Self-avoiding walks on fractals: scaling laws

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The scaling behaviour of linear polymers in disordered media, modelled by self-avoiding random walks (SAWs) on the backbone of three- and four-dimensional percolation clusters is studied by Monte Carlo simulations. We apply the pruned-enrichment Rosenbluth chain-growth method (PERM). Our numerical results bring about the estimates of critical exponents, which characterize disorder averages of end-to-end distance and number of SAWs.