

1. Record Nr.	UNINA9910962714403321
Titolo	Electroanalytical chemistry : new research / / Graham M. Smithe, editor
Pubbl/distr/stampa	Hauppauge, N.Y., : Nova Science Publishers, c2008
ISBN	1-60741-857-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (144 p.)
Altri autori (Persone)	SmitheGraham M
Disciplina	543/.4
Soggetti	Electrochemical analysis Electrochemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Intro -- ELECTROANALYTICAL CHEMISTRY: NEW RESEARCH -- CONTENTS -- PREFACE -- ELECTRODES BASED ON METALLOPHTHALOCYANINES INTEGRATED WITH CARBON NANOTUBES: POTENTIAL HYBRIDS FOR ENHANCING ELECTRON TRANSPORT -- Abstract -- 1. Introduction -- 2. Electrode Modification Strategies -- 3. Impact of CNTs on Heterogeneous Electron Transport -- 4. Future Trends and Conclusion -- References -- CLATHRATE HYDRATE CRYSTALLIZATION FOR CLEAN ENERGY AND ENVIRONMENTAL TECHNOLOGIES -- Abstract -- Introduction -- Clathrate Hydrates -- Clean Energy Technologies Based on Hydrates -- Natural Gas Transport and Storage -- Methane Hydrate Properties -- Gas Storage Potential in Hydrate -- The hydrate phase equilibria and gas storage capacity are constrained by the t -- Hydrate Storage and Decomposition -- Tuning Clathrate Hydrates -- Commercialization of Hydrate Technology for Gas Storage Application -- 2. CO ₂ Capture from Treated Flue Gas (CO ₂ /N ₂ /O ₂) and Fuel Gas (CO ₂ /H ₂) Gas Mixtures -- 3. Hydrogen Storage -- 4. Flow Assurance in Hydrocarbon Pipelines -- 5. Recovery of Methane from In-situ Methane Hydrate with Carbon Dioxide Injection -- 6. Recovery of Energy from Gas Hydrates. -- 7. Relationship of Hydrates with Climate Change. -- 8. Other Applications. -- Concluding Remarks -- References -- CORROSION RESEARCH FRONTIERS. ATMOSPHERIC CORROSION IN TROPICAL CLIMATE. ON THE CONCEPT OF TIME OF WETNESS AND ITS INTERACTION WITH CONTAMINANTS DEPOSITION -- Abstract -- Introduction -- Climate of Cuba and the

Yucatán Peninsula -- Time of Wetness (TOW) and ISO 9223 Definition. -- Time and TOW-ISO. -- Indoor Humidity -- TOW at Different Exposure Conditions -- Comparison of Air Temperature, Relative Humidity, TOW-ISO, Corrosion of Steel and Deposition of Contaminants at Different Exposure Conditions. -- TOW-ISO and Rain -- Corrosion in Tropical Coastal Atmospheres. Role of TOW-ISO. TOW and Corrosion Products of Steel. -- Conclusion -- Acknowledgments -- References -- THE APPLICATION OF D-STATISTICS BASED TESTS OF RANDOMNESS, INDEPENDENCE AND TREND TO ELECTROCHEMICAL OBSERVATIONS -- Abstract -- I. Introduction -- II. The Hypothesis of Randomness [11], and Testing Independence Against Trend [12] -- III. Discussion -- IV. Conclusion -- Acknowledgments -- Appendix -- References -- SELF-ASSEMBLY ASSISTED POLYPOLYMERIZATION (SAAP): A NOVEL APPROACH TO PREPARE MULTIBLOCK COPOLYMERS WITH A CONTROLLABLE CHAIN SEQUENCE AND BLOCK LENGTH -- Abstract -- Introduction -- 1. End-Functionalization of Block Copolymer with Oxalyl Chloride -- 2. End-Functionalization of Block Copolymer with Photosensitive Groups -- 3. End-Functionalization of Block Copolymer with 1,4-Dibromobutane -- 4. End-Functionalization of Block Copolymer with Carbon Dioxide -- Conclusion -- Acknowledgment -- References -- INDEX.

Sommario/riassunto

The field of electroanalytical chemistry is the field of electrochemistry that utilises the relationship between chemical phenomena which involve charge transfer and the electrical properties that accompany these phenomena for some analytical determination. This book presents research in this field.
