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Sommario/riassunto

A comprehensive view of the current methods for modeling solvent environments with contributions from the leading researchers in the field. Throughout, the emphasis is placed on the application of such models in simulation studies of biological processes, although the coverage is sufficiently broad to extend to other systems as well. As such, this monograph treats a full range of topics, from statistical mechanics-based approaches to popular mean field formalisms, coarse-grained solvent models, more established explicit, fully atomic solvent models, and recent advances in applying ab initio me