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Sommario/riassunto	Natural selection created optimal catalysts. However, optimal performance of enzyme catalysis does not necessarily refer to maximum reaction rate. Rather, it may be a compromise between specificity, rate, stability, and other chemical constraints that makes enzymes capable of catalyzing reactions under mild conditions and

with high substrate specificity, accompanied by high regio- and enantioselectivity. The book presented here focuses on the directed evolution of proteins, which has established itself as a powerful method for designing enzymes showing new substrate specificities. It includes a comprehensive repertoire of techniques for producing combinatorial enzyme libraries, while the functional gene expression in a suitable host helps in selecting the appropriate structure, making fast screening a necessity.
