

1. Record Nr.	UNINA9910450883403321
Autore	Enoki Toshiaki
Titolo	Graphite intercalation compounds and applications [[electronic resource] /] / Toshiaki Enoki, Masatsugu Suzuki, Morinobu Endo
Pubbl/distr/stampa	New York, : Oxford University Press, 2003
ISBN	0-19-756140-3 1-280-70390-3 9786610703906 0-19-535184-3
Descrizione fisica	1 online resource (453 p.)
Collana	Oxford scholarship online
Altri autori (Persone)	SuzukiMasatsugu EndoMorinobu
Disciplina	541.2/2
Soggetti	Graphite Clathrate compounds Electronic books.
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	Contents; 1 Introduction; 2 Synthesis and Intercalation Chemistry; 3 Structures and Phase Transitions; 4 Lattice Dynamics; 5 Electronic Structures; 6 Electron Transport Properties; 7 Magnetic Properties; 8 Surface Properties and Gas Adsorption; 9 GICs and Batteries; 10 Highly Conductive Graphite Fibers; 11 Exfoliated Graphite Formed by Intercalation; 12 Intercalated Fullerenes and Carbon Nanotubes; Index
Sommario/riassunto	Graphite intercalation compounds are a new class of electronic materials that are classified as graphite-based host guest systems. They have specific structural features based on the alternating stacking of graphite and guest intercalate sheets. The electronic structures show two-dimensional metallic properties with a large variety of features including superconductivity. They are also interesting from the point of two-dimensional magnetic systems. This book presents the synthesis, crystal structures, phase transitions, lattice dynamics, electronic structures, electron transport properties, magnetic properties, surface phenomena, and applications of graphite intercalation compounds.

