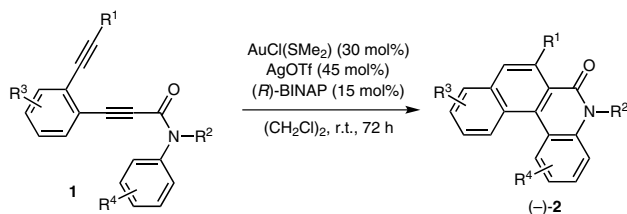


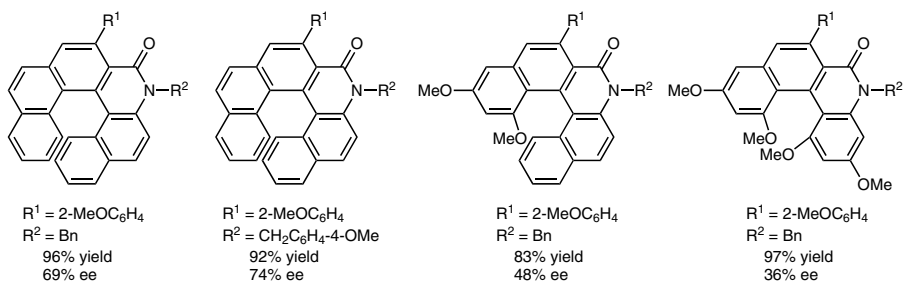
K. NAKAMURA, S. FURUMI, M. TAKEUCHI, T. SHIBUYA, K. TANAKA* (TOKYO UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, KOGANEI, JAPAN SCIENCE AND TECHNOLOGY AGENCY, KAWAGUCHI AND NATIONAL INSTITUTE FOR MATERIALS SCIENCE, TSUKUBA, JAPAN)

Enantioselective Synthesis and Enhanced Circularly Polarized Luminescence of S-Shaped Double Azahelicenes
J. Am. Chem. Soc. **2014**, *136*, 5555–5558.

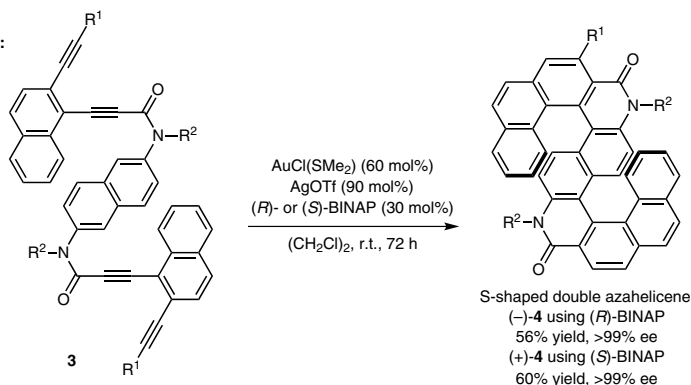
Enantioselective Azahelicenes via Intramolecular Hydroarylation of Alkynes



Selected examples:



Application:



Significance: The authors report an enantioselective synthesis of azahelicenes and S-shaped double azahelicenes, promoted by gold/silver triflate co-catalyzed intramolecular hydroarylation of alkynes. The photophysical properties of both azahelicenes and S-shaped double azahelicenes were then evaluated by measuring the circularly polarized luminescence activity.

Comment: Azahelicenes and S-shaped double azahelicenes were successfully synthesized via catalytic enantioselective sequential hydroarylation of achiral diynes and tetraynes in high yields and moderate to high enantioselectivities. Interestingly, the chiroptical property of the S-shaped double azahelicenes is very promising, since the circularly polarized luminescence activity of double azahelicenes was amazingly much higher than that of the simple azahelicenes.

SYNFACTS Contributors: Hisashi Yamamoto, Wafa Gati
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