

1. Record Nr.	UNINA9910817030803321
Autore	Tarascon Jean-Marie
Titolo	Electrochemical energy storage // Jean-Marie Tarascon, Patrice Simon
Pubbl/distr/stampa	London, England ; ; Hoboken, New Jersey : , : ISTE : , : Wiley, , 2015 ©2015
ISBN	1-118-99813-8 1-118-99815-4 1-118-99814-6
Descrizione fisica	1 online resource (96 p.)
Collana	Energy Series : Energy Storage - Batteries and Supercapacitors Set
Disciplina	621.31242
Soggetti	Electric batteries - Materials Energy storage - Materials Power electronics - Materials
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	Cover; Title Page ; Copyright ; Contents; Introduction; 1: Batteries and Supercapacitors: Some Reminders; 1.1. Main evolution of batteries from the 1980's to now; 1.2. Supercapacitors: recent developments; 2: Advanced Li-ion; 2.1. Positive electrode materials for Li-ion technology; 2.2. Negative electrode materials for Li-ion technology; 2.3. The question of electrolytes for Li-ion technology; 3: Capacitive Storage; 3.1. Carbonated materials for capacitive storage; 3.2. Pseudocapacitive materials; 3.3. Electrolytes for supercapacitors; 3.4. Hybrid systems and middle-term goals 4: New Chemistries 4.1. Li-air technology; 4.2. Li-S technology; 4.3. Na-ion technology; 4.4. Redox-flow technology; 4.5. All-solid state batteries; 5: Eco-Compatible Storage; 5.1. Ionothermal synthesis; 5.2. Bioinspired synthesis/approach; 5.3. Organic electrodes for "green" Li-ion batteries and more durable batteries; 5.4. Recycling and LCA; 6: Smart Materials; 6.1. Photonics of insertion materials to create photo-rechargeable batteries; 6.2. Micro-energy sources; 7: Technology Transfer, Research Promotion and Education; 7.1. Development: industrial property; 7.2. Education 7.2.1. Erasmus Mundus Master's degree: Materials for Energy Storage

and Conversion (MESC)7.2.2. Specialization in Energy Storage and
Conversion (SCE), at ENSCBP (Bordeaux - INP); Conclusion;
Bibliography; Index
