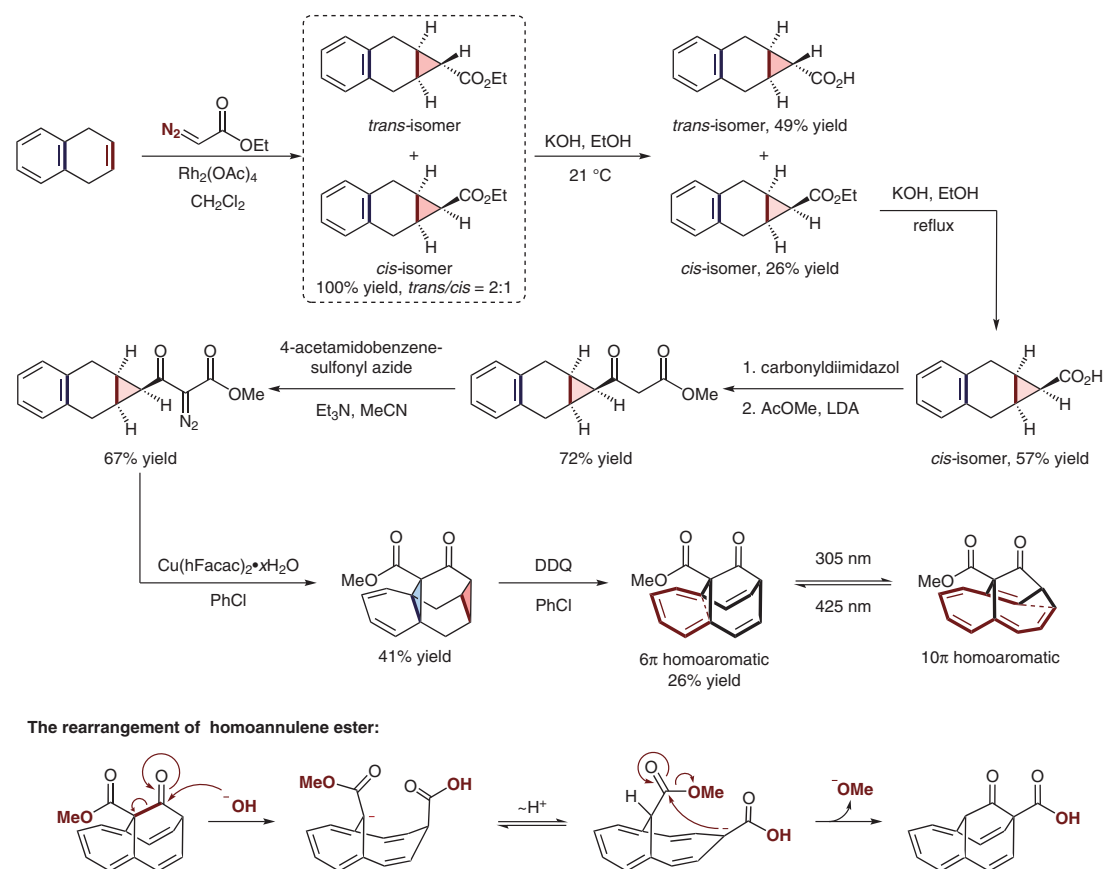


Neutral 6π and 10π Homoaromatics



Significance: Neutral homoaromatic molecules are considered as a class of veiled species mainly owing to the difficulty inherent to their syntheses, isolation and characterizations. Inspired by the previously studied unstable ellassovalene, the authors herein achieve a series of novel neutral homoaromatic hydrocarbons with enhanced stability by reducing the ring strain.

Comment: Facilitated by $\text{Cu}(\text{hFacac})_2$, an intramolecular Buchner dearomatization is performed to afford triasterane, which upon oxidation produces a stable homoaromatic molecule. Interestingly, this homoannulene ester is found to undergo a reversible photochemical rearrangement via [1,1]-sigmatropic shift, thereby switching between the 6π and 10π homoaromatic structures.