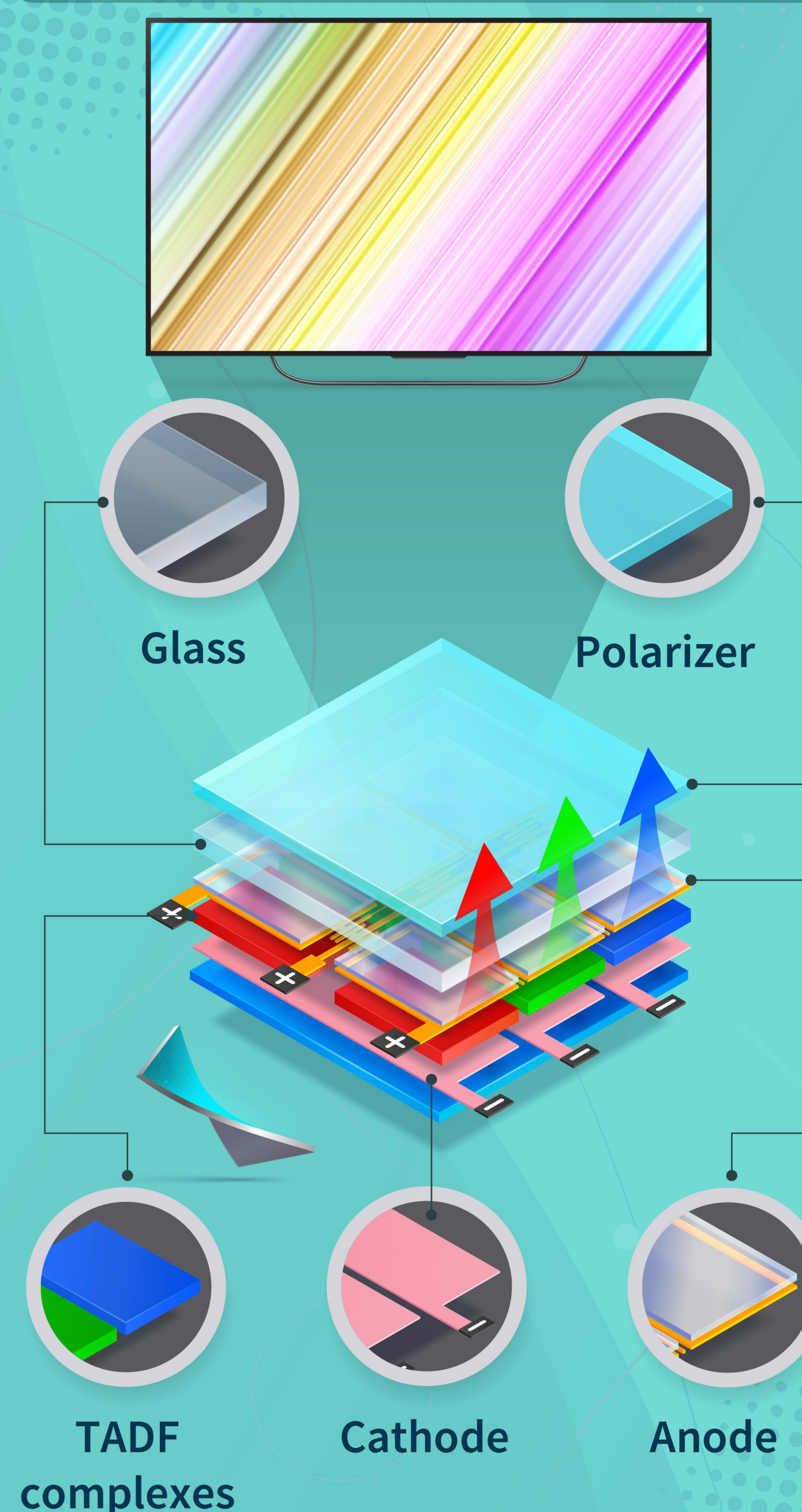


# Molecular Design of Highly Emissive Gold Complexes for OLED Applications

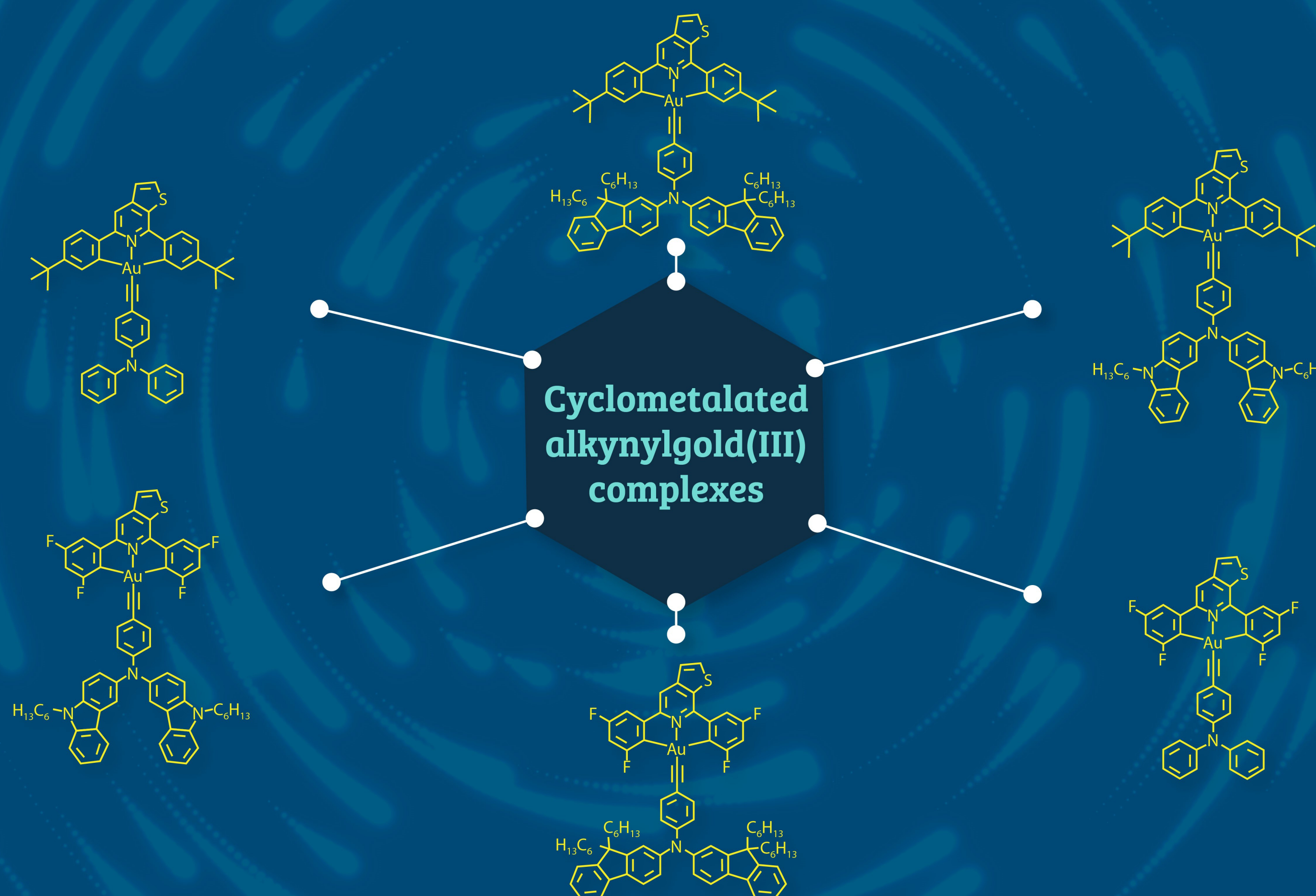
Chemical  
Science

Compounds exhibiting thermally activated delayed fluorescence (TADF) can act as emitters for ultra-high-definition organic light-emitting device (OLED) displays

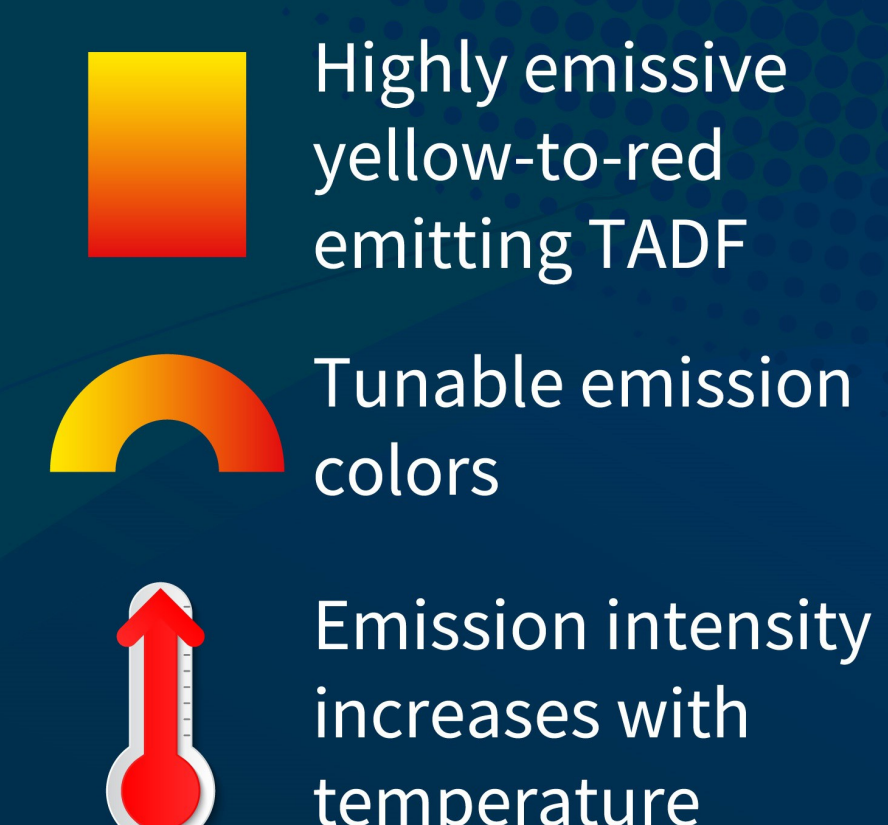
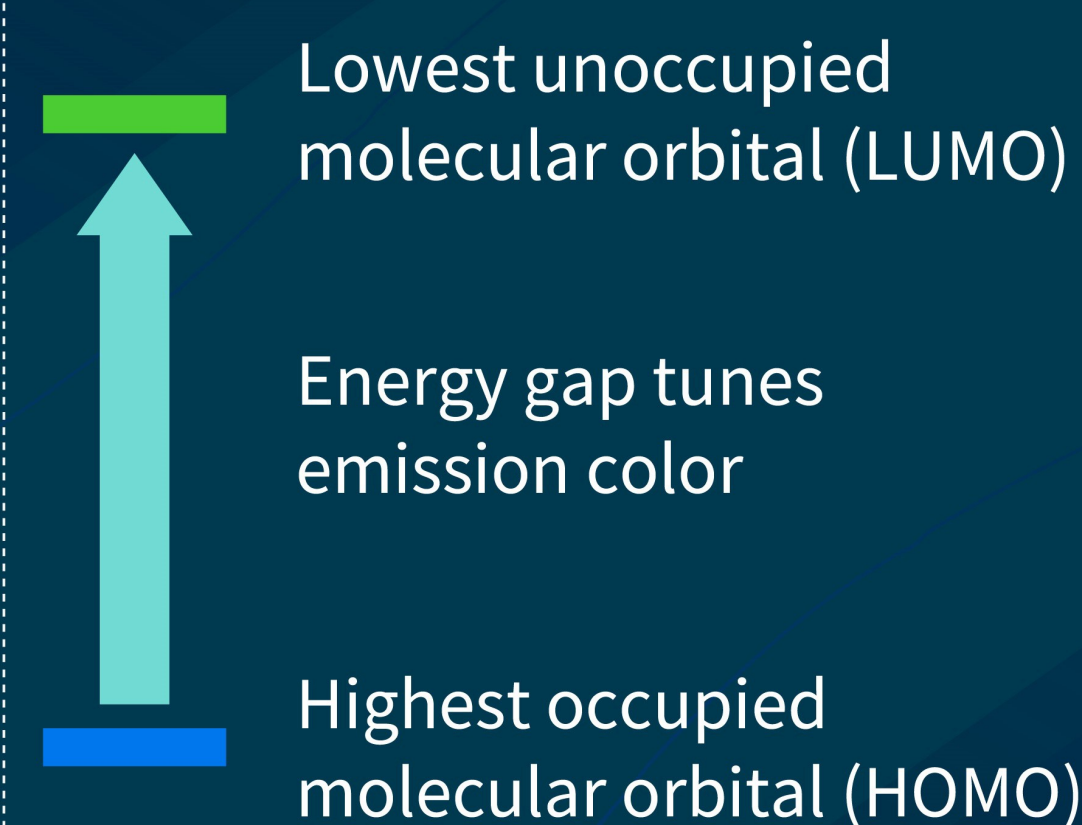
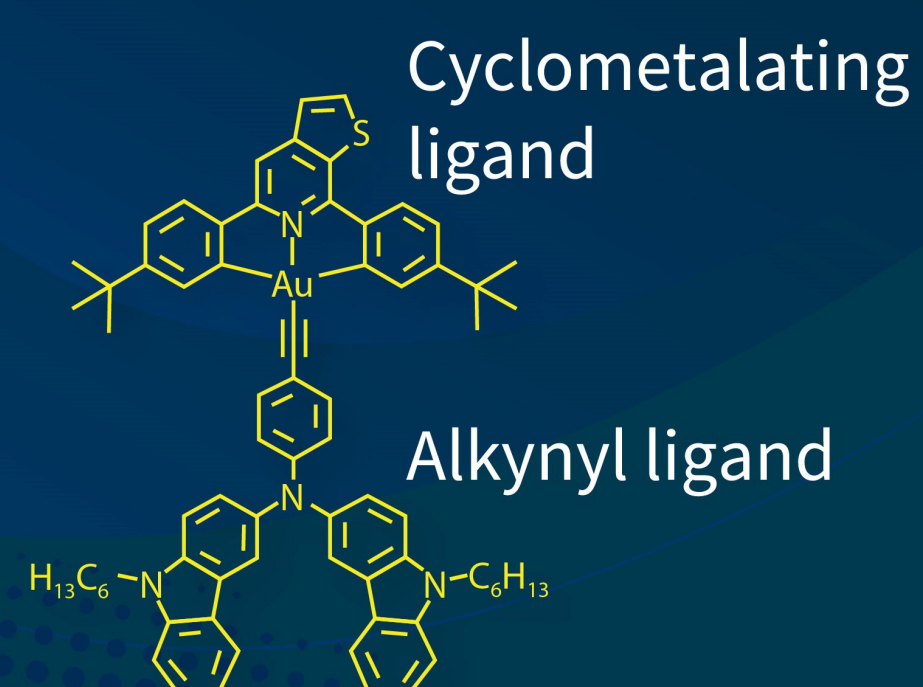


Can highly emissive gold (III) TADF complexes be synthesized?

## Formation of cyclometalated alkynylgold(III) complexes



## Choice of cyclometalating ligands and alkynyl ligands control energy gap between HOMO-LUMO



Alkynyl gold complexes are effective TADF emitters suitable for application in OLEDs