E. SMITH, K. D. JONES, L. O'BRIEN, S. P. ARGENT, C. SALOME, Q. LEFEBVRE, A. VALERY, M. BÖCÜ, G. N. NEWTON, H. W. LAM* (UNIVERSITY OF NOTTINGHAM, UK)
Silver(I)-Catalyzed Synthesis of Cuneanes from Cubanes and their Investigation as Isosteres
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Category
Metals in Synthesis

Key words
cubanes
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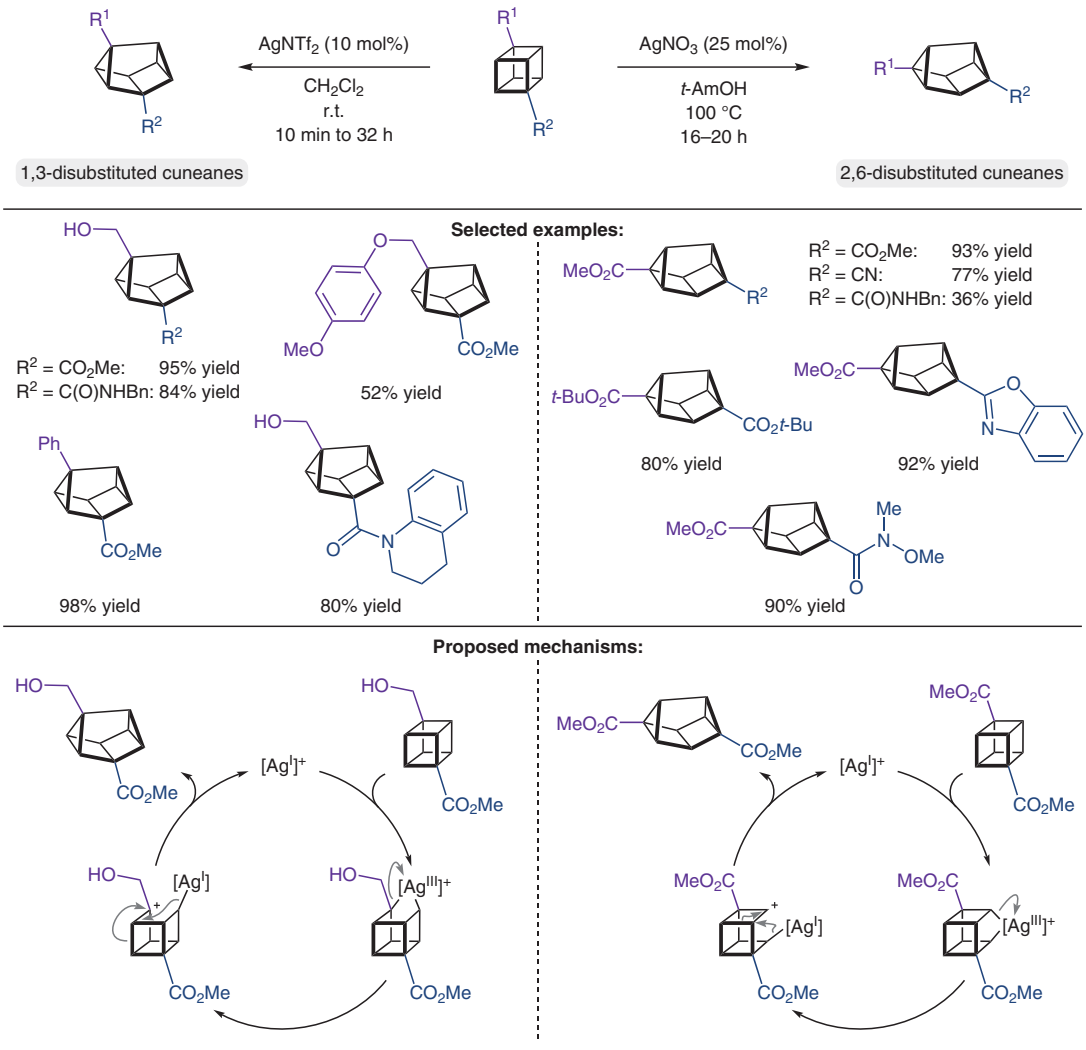
silver catalysis

Synfact of the Month

Silver(I)-Catalyzed Rearrangement of 1,4-Disubstituted Cubanes to 1,3- or 2,6-Disubstituted Cuneanes



Significance: Lam and co-workers disclosed a silver(I)-catalyzed rearrangement of 1,4-disubstituted cubanes to 1,3- or 2,6-disubstituted cuneanes. The regioselectivity is strongly dependent on the electronic character of the substituents.

Comment: To explore those strained hydrocarbons as isosteres of 1,3-disubstituted benzenes, an analogue of the anticancer drug sonidegib was prepared by replacing the 1,2,3-trisubstituted benzene with a 1,3-disubstituted cuneane.

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