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Self-assembly via anisotropic interactions

Modeling association kinetics of patchy particle systems and self-assembly induced by critical Casimir forces

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List of publications

Publications related to this thesis:

- **Chapter 3**

Newton, A. C.^{2,4,5}; Nguyen, A.³; Veen, S. J.³; Kraft, D. J.³; Schall, P.^{1,5}; Bolhuis, P. G.^{1,4,5,6}; *in review*, Modeling critical Casimir force induced self-assembly experiments on patchy colloidal dumbbells

- **Chapter 4**

Newton, A. C.^{2,4,5}; Groenewold, J.¹; Kegel, W. K.^{1,5}; Bolhuis, P. G.^{1,4,5,6}; *Proceedings of the National Academy of Sciences*, **112**, 15308, 2016, Rotational diffusion affects the dynamical self-assembly pathways of patchy particles

- **Chapter 5**

Newton, A. C.^{2,4,5}; Groenewold, J.¹; Kegel, W. K.¹; Bolhuis, P. G.^{1,5,6}; *in preparation*, The role of multivalency in the association kinetics of patchy particle complexes

- **Chapter 6**

Newton, A. C.^{1,2,4,5}; Kools, R.²; Swenson, D. W. H.^{1,5}; Bolhuis, P. G.^{1,5,6}; *in preparation*, The opposing effects of isotropic and anisotropic attraction on dimerization kinetics

¹ Design research

² Performed research (simulations)

³ Performed research (experiments)

⁴ Analysis data

⁵ Preparation manuscript

⁶ Project supervision