

## Electronic supplementary information for

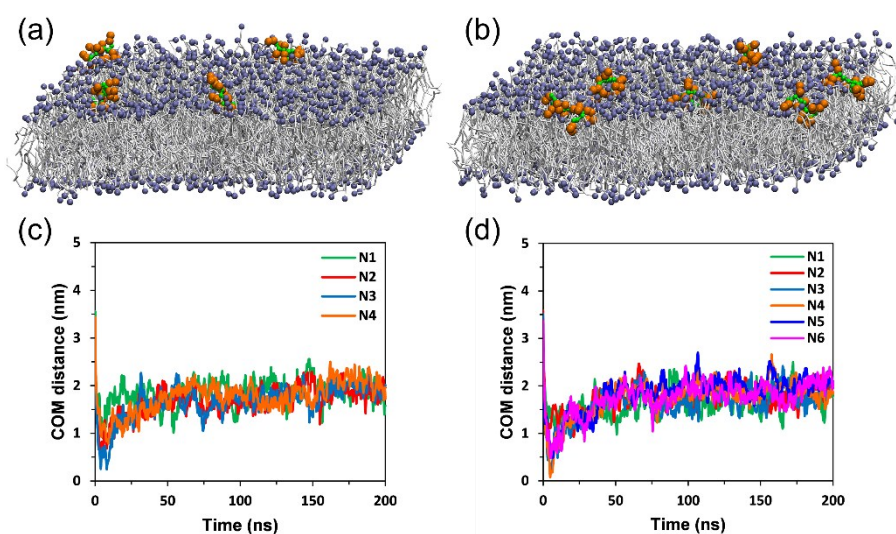
### Molecular mechanism of HIV-1 TAT peptides and conjugated gold nanoparticles translocating across lipid membranes

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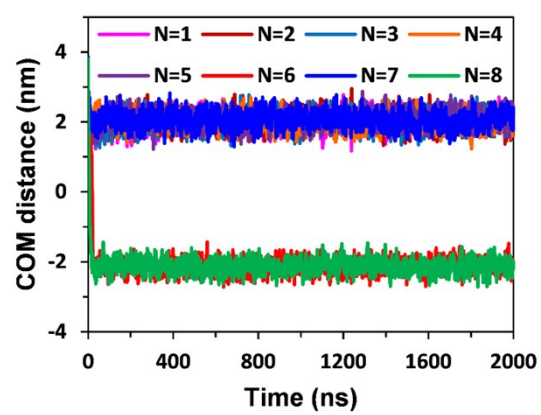
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**Fig. S1.** (a) The final simulation snapshot of 4 TAT peptides interacting with the lipid membrane, (b) the final simulation snapshot of 6 TAT peptides interacting with the lipid membrane, (c) the COM distance in the z direction between TAT peptides and the lipid membrane when N=4, (d) the COM distance in the z direction between TAT peptides and the lipid membrane when N=6.



**Fig. S2.** COM distances in the z direction between each TAT peptide and the lipid membrane (N=8).