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Nota di contenuto	Frontiers of circularly polarized luminescence chemistry of isolated small organic molecules -- Circularly polarized luminescence of axially chiral binaphthyl fluorophores -- Circularly polarized luminescence from planar chiral compounds based on [2.2]paracyclophane -- Circularly polarized luminescence in helicene and helicenoid derivatives -- Structural control of fluorescent helicates for improved circularly polarized luminescence properties -- BODIPY based emitters of circularly polarized luminescence -- Propeller chirality: Circular dichroism and circularly polarized luminescence -- Photo-switching of circularly polarized luminescence -- Circularly polarized luminescence of chirally arranged achiral organic luminophores by covalent and supramolecular methods -- Structural and electronic information drawn from the CPL spectra: Many questions and some answers for simple organic molecules, polymers and molecular aggregates -- Circularly polarized luminescence from gelator molecules: From

isolated molecules to assemblies -- Circularly polarized luminescence from intramolecular excimers -- Design of circularly polarized thermally activated delayed fluorescence emitters -- Principles and applications of CPL spectrophotometer -- Transient circular dichroism approach to chirality detection in dark photo-excited states.

Sommario/riassunto

This book collects all the latest advances in the leading research of the circularly polarized luminescence (CPL) of small organic molecules. Compared with that of lanthanide-based fluorophores, the research into the CPL of small organic molecules is still at the developmental stage for their relatively smaller dissymmetric factors, but has been a source of widespread attention recently. The book includes the state of the art of the discoveries in CPL organic molecules, such as helicenes, biaryls, cyclophanes, boron dipyrromethene dyes, and other chiral molecules, mostly in their isolated states, covering all possible chiral substances for future applications. This book also highlights the recent development of CPL instruments as well as time-resolved circular dichroism spectroscopy, to facilitate the further development and future design of CPL molecules.