Record Nr. UNINA9910483683603321 Tribological applications of composite materials / / Mohamed Thariq **Titolo** Hameed Sultan [and four others] editors Pubbl/distr/stampa Gateway East, Singapore:,: Springer,, [2021] ©2021 **ISBN** 981-15-9635-2 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XI, 406 p. 208 illus., 146 illus. in color.) Collana Composites Science and Technology, , 2662-1819 Disciplina 621.89 Tribology Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Tribological behaviour of composites materials -- Tribology properties Nota di contenuto of synthetic fibre reinforced composites -- Tribology properties of natural fibre reinforced composites -- The effect of fillers on the tribological properties of composites -- Tribological behaviour of polymer composites at elevated temperature -- The effect of size, length and orientation of the fibres on the tribological properties of composites -- Natural fibre composites as friction materials -- Dry sliding wear behavior of materials composites -- Wear properties of hybrid composites -- Scratch resistance of the polymer composites --The effects of fibre loading of composites on the scratch resistance --Lubrication effects on the tribological properties of the composites --Tribological composites for biomedical applications -- Tribological composites for aerospace applications -- Tribological composites for automotive applications. This book covers the current advances and practices in tribological Sommario/riassunto applications of composite materials under various processes, presenting the development, characterization, and morphological properties of composite materials in tribological applications. It covers a wide range of subjects, extending from fundamental research on the tribological characteristics of various multi-phase materials to the final applications of composites in wear loaded, technical components. It brings together contributions from researchers who discusses

innovative experimental approaches and analytical techniques, creating

a reference with comprehensive coverage of modern research techniques and the potential application of tribological composites in biomedical, aerospace, automotive, marines and construction industries. This volume will be of interest to material science researchers working in both industry and academia.