1. Record Nr. UNINA9910674040203321 Autore Bruno Giovanni Titolo Brittle Materials in Mechanical Extremes Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021 Descrizione fisica 1 electronic resource (178 p.) Soggetti Research & information: general Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The goal of the Special Issue "Brittle Materials in Mechanical Extremes" Sommario/riassunto is to spark a discussion of the analogies and the differences between different brittle materials, such as ceramics and concrete. The contributions to the Issue span from construction materials (asphalt and concrete) to structural ceramics to ice. Data reported in the Issue were obtained by advanced microstructural techniques (microscopy, 3D imaging, etc.) and linked to mechanical properties (and their changes as a function of aging, composition, etc.). The description of the mechanical behavior of brittle materials under operational loads, for instance, concrete and ceramics under very high temperatures, offers an unconventional viewpoint on the behavior of such materials. While it

is by no means exhaustive, this Special Issue paves the road for the fundamental understanding and further development of materials.