1. Record Nr. UNINA9910682582303321

Titolo	Advances in Diabetes Research and Management / / edited by Rana Noor
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	9789811900273 9789811900266
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (261 pages)
Disciplina	616.462
Soggetti	Human physiology Metabolism Molecular probes Metabolism - Disorders Human Physiology Biological Sensors and Probes Metabolic Disease
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Biochemical Assay for Measuring Diabetes Mellitus -- 2. Diabetes and other comorbidities-Microvascular and Macrovascular diseases Diabetes and Cancer -- 3. Diabetes and Cardiovascular Disorder -- 4. Diabetes and Neurological Disorders -- 5. Diabetic and nephropathy -- 6. Technology in the management of type 1 and type 2 diabetes mellitus - recent status and future prospects -- 7. The Broader aspects of Treating Diabetes with the Application of Nanobiotechnology -- 8. A comprehensive pharmacological appraisal of Indian traditional medicinal plants with Antidiabetic potential -- 9. Diabetes management - From "Painful" pricks to "Painfree" bliss -- 10. Diabetes mellitus and iPSC based therapy -- 11. ketogenic diet and. Diabetics' of gut microbe on diabetics.
Sommario/riassunto	This book discusses the latest research in the pathophysiology, diagnosis, and screening of diabetes and its management. It reviews novel technologies for early diagnosis and highlights the molecular mechanisms of microvascular and macrovascular complications of

diabetes 2 mellitus. The book covers the applications of nanotechnology in diagnostics, monitoring, and treatment of diabetes mellitus. The chapter also presents the latest developments in differentiating pancreatic cells from PSCs and illustrates the challenges of their therapeutic application in treating diabetes. The book also explores the prospective medicinal plants comprising either plant extract or isolated bioactive phytoconstituents bearing anti-diabetic potential, which has been reported in several in vitro, in vivo, or clinical studies. It further examines the major mechanisms involved in cardiovascular complications among type 2 diabetes mellitus individuals and discusses the various pharmacological interventions and agents developed to delay cardiovascular events and thereby the quality and duration of the patients. Towards the end, the book summarizes the potential impact of ketogenic diets on diabetic patients, and the role of genetic vulnerability in diabetic nephropathy. As such, this book is a valuable source for students, researchers, and practitioners working in glucose metabolism, diabetes, and human health.