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Sommario/riassunto	<p>This book focuses on recent advances in the synthesis of nanoparticles, their characterization, and their applications in different fields such as catalysis, photonics, magnetism, and nanomedicine. Nanoparticles receive a large share of the worldwide research activity in contemporary materials science. This is witnessed by the number of scientific papers with "nanoparticle" as a keyword, increasing linearly in the last 10 years from about 16,000 in 2009 to about 50,000 in 2019. This impressive widespread interest stems from the basic science of nanoparticles, which constitute a bridge between the molecular and the bulk worlds, as well as from their technological applications. The preparation of nanoparticles is a crossroad of materials science where chemists, physicists, engineers, and even biologists frequently meet, leading to a continuous improvement of existing techniques and to the invention of new methods. The reader interested in nanoparticles synthesis and properties will here find a valuable selection of scientific cases that cannot cover all methods and applications relevant to the field, but still provide an updated overview on the fervent research activity focused on nanoparticles.</p>