

1. Record Nr.	UNINA9910437803503321
Autore	Mariscal Marcelo Mario
Titolo	Metal clusters and nanoalloys : from modeling to applications // Marcelo Mario Mariscal, Oscar Alejandro Oviedo, Ezequiel Pedro Marcos Leiva
Pubbl/distr/stampa	New York, NY, : Springer, 2012, c2013
ISBN	1-283-52937-8 9786613841827 1-4614-3643-5
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (357 p.)
Collana	Nanostructure science and technology
Altri autori (Persone)	OviedoOscar Alejandro LeivaEzequiel Pedro Marcos
Disciplina	669.9
Soggetti	Metal clusters Nanostructured materials Alloys
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Experimental and simulated electron microscopy in the study of metal nanostructures -- Density-functional theory of free and supported metal nanoclusters and nanoalloys -- Closed-shell metal clusters -- Optical properties of metal nanoclusters from an atomistic point of view -- Spin-fluctuation theory of cluster magnetism -- Thermodynamics and kinetics using semi-empirical approaches -- Structure and chemical ordering in nanoalloys: Towards nanoalloys phase diagrams -- Modeling of Janus nanoparticles -- Modeling of protected nanoparticles -- Thermodynamic modeling of metallic nanoclusters.
Sommario/riassunto	Metallic nanoparticles are promising materials due to their potential applications to a wide array of disciplines ranging from novel building materials to medicine. This book is the first of its kind, focusing solely on the most advanced theoretical techniques to model and simulate metallic clusters and nanoparticles. It includes a summary of the current state of research on metallic nanoparticles, detailed explanations of why and how these tools help experimentalists, and cutting edge contributions from renowned

experts in the field from around the globe.
