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Titolo	Dielectric Properties of Ionic Liquids [[electronic resource] /] / edited by Marian Paluch
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Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (X, 237 p. 116 illus., 58 illus. in color.)
Collana	Advances in Dielectrics, , 2190-930X
Disciplina	541.372
Soggetti	Electrochemistry Optical materials Electronic materials Amorphous substances Complex fluids Polymers Materials science Nanotechnology Optical and Electronic Materials Soft and Granular Matter, Complex Fluids and Microfluidics Polymer Sciences Characterization and Evaluation of Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to Ionic Liquids -- Rotational and translational diffusion in ionic liquids -- Charge transport and glassy dynamics in ionic liquids confined to nanoporous systems -- Electrochemical double layers in ionic liquids investigated by Broadband Dielectric Spectroscopy and other complementary experimental techniques -- Electrical properties of the interface between metals and Ionic Liquids -- Dielectric properties of protic ionic liquids -- Polymerized ionic liquids.
Sommario/riassunto	This book discusses the mechanisms of electric conductivity in various ionic liquid systems (protic, aprotic as well as polymerized ionic liquids). It hence covers the electric properties of ionic liquids and their

macromolecular counterpanes, some of the most promising materials for the development of safe electrolytes in modern electrochemical energy devices such as batteries, super-capacitors, fuel cells and dye-sensitized solar cells. Chapter contributions by the experts in the field discuss important findings obtained using broadband dielectric spectroscopy (BDS) and other complementary techniques. The book is an excellent introduction for readers who are new to the field of dielectric properties of ionic conductors, and a helpful guide for every scientist who wants to investigate the interplay between molecular structure and dynamics in ionic conductors by means of dielectric spectroscopy.
