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Autore	Manjunatha Jamballi G
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Nota di contenuto	Intro -- < -- named-book-part-body& -- #62 -- < -- p& -- #62 -- Since the last decade, graphene based materials have attained significant importance in electrochemical and material science. Different forms of graphene like graphene oxide, reduced graphene oxide, graphene quantum dots, pristine graphene, functionalized graphene, graphene nanoplatelets, etc, are used in construction of electrochemical devices. The extensive usage of these materials in electrochemical sensing of significant molecules or ions is due to their exce -- Acknowledgements -- Editor biography -- Jamballi G Manjunatha -- List of contributors -- Chapter An overview of graphene properties, types, and role in chemistry -- 1.1 Properties -- 1.1.1 Rheological properties -- 1.1.2 Thermal conductivity -- 1.2 Routes of synthesis -- 1.2.1 Top-down and bottom-up -- 1.3 Applications -- 1.3.1 Final considerations -- References -- Chapter Recent advances in graphene-based electrochemical sensing devices -- 2.1 Introduction -- 2.1.1 Objective of the chapter -- 2.2 Graphene in electrochemical sensing devices -- 2.2.1 Cancer biomarkers -- 2.2.2 Heavy metal electrochemical sensors -- 2.2.3 Cholesterol and glucose electrochemical (bio)sensors -- 2.2.4 Bisphenol A electrochemical detection -- 2.2.5 Dopamine, ascorbic acid, and uric acid -- 2.2.6 NADH-based electrochemical detection -- 2.2.7 Graphene-based gas

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Sommario/riassunto

This book serves as a comprehensive exploration into the realm of graphene-based sensors, delving into the intricate fusion of nanomaterials and sensing mechanisms that underpin their remarkable capabilities.
