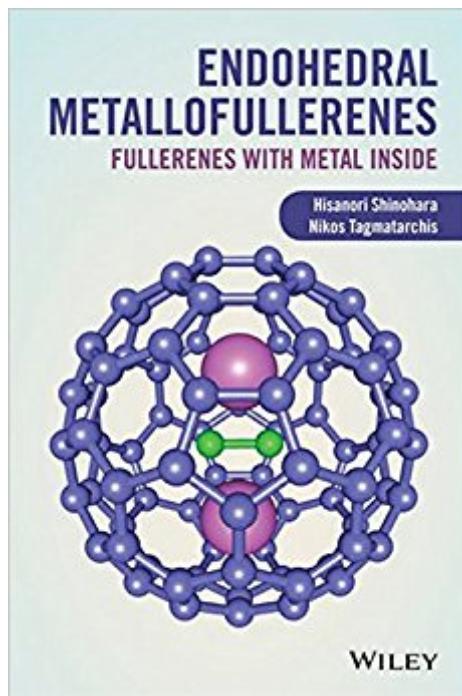


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# Endohedral Metallofullerenes: Fullerenes With Metal Inside



## Synopsis

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 endohedral metallofullerenes, followed by scanning tunneling microscopy studies and the examination of electronic, vibrational, magnetic and optical properties. The book concludes with chapters addressing the chemical functionalization of endohedral metallofullerenes, and applications ranging from solar cells to biomedicine.

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Endohedral metallofullerenes are a fascinating class of fullerene materials because many of the structural, electronic and magnetic properties of the fullerenes change drastically upon encapsulation of metal atoms. Consequently these materials offer practical applications in a variety of areas including solar cells and biomedicine. 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

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