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Nota di contenuto	Introduction -- Graphene for DNA Biosensing -- Graphene for Amino Acid, Peptide, Protein and Enzyme Detection -- Graphene for Glucose, Dopamine, Ascorbic Acid and Uric Acid Detection -- Graphene for Detetion of Adenosine Triphosphate, Nicotinamide Adenine Dinucleotide, Other Molecules, Gas and Ions -- Graphene in Drug Delivery, Cellular Imaging, Bacteria Inhibition, Versatile Targets Bioassays -- Conclusions and Perspectives.
Sommario/riassunto	This book highlights the latest advances in the use of graphene and bio-compatible-material-decorated graphene to detect various targets (e.g. DNA, RNA, amino acids, peptides, proteins, enzymes, antigens,

glucose, DA, AA, UA, ATP, NADH, gas, ions, etc.). It focuses on the specific interaction of these substances with graphene (or modified graphene) and the efficient transduction of the target recognition event into detectable signals via various techniques. Particular emphasis is given to well-designed strategies for constructing graphene-based platforms and target determination. It also covers other bio-analytical applications including cellular imaging, drug delivery and bacteria inhibition, before turning to a discussion of future challenges and prospects of graphene in bio-analytical applications. This book is intended for researchers working in the fields of analytical chemistry, nanomaterials and biomedical engineering. Li Niu is a Professor at the State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences.