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| Autore                  | Basu Bikramjit  |
| Titolo                  | Friction and wear of ceramics : principles and case studies / / Bikramjit Basu, Mitjan Kalin and B. V. Manoj Kumar  |
| Pubbl/distr/stampa      | Hoboken, New Jersey : , : John Wiley & Sons, Incorporated, , 2020   |
| ISBN                    | 1-5231-3723-1<br>1-119-53883-1<br>1-119-53840-8<br>1-119-53879-3  |
| Descrizione fisica      | 1 online resource (403 pages) : illustrations   |
| Disciplina              | 620.1404292   |
| Soggetti                | Ceramic materials - Mechanical properties<br>Friction<br>Mechanical wear  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di bibliografia    | Includes bibliographical references and indexes.  |
| Sommario/riassunto      | "This book is designed to enrich the knowledge on essential concepts of tribology as well as processing and properties of ceramics and ceramic coatings. This book is expected to help students and practicing scientists alike understand that a comprehensive knowledge about the friction and wear properties is essential to realize the performance of ceramic materials. This book also offers an understanding of state-of-the-art research findings of the advanced ceramics and coatings. The description of the wear micro-mechanisms will provide a strong background to the readers as how to design and to develop new wear resistant ceramic materials. Overall, various sections of the book discuss fundamentals of nature and properties of materials, friction and wear of structural ceramics for components used in energy, aerospace and manufacturing industries. Some of the key features of the book are as follows: Fundamentals section highlights the salient issues of processing of ceramics and ceramic coatings, and their mechanical properties; State-of-the- art research findings on the sliding and erosion wear behavior of important ceramic systems including bulk |

silicon carbide , alumina, zirconium diboride, titanium carbide based cermets and tungsten carbide-cobalt coatings. Finally, an Appendix is included, wherein a collection of several types of questions, including multiple choice, short answer and long answer, are provided"--

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