High-Surface Graphene Nano-foam for Electrochemistry

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Graphene is emerging as an interesting new organic material for electro-catalysis, due to its high surface area, high strength (= durability), and large electrical and thermal conductivities. Here, we will introduce the topic of graphene for organic electronics. We introduce the topic of nitrogen-doped carbons as metal-free, organic electrochemical oxygen reduction catalysts, and present our recent results on the characterization and catalytic activity of nitrogen-doped graphene nanofoam. We will also present results using high-surface area graphene nanofoam as a platinum support for electrochemical oxygen reduction, with potential application in fuel cells.

References:

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