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Metallofullerenes; 11 Gadonanostructures as Magnetic Resonance Imaging Contrast Agents; 12 Chemistry of Soluble Carbon Nanotubes: Fundamentals and Applications; 13 Functionalization of Carbon Nanotubes for Nanoelectronic and Photovoltaic Applications; 14 Dispersion and Separation of Single-walled Carbon Nanotubes; 15 Molecular Encapsulations into Interior Spaces of Carbon Nanotubes and Nanohorns; 16 Carbon Nanotube for Imaging of Single Molecules in Motion
17 Chemistry of Single-Nano Diamond Particles 18 Properties of p-electrons in Graphene Nanoribbons and Nanographenes; 19 Carbon Nano Onions; Index; Colour Plates

Sommario/riassunto

During the last decade, fullerenes and carbon nanotubes have attracted special interest as new nanocarbons with novel properties. Because of their hollow caged structure, they can be used as containers for atoms and molecules, and nanotubes can be used as miniature test-tubes. Chemistry of Nanocarbons presents the most up-to-date research on chemical aspects of nanometer-sized forms of carbon, with emphasis on fullerenes, nanotubes and nanohorns. All modern chemical aspects are mentioned, including noncovalent interactions, supramolecular assembly, dendrimers, nanocomposites, chirality
