



# Effect of electrolyte solvent on the morphology of polypyrrole films: Application to the use of polypyrrole in pH sensors

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Auteur	Carquigny, Stéphanie [1], Segut, Olivier [2], Lakard, Boris [3], Lallemand, F. [4], Fievet, Patrick [5]
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Résumé en anglais	Electrochemical and morphological characteristics of polypyrrole (PPy) films electro-deposited from three different electrolyte solutions (acetonitrile, water and acetonitrile + water) have been investigated using atomic force microscopy and scanning electron microscopy. Experimental parameters including the electrolyte and the deposition time were shown to affect the morphologies of polypyrrole films. After characterization of the polypyrrole film morphologies, these polymer films were successfully tested as sensitive layers in pH sensors since the pH sensor responses were fast, linear and sensitive to pH changes. More, these responses of the pH sensors were dependent on the experimental conditions of the electro-deposition (thickness and solvent).
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## Liens

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[2] <http://okina.univ-angers.fr/olivier.segut/publications>

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