Record Nr. UNINA9910739405903321 Disruption of protein-protein interfaces: in search of new inhibitors // **Titolo** Stefano Mangani, editor Pubbl/distr/stampa New York, : Springer, 2013 **ISBN** 3-642-37999-0 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (vii, 161 pages): illustrations (some color) Collana Gale eBooks Altri autori (Persone) ManganiStefano Disciplina 54 547 547.7 Soggetti Protein-protein interactions Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Drug discovery by targeting protein-protein interactions -- Protein-Protein Interaction Inhibitors: case studies on small molecules and natural compounds -- Disrupting Protein-Protein Interfaces using GRID Molecular Interaction Fields -- NMR as a tool to target protein-protein interactions -- Protein-protein interactions in the solid state The troubles of crystallizing of protein-protein complexes -- Fluorescence observables and enzyme kinetics in the investigation of PPI modulation by small molecules Detection, mechanistic insight, functional consequences. Sommario/riassunto "Disruption of Protein-Protein Interfaces" reviews the latest developments and future perspectives in drug discovery at proteinprotein interfaces, as well as including details of experimental and computational tools to tackle the subject, and highlighting the contribution of the Italian research community to the field. Evidence shows that blocking or modulating protein-protein interactions might lead to the development of useful new drugs. Consequently, in recent years great effort has been dedicated to unveiling the molecular details of protein-protein interfaces by structural techniques e.g. X-ray diffraction, NMR spectroscopy. This book, written and edited by leaders in the field, provides examples from the literature of successes and

failures to develop drug-like molecules effective in interacting at