

Solvent-free C–H alkynylation of azulenes.

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Rok wydania

2021

Czasopismo

Organic Chemistry Frontiers

Numer woluminu

8

Strony

5674-5680

DOI

10.1039/d1qo01091c

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

A solvent-free coupling of azulenes with 1-haloalkynes and 1-halopolyynes has been developed. 1-Haloalkynes were used as substrates and the reaction needs only simple grinding of substrates in a mortar with basic Al_2O_3 without solvents or precious metal catalysts. The reaction works for longer 1-halopolyynes as well and direct introduction of a linear carbon chain up to $(\text{CC})_4$ is possible giving an easy access to azulene end-capped sp -hybridised carbon molecular wires. Finally, further reactivity of the resulting azulenes was tested and two butadiynyl derivatives were transformed into the corresponding thiophenes.

Adres publiczny

<http://dx.doi.org/10.1039/d1qo01091c>

Strona internetowa wydawcy

<https://www.rsc.org/>