



# Design, synthesis and electrochemical properties of a thiophene derivative functionalized with a siderophore-like chelator

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Titre	Design, synthesis and electrochemical properties of a thiophene derivative functionalized with a siderophore-like chelator
Type de publication	Article de revue
Auteur	Moggia, Fabrice [1], Fages, Frédéric [2], Brisset, Hugues [3], Chaix, Carole [4], Mandrand, Bernard [5], Levillain, Eric [6], Roncali, Jean [7]
Pays	Pays-Bas
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Résumé en anglais	A hybrid 3,4-ethylenedioxythiophene (EDOT)-thiophene precursor functionalized with an hydroxypyridinone group has been synthesized and electropolymerized into the corresponding polymer. The analysis of the dependence of the open circuit potential (OCP) of the modified electrode on the concentration of Fe <sup>3+</sup> in aqueous solution shows that metal binding to the hydroxypyridinone groups prevents the oxidation of the conjugated polymer backbone until a threshold determined by the occupancy of the available complexation sites of the functionalized polymer is reached.
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua2059">http://okina.univ-angers.fr/publications/ua2059</a> [11]
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## Liens

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