

1. Record Nr.	UNINA9910254140303321
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Titolo	Endohedral Lithium-containing Fullerenes : Preparation, Derivatization, and Application // by Yutaka Matsuo, Hiroshi Okada, Hiroshi Ueno
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2017
ISBN	981-10-5004-X
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIV, 140 p. 113 illus., 68 illus. in color.)
Disciplina	541.2
Soggetti	Nanochemistry Nanoscale science Nanoscience Nanostructures Nanotechnology Organic chemistry Nanoscale Science and Technology Organic Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction to endohedral fullerenes with the C60 cage -- History of Li@C60 -- Synthesis and characterization of lithium-ion-containing fullerene -- Li+@C60 salts: Crystal structures and properties -- Chemical modification of Li+@C60 -- Photoinduced electron transfer in Li+@C60 -- Neutral Li@C60: A hydrogen-like superatom -- Computational studies of Li@C60 -- New directions in Li@C60 research: Physical measurements.
Sommario/riassunto	This book describes the emergent endohedral metallofullerene, lithium-containing fullerene Li@C60, with an overview from its history to recent application research. The book covers synthesis, preparation, purification, structure, physical and chemical properties, derivatization, computational theoretical studies, and device application of Li@C60. Readers can learn cutting-edge nanotechnology of this exotic nanocarbon material, which is expected to deliver future solutions in clean energy and bio devices. This work is by a researcher who has long experience in carbon nanomaterials—more than 15 years with his

contributing coworkers. The level of the book is appropriate for graduate students, post-docs researchers, and young faculty members who are interested in nanomaterials from the point of view of chemistry and physics.
