# **Special Issue**

# Engineered Graphene-Based Materials in Brain Theranostics

# Message from the Guest Editors

Brain disorders, including inflammatory, psychiatric, neurodevelopmental, and neurodegenerative diseases as well as cancer stroke and trauma, are significant threats to public health. However, the blood-brain barrier, targeted biodistribution, and complex intercellular communication between brain cells are significant obstacles for their treatment. Brain theranostics, an emerging field of medicine that involves monitoring biomarker and engineering probes for improved diagnosis and therapy efficacy, is gaining increasing attention. The unique structural, optical, electrical, thermal, and biocompatible properties of graphene and its derivatives make graphene-based nanomaterials attractive for brain theranostics applications. This Special Issue aims to showcase the variety and relevance of recent advances in the field of application of graphene-based nanomaterials in brain theranostics. Potential topics include but are not limited to the following: biofunctionalization, multidisciplinary analysis of nanomaterials' properties and biocompatibility, therapeutic approaches, targeted delivery, imaging modalities, and efficacy and biosafety assessment.

# **Guest Editors**

Prof. Dr. Marek Osinski

Prof. Dr. Małgorzata Kujawska

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# Deadline for manuscript submissions

closed (30 June 2021)



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Addressing the environmental and public health challenges requires engagement and collaboration among clinicians and public health researchers. Scientific discoveries and advances in this research field play a critical role in providing a rational basis for informed decision-making toward control and prevention of human diseases, especially the illnesses that are induced from environmental exposure to health hazards.

*IJERPH* provides a forum for discussion of discoveries and knowledge in these multidisciplinary fields. Please consider publishing your research in this high quality peer-reviewed journal.

# Editor-in-Chief

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