

1. Record Nr.	UNINA9910139761203321
Titolo	Polyphosphazenes for biomedical applications [[electronic resource] /] / edited by Alexander K Andrianov
Pubbl/distr/stampa	Hoboken, N.J., : Wiley, c2009
ISBN	1-282-25936-9 9786612259364 0-470-47887-X 0-470-47888-8
Descrizione fisica	1 online resource (480 p.)
Altri autori (Persone)	AndrianovAlexander K
Disciplina	547.043 547/.043
Soggetti	Polyphosphazenes Coordination polymers - Synthesis
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	POLYPHOSPHAZENES FOR BIOMEDICAL APPLICATIONS; CONTENTS; CONTRIBUTORS; PREFACE; I INTRODUCTION; 1 Polyphosphazenes for Biology and Medicine: Current Status and Future Prospects; 2 Expanding Options in Polyphosphazene Biomedical Research; II VACCINE DELIVERY AND IMMUNOMODULATION; 3 Polyphosphazene Vaccine Delivery Vehicles: State of Development and Perspectives; 4 Potential of Polyphosphazenes in Modulating Vaccine-Induced Immune Responses: I. Investigations in Mice; 5 Potential of Polyphosphazenes in Modulating Vaccine-Induced Immune Responses: II. Investigations in Large Animals 6 Polyphosphazenes as Adjuvants for Inactivated and Subunit Rotavirus Vaccines in Adult and Infant Mice7 Polyphosphazene Immunoadjuvants for Intradermal Vaccine Delivery; III BIOMATERIALS; 8 Biodegradable Polyphosphazene Scaffolds for Tissue Engineering; 9 Biodegradable Polyphosphazene Blends for Biomedical Applications; 10 Polyphosphazenes from Condensation Polymerization; 11 Electrospun Polyphosphazene Nanofibers for In Vitro Osteoblast Culture; 12 Phosphazenes and Surfaces; IV DRUG DELIVERY SYSTEMS; 13

Amphiphilic Ionizable Polyphosphazenes for the Preparation of pH-Responsive Liposomes  
14 Poly- and Cyclophosphazenes as Drug Carriers for Anticancer Therapy  
15 Amphiphilic Polyphosphazenes as Drug Carriers; 16 Synthesis and Characterization of Organometallic Polyphosphazenes and Their Applications in Nanoscience; 17 Transport Properties of Polyphosphazenes; 18 Potentiometric Monitoring of Antibody-Antigen Interactions and Stabilization of Polyaniline Electrodes with p-Sulfonated Poly(bisphenoxyphosphazene); VI WELL-DEFINED POLYPHOSPHAZENES: SYNTHETIC ASPECTS AND NOVEL MOLECULAR ARCHITECTURES; 19 Synthesis and Chemical Regularity in Phosphazene Copolymers  
20 Supramolecular Structures of Cyclotriphosphazenes  
APPENDIX A;  
INDEX

---

Sommario/riassunto

Brings together, analyzes, and contextualizes the latest findings and practical applications Polyphosphazenes, an emerging class of polymers, include macromolecules, which have been proven to be biocompatible, biodegradable, and bioactive. Their unprecedented structural diversity and unique properties make them suitable as vaccine adjuvants, microencapsulating agents, biodegradable materials, scaffolds for tissue engineering, biocompatible coatings, and carriers for gene delivery. Polyphosphazenes for Biomedical Applications offers a thorough review of polyphosphazene research

---