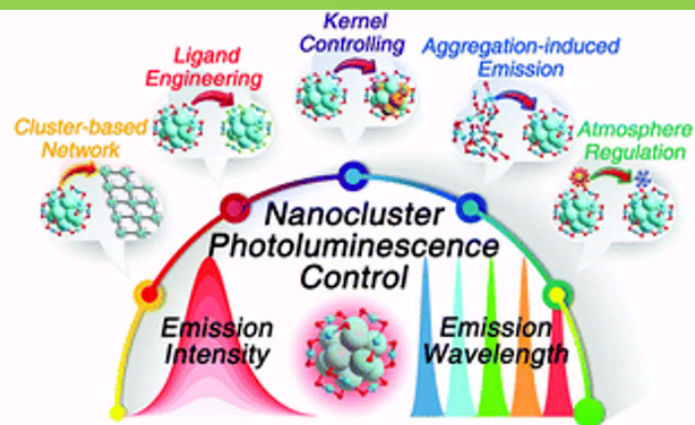


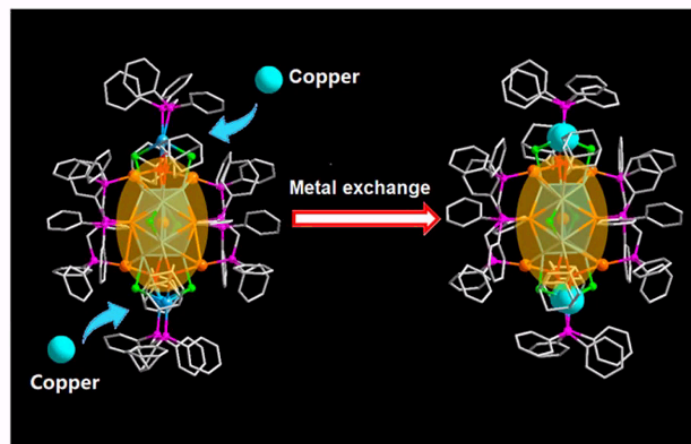
Advances in Enhancing Luminescence of Atomically Precise Ag NCs



- The *metal core* and the *surface ligands*: play decisive roles
- PL can be enhanced by either the *enhancement of radiative decay* or the *suppression of nonradiative decay*.
- The latter is more popular, for example, via the *suppression of surface ligand vibrations and of metal core phonons*.
- The *radiative decay* can be possibly controlled by the *core structure and heterometal doping*.

Molecular Surgery:

The nonradiative transitions for the excited states are mainly related to the rotation/vibration of ligands which cap the metal core. Hence, alloying can block the nonradiative pathways and open the radiative channels by restricting the intramolecular motion.



Challenge: doping with intact core!

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