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Nota di contenuto	Optical Properties of Nanoparticle Systems; Contents; Preface; 1: Introduction; 2: Nanoparticle Systems and Experimental Optical Observables; 3: Interaction of Light with Matter - The Optical Material Function; 4: Fundamentals of Light Scattering by an Obstacle; 5: Mie ' s Theory for Single Spherical Particles; 6: Application of M ie ' s Theory; 7: Extensions of M ie ' s Theory; 8: Limitations of Mie ' s Theory - Size and Quantum Size Effects in Very Small Nanoparticles; 9: Beyond M ie ' s Theory I - Nonspherical Particles; 10: Beyond Mie ' s Theory II - The Generalized Mie Theory 11: The Generalized Mie Theory Applied to Different Systems12: Densely Packed Systems; 13: Near - Field and SERS; 14: Effective Medium Theories; References; Color Plates; Index
Sommario/riassunto	Filling the gap for a description of the optical properties of small particles with sizes less than 1000 nm and to provide a comprehensive overview on the spectral behavior of nanoparticulate matter, this is the most up-to-date reference on the optical physics of nanoparticle systems. The author, an expert in the field with both academic and industrial experience, concentrates on the linear optical properties,

elastic light scattering and absorption of single nanoparticles and on
reflectance and transmittance of nanoparticle matter.
