

Transition-metal free mechanochemical approach to polyne substituted pyrroles.

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Streszczenie

In this contribution, the synthesis of long chain hexatriynyl- and octatetraynyl-substituted pyrroles in one step from 1-halopolyne precursors is reported. The products were obtained via a mechanochemical approach by simple grinding of 1-haloalkynes with *N*-substituted pyrroles and potassium carbonate which played a role of heterogeneous catalyst and this solvent- and transition metal-free approach is unprecedented in the synthesis of new, organic, long chain polyynes. Additionally, an extensive X-ray single crystal study of pyrrole end-capped polyynes is presented. Such compounds are possible substrates for different oligoheterocycles and have a significant application potential such as for instance molecular wires.

Adres publiczny

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Strona internetowa wydawcy

<https://www.acs.org/content/acs/en.html>