

1. Record Nr.	UNINA9910153182503321
Titolo	Materials aspect of thermoelectricity // edited by Ctirad Uher, University of Michigan, Ann Arbor, USA
Pubbl/distr/stampa	Boca Raton, FL : , : CRC Press, , [2017] ©2017
ISBN	1-315-19702-2 1-351-76880-8 1-4987-5491-0
Descrizione fisica	1 online resource (625 pages)
Disciplina	621.31/243
Soggetti	Thermoelectricity Thermoelectric materials Materials - Thermal properties Expansion (Heat)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	1. Discovery and design of new thermoelectric materials / Eric S. Toberer, Prashun Gorai, and Vladan Stevanovic -- 2. Tetradymites : Bi ₂ Te ₃ -related materials / Joseph P. Heremans and Bartlomiej Wiendlocha -- 3. Growth and transport properties of tetradymite thin films / Hang Chi, Wei Liu, and Ctirad Uher -- 4. All-scale hierarchical PbTe : from nanostructuring to a panoscopic material / Gangjian Tan and Mercouri G. Kanatzidis -- 5. Thermoelectric properties of magnesium silicide : based solid solutions and higher manganese silicides / Johannes de Boor, Titas Dasgupta, and Eckhard Muller -- 6. Clathrate-based thermoelectrics / Toshiro Takabatake and Koichiro Suekuni -- 7. Advances in nanostructured half-Heusler alloys for thermoelectric applications / Pierre F.P. Poudeu, Ruiming Lu, Yuanfeng Liu, Pranati Sahoo, and Alexander Page -- 8. Thermoelectric properties of Cu ₂ -pX (X = S, Se, and Te) / Pengfei Qiu, Xun Shi, and Lidong Chen -- 9. BiCuSeO : a promising thermoelectric material / Li-Dong Zhao and Jing-Feng Li -- 10. Phase diagram study in n-CoSb ₃ Skutterudites

/ Yinglu Tang, Chris Wolverton, and G. Jeffrey Snyder -- 11. Chain-forming A_3MPn_3 and $A_5M_2Pn_6$ Zintl phases / Alex Zevalkink, Umut Aydemir, and G. Jeffrey Snyder -- 12. Thallium-based chalcogenides as thermoelectrics / Quansheng Guo, Abdeljalil Assoud, and Holger Kleinke -- 13. Higher manganese silicides / Yuzuru Miyazaki -- 14. Boron-based materials / Takao Mori -- 15. Complex chalcogenides : pseudo-hollandites, structures and properties / Franck Gascoin -- 16. Tetrahedrites : earth-abundant thermoelectric materials with intrinsically low thermal conductivity / Xu Lu and Donald T. Morelli -- 17. Organic thermoelectric materials / Gun-Ho Kim and Kevin P. Pipe -- 18. Inorganic/organic hybrid superlattice materials / Kunihito Koumoto, Ruoming Tian, Ronggui Yang, and Chunlei Wan -- 19. Recent progress in Skutterudites / G. Jeffrey Snyder, Yinglu Tang, Caitlin M. Crawford, and Eric S. Toberer -- 20. SHS-processed thermoelectric materials / Xinfeng Tang, Xianli Su, Qingjie Zhang, and Ctirad Uher -- 21. Prospective thermoelectrics among topological insulators / Jihui Yang.
