

研究论文

含长链亚烷基桥的芳炔类共轭大环的合成

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摘要 采用模板导向法高产率地合成了两个含长链亚烷基桥的芳炔类共轭大环. 通过四碘化合物与单保护双炔化物的四重Hagihara偶合反应构建了环化所需要的复杂前体. 通过相应的模板四炔衍生物的分子内Glaser偶合反应环化得到大环. 大环的结构用NMR, GPC及UV-Vis表征确证.

关键词 [大环](#) [芳炔基](#) [模板](#) [双轴向列相液晶](#)

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Synthesis of Arylenealkyne Conjugated Macrocycles Containing Long Alkylene Bridge

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Abstract The synthesis of the first two arylenealkyne conjugated macrocycles containing long alkylene bridge *via* Glaser coupling of template-directed tetraacetylenes was reported. Tetraacetylenes intermediates with complex structures were constructed rapidly *via* quadruple Hagihara coupling of monoprotected bisacetylenes to appropriate tetraiodides and subsequent desilylation. The characterization of such compounds was carried out by NMR, GPC and UV-Vis spectra. Unfortunately the two compounds were not liquid crystals, without biaxial nematic mesophase character as expected.

Key words [Macrocycles](#) [Arylenealkyne](#) [Template](#) [Biaxial nematic phase liquid crystal](#)

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