

## Supplementary materials

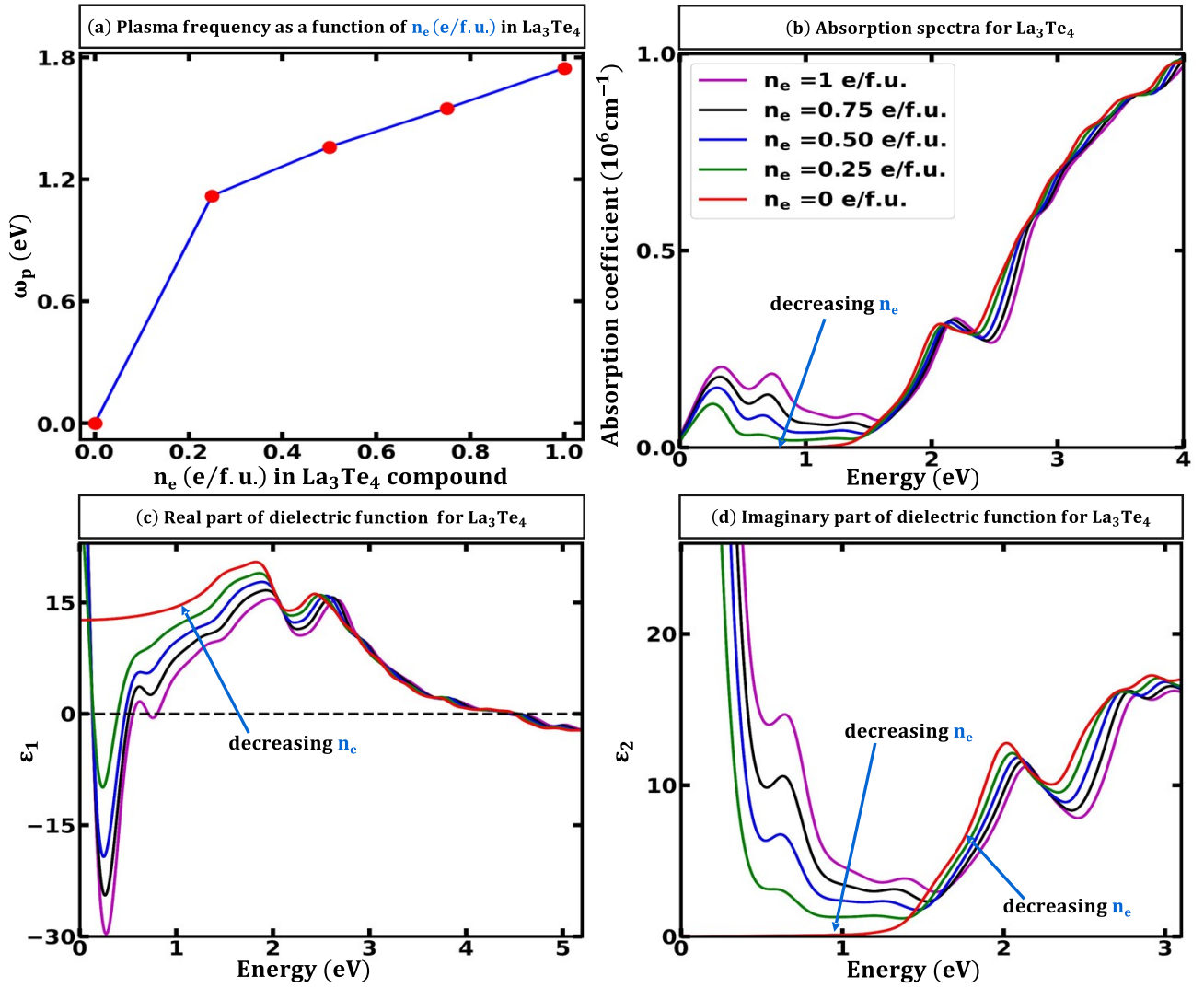
for

### **Spontaneous off-stoichiometry as the knob to control dielectric properties of gapped metals**

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**Figure S1:** (a) Plasma frequency as a function of different numbers of electrons in  $\text{La}_3\text{Te}_4$ . (b) Absorption spectra for  $\text{La}_3\text{Te}_4$  with different number of electrons considering superposition of both interband and intraband transitions. (c) Real and (d) imaginary part of dielectric function for a different number of electrons per formula unit ( $n_e/\text{f.u.}$ ) in the conduction band of  $\text{La}_3\text{Te}_4$ . The results are shown for a ridged shift of the Fermi level.