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| 1. Record Nr.           | UNINA9910557375603321   |
| Titolo                  | Energy Storage Systems for Electric Vehicles  |
| Pubbl/distr/stampa      | Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020   |
| Descrizione fisica      | 1 online resource (550 p.)  |
| Disciplina              | 621.3124240284  |
| Soggetti                | History of engineering and technology   |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Sommario/riassunto      | <p>The global electric car fleet exceeded 7 million battery electric vehicles and plug-in hybrid electric vehicles in 2019, and will continue to increase in the future, as electrification is an important means of decreasing the greenhouse gas emissions of the transportation sector. The energy storage system is a very central component of the electric vehicle. The storage system needs to be cost-competitive, light, efficient, safe, and reliable, and to occupy little space and last for a long time. It should also be produced and disposed of in an environmentally friendly manner. This leaves many research challenges, and the purpose of this book is therefore to provide a platform for sharing the latest findings on energy storage systems for electric vehicles (electric cars, buses, aircraft, ships, etc.) Research in energy storage systems requires several sciences working together, and this book therefore include contributions from many different disciplines; this covers a wide range of topics, e.g. battery-management systems, state-of-charge and state-of-health estimation, thermal-battery-management systems, power electronics for energy storage devices, battery aging modelling, battery reuse and recycling, etc.</p> |