

Contents

1	Introduction to Ionic Liquids	1
	Veronika Strehmel	
2	Rotational and Translational Diffusion in Ionic Liquids	29
	Joshua Sangoro, Tyler Cosby and Friedrich Kremer	
3	Femto- to Nanosecond Dynamics in Ionic Liquids: From Single Molecules to Collective Motions	53
	Johannes Hunger and Richard Buchner	
4	High-Pressure Dielectric Spectroscopy for Studying the Charge Transfer in Ionic Liquids and Solids	73
	Z. Wojnarowska and M. Paluch	
5	Glassy Dynamics and Charge Transport in Polymeric Ionic Liquids	115
	Falk Frenzel, Wolfgang H. Binder, Joshua Rume Sangoro and Friedrich Kremer	
6	Ionic Transport and Dielectric Relaxation in Polymer Electrolytes	131
	Yangyang Wang	
7	Electrochemical Double Layers in Ionic Liquids Investigated by Broadband Impedance Spectroscopy and Other Complementary Experimental Techniques	157
	Bernhard Roling, Marco Balabajew and Jens Wallauer	
8	Dielectric Properties of Ionic Liquids at Metal Interfaces: Electrode Polarization, Characteristic Frequencies, Scaling Laws	193
	A. Serghei, M. Samet, G. Boiteux and A. Kallel	

9 Decoupling Between Structural and Conductivity Relaxation in Aprotic Ionic Liquids	213
Evgeni Shoifet, Sergey P. Verevkin and Christoph Schick	
Index	235



<http://www.springer.com/978-3-319-32487-6>

Dielectric Properties of Ionic Liquids

Paluch, M. (Ed.)

2016, X, 237 p. 116 illus., 58 illus. in color., Hardcover

ISBN: 978-3-319-32487-6