Record Nr. UNINA9910437810203321 Dynamics in Enzyme Catalysis / / edited by Judith Klinman, Sharon **Titolo** Hammes-Schiffer Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2013 **ISBN** 3-642-38962-7 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (IX, 212 p.) Topics in Current Chemistry, , 0340-1022; ; 337 Collana Disciplina 572/.4 Soggetti Catalysis **Proteins** Chemistry, Physical and theoretical Protein Science Theoretical and Computational Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Relationship of Femtosecond-Picosecond Dynamics to Enzyme-Catalyzed H-Transfer -- Protein Conformational Disorder and Enzyme Catalysis -- A Surprising Role for Conformational Entropy in Protein Function -- Conformational Heterogeneity Within the LID Domain Mediates Substrate Binding to Escherichia coli Adenylate Kinase: Function Follows Fluctuations -- Structured Crowding and Its Effects on Enzyme Catalysis -- Allosteric Activation Transitions in Enzymes and Biomolecular Motors: Insights from Atomistic and Coarse-Grained Simulations -- Multiple Intermediates, Diverse Conformations, and Cooperative Conformational Changes Underlie the Catalytic Hydride Transfer Reaction of Dihydrofolate Reductase -- Protein Dynamics and the Enzymatic Reaction Coordinate. Sommario/riassunto Christopher M. Cheatum and Amnon Kohen Relationship of Femtosecond-Picosecond Dynamics to Enzyme-Catalyzed H-Transfer Cindy Schulenburg and Donald Hilvert Protein Conformational Disorder and Enzyme Catalysis A. Joshua Wand, Veronica R. Moorman and Kyle W. Harpole A Surprising Role for Conformational Entropy in Protein

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