

1. Record Nr.	UNINA9910869175703321
Titolo	Applications of Biotribology in Biomedical Systems // edited by Abhishek Kumar, Avinash Kumar, Ashwani Kumar
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031583278
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (462 pages)
Altri autori (Persone)	KumarAbhishek KumarAvinash KumarAshwani <1989->
Disciplina	610.28
Soggetti	Biomedical engineering Tribology Corrosion and anti-corrosives Coatings Biomedical Engineering and Bioengineering Corrosion
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to Biotribology: A Science of Surface Interaction -- Characterization of Hydrogel Properties in the Advancement of Biotribology -- Recent Advancements in Developing Nano-biosensors for Treating Inflammatory Diseases of Human: A Comprehensive Overview -- Biological Smart Materials for Cancer Treatment -- Tribological Measurements of Human Skin -- Tribological Hurdles in Biomedical Manufacturing: A Comprehensive Examination -- Navigating the Landscape: Cutting-edge Biomedical Manufacturing Techniques -- Animal Tribology -- Medical Devices Tribology -- Composites for Drug Eluting Devices: Emerging Biomedical Applications -- Biological Smart Biomaterials: Materials for Biomedical Applications -- Bioresorbable Composite for Orthopaedics and Drug Delivery Applications -- Wear and Friction Mechanism Study in Knee and Hip Rehabilitation: A Comprehensive Review -- Challenges and Perspective of Manufacturing Techniques in Biomedical Applications.
Sommario/riassunto	This book summarizes the past, present, and future work in

biotribology with a special emphasis on its applications in the design and manufacture of biomedical devices and their potential future uses. The book covers several aspects of biotribology such as biocompatible materials, joint tribology, skin tribology, oral tribology, tribology of the other human bodies or tissues, animal tribology, plant tribology, medical device tribology, and more. This is an essential reference for academics, biomedical researchers, biologists, tribologists, chemists, physicists, biomedical scientists, materials engineers, mechanical engineers and other professionals in related engineering, medicine, and biomedical industries. This book can also serve as a useful research text for undergraduate and graduate engineering courses such as tribology, materials, biomaterials, material characterization, interface science, and biomedical science.
