

1. Record Nr.	UNINA9910467062603321
Titolo	Lithium sulfur batteries / / edited by Mark Wild, and Greg Offer
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2019
ISBN	1-5231-2832-1 1-119-29785-0 1-119-29790-7 1-119-29789-3
Edizione	[1st edition]
Descrizione fisica	1 online resource (448 pages)
Disciplina	621.312424
Soggetti	Lithium sulfur batteries Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	A guide to lithium sulfur batteries that explores their materials, electrochemical mechanisms and modelling and includes recent scientific developments Lithium Sulfur Batteries (Li-S) offers a comprehensive examination of Li-S batteries from the viewpoint of the materials used in their construction, the underlying electrochemical mechanisms and how this translates into the characteristics of Li-S batteries. The authors – noted experts in the field – outline the approaches and techniques required to model Li-S batteries. Lithium Sulfur Batteries reviews the application of Li-S batteries for commercial use and explores many broader issues including the development of battery management systems to control the unique characteristics of Li-S batteries. The authors include information on sulfur cathodes, electrolytes and other components used in making Li-S batteries and examine the role of lithium sulfide, the shuttle mechanism and its effects, and degradation mechanisms. The book contains a review of battery design and: Discusses electrochemistry of Li-S batteries and the analytical techniques used to study Li-S batteries Offers information on the application of Li-S batteries for commercial use Distills years of research on Li-S batteries into one comprehensive volume Includes

contributions from many leading scientists in the field of Li-S batteries
Explores the potential of Li-S batteries to power larger battery
applications such as automobiles, aviation and space vehicles Written
for academic researchers, industrial scientists and engineers with an
interest in the research, development, manufacture and application of
next generation battery technologies, Lithium Sulfur Batteries is an
essential resource for accessing information on the construction and
application of Li-S batteries.
