



Electrode grafting by oxidation of an amine catalyzed by a ferrocenyl “antenna” through intramolecular electron transfer

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Mots-clés	Amine [6], Ferrocene [7], Intramolecular electron transfer [8], Modified electrode [9], Radical aminyl [10]
Résumé en anglais	<p>Two aminoferrocene complexes were studied by electrochemical techniques. Molecules retain the redox properties of both ferrocene and amine groups, but fundamentally different behaviours were observed depending on whether the linker between the two redox end groups was saturated (ethyl bridge) or not (ethynyl bridge). The possibility of an intramolecular electron transfer from the amine to the ferricenium moiety through the π-conjugated linker was demonstrated and the ethynyl bridge is expected to have a dual effect by facilitating both the oxidation of the amine into the cation radical and the production of aminyl radical, due to its strong electron withdrawing effect. Because of this synergy of properties, grafting of the conjugated aminoferrocene complex can occur just by oxidizing the ferrocene group without the presence of a base in solution.</p>
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Liens

[1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26505>

[2] <http://okina.univ-angers.fr/sylvie.dabos/publications>

- [3] <http://okina.univ-angers.fr/thomas.cauchy/publications>
- [4] <http://okina.univ-angers.fr/f.gohier/publications>
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- [6] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=24055>
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- [11] <http://okina.univ-angers.fr/publications/ua16596>
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