

The cover art features a dark brown, textured background. Scattered across it are several stylized flowers in shades of teal, yellow, and orange. Interspersed with these flowers are various protein structures, some shown as green ribbons and others as yellow or orange helices and sheets. The overall aesthetic is a blend of natural beauty and scientific complexity.

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# chemistry

Golden opportunity for  
protein sensing

**METAL-ORGANIC FRAMEWORKS**

Caught in a cation trap

**CHARGE-SHIFT BONDING**

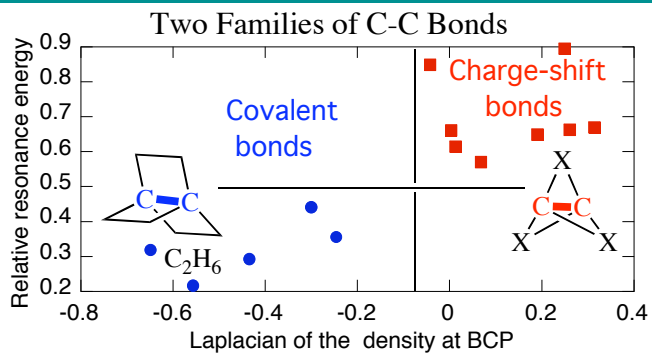
Chemistry's next top model

**GOLD CATALYSIS**

Cation or carbene?

## ARTICLES

Like in a phase diagram 16 C-C bonds separate into two bond families; classical covalent bonds, where bonding arises from spin pairing, and charge shift bonds, where spin pairing is destabilizing and bonding arises from the covalent-ionic resonance energy!



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**An Excursion From Normal to Inverted C-C Bonds Shows a Clear Demarcation between Covalent and Charge-Shift C-C Bonds**