

Electronic and Magnetic Behaviors of Hydrogen Functionalized Graphene Nanostructure Material

Sekhar Chandra Ray*

Department of Physics, College of Science, Engineering and Technology, University of South Africa, Private Bag X6, Florida, 1710, Science Campus, Christiaan de Wet and Pioneer Avenue, Florida Park, Johannesburg, South Africa.

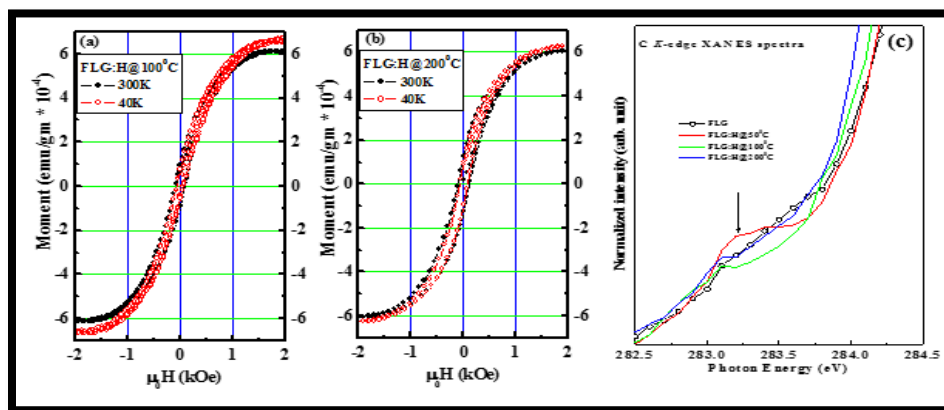


Figure S1. For a comparison of M-H loops of hydrogen plasma treated, few layer graphene at (a) 100°C and (b) 200°C temperature. (c) C K-edge XANES spectra where @50°C temperature hydrogen plasma treated Graphene shows “Zig-Zag” edge.

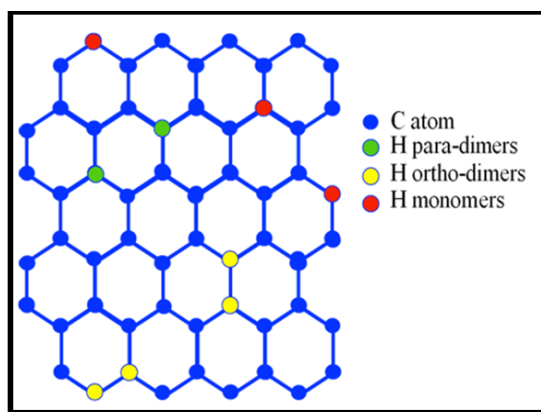


Figure S2. Different hydrogen attachment on graphene [ortho-dimers: yellow; para-dimers: blue; monomers: red].