Title: Artificial-Cellular Computing
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Abstract: This paper describes a compelling method to make a wet-computing system based on artificial cell models. The discrete system is inspired by real cell chemical information processing. Liposomes, which are small vesicles of phospholipid bilayer membranes, have been established as the basement architecture of artificial cell models that can safely entrap enzymes, proteins, genes and substrates. Recently, biochemical reactions such as the gene expression system are incorporated within the liposome. Such liposome conditions can be "operated" by some specific physico-chemical triggers. Here, the possibility and real examples of the artificial cellular model and their operation as computation elements have been described.