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Autore	Lee HoSung
Titolo	Thermal design : heat sinks, thermoelectrics, heat pipes, compact heat exchangers, ands solar cells // Hosung Lee
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ISBN	1-119-68604-0 1-119-68603-2
Edizione	[Second edition.]
Descrizione fisica	1 online resource (931 pages)
Disciplina	621.4021
Soggetti	Heat engineering - Materials Thermodynamics Heat-transfer media Thermoelectric apparatus and appliances
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Heat Sinks -- Heat Pipes -- Compact Heat Exchangers -- Thermoelectric Design -- Thermoelectric Materials -- Solar Cells -- Appendix A: Thermophysical Properties -- Appendix B -- Appendix C: Pipe Dimensions -- Appendix D: Periodic Table -- Appendix E: Thermoelectric Properties -- Appendix F: Fermi Integral -- Appendix G: Hall Factor -- Appendix H: Curve Fitting of Working Fluids -- Appendix L: Tutorial for MathCAD -- Appendix M: Conversion Factors.
Sommario/riassunto	"In this significantly updated new edition, Thermal Design details the physical mechanisms of standard thermal devices while integrating essential formulas and detailed derivations to give a practical understanding of the field to students. The textbook examines the design of thermal devices through mathematical modeling, graphical optimization, and occasionally computational-fluid-dynamic (CFD) simulation. Moreover, it presents information on significant thermal devices such as heat sinks, thermoelectric generators and coolers, heat pipes, and heat exchangers as design components in larger systems -- all of which are increasingly important and fundamental to numerous fields such as microelectronic cooling, green or thermal energy

conversion, and thermal control and management in space."--
