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| Titolo | Endohedral metallofullerenes : fullereness with metal inside / / Hisanori Shinohara, Nikos Tagmatarchis |
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| ISBN | 1-118-69800-2 1-118-69801-0 1-118-69792-8 |
| Descrizione fisica | 1 online resource (602 p.) |
| Disciplina | 546.681 |
| Soggetti | Fullerenes |
| 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 at the end of each chapters and index. |
| Nota di contenuto | Synthesis, extraction and purification -- Molecular and crystal structures -- Electronic states and structures -- Carbide and nitride metallofullerenes -- Non-IPR metallofullerenes -- Other type of metallofullerenes -- Non-metal endohedral fullerenes -- Scanning tunneling microscopy (STM) studies on metallofullerenes -- Magnetic properties of metallofullerenes -- Organic chemistry of metallofullerenes -- Applications with metallofullerenes -- Growth mechanism -- M@C60 : a big mystery and a big challenge. |
| Sommario/riassunto | Endohedral Metallofullerenes: Fullerenes with Metal Inside presents a comprehensive survey of the current state of knowledge on endohedral metallofullerenes, from preparation to functionalization, reactivity and applications. Following a brief historical overview, the book describes methods for synthesis, extraction, separation and purification, and provides an insight into the molecular and crystal structures. Subsequent chapters discuss various categories of endohedral metallofullerenes based on the encapsulated species, including carbides, nitrides, sulphides, oxides, non-metal and non-IPR |