Accepted Manuscript



Title: Functionalized Graphene Sheets with Poly(ionic liquid)s and High Adsorption Capacity of Anionic Dyes

Author: Weifeng Zhao Yusheng Tang Jia Xi Jie Kong

PII:	S0169-4332(14)02542-2
DOI:	http://dx.doi.org/doi:10.1016/j.apsusc.2014.11.069
Reference:	APSUSC 29114
To appear in:	APSUSC
Received date:	27-8-2014
Revised date:	10-11-2014
Accepted date:	11-11-2014

Please cite this article as: W. Zhao, Y. Tang, J. Xi, J. Kong, Functionalized Graphene Sheets with Poly(ionic liquid)s and High Adsorption Capacity of Anionic Dyes, *Applied Surface Science* (2014), http://dx.doi.org/10.1016/j.apsusc.2014.11.069

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights for "Functionalized Graphene Sheets with Poly(ionic liquid)s and High Adsorption Capacity of Anionic Dyes"

Graphene sheets were covalently functionalized with poly(1-vinylimidazole) (PVI) type poly(ionic liquid) through a quaternarization reaction, which exhibited high capability of 1910 mgog⁻¹ for removal of anionic dye from water solution. The high adsorption capacity and facile regeneration by centrifugal separation suggest that chemically-converted graphene sheets with poly(ionic liquid)s possesses great application potential as an adsorbent for the purification of water containing anionic organic dyes.

Download English Version:

https://daneshyari.com/en/article/5350926

Download Persian Version:

https://daneshyari.com/article/5350926

Daneshyari.com