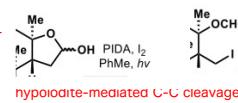
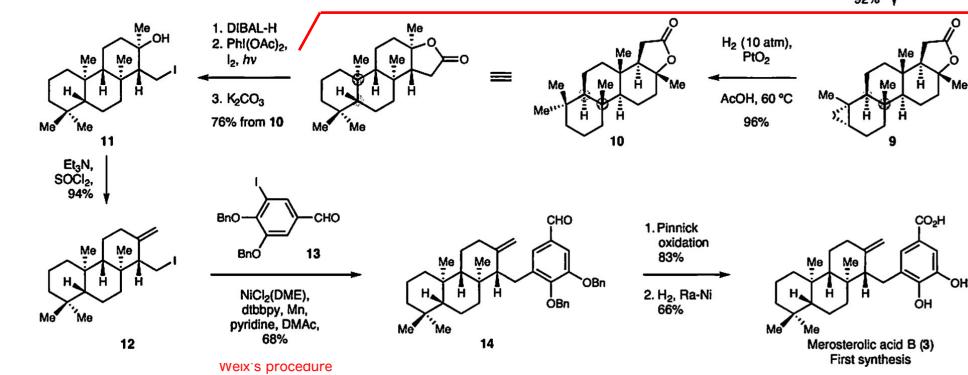
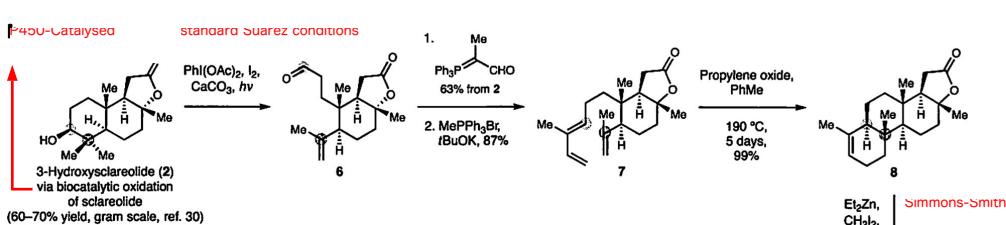
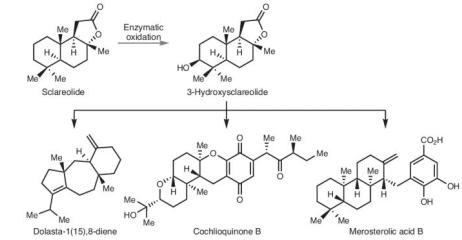


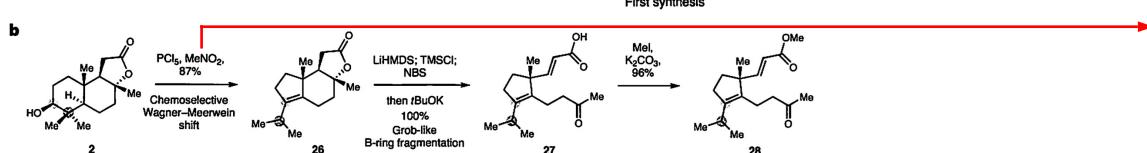
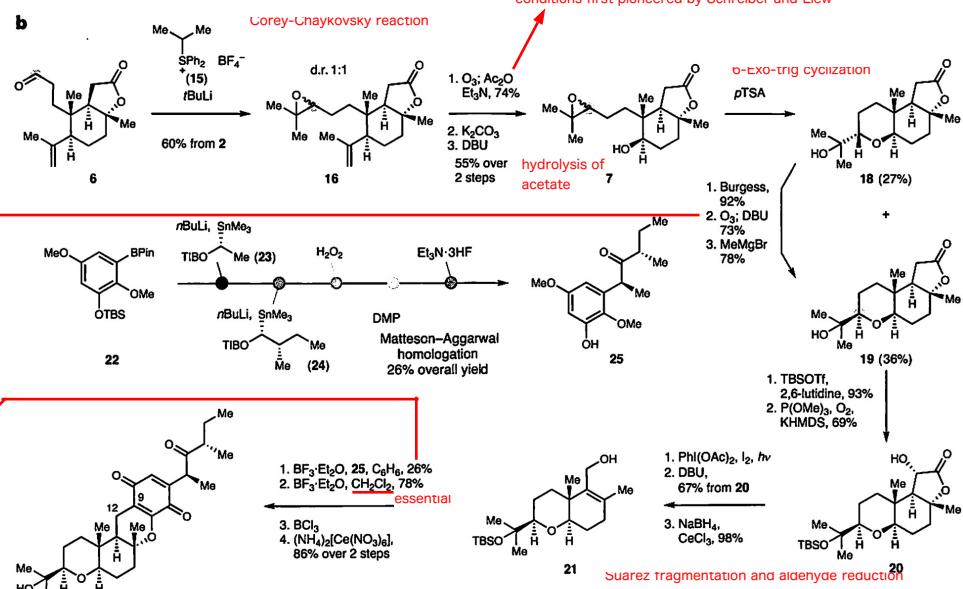
# Synthesis of diverse terpenoid frameworks via enzyme-enabled abiotic scaffold hop

Heping Deng, Junhong Yang, Fuzhuo Li, Jian Li & Hans Renata

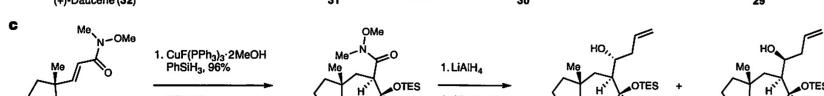
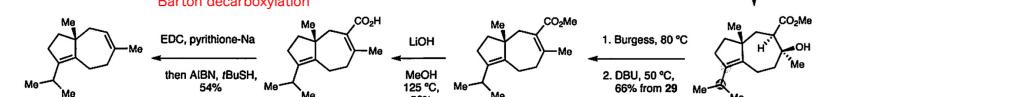
Nature Chemistry volume 17, pages 1275–1283 (2025)



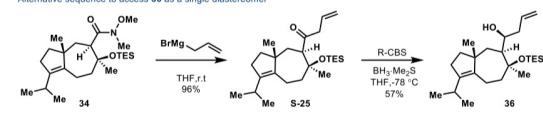
Wex's procedure



acid	solvent	result	yield	T/°C
BOMH (0.1 eq)	DCM	26-5-9 + 1-1	82%	10 °C
BOMH (0.1 eq)	DCM	26-5-9 + 1-1	54%	12
PCl <sub>5</sub> (1.2 eq)	CHCl <sub>3</sub>	26-5-9 + 1-1	77%	0 °C
PCl <sub>5</sub> (1.2 eq)	benzene/ether 1:1	26-5-9 + 1-1	80%	12
PCl <sub>5</sub> (1.2 eq)	benzene/ether 1:3	26-5-9 + 1-2	87%	12
PCl <sub>5</sub> (1.2 eq)	benzene/ether 1:5	26-5-9 + 1-3	82%	12
PCl <sub>5</sub> (1.2 eq)	toluene	26-5-9 + 1-1	99%	12
PCl <sub>5</sub> (1.2 eq)	1,2-Dichloroethane	26-5-9 + 1-1	67%	12
PCl <sub>5</sub> (1.2 eq)	MeNO <sub>2</sub>	26 + other unknown products	87%	12
PCl <sub>5</sub> (0.9 eq)	MeNO <sub>2</sub>	26	72%	12
PCl <sub>5</sub> (0.9 eq) + PCl <sub>5</sub> (0.9 eq)	MeNO <sub>2</sub>	only 26	87%	12



Alternative sequence to access 36 as a single diastereomer



Failed intramolecular Diels–Alder attempts to establish the dolastane skeleton

