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Titolo	Theoretical Thermotics [[electronic resource]] : Transformation Thermotics and Extended Theories for Thermal Metamaterials / / by Ji-Ping Huang
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Descrizione fisica	1 online resource (260 pages)
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Soggetti	Thermodynamics Heat engineering Heat transfer Mass transfer Statistical physics Dynamical systems Condensed matter Structural materials Mathematical physics Engineering Thermodynamics, Heat and Mass Transfer Complex Systems Condensed Matter Physics Structural Materials Theoretical, Mathematical and Computational Physics
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction -- Transformation Thermotics for Thermal Conduction -- Transformation Thermotics for Thermal Conduction and Convection -- Transformation Thermotics for Thermal Conduction and Radiation -- Transformation Thermotics for Thermal Conduction, Convection and Radiation. .
Sommario/riassunto	This book focuses on theoretical thermotics, the theory of transformation thermotics and its extended theories for the active control of macroscopic thermal phenomena of artificial systems, which

is in sharp contrast to classical thermodynamics comprising the four thermodynamic laws for the passive description of macroscopic thermal phenomena of natural systems. The book covers the basic concepts and mathematical methods, which are necessary to understand thermal problems extensively investigated in physics, but also in other disciplines of engineering and materials. The analyses rely on models solved by analytical techniques accompanied with computer simulations and laboratory experiments. This book serves both as a reference work for senior researchers and a study text for zero beginners.
