

Supporting Information for “Elevated Gold Ellipse Nanoantenna Dimers as Sensitive and Tunable Surface Enhanced Raman Spectroscopy Substrates”

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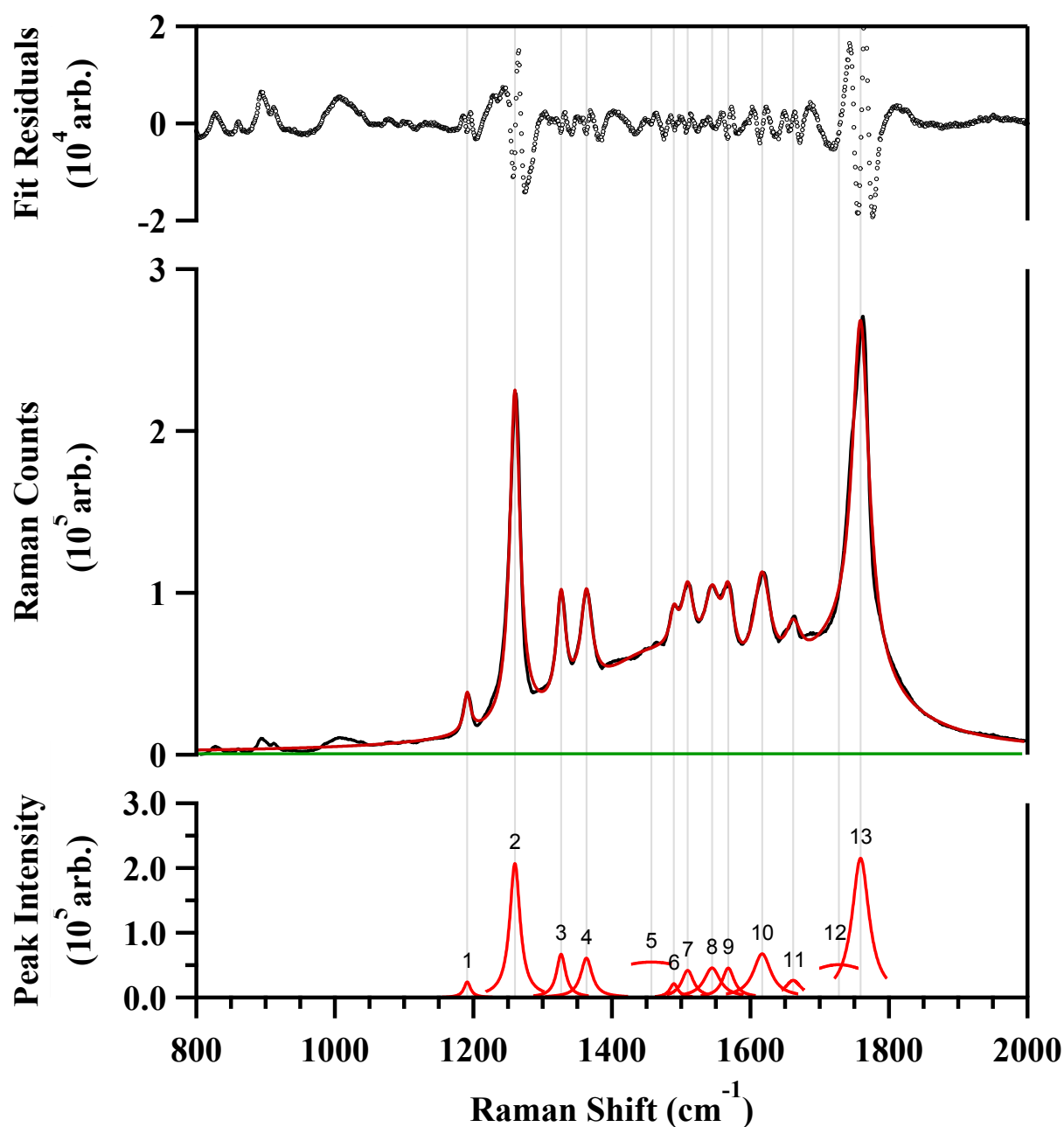


Figure S1. Fitting analysis of a representative SERS spectrum of *p*MA adsorbed on an elevated Au ellipse dimer substrate (1.3 aspect ratio, 10 nm nanogap, 100 nm post height, 0° polarization) collected with one 10 s scan and 1 mW 785 nm excitation. Top panel: Fit residuals (*red markers*). Middle panel: raw data (*black trace*), composite fit (*red trace*), and baseline (*green trace*). Bottom panel: Lorentzian peak components (*red traces*) with corresponding peak number. Solid grey lines indicate fit peak centers. Peak 13 area used for enhancement factor determination.

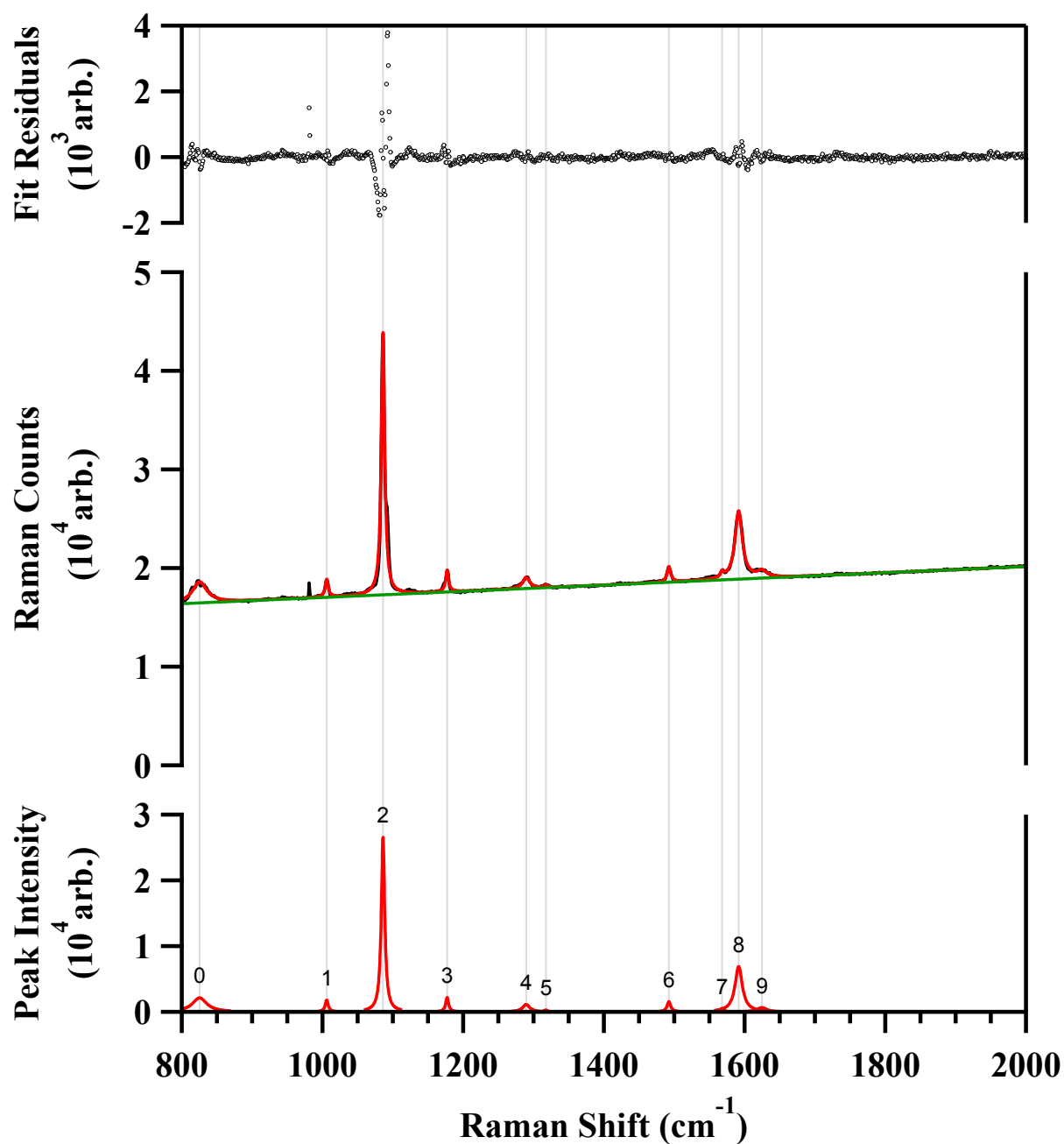


Figure S2. Fitting analysis of a representative spectrum of a *pMA* particle on Au mirror collected with one 10 s scan and 1 mW 785 nm excitation. Top panel: Fit residuals (*red markers*). Middle panel: raw data (*black trace*), composite fit (*red trace*), and baseline (*green trace*). Bottom panel: Lorentzian peak components (*red traces*) with corresponding peak number. Solid grey lines indicate fit peak centers. Peak eight area used for enhancement factor determinations.

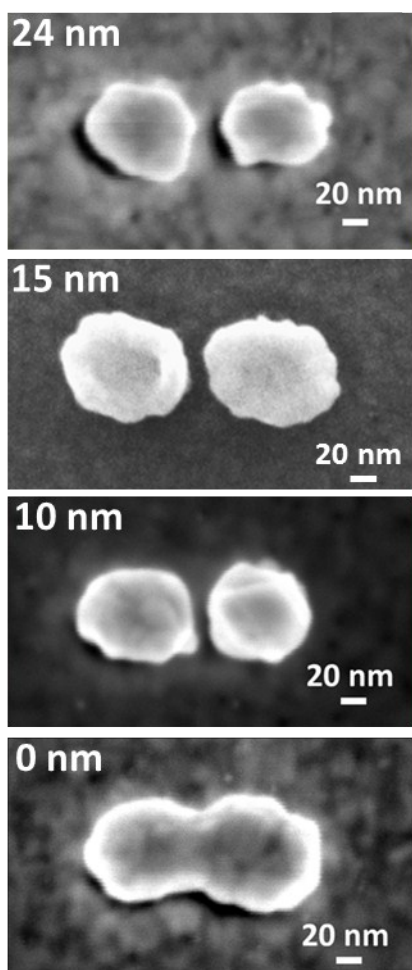


Figure S3. SEM images of single elevated Au ellipse dimers (1.3:1 aspect ratio, 100 nm post height) with 0 nm, 10 nm, 15 nm, and 24 nm gap sizes.

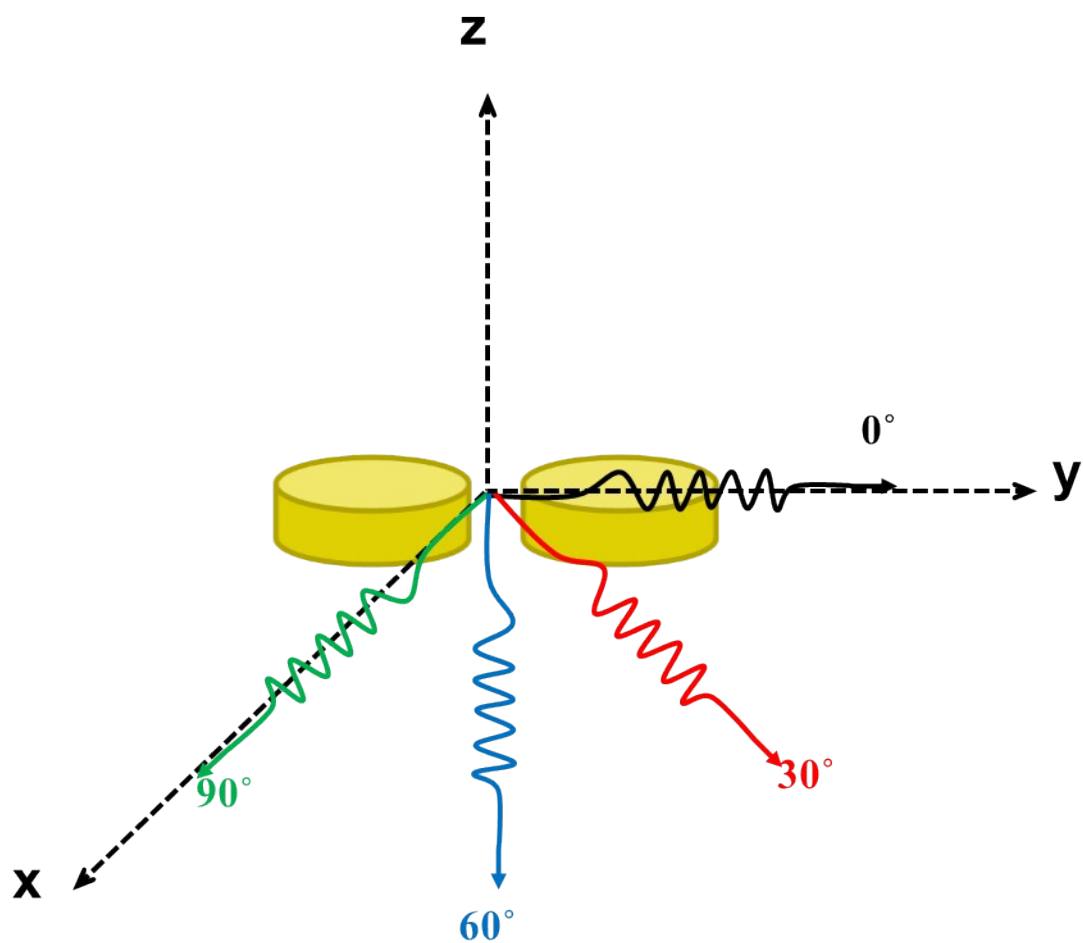


Figure S4. Schematic illustrating the polarization orientation relative to an elevated Au ellipse dimer.