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In the fast-developing field of nanomedicine, a broad variety of materials have been used for the development of advanced delivery systems for drugs, genes, and diagnostic agents. With the recent breakthroughs in the field, we are witnessing a new age of disease management, which is governed by precise regulation of dosage and delivery.

This book presents the advances in the use of polymeric nanomaterials for medical imaging, diagnosis, theranostics, and drug delivery. Beginning with the combinatorial approach for polymer design, it discusses star-shaped amphiphilic polymers, self-assembling polymer–drug conjugates, amphiphilic dendrimers, dendrimer nanohybrids, sustainable green polymeric nanoconstructs, chitosan-based nanogels, and multifunctional hybrid nanogels. The book provides all available information about these materials and describes in detail their advantages and disadvantages and the areas where they could be utilized successfully.



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