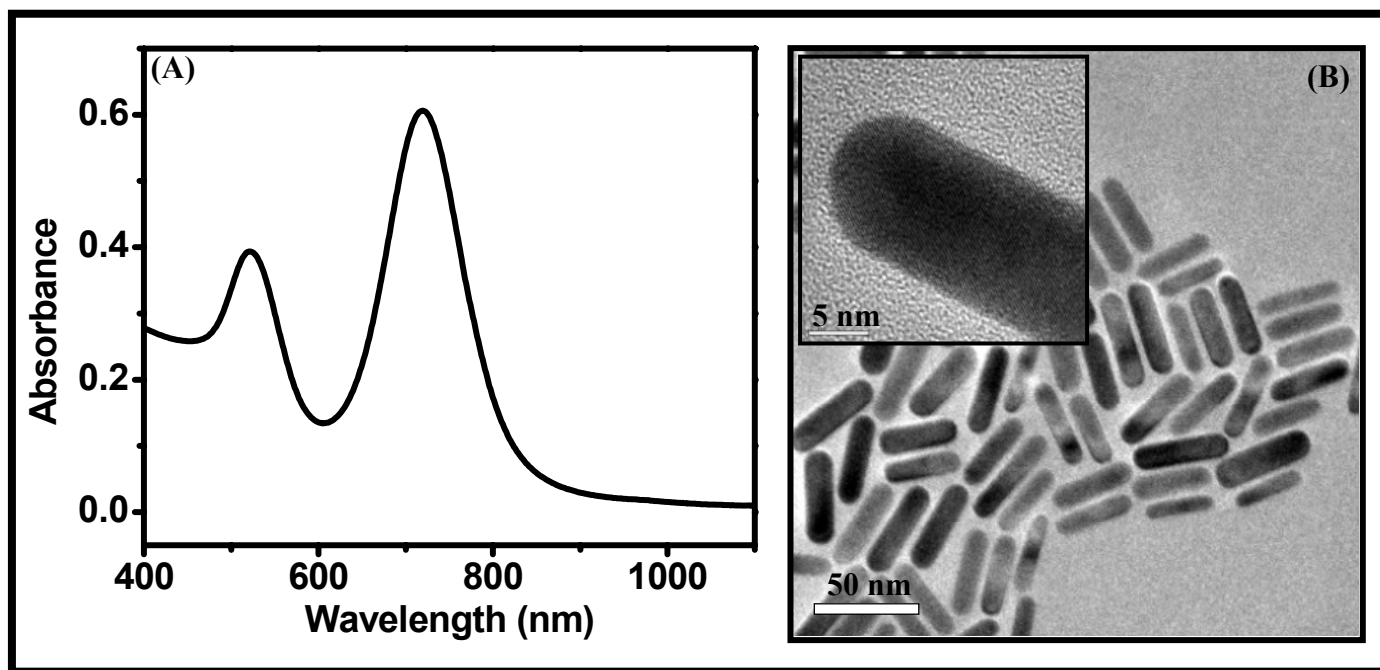
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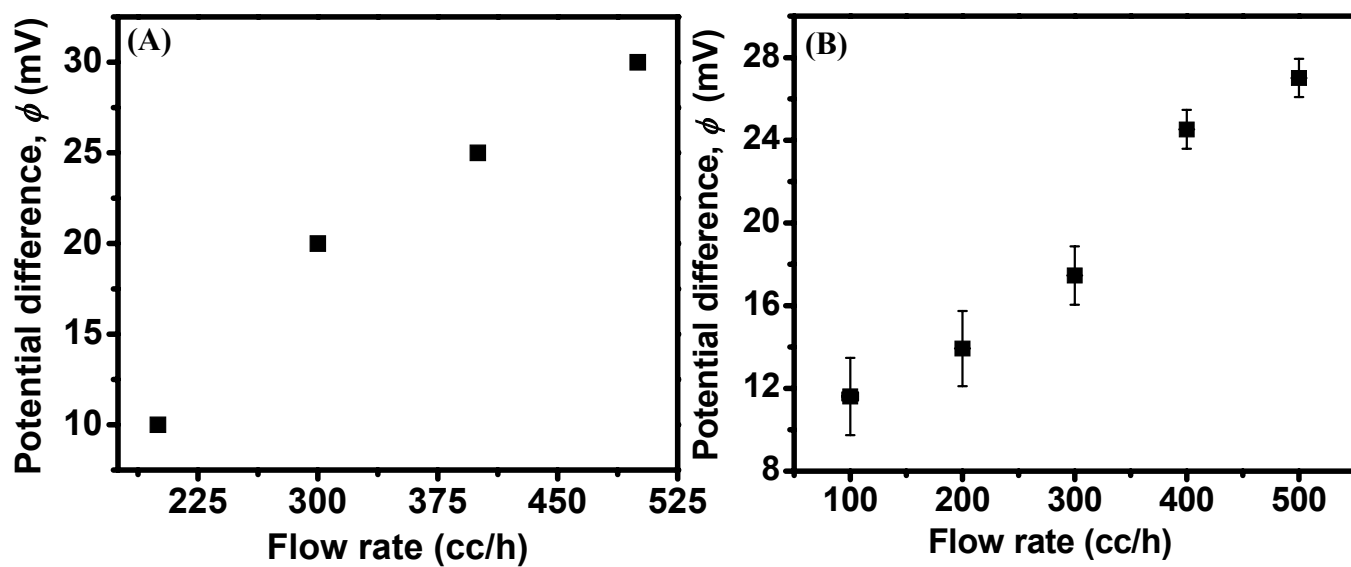
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**Figure S1.** (A) UV-Vis spectrum of Ag nanoparticle dispersion (red trace) and Ag nanoparticle multilayer assembly (black trace). (B) TEM images of Ag nanoparticles with a lattice-resolved image of a particle in the inset.



**Figure S2.** (A) UV-Vis spectrum of an aqueous dispersion of AuNR. (B) TEM images of gold nanorods. A high resolution image of a nanorod tip is given as the inset.



**Figure S3.** Plot of potential difference versus flow rate for (A) Ag nanoparticle array and (B) Au nanorod array.