

1. Record Nr.	UNINA9910453543103321
Autore	Ben-Naim Arieh <1934->
Titolo	A farewell to entropy [[electronic resource]] : statistical thermodynamics based on information : $S=\log W$ // Arieh Ben-Naim
Pubbl/distr/stampa	Hackensack, N.J., : World Scientific, c2008
ISBN	1-281-93836-X 9786611938369 981-279-073-X
Descrizione fisica	1 online resource (412 p.)
Disciplina	536.73
Soggetti	Entropy Second law of thermodynamics Statistical thermodynamics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 373-379) and index.
Nota di contenuto	1. Introduction. 1.1. A brief history of temperature and entropy. 1.2. The association of entropy with disorder. 1.3. The association of entropy with missing information -- 2. Elements of probability theory. 2.1. Introduction. 2.2. The axiomatic approach. 2.3. The classical definition. 2.4. The relative frequency definition. 2.5. Independent events and conditional probability. 2.6. Bayes' Theorem. 2.7. Random variables, average, variance and correlation. 2.8. Some specific distributions. 2.9. Generating functions. 2.10. The law of large numbers -- 3. Elements of information theory. 3.1. A qualitative introduction to information theory. 3.2. Definition of Shannon's information and its properties. 3.3. The various interpretations of the Quantity H. 3.4. The assignment of probabilities by the maximum uncertainty principle. 3.5. The missing information and the average number of binary questions needed to acquire it. 3.6. The false positive problem, revisited. 3.7. The urn problem, revisited -- 4. Transition from the general MI to the thermodynamic MI. 4.1. MI in binding systems: one kind of information. 4.2. Some simple processes in binding systems. 4.3. MI in an ideal gas system: two kinds of

information. The Sackur-Tetrode equation. 4.4. Comments -- 5. The structure of the foundations of statistical thermodynamics. 5.1. The isolated system; the micro-canonical ensemble. 5.2. System in a constant temperature; the canonical ensemble. 5.3. The classical analog of the canonical partition function. 5.4. The re-interpretation of the Sackur-Tetrode expression from informational considerations. 5.5. Identifying the parameter for an ideal gas. 5.6. Systems at constant temperature and chemical potential; the grand canonical ensemble. 5.7. Systems at constant temperature and pressure; the isothermal isobaric ensemble. 5.8. The mutual information due to intermolecular interactions -- 6. Some simple applications. 6.1. Expansion of an ideal gas. 6.2. Pure, reversible mixing; the first illusion. 6.3. Pure assimilation process; the second illusion. 6.4. Irreversible process of mixing coupled with expansion. 6.5. Irreversible process of demixing coupled with expansion. 6.6. Reversible assimilation coupled with expansion. 6.7. Reflections on the processes of mixing and assimilation. 6.8. A pure spontaneous deassimilation process. 6.9. A process involving only change in the momentum distribution. 6.10. A process involving change in the intermolecular interaction energy. 6.11. Some baffling experiments. 6.12. The second law of thermodynamics.

Sommario/riassunto

The principal message of this book is that thermodynamics and statistical mechanics will benefit from replacing the unfortunate, misleading and mysterious term "entropy" with a more familiar, meaningful and appropriate term such as information, missing information or uncertainty. This replacement would facilitate the interpretation of the "driving force" of many processes in terms of informational changes and dispel the mystery that has always enshrouded entropy. It has been 140 years since Clausius coined the term "entropy"; almost 50 years since Shannon developed the mathematical theory of "i

2. Record Nr.	UNINA9910163975203321
Autore	Reader Capitol
Titolo	Summary of The Predator State
Pubbl/distr/stampa	Cork, : Primento Digital, 2013
ISBN	9782511002421 2511002426
Descrizione fisica	1 online resource (21 p.)
Disciplina	330.973
Soggetti	Free enterprise -- United States United States -- Economic policy -- 1981-1993 United States -- Economic policy -- 1993-2001 United States -- Economic policy -- 2001-
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Title page; Book Presentation; Book Abstract; About the Author; Important Note About This Ebook; Summary of The Predator State (James K. Galbraith); Introduction; Another God that Failed; The Bush Administration and the Predator State; Supply-Side Illusions; The Economics of Predators and Prey; Conclusion; Buy the Book; About the Summary Publisher; Copyright
Sommario/riassunto	This ebook consists of a summary of the ideas, viewpoints and facts presented by James K. Galbraith in his book "The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should too". This summary offers a concise overview of the entire book in less than 30 minutes reading time. However this work does not replace in any case James K. Galbraith's book. Galbraith argues that Bush administration had no choice not to abandon Reganism. He also demonstrates that the real economy is not a free-market economy, thus believes that problems are not solved by incantations about the