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Negative ion drift velocity and longitudinal diffusion in mixtures of carbon disulfide and methane.

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Abstract

Negative ion drift velocity and longitudinal diffusion has been measured for gas mixtures of carbon disulfide (CS₂) and methane (CH₄). Measurements were made as a function of total pressure, CS₂ partial pressure and electric field. Constant mobility and thermal-limit longitudinal diffusion is observed for all gas mixtures tested. Gas gain for some of the mixtures is also included.

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