Graphene aerogels: from self-assembly to applications

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Graphene aerogels have been proposed for applications in fields as varied as environmental remediation, Li-ion batteries, and bone tissue engineering. All these applications have different requirements in terms of mechanical properties, pore size, connectivity, and interfaces with the exterior environment. In this talk we will explore how we can tune the properties of reduced graphene oxide gels made by hydrothermal reduction of graphene oxide suspensions by controlling how graphene oxide flakes self-assemble during the process, and show few examples of applications of the resulting gels.

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