

Lecture Notes in Physics

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Ionic Liquids, Molten Salts and Polyelectrolytes

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Edited by K.-H. Bennemann, F. Brouers, and D. Quitmann



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P R E F A C E

This book presents a series of up-to-date review articles and contributions on recent research in the areas of ionic liquids, molten salts and polyelectrolytes.

Electron-charge transfer and its effect on various structural and thermodynamical properties and phase transitions in various ionic systems are discussed in detail.

A review is given of the use of molten salt electrolytes in batteries, and many experimental and theoretical results on the static and dynamical properties of polyelectrolytes are reported. The significance of polyelectrolytes in biology is also discussed.

It becomes apparent that similarities exist among the physical ideas underlying the structure and the thermodynamical and dynamical behaviour of the different systems treated in this book.

Berlin, September 1982

K.-H. Bennemann

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