抗冻糖蛋白溶液中冰晶生长速率的研究

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　　在分析了溶液中抗冻糖蛋白与冰晶表面的相互作用的基础上，提出了在抗冻糖蛋白溶液中冰晶沿c轴方向生长的理论。给出了冰晶在抗冻糖蛋白溶液中生长速率的定量计算，而且理论值与实验结果有较好的符合，解释了冰晶在抗冻糖蛋白溶液中生长速率和生长习性的各向异性。

A STUDY ON THE GROWTH RATES OF ICE CRYSTALS IN A SOLUTION OF ANTIFREEZE (GLYCO)PROTEINS

　　By analysing the interaction between the antifreeze glycoprotein/antifreeze protein and ice crystal surface the theory of ice crystal growth along the c-axis in an AF(G)P solution is presented. The quantitative calculation of the growth rates was given. The theoretical results are consistent with the experimental data. The anisotropic growth habits and the growth rates of ice crystals in the AF(G)P solution were explained.

关键词

生长速率(Growth rate)；生长习性(Growth habit)；激活能(Activation energy)