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Titolo	Self-Assembled Molecules – New Kind of Protein Ligands [[electronic resource]] : Supramolecular Ligands / / edited by Irena Roterman, Leszek Konieczny
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Nota di contenuto	Supramolecular Protein Ligands – Unexplored Teritory Of Potential Pharmacological Activity -- Supramolecular Congo Red As Specific Ligand Of Antibodies Engaged In Immune Complex -- Protein Conditioning For Binding Congo Red And Other Supramolecular Ligands -- Metal Ions Introduced To Proteins By Supramolecular Ligands -- Possible Mechanism Of Amyloidogenesis Of V Domains -- Supramolecular Structures As Carrier Systems Enabling The Use Of Metal Ions In Antibacterial Therapy -- Congo Red Interactions With Single-Walled Carbon Nanotubes.
Sommario/riassunto	This book is an open access under a CC BY license. The subject of this book relates to protein ligands with particular structural and complexation properties. They are composed of self-assembled molecules, capable of penetrating as a unit into proteins outside the binding site. The ribbon-like supramolecular system only permits the penetration of self-assembled molecules into the protein-body and

formation of stable complexes. Supramolecular Congo red and similar compounds fit these requirements. Destabilized protein fragments enable the penetration of such ligands, with susceptibility to supramolecular ligand binding often associated with protein function. As a result, complexation modifies their functional effects. The activity of enzymes is inhibited by arresting them in the complexed state, but “naturally irreversible” complexation as in the case of immune complexation, is enhanced instead. This property offers many attractive possibilities of using supramolecular ligands as described in this book.