

Supporting Information for:

**Effect of Tether Conductivity on the Efficiency of
Photoisomerization of Azobenzene-Functionalized
Molecules on Au{111}**

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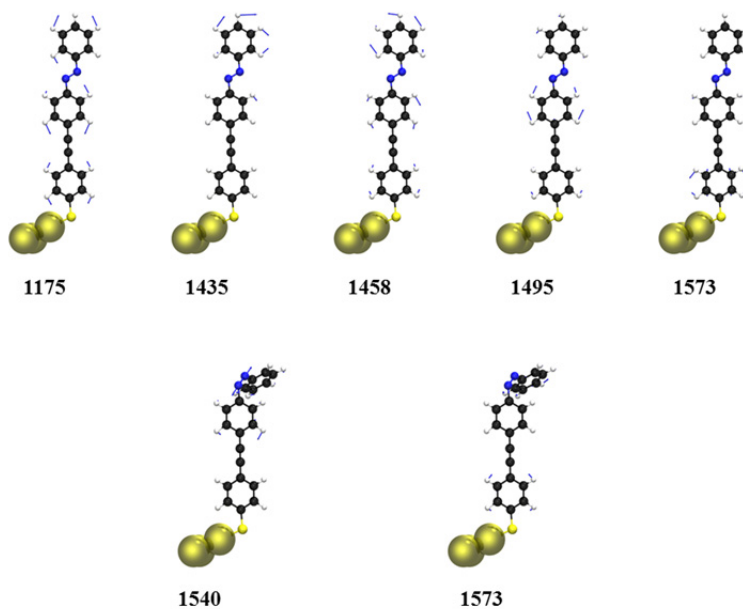
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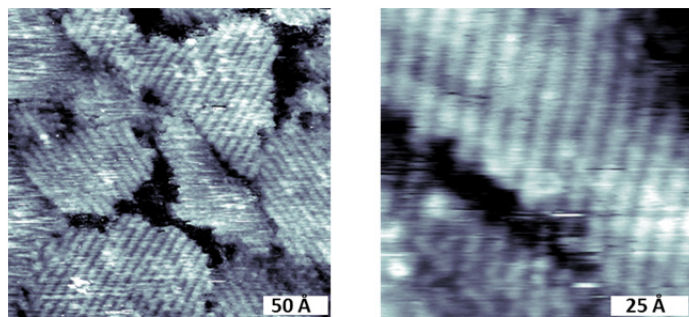
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Supporting Figure S1: Vibrational modes of all the prominent peaks of **Azo2** attached to a Au_3 cluster observed in theoretical calculations in their *trans* and *cis* conformations respectively.



Supporting Figure S2: **Azo2** molecules assemble nominally perpendicular to the $\text{Au}\{111\}$ surface as opposed to the tilted alignment of **Azo1** alkyl tethers. Imaging conditions: $V_s = -1$ V, $I = 1$ pA.