

BOOK REVIEW

Proceedings OF THE INTERNATIONAL SYMPOSIUM ON TRANSPORT PROCESSES IN STATISTICAL MECHANICS, Edited by I. Prigogine, Interscience Publishers, New York, and London, 1958, pp. 436. Price \$ 10.00

The present volume is a collection of 48 papers presented in the International Symposium on 'Transport Processes in Statistical Mechanics' held in Brussels in Aug. 1956. The volume has been divided into 14 parts, the theoretical papers being grouped in Parts I to XII and experimental papers in Parts XIII and XIV. The division of the book into the different parts is, however, not always quite logical.

In parts I to III the statistical mechanical basis of the steady state has been discussed from several points of view leading to the derivation of Boltzmann equation as used in the kinetic theory of gases, while part IX deals with the quantum-mechanical aspect. The other parts deal with specific problems. Transport phenomena (mainly thermal conductivity and diffusion) in solids are dealt with in Parts IV, V and VII while diffusion in gases and liquids are discussed in Parts VI and VIII respectively. Part X deals with some transport phenomena in liquids, particularly liquid helium. Part XI which covers about seventyfive pages is particularly welcome as it gives a fair idea of the controversial aspects of the basic principles of the thermodynamic theory of irreversible processes. This might stimulate activity in making the fundamentals more sound or in extending the domain of applicability of the theory of irreversible processes. In parts XIII and XIV some special experiments of topical interest are discussed such as viscosity and thermal conductivity of gases at high pressures, diffusion and thermal diffusion in gases and liquids, Soret effect, etc. The parts are followed by discussions which are quite interesting and useful.

The book gives, in a small compass, a good picture of the current effort being made to elucidate the intricate aspects of the Transport Theory from statistical mechanics. In view of the nature of the subject and the form of the book as a mere collection of papers, the present volume is likely to be useful only for research workers in the field.

- B. N. S.

Welcome to the International Symposium on High-Performance Parallel and Distributed Computing (ACM HPDC 2019)!, the premier conference at the intersection of high performance and distributed computing, now in our 27th year. HPDC is fortunate to be co-located and sponsored by ACM FCRC this year which is providing exceptional keynotes, the Turing Award Lecture, and a chance to mingle with our colleagues in other disciplines of Computer Science. ACM HPDC has a focus on high-performance parallel and distributed computing topics over the years including platforms spanning clouds, clusters, grids, Proceedings of the International Symposium, Tokyo, Japan, 1987. Berlin and New York: Springer. Katsumoto, S., Komori, F., Sano, N. and Kobayashi, S.-I. 1987. Anisotropic transport properties of single crystal $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$: evidence for the dimensional crossover. Phys. Rev. 1987. Onsager, L. 1931a. Reciprocal relations in irreversible processes. I. Phys. Rev., 37, 405. Onsager, L. 1931b. Reciprocal relations in irreversible processes. II. Phys. In theory, graphics processing units largely exceed central processing units by the degree of performance. But in order to load the GPU with computing tasks to the boundary levels of its maximum performance, the task has to be divided into streams. The number of streams should be comparable to or, to... The article represents the results of investigating the structure of the layers, obtained using the specimens of low-carbon steel, subjected to plasma cementation. The dependence of their structure on the percentage of graphite in the coating, which served as a carbon source, is established. The influence Article details Download article (PDF). Mathematical Modeling and Numerical Simulation in Continuum Mechanics: Proceedings of the International Symposium on Mathematical Modeling and Numerical Simulation in Continuum Mechanics, September 29 – October 3, 2000 Yamaguchi, Japan. 314 Pages · 2002 · 24.54 MB · 2,389 Downloads · English. by Ivo Babuška & Philippe G. Ciarlet & Tetsuhiko Miyoshi (eds.) continuum mechanics. Preview. Download. and Manufacturing : Proceedings of the International Joint Conference on Mechanics, Design Engineer Computer-aided design, manufacturing, modeling and simulation : selected, peer reviewed papers from the International Conference on Computer-Aided Design, Manufacturing, Modeling and Simulation (CDMMS 2011), September 13-16, 2011, Hangzhou, China.