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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Thermodynamic fundamentals -- Exergy and energy analyses -- Chemical exergy -- Exergy, environment, and sustainable development -- Applications of exergy in industry -- Exergy analysis of psychrometric processes -- Exergy analysis of heat pump systems -- Exergy analysis of absorption cooling systems -- Exergy analysis of thermal energy storage systems -- Exergy analysis of drying processes and systems -- Exergy analysis of renewable energy systems -- Exergy analysis of steam power plants -- Exergy analysis of cogeneration and district energy systems -- Exergy analysis of integrated trigeneration and multigeneration systems -- Exergy analysis of cryogenic and liquefaction systems -- Exergy analysis of crude oil distillation systems -- Exergy analysis of hydrogen production systems -- Exergy analysis of fuel cell systems -- Exergy analysis of aircraft flight systems -- Exergoeconomic analysis of thermal systems -- Exergy analysis of countries, regions, and economic sectors -- Exergetic life cycle assessment -- Exergy and industrial ecology -- Exergy and multiobjective optimization -- Exergy in policy development and education -- Closing remarks and future expectations -- Appendices.
Sommario/riassunto	This book deals with exergy and its applications to various energy

systems and applications as a potential tool for design, analysis and optimization, and its role in minimizing and/or eliminating environmental impacts and providing sustainable development. In this regard, several key topics ranging from the basics of the thermodynamic concepts to advanced exergy analysis techniques in a wide range of applications are covered as outlined in the contents. Offers comprehensive coverage of exergy and its applications, along with the most up-to-date information in the area with recent developments. Connects exergy with three essential areas in terms of energy, environment and sustainable development. Provides a number of illustrative examples, practical applications, and case studies.