Enantioselective Azahelicenes via Intramolecular Hydroarylation of Alkynes

**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.