

Figure S1. Conductivity for various configurations of bulk (a), surface (b), and nanoclusters (c) of  $\text{C}_3\text{N}_4$ .

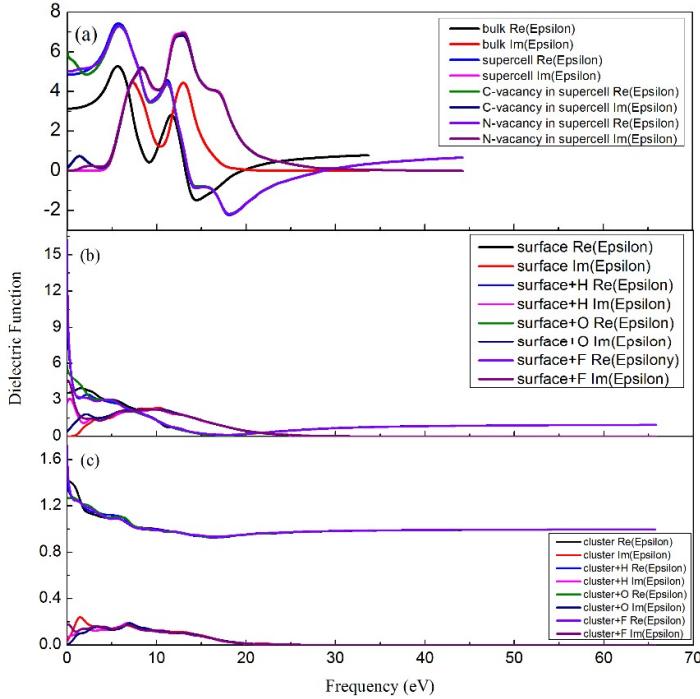


Figure S2. Dielectric function for various configurations of bulk (a), surface (b), and nanoclusters (c) of  $\text{C}_3\text{N}_4$ .

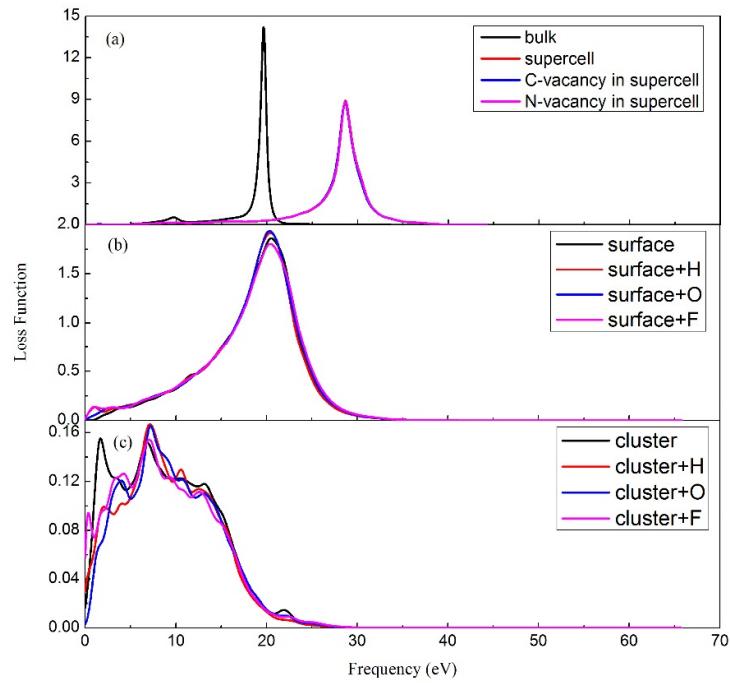


Figure S3. Loss function for various configurations of bulk (a), surface (b), and nanoclusters (c) of  $\text{C}_3\text{N}_4$ .

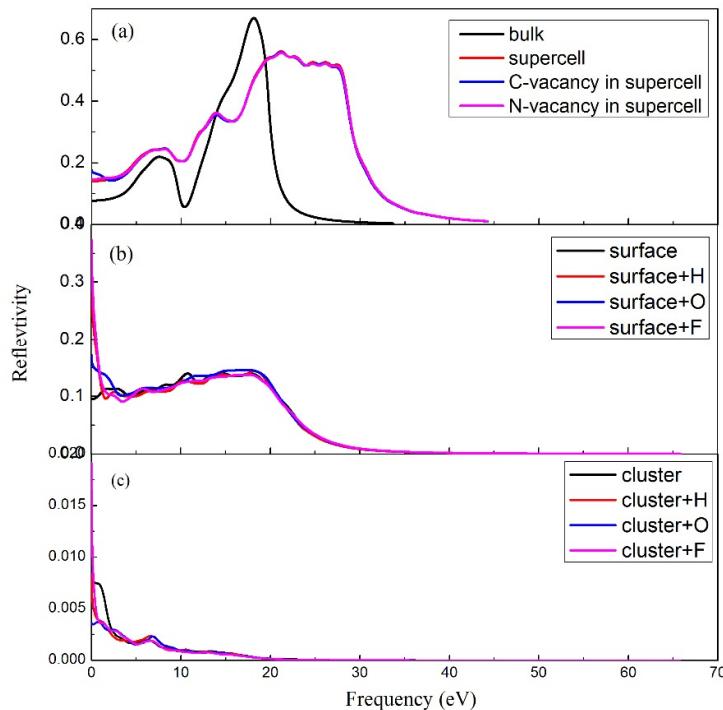


Figure S4. Reflectivity for various configurations of bulk (a), surface (b), and nanoclusters (c) of  $\text{C}_3\text{N}_4$ .

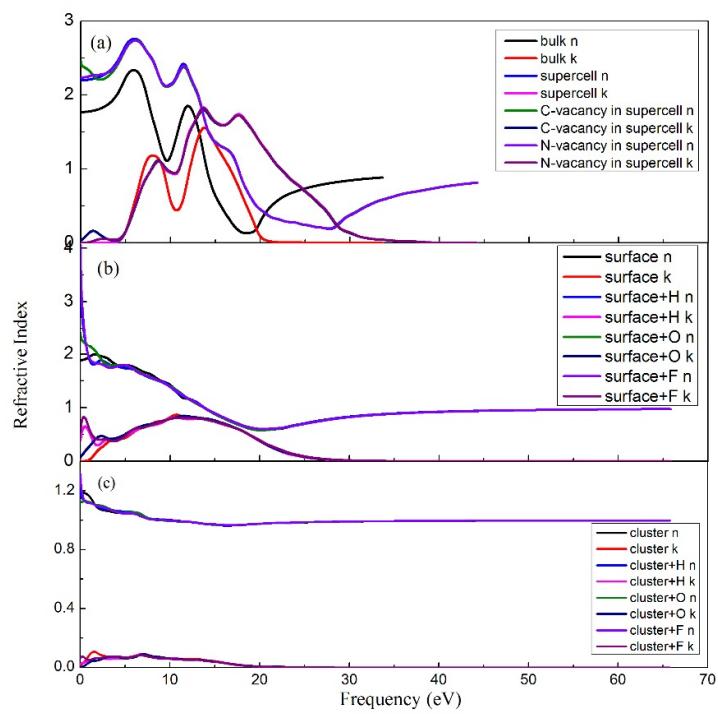


Figure S5. Refractive index for various configurations of bulk (a), surface (b), and nanoclusters (c) of  $\text{C}_3\text{N}_4$ .