1. Record Nr. UNINA9910747593403321 Autore Qiu Limin **Titolo** Proceedings of the 28th International Cryogenic Engineering Conference and International Cryogenic Materials Conference 2022 [[electronic resource]]: ICEC28-ICMC 2022, Hangzhou, China // edited by Limin Qiu, Kai Wang, Yanwei Ma Singapore: .: Springer Nature Singapore: .: Imprint: Springer. , 2023 Pubbl/distr/stampa **ISBN** 981-9961-28-9 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (0 pages) Collana Advanced Topics in Science and Technology in China, , 1995-6827;; Altri autori (Persone) WangKai MaYanwei Disciplina 536.56 Soggetti Low temperatures **Electronics** Superconductivity Superconductors Ceramic materials Materials Low Temperature Physics Electronics and Microelectronics, Instrumentation Ceramics Materials Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Plenary Session -- E-01: Large Scale Refrigeration, Liquefaction, Air Separation and Industrial Cryogenics -- E-02: Cryocoolers: Pulse Tube, GM, Stirling, Magnetic and Other Coolers -- E-03: Expanders, Cryopumps, Compressors, Regenerators and Other Components -- E-04: Space Cryogenic Applications -- E-05: Cryostat Technology and Thermal Insulation -- E-06: Thermo-Physical Properties of Solids and Fluids in Cryo-systems -- E-07: Magnet Technology, Design and

> Evaluation -- E-08: Large Scale Cryogenics: Fusion Reactors, Accelerators, Superconducting Cavities and Detectors -- E-09: Low Temperature Refrigeration for Quantum Computers, Detectors and LT

Experiments -- E-10: Superconducting Current Leads and Links -- E-11: Cryogenics for Power Applications and Transportation -- E-12: Various Applications of Superconductors -- E-13: LNG and Hydrogen Systems -- E-14: New Devices and Novel Concepts -- E-15: Biological, Medical and Food Applications -- E-16: Instrumentation, Telemetry and Process Control -- E-17: Safety, Reliability and Standards -- M-01: Processing and Properties NbTi/Nb3Sn/A15/RE123/BSCCO and MgB2 -- M-02: Pnictides and Other Superconducting Materials -- M-03: Superconductor Stability, AC Losses and Electromagnetic Properties --M-04: HTS Bulk, Thin Films and Cables -- M-05: Flux Pinning and Critical Current -- M-06: Metallic, Composite Materials, Insulation and Impregnation Materials Processing and Properties -- M-07: Cryogenic Materials Testing and Methods -- M-08: New Cryogenic Materials Properties and Applications -- M-09: Cryogenic Low and High Power Electronics, Superconducting Detectors -- M-10: Radiation and Other Degradation Effects -- M-11: Heat Transfer, Thermodynamic and Fluid Properties of Cryogenic Materials.

Sommario/riassunto

This book gathers selected papers from the 28th International Cryogenic Engineering Conference and International Cryogenic Materials Conference 2022 (ICEC28-ICMC 2022), held virtually in Hangzhou, China on 25-29 April 2022, due to COVID-19 pandemic. Highlighting the latest findings on cryogenic engineering and cryogenic materials, it covers topics including: large-scale cryogenic components, processes and systems for refrigeration, separation, and liquefaction of cryogenic fluids, small-scale cryocoolers, cryogenic space applications, thermal insulation, thermal-physical properties of cryogenic fluids and materials, superconducting materials, devices, systems and applications, etc. The book offers valuable information and insights for academic researchers, engineers in the industry, and operators in the cryogenic field.