Record Nr. UNINA9910253958503321 Advances in Personalized Nanotherapeutics // edited by Ajeet **Titolo** Kaushik, Rahul Dev Jayant, Madhavan Nair Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-63633-2 Edizione [1st ed. 2017.] 1 online resource (XIII, 240 p. 56 illus., 53 illus. in color.) Descrizione fisica 610.28 Disciplina Soggetti Biomedical engineering Nanoscale science Nanoscience Nanostructures Biomedical Engineering/Biotechnology Nanoscale Science and Technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Sommario/riassunto Health agencies have declared personalized nanomedicine as an important area to investigate novel therapies to combat against targeted diseases with no-side effects. The disease profile varies from patient-to-patient and standard therapies sometime are unsuitable for complete cure. This raises the demand of nanomedicine development. The tunable therapeutic salient features of nanomedicine including site-specific delivery and controlled release of a specific drug according to patient requirement make nanomedicine very special. Such of human compatible personalization is very useful in diseases management required to optimize a therapy for health care. Knowing the potentials

of the nanomedicines, significant efforts are being to design and develop nano-enabled therapeutic strategies to cure and monitor diseases contributing to personalized health care. As per state-of-theart, various approaches have been optimized resulting in development of pharmacologically relevant personalized nanomedicine to combat

against diseases with improved efficacy and no adverse effects. In this book, we described the fundamentals nanomedicine, nanotechnology for nanomedicine development, approach of personalized nanomedicine, potential novel nano-carriers for site-specific drug delivery, role of nano-bio-technology for efficient therapeutics, nanopharmacology, targeted CNS drug delivery, stimuli- responsive drug release, aspects of bioinformatics for diseases management, miniaturized bio-sensing systems for diseases detection with monitoring, and nano-bio-technology for diseases management. The challenges in personalized nano-therapeutics development, possible vision to overcome challenges, and future prospects to promote therapies for clinical application are also discussed in this book. We believe that present book would serve as a platform for new scholars of academia and industries to understand state-of-the-art of nano-biotechnology for therapeutics to plan future research to develop effective personalized nanomedicine against targeted diseases. Our book is a call for experts to explore multidisciplinary research towards developing novel personalized nanomedicines to combat against targeted diseases to personalized health care.