



Article

Molecular Investigation of CO₂/CH₄ Competitive Adsorption and Confinement in Realistic Shale Kerogen

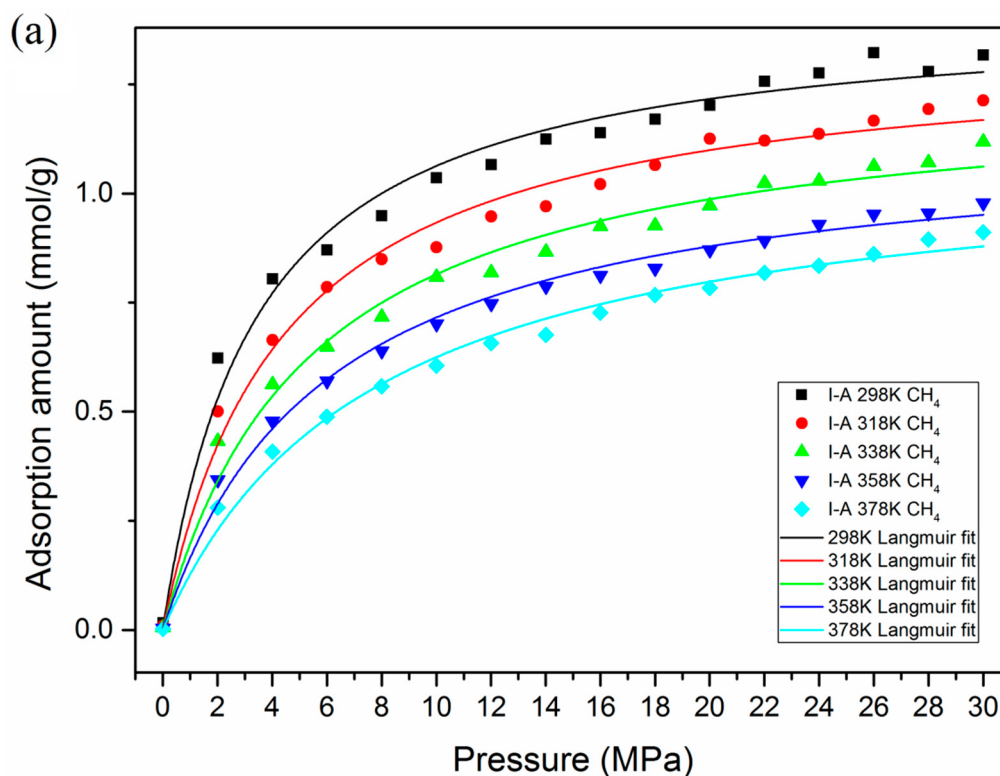
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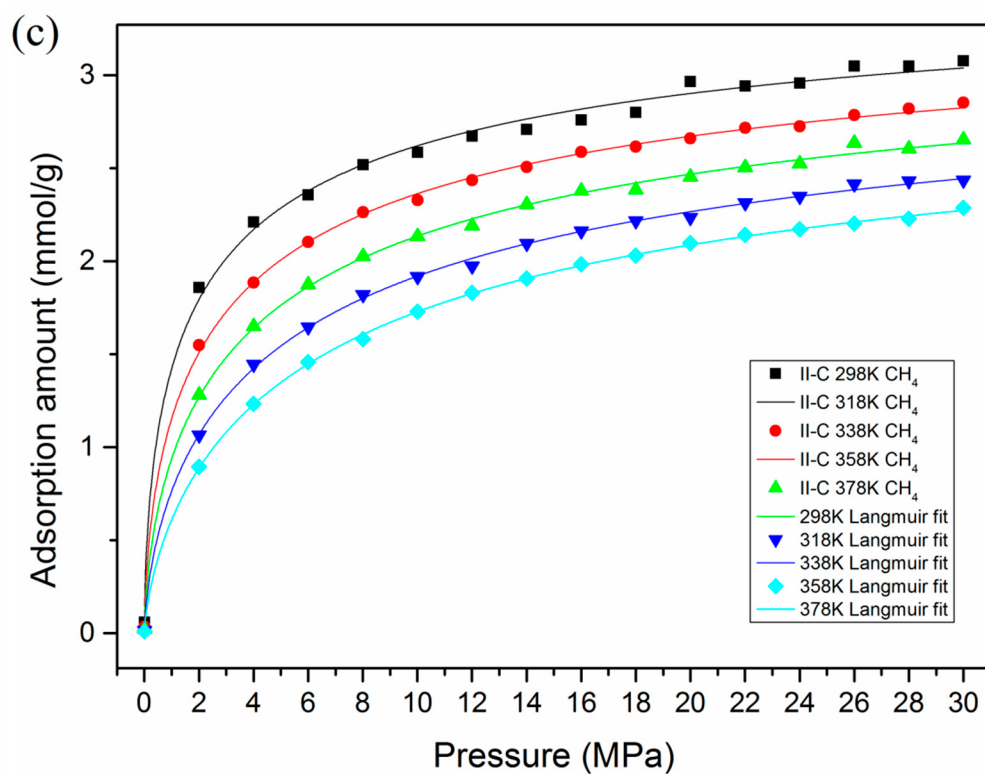
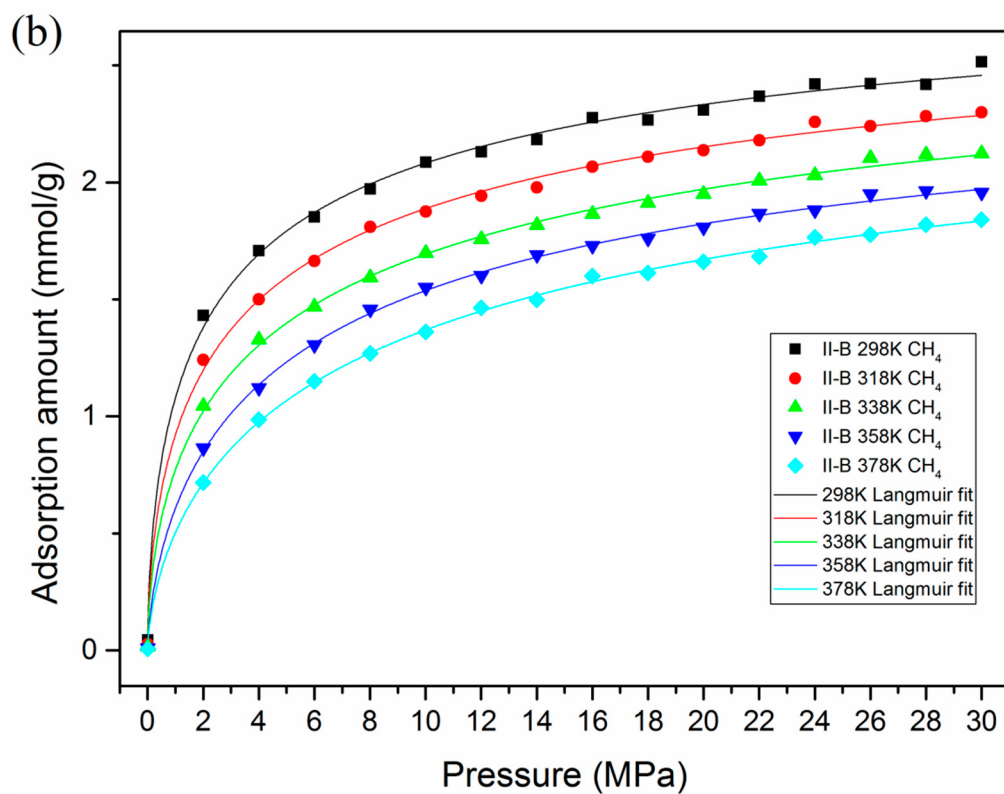
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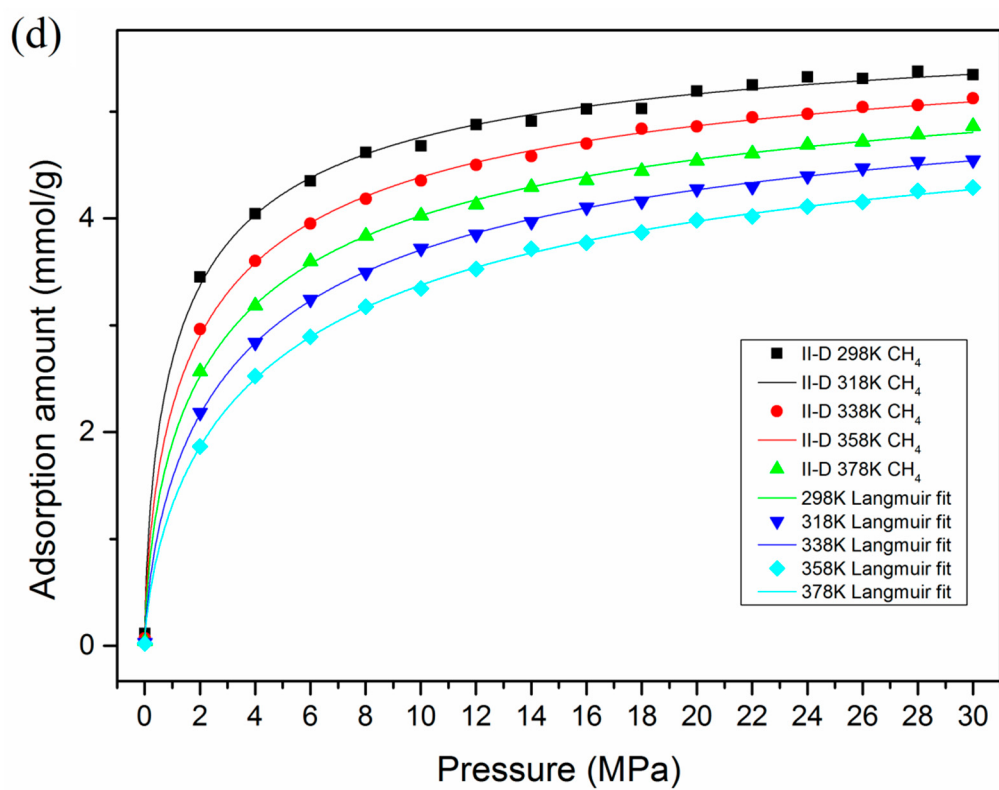
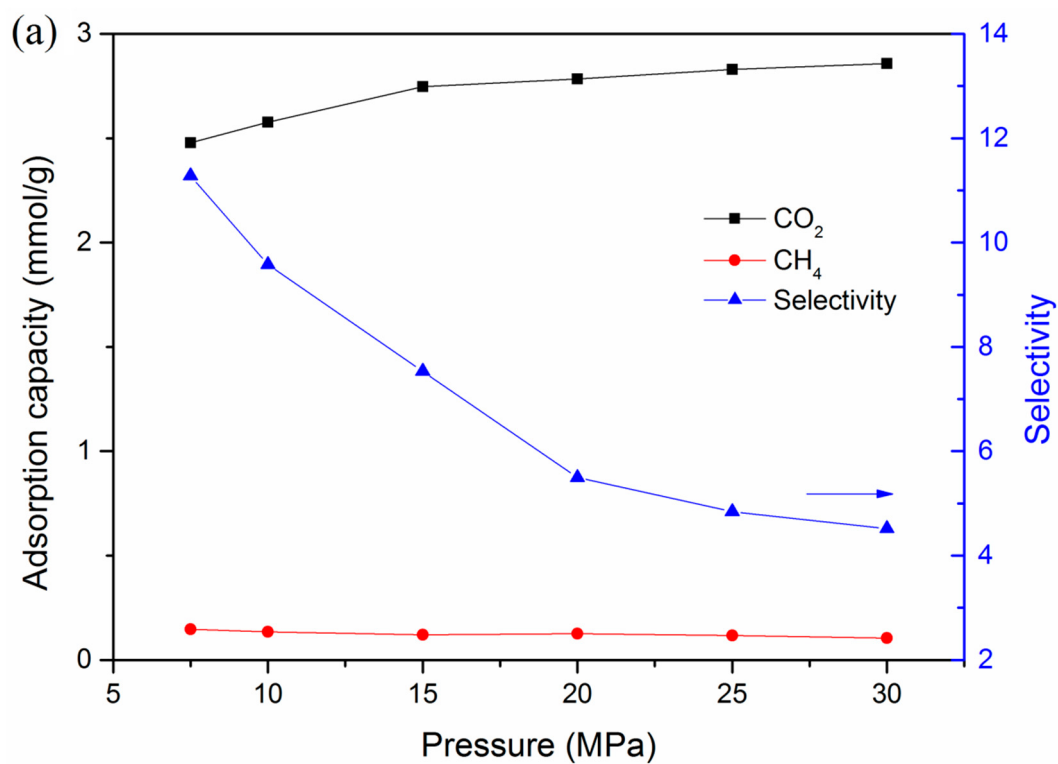
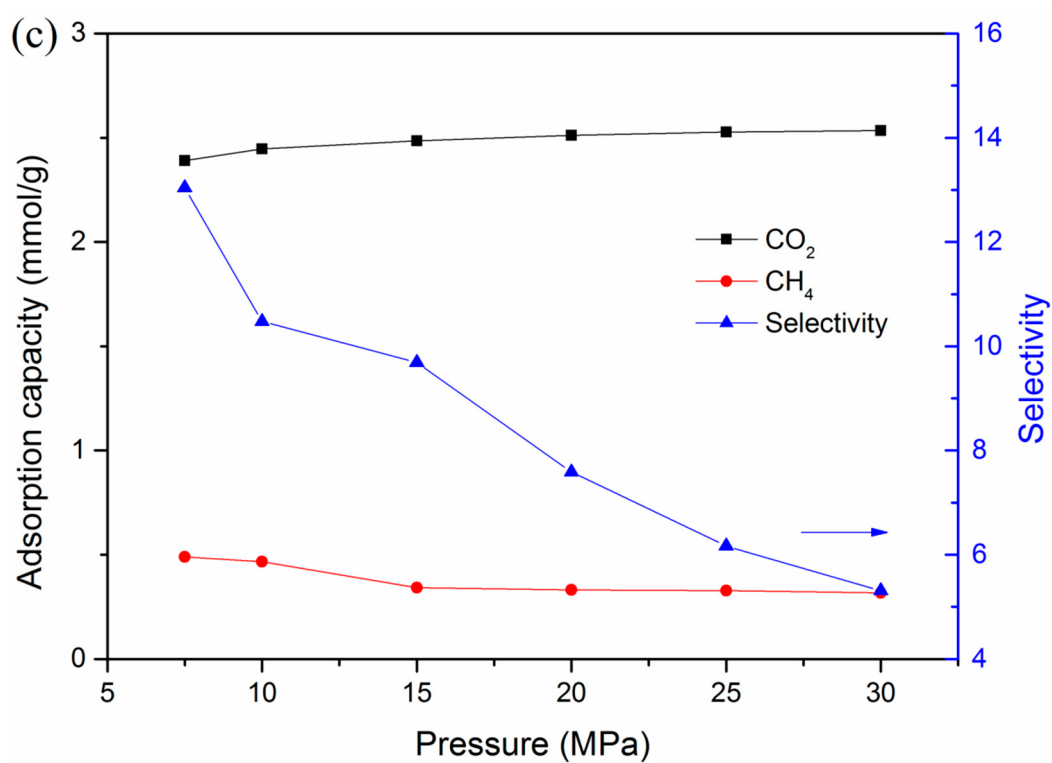
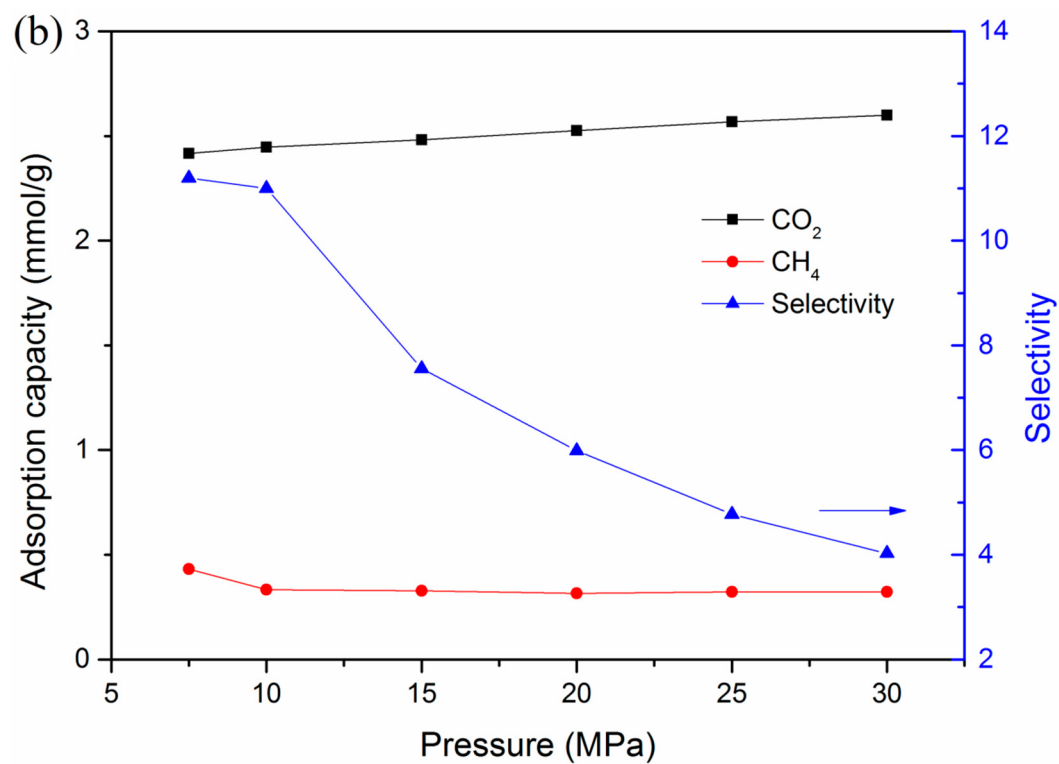


Figure S1. The adsorption isotherms of pure CH_4 at different temperatures and Langmuir fitting in kerogen with different maturity levels: (a) I-A; (b) II-B; (c) II-C; (d) II-D.





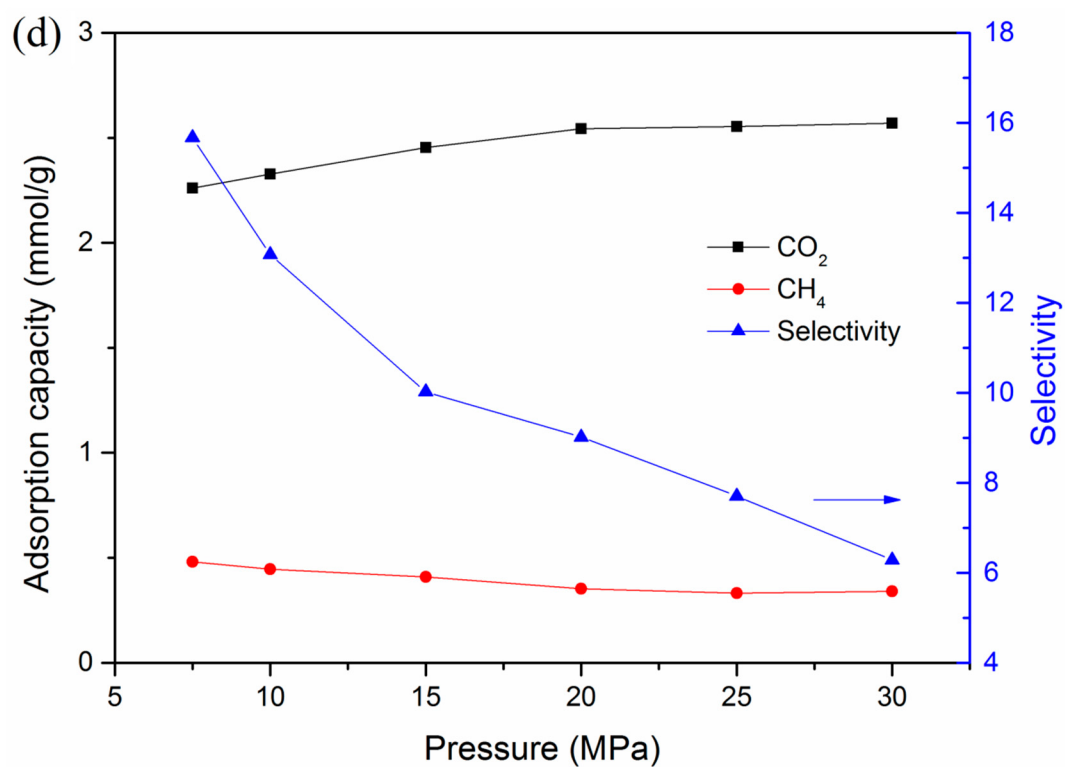


Figure S2. Variation of adsorption capacities and selectivity of CO₂/CH₄ binary mixture as a function of CO₂ partial pressure at different CH₄ fixed partial pressures: (a) 5 MPa; (b) 15 MPa; (c) 20 MPa; (d) 25 MPa, T=298 K.