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RESEARCH NOTES

激光全息干涉法测量甘氨酸、L-丙氨酸、L-缬氨酸和异亮氨酸液相扩散系数的研究

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摘要 The diffusion coefficients of aqueous solutions ofglycine, L-alanine, L-valine and L-isoleucine at 298.15 K were determined by holographic interferometry with accuracy and promptness while without disturbance. The density and viscosity of these solutions were also determined. According to original Gordon model, a model for correlating the diffusion coefficients of amino acids in aqueous solutions was developed and applied. The results showed that this model provided significant convenience in correlation of diffusion coefficients for amino acids system.

关键词 测量方法 液体扩散系数 水溶液 氨基乙酸 L-丙氨酸 L-缬氨酸 L-异亮氨酸

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Measurement of Liquid Diffusion Coefficients of Aqueous Solutions of Glycine, L-Alanine, L-Valine and L-Isoleucine by Holographic Interferometry

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Abstract The diffusion coefficients of aqueous solutions ofglycine, L-alanine, L-valine and L-isoleucine at 298.15 K were determined by holographic interferometry with accuracy and promptness while without disturbance. The density and viscosity of these solutions were also determined. According to original Gordon model, a model for correlating the diffusion coefficients of amino acids in aqueous solutions was developed and applied. The results showed that this model provided significant convenience in correlation of diffusion coefficients for amino acids system.

Key words amino acid liquid diffusion coefficient holographic interferometry model

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