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Title:	Synthesis of 1,2,3-Trisubstituted Cyclopentannulated Benzothiophenes through an Acid-Mediated Solvent-Free, One-Pot Domino Process
Authors:	Satpathi, B. (/jspui/browse?type=author&value=Satpathi%2C+B.) Dhiman, Seema (/jspui/browse?type=author&value=Dhiman%2C+Seema) Ramasastry, S.S.V. (/jspui/browse?type=author&value=Ramasastry%2C+S.S.V.)
Keywords:	Sulfur heterocycles Domino reactions Fused-ring systems Annulation Brønsted acids
Issue Date:	2014
Publisher:	Wiley-VCH Verlag
Citation:	European Journal of Organic Chemistry, 2014(10), pp.2022-2026.
Abstract:	The synthesis of 1,2,3-trisubstituted cyclopenta[b]thiophenes was achieved through a Brønsted acid mediated domino process under solvent-free conditions. In this one-pot process, benzothienylation of 1,3-dicarbonyls follows an intramolecular aldol-type reaction leading to the generation of functionalized and highly substituted annulated benzothiophenes. This class of compounds find potential applications in molecular electronics and exhibit significant biological activities. A brief theoretical investigation established a significant relationship between the energy of the regioisomers and their distribution.
URI:	https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/ejoc.201400008 (https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/ejoc.201400008) http://hdl.handle.net/123456789/3065 (http://hdl.handle.net/123456789/3065)
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