

1. Record Nr.	UNINA9910367745303321
Autore	Benelli Giovanni
Titolo	Green Synthesis of Nanomaterials
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2019
ISBN	3-03921-787-9
Descrizione fisica	1 online resource (224 p.)
Soggetti	Biology, life sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Nanomaterials possess astonishing physical and chemical properties. They play a key role in the development of novel and effective drugs, catalysts, sensors, and pesticides, to cite just a few examples. Notably, the synthesis of nanomaterials is usually achieved with chemical and physical methods needing the use of extremely toxic chemicals or high-energy inputs. To move towards more eco-friendly processes, researchers have recently focused on so-called "green synthesis", where microbial, animal-, and plant-borne compounds can be used as cheap reducing and stabilizing agents to fabricate nanomaterials. Green synthesis routes are cheap, environmentally sustainable, and can lead to the fabrication of nano-objects with controlled sizes and shapes-two key features determining their bioactivity.</p>