1. Record Nr. UNINA9910794297603321 Autore Andrea Davide **Titolo** Lithium-ion batteries and applications: a practical and comprehensive guide to lithium-ion batteries and arrays, from toys to towns . Volume 1 Batteries / / Davide Andrea Norwood, Massachusetts:,: Artech House,, 2020 Pubbl/distr/stampa [Piscataqay, New Jersey]:,: IEEE Xplore,, [2020] **ISBN** 1-63081-768-6 Descrizione fisica 1 online resource (577 pages) Disciplina 621.312424 Soggetti Lithium ion batteries Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "This comprehensive, two-volume resource provides a thorough Sommario/riassunto introduction to lithium ion (Li-ion) technology. Readers get a hands-on understanding of Li-ion technology, are guided through the design and assembly of a battery, through deployment, configuration and testing. The book covers dozens of applications, with solutions for each application provided. Volume One focuses on the Li-ion cell and its types, formats, and chemistries. Cell arrangements and issues. including series (balance) and parallel (fusing, inrush current) are also discussed. Li-ion Battery Management Systems are explored, focusing on types and topologies, functions, and selection. Battery design, assembly, deployment, troubleshooting and repair are also discussed, along with modular batteries, split batteries and battery arrays. Written by a prominent expert in the field and packed with over 500 illustrations, these volumes contain solutions to practical problems.

making it useful for both the novice and experienced practitioners."--