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Critical exponents taking into account dynamic scaling for adsorption on small-size one-dimensional clusters. VLADIMIR UDODOV, ANDREY TASKIN, KATANOV KHAKAS STATE UNIVERSITY COLLABORATION — Adsorption on small-size one-dimensional clusters is investigated using the Monte Carlo method. The effect of temperature and system size variations on adsorption is studied. Critical coefficients of the correlation length and dynamic critical coefficient z are calculated taking into account the hypothesis of dynamic scaling. The results obtained demonstrate that non-equilibrium adsorption in nanosystems can occur in a much different fashion than in macrosystems.

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