



Preparation of a tetrahydroxyphenazine-modified carbon as cathode material for supercapacitor in aqueous acid electrolyte

Submitted by Stéphanie Legoupy on Wed, 08/31/2016 - 09:48

Titre	Preparation of a tetrahydroxyphenazine-modified carbon as cathode material for supercapacitor in aqueous acid electrolyte
Type de publication	Article de revue
Auteur	Legoupy, Stéphanie [1], Lebègue, Estelle [2], Cougnon, Charles [3]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2016
Langue	Anglais
Date	Jan-09-2016
Pagination	47-50
Volume	70
Titre de la revue	Electrochemistry Communications
ISSN	13882481
Résumé en anglais	<p>A procedure for the grafting of oxocarbon compounds is proposed by condensation reaction with a benzenediamine to obtain an attached-phenazine moieties. A technical proof of concept is given by the covalent capture of rhodizonic acid on the Norit activated carbon and potentiality for supercapacitors is evidenced. The compositematerial obtained was tested as positive electrode for aqueous supercapacitors in 1 M H₂SO₄. The redox activity covering a wide range of potential gives an unprecedented increase in specific charge of 350% and a specific energy at the discharge 3.4 times higher than the unmodified carbon.</p>
URL de la notice	http://okina.univ-angers.fr/publications/ua14908 [4]
DOI	10.1016/j.elecom.2016.06.018 [5]
Titre abrégé	Electrochemistry Communications

Liens

- [1] <http://okina.univ-angers.fr/s.legoupy/publications>
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=3184](http://okina.univ-angers.fr/publications?f[author]=3184)
- [3] <http://okina.univ-angers.fr/c.cougnon/publications>
- [4] <http://okina.univ-angers.fr/publications/ua14908>
- [5] <http://dx.doi.org/10.1016/j.elecom.2016.06.018>

Publié sur *Okina* (<http://okina.univ-angers.fr>)