1. Record Nr. UNISA990000590120203316

Autore	PIANTONI, Carlo
Titolo	72 tecniche per le attivita espressive / Carlo Piantoni
Pubbl/distr/stampa	Brescia : La scuola, 1995
ISBN	88-350-6239-X
Edizione	[6. ed]
Descrizione fisica	348 p. : ill. ; 27 cm
Disciplina	706
Soggetti	Educazione artistica Arte - Tecnica Fanciulli - Attività espressive
Collocazione	707 PIA
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910141151203321

Titolo	Power ultrasound in electrochemistry [[electronic resource]] : from versatile laboratory tool to engineering solution sonoelectrochemistry / / edited by Bruno G. Pollet
Pubbl/distr/stampa	Hoboken, NJ, : Wiley, 2012
ISBN	1-119-96786-4 1-283-40980-1 9786613409805 1-119-96739-2 1-119-96738-4
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (366 p.)
Altri autori (Persone)	PolletBruno G
Disciplina	541/.370284
Soggetti	Sonochemistry Sonic waves - Industrial applications 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	Power Ultrasound in Electrochemistry; Contents; Foreword; About the Editor; List of Contributors; Acknowledgements; Introduction to Electrochemistry; I.1 Introduction; I.2 Principles of Electrochemistry; I.3 Electron-Transfer Kinetics; I.4 Determination of Overpotentials; I.4.1 Decomposition Voltages; I.4.2 Discharge Potentials; I.5 Electroanalytical Techniques; I.5.1 Voltammetry; I.5.2 Amperometry; References; 1 An Introduction to Sonoelectrochemistry; 1.1 Introduction to Ultrasound and Sonochemistry; 1.2 Applications of Power Ultrasound through Direct Vibrations; 1.2.1 Welding 1.3 Applications of Power Ultrasound through Cavitation1.3.1 Homogeneous Reactions; 1.3.2 Heterogeneous Reactions Involving a Solid/Liquid Interface; 1.3.3 Heterogeneous Liquid/Liquid Reactions; 1.4 Electrochemistry; 1.5 Sonoelectrochemistry - The Application of Ultrasound in Electrochemistry; 1.5.1 Ultrasonic Factors that Influence Sonoelectrochemistry; 1.6 Examples of the Effect of Ultrasound on Electrochemical Processes under Mass Transport Conditions; 1.7

Experimental Methods for Sonoelectrochemistry; 1.7.1 Cell Construction; 1.7.2 Stability of the Electrodes Under Sonication
1.7.3 Some Applications of SonoelectrochemistryReferences; 2 The Use of Electrochemistry as a Tool to Investigate Cavitation Bubble Dynamics; 2.1 Introduction; 2.2 An Overview of Bubble Behaviour; 2.3 Mass Transfer Effects of Cavitation; 2.4 Isolating Single Mechanisms for Mass Transfer Enhancement; 2.5 Electrochemistry Next to a Tethered Permanent Gas Bubble; 2.6 Mass Transfer from Forced Permanent Gas Bubble Oscillation; 2.7 Mass Transfer Effects from Single Inertial Cavitation Bubbles; 2.8 Investigating Non-inertial Cavitation Under an Ultrasonic Horn
2.9 Measuring Individual Erosion Events from Inertial Cavitation2.10 Conclusions; Acknowledgements; References; 3 Sonoelectroanalysis: An Overview; 3.1 Introduction; 3.2 Analysis of Pesticides; 3.3 Quantifying Nitrite; 3.4 Biogeochemistry; 3.5 Quantifying Metal in 'Life or Death' Situations; 3.6 Analysis of Trace Metals in Clinical Samples; 3.7 Biphasic Sonoelectroanalysis; 3.8 Applying Ultrasound into the Field: The Sonotrode; 3.9 Conclusions; References; 4 Sonoelectrochemistry in Environmental Applications; 4.1 Introduction
4.2 Sonoelectrochemical Degradation of Persistent Organic Pollutants4.2.1 Sonoelectrochemical Applications; 4.2.2 Hybrid Sonoelectrochemical Techniques Applications; 4.3 Recovery of Metals and Treatment of Toxic Inorganic Compounds; 4.4 Disinfection of Water by Hypochlorite Generation; 4.5 Soil Remediation; 4.6 Conclusions; List of Symbols and Abbreviations; References; 5 Organic Sonoelectrosynthesis; 5.1 Introduction; 5.2 Scale-Up Considerations; 5.3 Early History of Organic Sonoelectrochemistry; 5.4 Electroorganic Syntheses; 5.4.1 Electroreductions; 5.4.2 Organochalcogenides
5.4.3 Synthetic Electrooxidations

Sommario/riassunto

The use of power ultrasound to promote industrial electrochemical processes, or sonoelectrochemistry, was first discovered over 70 years ago, but recently there has been a revived interest in this field. Sonoelectrochemistry is a technology that is safe, cost-effective, environmentally friendly and energy efficient compared to other conventional methods.? The book contains chapters on the following topics, contributed from leading researchers in academia and industry:? Use of electrochemistry as a tool to investigate Cavitation Bubble DynamicsSonoelectroanalysis</d