

1. Record Nr.	UNINA990005652510403321
Autore	James, William
Titolo	Pragmatism : a new name for some old ways of thinking / popular lectures on philosophy by William James
Pubbl/distr/stampa	London : Longmans Green, 1908
Descrizione fisica	XIII, 309 p. ; 22 cm
Disciplina	191 144.3
Locazione	FLFBC
Collocazione	P.1 FG 2091
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA990001064890403321
Titolo	La strategia sovietica per lo sviluppo economico 1924-1930 : la discussione degli anni venti nell'URSS / a cura e con un saggio introduttivo di Nicolas Spulber ; edizione italiana a cura di Lisa Foà
Pubbl/distr/stampa	Torino, : Einaudi, 1970
Descrizione fisica	X, 607 p. : ill. ; 22 cm
Collana	Nuova biblioteca scientifica Einaudi ; 26
Disciplina	330 339.5 338.0947
Locazione	DECTS FSPBC FGBC DTE FI1 FLFBC
Collocazione	N04.78 COLLEZ. 116 (26) Collez. 286 (26)

XV L 115  
1B-053  
338.09 FOA 1  
ISVE P01.7

Lingua di pubblicazione Italiano  
Formato Materiale a stampa  
Livello bibliografico Monografia

3. Record Nr. UNINA9910141268803321  
Autore Lvovich Vadim F. <1967->  
Titolo Impedance spectroscopy [[electronic resource] ] : applications to electrochemical and dielectric phenomena // Vadim F. Lvovich  
Pubbl/distr/stampa Hoboken, N.J., : Wiley, c2012  
ISBN 1-62198-219-X  
1-280-88135-6  
9786613722669  
1-118-16409-1  
1-118-16407-5  
1-118-16410-5

Descrizione fisica 1 online resource (370 p.)

Classificazione SCI013050

Disciplina 543/.4

Soggetti Impedance spectroscopy  
Electrochemistry

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 and index.

Nota di contenuto Impedance Spectroscopy: Applications to Electrochemical and Dielectric Phenomena; Contents; Preface; 1. Fundamentals of electrochemical impedance spectroscopy; 1.1. Concept of complex impedance; 1.2. Complex dielectric, modulus, and impedance data representations; 1.3. Electrochemical experiment: charge and material transport; 1.4. Fundamental ambiguity of impedance spectroscopy analysis; 2. Graphical representation of impedance spectroscopy data; 2.1. Nyquist

and Bode representation of complex impedance data for ideal electrical circuits; 2.2. Dielectric data representation

3. Equivalent-circuit elements and modeling of the impedance phenomenon

3.1. Ideal circuit elements; 3.2. Nonideal circuit elements; 3.3. Circuit models for systems with two and more time constants; 4. Examples of ideal equivalent circuit models; 4.1. Basic R-C circuit; 4.2. Basic R|C circuit; 4.3. Randles RSOL- RCT\CDL circuit; 4.4. Debye dielectric relaxation (R1-C1)\C circuit; 5. Impedance representation of bulk-material and electrode processes; 5.1. Uncompensated impedance ZO<sub>H</sub>M; 5.2. Bulk-media impedance-RSOL, RBULK and CBUKL; 5.3. Electrochemical double-layer capacitance CDL

5.4. Electrochemical charge-transfer resistance RCT

5.5. Electrochemical sorption impedance ZSORP; 5.6. Mass-transport impedance; 5.7. Mixed charge-transfer, homogeneous, and diffusion-controlled kinetics; 6. Distributed impedance models; 6.1. Distributed RBULK |CBULK - R|NT|CPEDL circuit model; 6.2. General impedance models for distributed electrode processes; 6.3. Identification of frequency ranges for conductivity and permittivity measurements; 7. Impedance analysis of complex systems; 7.1. Dielectric analysis of highly resistive composite materials with particle conduction

7.2. Dielectric analysis of ionic colloidal suspensions

7.3. AC electrokinetics and dielectrophoretic spectroscopy of colloidal suspensions; 7.4. Specific adsorption and multistep heterogeneous kinetics; 7.5. Impedance kinetics studies on porous electrodes; 8. Impedance Instrumentation, testing, and data validation; 8.1. Impedance test equipment; 8.2. Single-sine impedance equipment-lock-in amplifier and frequency-response analyzer; 8.3. Multiple-sine impedance equipment; 8.4. Electrochemical cells; 8.5. Linearity, causality, stability, consistency, and error analysis of impedance measurements

8.6. Complex nonlinear least-squares regression fitting

8.7. Practical approach to experimental impedance data collection and analysis; 9. Selected examples of impedance-analysis applications: electroactive polymer films; 9.1. The field of electroactive polymers; 9.2. Impedance analysis of electrochemically active polymer films; 9.3. EIS models of conducting polymer films; 9.4. The future of electroactive polymers; 10. Selected examples of EIS analysis applications: industrial colloids and lubricants; 10.1. The field of industrial colloids and lubricants

10.2. Physical and chemical properties of lubricants

## Sommario/riassunto

"This book presents a balance of theoretical considerations and practical problem solving of electrochemical impedance spectroscopy. This book incorporates the results of the last two decades of research on the theories and applications of impedance spectroscopy, including more detailed reviews of the impedance methods applications in industrial colloids, biomedical sensors and devices, and supercapacitive polymeric films. The book covers all of the topics needed to help readers quickly grasp how to apply their knowledge of impedance spectroscopy methods to their own research problems. It also helps the reader identify whether impedance spectroscopy may be an appropriate method for their particular research problem. This includes understanding how to correctly make impedance measurements, interpret the results, compare results with expected previously published results from similar chemical systems, and use correct mathematical formulas to verify the accuracy of the data. Unique features of the book include theoretical considerations for dealing with modeling, equivalent circuits, and equations in the complex domain, review of impedance instrumentation, best measurement methods for particular systems and alerts to potential sources of errors, equations

and circuit diagrams for the most widely used impedance models and applications, figures depicting impedance spectra of typical materials and devices, extensive references to the scientific literature for more information on particular topics and current research, and a review of related techniques and impedance spectroscopy modifications"--

---