



Graphene Oxide-Based Porous 3D Mesh

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Summary

The University of North Dakota has developed a method of making porous three-dimensional graphene mesh. The method includes combining a graphene-containing material and a polymer having a plurality of hydroxyl groups in an alcohol solvent to form a mixture, adding a salt to the mixture, heating the mixture to form a gel, and washing the gel with water to remove the salt from the gel, leaving behind stable pores to form a scaffold.

Advantages

- Excellent substrate for modeling the influence of the cellular microenvironment on cell growth and differentiation.
- Mimics cell-cell and cell-microenvironmental interactions.
- Tunable hardness and porosity for application in cell culture systems.
- Simple, easily reproducible, low cost, and amenable to expanded production.

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