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Author: M.H. Chakrabarti C.T.J. Low N.P. Brandon V. Yufit
M.A. Hashim M.F. Irfan J. Akhtar E. Ruiz-Trejo M.A. Hussain



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Progress in the electrochemical modification of graphene-based materials and their applications

M. H. Chakrabarti^{a,b,1}, C. T. J. Low^c, N. P. Brandon^b, V. Yufit^b, M. A. Hashim^a, M. F. Irfan^d, J. Akhtar^e, E. Ruiz-Trejo^b, M. A. Hussain^a

^a Department of Chemical Engineering, Faculty of Engineering, University of Malaya, 50603 Kuala Lumpur, Malaysia

^b Department of Earth Science and Engineering, Imperial College London, South Kensington, London SW7 2AZ, UK

^c Energy Technology Research Group, Faculty of Engineering and the Environment, University of Southampton, Highfield, Southampton SO17 1BJ, UK

^d Department of Chemical and Materials Engineering, University of Alberta, 9107 – 116 St, Edmonton, AB, Canada T6G 2V4

^e Centre for Coal Technology, University of the Punjab, 54000 Lahore, Pakistan

Highlights

Six means of functionalising graphene electrochemically is reviewed
Electrochemical functionalization is relatively new to other standard methods
The technique is expected to improve graphene's application range considerably

Abstract

Graphene is a 2-D allotrope of carbon with exciting properties such as extremely high electronic conductivity and superior mechanical strength. It has considerable potential for applications in fields such as bio-sensors, electrochemical energy storage and electronics. In most cases, graphene has been functionalised and modified with other materials to prepare composites. This work reviews the electrochemical modification of graphene. Commencing

¹ Corresponding author at: Department of Earth Science and Engineering, Imperial College London, South Kensington, London SW7 2AZ, UK.
E-mail address: mohammedharun77@yahoo.com (M. H. Chakrabarti).

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