

Nanoparticles in Green Organic Synthesis

Strategy towards Sustainability



Sabyasachi Bhunia, Brajesh Kumar, Pardeep Singh, Ramesh Oraon, and Ki-Hyun Kim

Details

ISBN Language Published Copyright

978-0-323-95921-6 English 2023 Copyright © 2023 Elsevier Inc. All rights reserved.

Imprint DOI

Elsevier https://doi.org/10.1016/C2021-0-01559-5

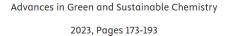
Table of contents

	• Full text access Front Matter, Copyright, Contributors, Preface
	Book chapter O Abstract only Chapter 1 - Nanomaterials in organic oxidation reactions
	Prasenjit Bhunia and Kingshuk Dutta Pages 1-39
	View chapter → View abstract ✓
	Book chapter O Abstract only Chapter 2 - Recent advance in nanoparticle catalysts for C–C cross-coupling reaction
	Shipra Sagar, Snigdha Rani Patra and Sabyasachi Bhunia Pages 41-73
	View chapter → View abstract ✓
	Book chapter O Abstract only Chapter 3 - Nanoparticles in multicomponent reactions toward green organic synthesis
	Debjit Das and Sasadhar Majhi Pages 75-102
	View chapter → View abstract ✓
	Book chapter O Abstract only Chapter 4 - An insight into nanoparticle-catalyzed green stereoselective organic transformations
actions for selected chapters elect all / Deselect all	Shrawan Kumar Mangawa, Smriti Srivastava and Shailja Singh Pages 103-140
	View chapter → View abstract ✓
± Export citations	Book chapter O Abstract only Chapter 5 - Green nanoparticles for photocatalytic organic synthesis
	Girish Chandra, Gopal Kumar Mahato and Samridhi Patel Pages 141-171
	View chapter → View abstract ✓
	Chapter 6 - Green nanoparticles for protection and deprotection reactions in organic synthesis
	M <mark>ahesh S. Majik and Vipul M. Ghare</mark> Pages 173-193
	View chapter → View abstract ✓



Nanoparticles in Green Organic Synthesis

Strategy Towards Sustainability





Pho Sor

Rec

Mat

M.B Kum

> Tre pro

Adv Gou

One FeP

lour

Zhei

Sho

Art

Cap Men

ŐР

Chapter 6 - Green nanoparticles for protection and deprotection reactions in organic synthesis

Mahesh S. Majik ^{a b}, Vipul M. Ghare ^{c d}

- ^a Goa State Higher Education Council (GSHEC), Porvorim, Goa, India
- b Department of Chemistry, Government College of Arts, Science and Commerce, Khandola, Marcela, Goa, India
- ^c HPSM's Ganpat Parsekar College of Education, Harmal, Goa, India
- d School of Chemical Sciences, Goa University, Taleigao Plateau, Goa, India

Available online 17 March 2023, Version of Record 17 March 2023.

What do these dates mean?

Show less ^

+ Add to Mendeley

≪ Share

→ Cite





https://doi.org/10.1016/B978-0-323-95921-6.00001-9 7

Get rights and content 7

Abstract

The development of green methodologies in the synthesis of <u>natural products</u> has gained tremendous interest among researchers. Many organic chemists engineered the multistep synthesis of bioactive compounds which required a

Access through another organization

Goa University does not subscribe to this content on ScienceDirect.

reaction conditions is an important step in protection-deprotection strategies. In recent years, nanomaterials were widely used as heterogeneous catalysts in diverse organic reactions owing to their catalytic efficiency, selectivity, and reusability. Despite the numerous advantages of nanomaterials in protection/deprotection reactions over other conventional reagents, they are rarely explored in such a type of reaction. In this chapter, applications of nanoparticle-based catalysts along with their structural properties for the protection and deprotection reactions are discussed.