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## Palladium-Catalyzed Butafulvene Synthesis



**Significance:** A palladium-catalyzed coupling of propargylic carbonates or bromides has been developed to synthesize butafulvene derivatives. Two sets of mild reaction conditions are reported to access either symmetrical butafulvenes or unsymmetrical products when coupling with allenylic boronate or in-situ-prepared allenyl-indium reagents. **Comment:** Primary propargyl carbonates were unreactive; however, in-situ prepared allenyl-indium reagents could be used as an alternative to access symmetrical terminal butafulvenes. Intermediate tracking and control experiments shed light on a potential reaction pathway, indicating that bisallene **C** undergoes palladium-catalyzed cycloisomerization to generate the product. Category

Metals in Synthesis

## Key words

palladium catalysis small-ring synthesis butafulvenes



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