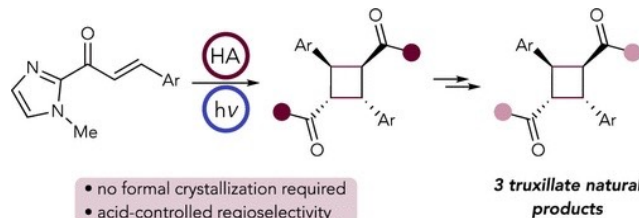


A General Synthetic Strategy toward the Truxillate Natural Products via Solid-State Photocycloadditions

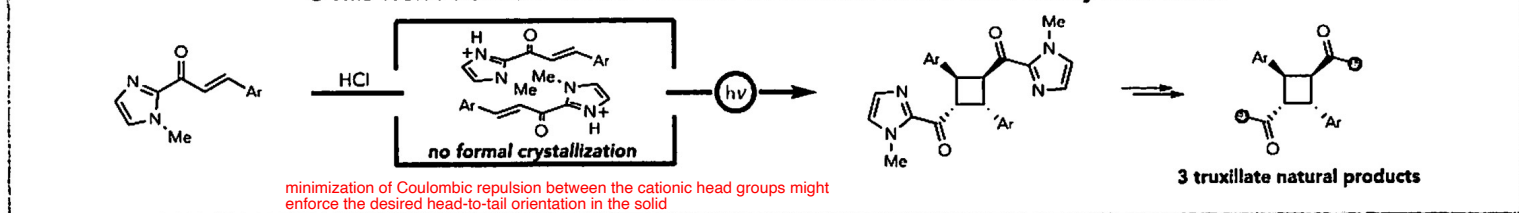
Ellie F. Plachinski, Hyung Joo Kim, Matthew J. Genzink, Kyana M. Sanders, Riley M. Kelch, Iliia A. Guzei, and Tehshik P. Yoon*
Cite this: J. Am. Chem. Soc. 2024, 146, 22, 14948–14953

solid-state photoreactions are so sensitive to crystal form,

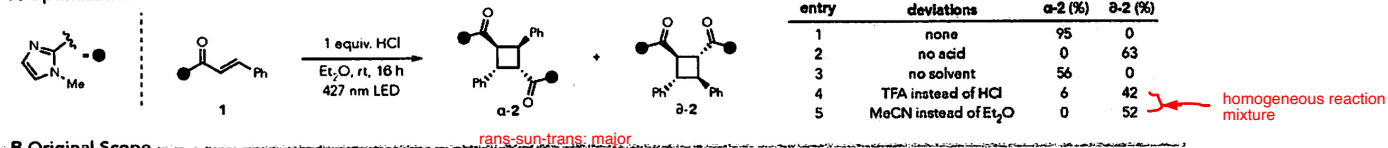
Alternate strategies to control the relative regioselectivity of solid-state photocycloadditions using hydrogen bonding, pi-pi stacking, or cation-pi interactions have been reported.



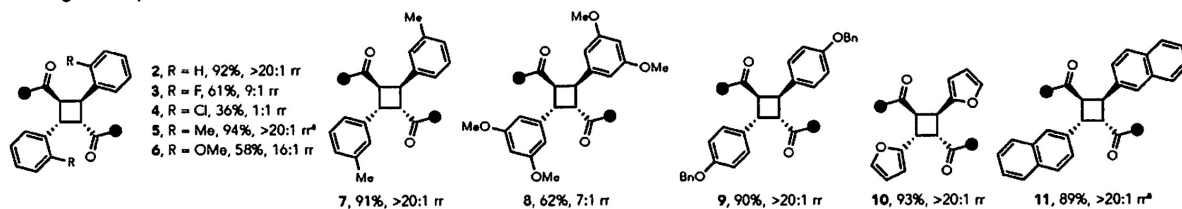
C This Work: Truxillate Natural Products via Selective Solid-State Photocycloadditions



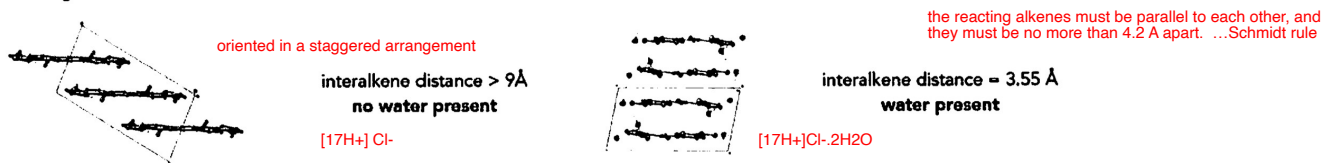
A Optimization



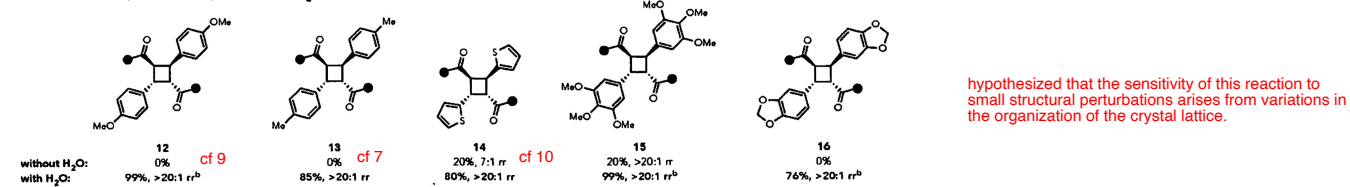
B Original Scope



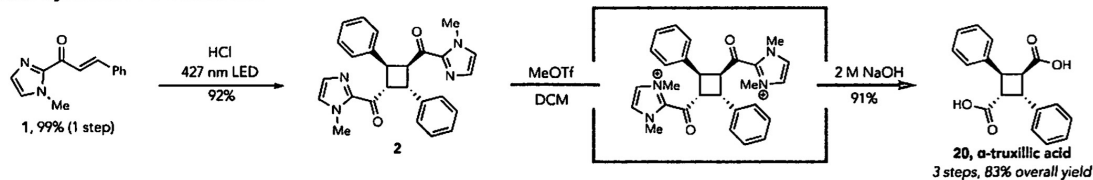
C Effect of H₂O on p-OMe Crystal Structure



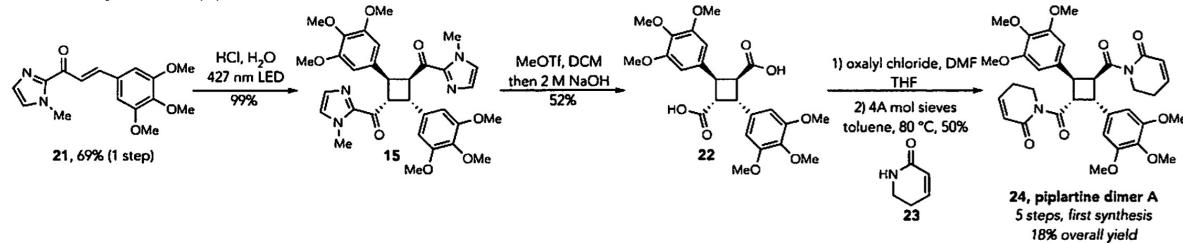
D Additional Scope Enabled by Addition of H₂O



A Total Synthesis of α -truxillic acid



B Total Synthesis of pipartine dimer A



C Total Synthesis of dipiperamide A

