

Soft Matter

Supporting Information: Supramolecular linkage formation rates change self-assembly of functionalized particles

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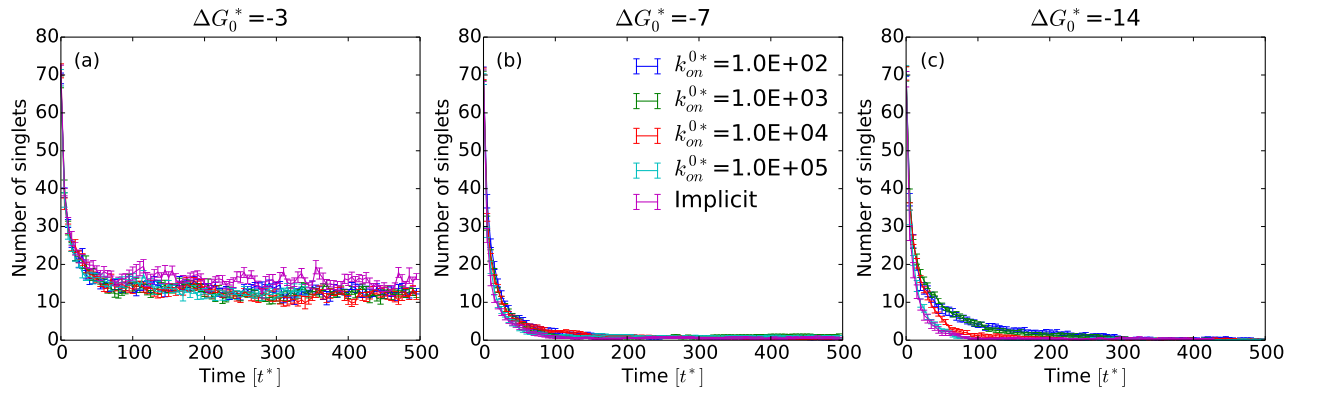


Figure S1: Number of free particles *versus* simulation time at three different values of ΔG_0^* .

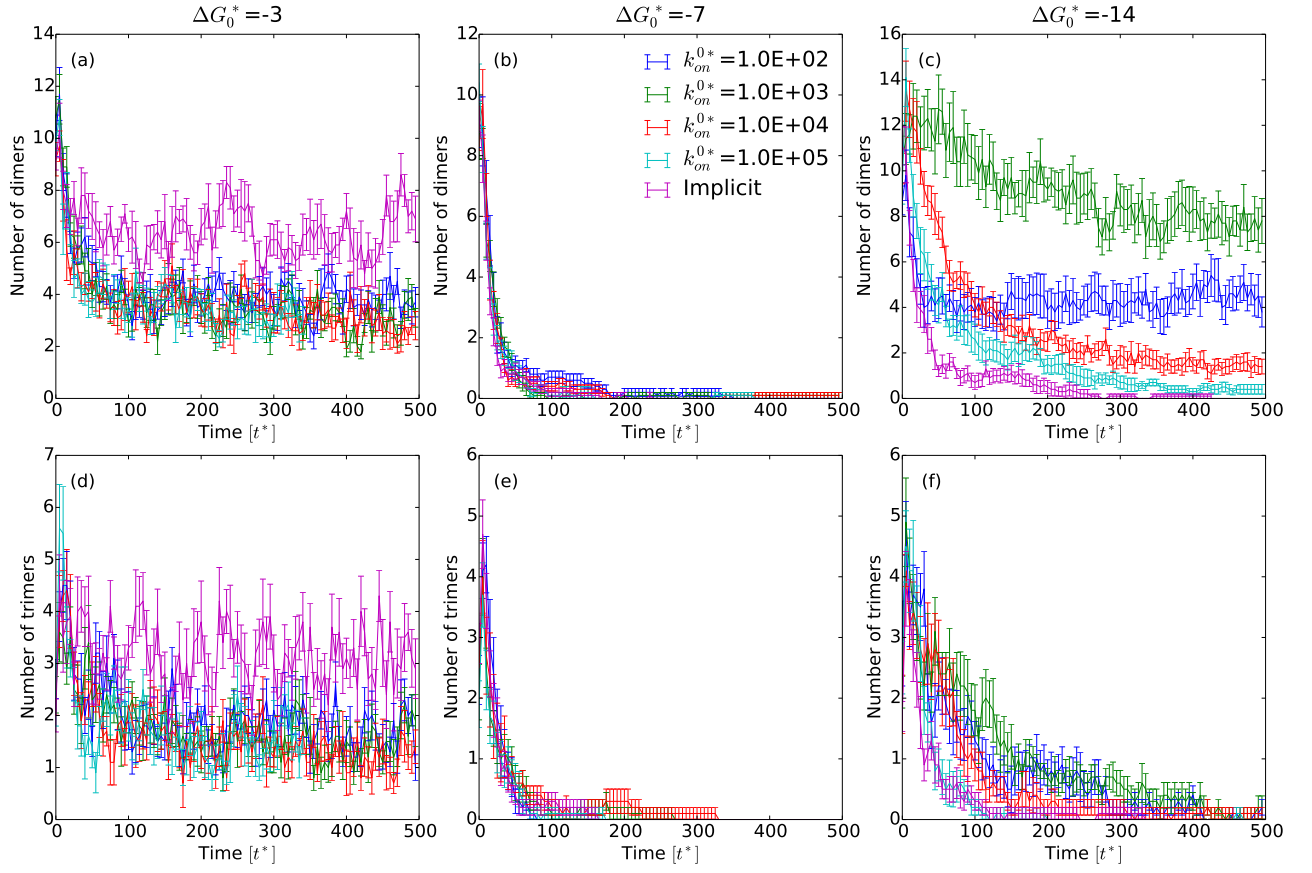


Figure S2: Number of dimers (first row) and trimers (second row) *versus* simulation time at three different values of ΔG_0^* .

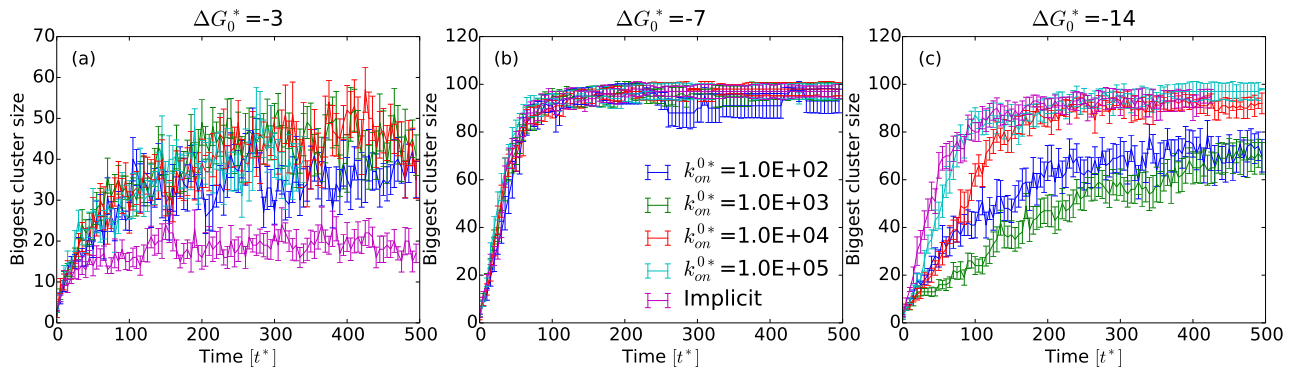


Figure S3: Size of the biggest cluster in the system *versus* simulation time at three different values of ΔG_0^* .

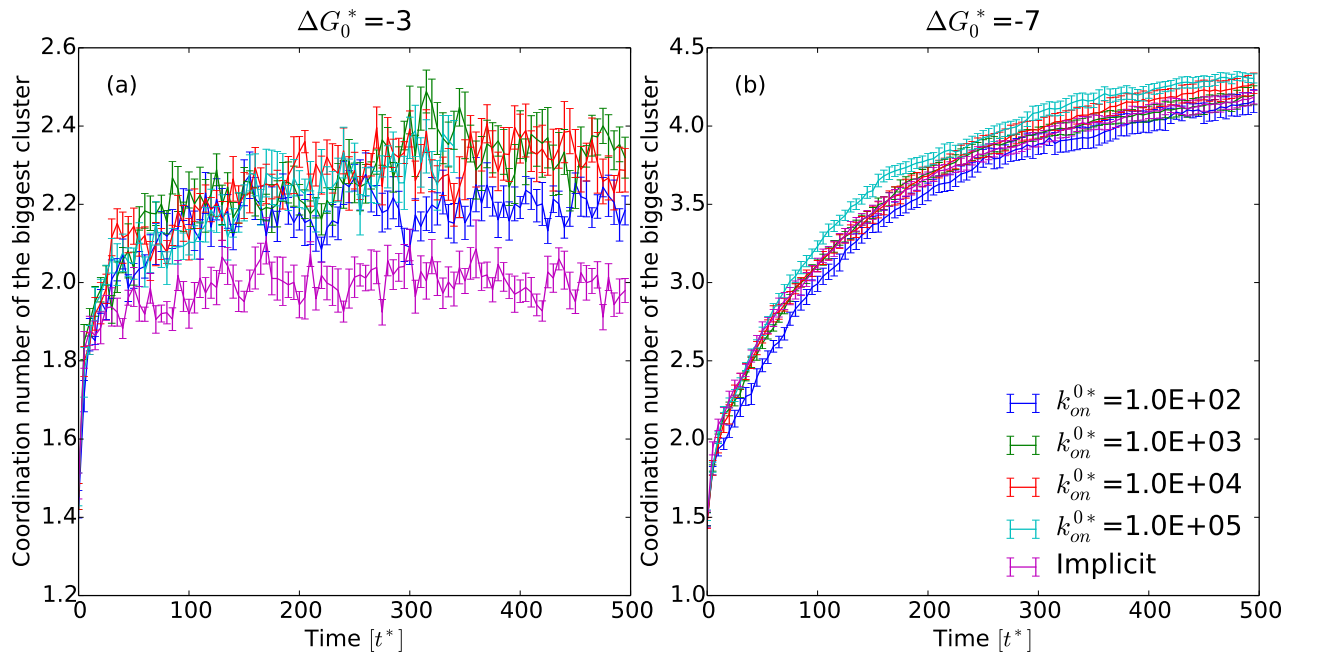


Figure S4: Average valency ($\langle z \rangle$) of particles in the biggest cluster *versus* simulation time for two different ΔG_0^* .

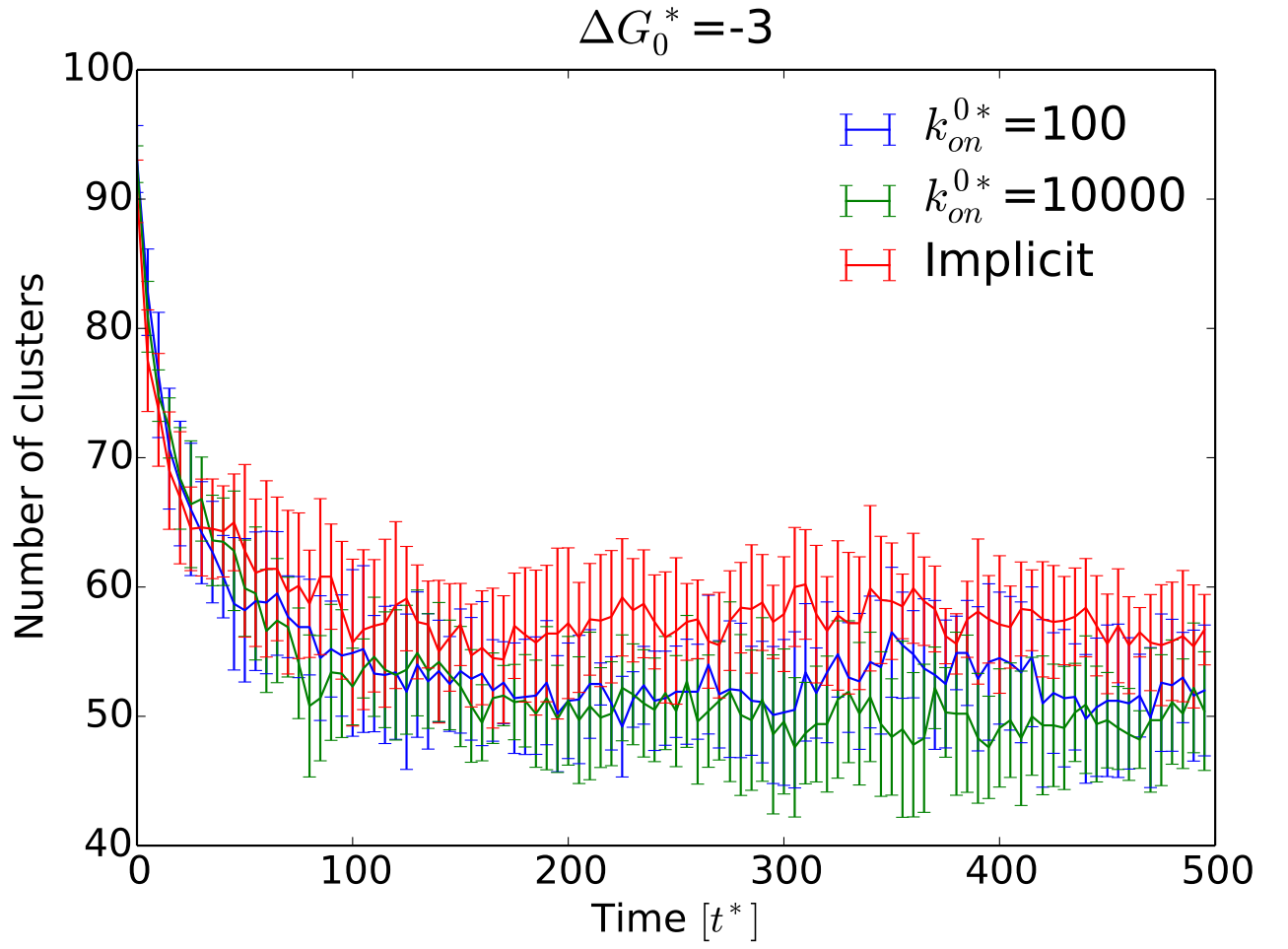


Figure S5: Number of clusters *versus* simulation time at packing fraction 0.05 and $\Delta G_0^* = -3$.

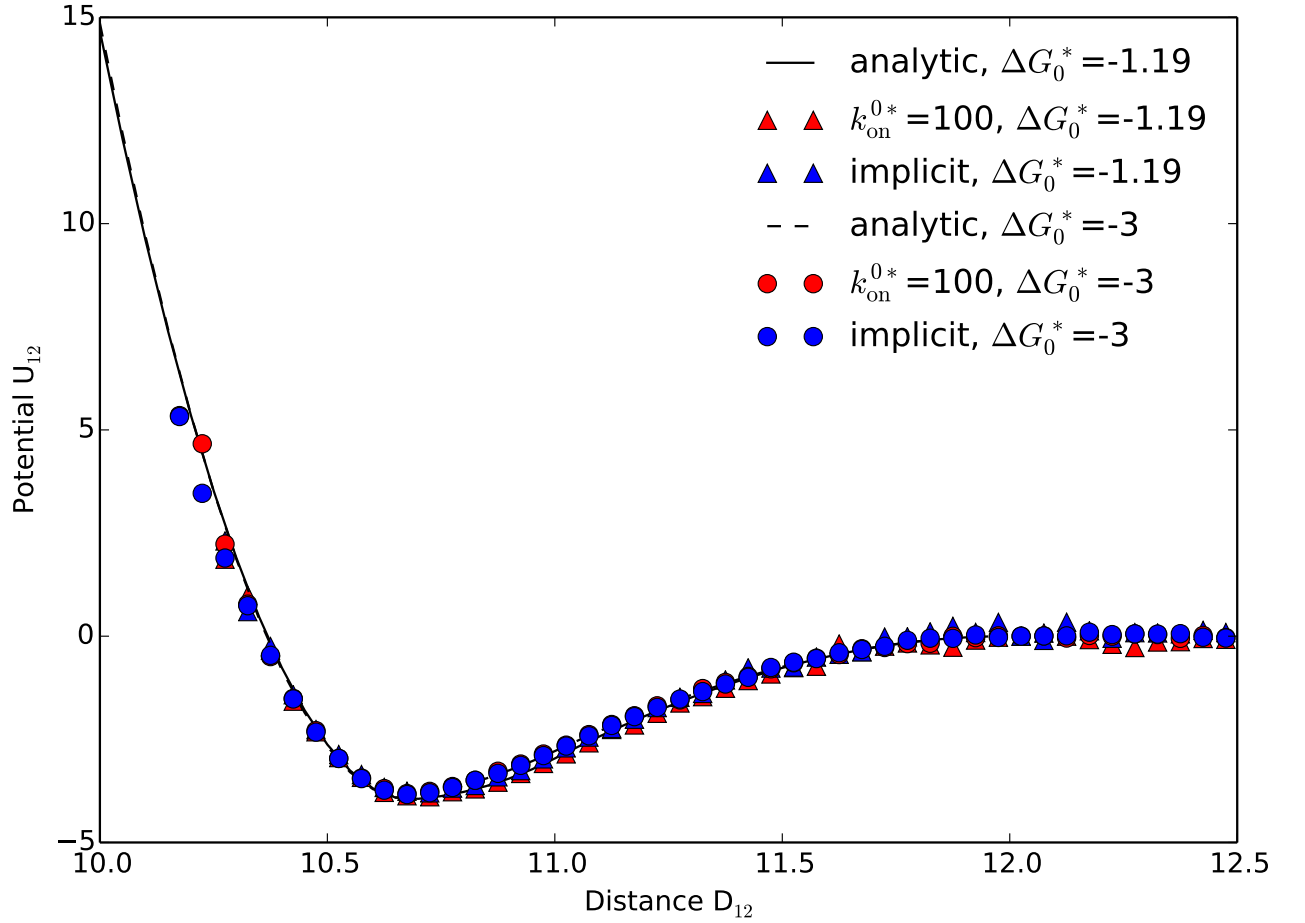


Figure S6: Effective pair interaction as calculated using implicit-linker (blue symbols) and the explicit-linker method (red symbols) as a function of the distance between particle centres of mass (D_{12}). Curves refer to analytic predictions of U_{12} . Triangles refer to a system with $N = 100$ linkers and $\Delta G_0^* = -1.19$, while dots to a system with $N = 40$ and $\Delta G_0^* = -3$.

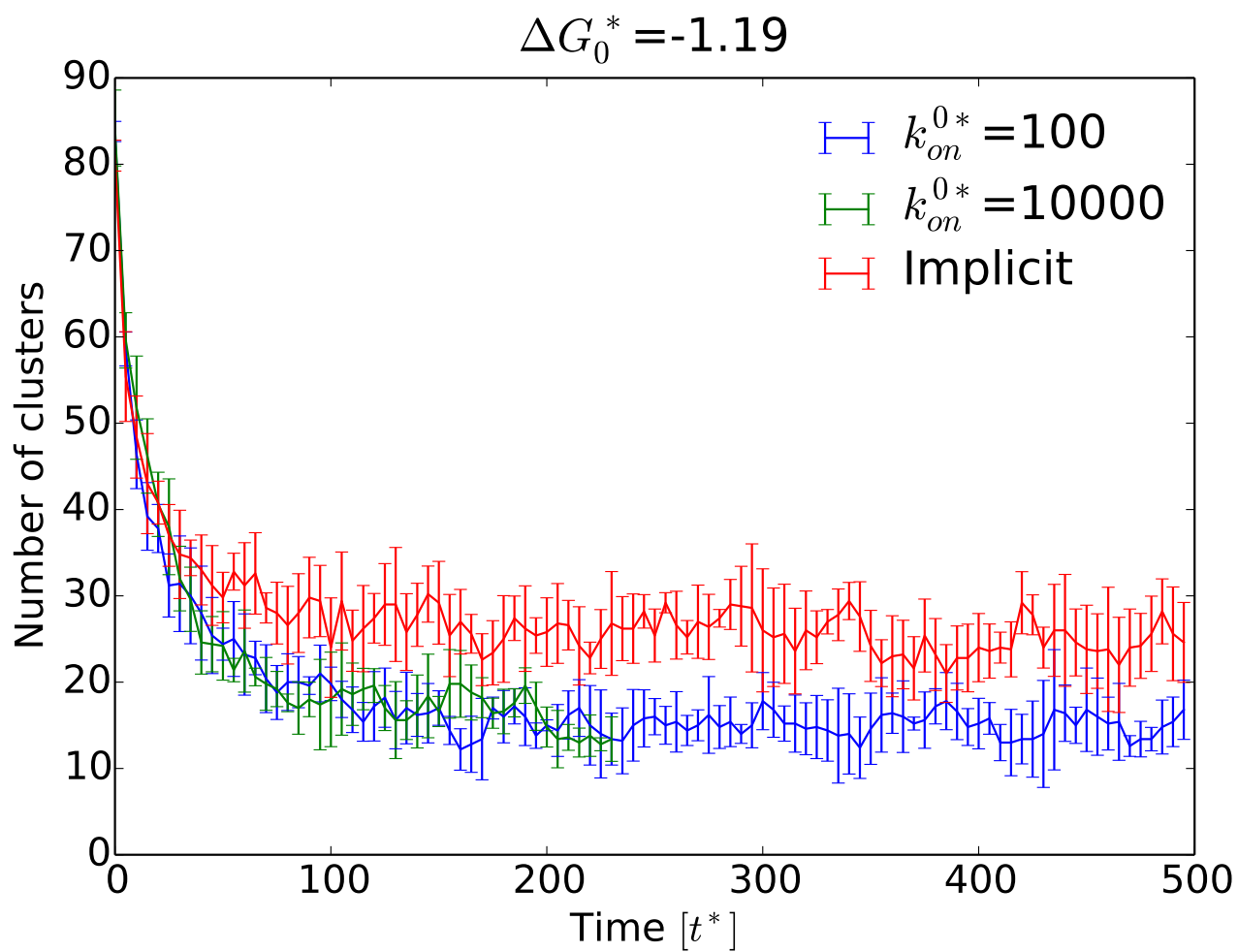


Figure S7: Number of clusters *versus* simulation time for a model with $N = 100$ and $\Delta G_0^* = -1.19$.

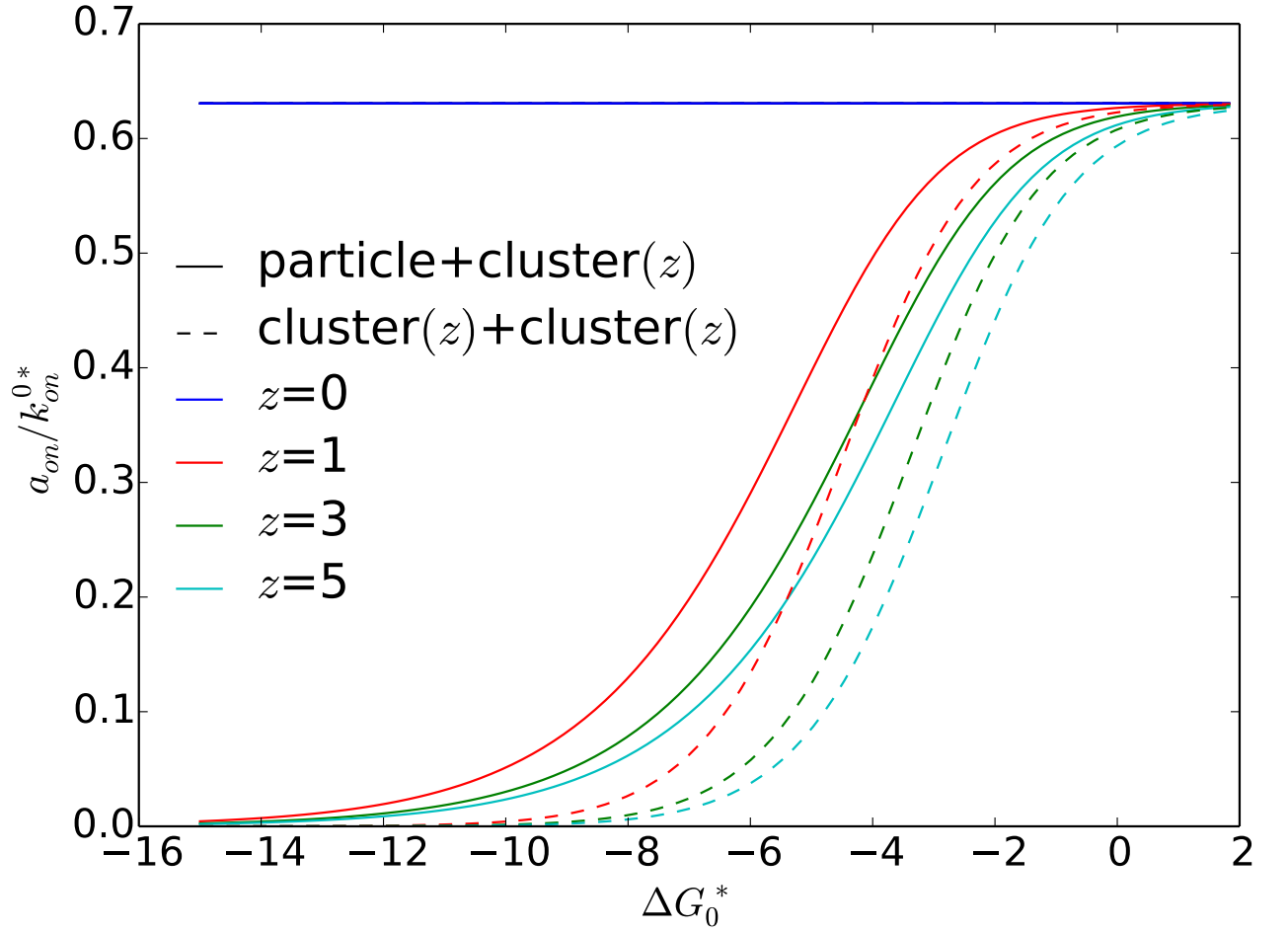


Figure S8: Propensity (see manuscript Eq. 9) of attaching an isolated particle to an existing cluster (solid lines), and propensity of creating a new linkage between two particles embedded in the same cluster (dashed lines). If compared to manuscript Fig. 6 the number of linkers was increased from $N = 40$ to $N = 100$. In all calculations the distance between linkable particles has been taken equal to $2 \cdot R + L$ and z is the cluster coordination number.