

Gijsje Koenderink – Full list of publications
Publications in peer-reviewed journals

2016

- *Fibrin networks support recurring mechanical loads by adapting their structure across multiple scales*
N.A Kurniawan, B.E. Vos, A. Biebricher, G.J.L. Wuite, E.J.G. Peterman, G.H. Koenderink, Biophysical Journal, in press
- *Local dynamic mechanical analysis for heterogeneous soft matter using ferrule-top indentation*,
H. van Hoorn, N.A. Kurniawan, G.H. Koenderink, D. Iannuzzi, Soft Matter **12**, 3066-3073
- *Fibrin-fiber architecture influences cell spreading and differentiation*
S.M.C. Bruekers, M. Jaspers, J. M.A. Hendriks, N.A. Kurniawan, G.H. Koenderink, P.H.J. Kouwer, A.E. Rowan, W.T.S. Huck, Cell Adhes. Migr. **10**, 1-10
- *Strain-controlled criticality governs the nonlinear mechanics of fiber networks*
A Sharma, AJ Licup, KA Jansen, R Rens, M Sheinman, GH Koenderink, FC MacKintosh, Nature Physics **12**, 584–587 (Preprint: arXiv:1506.07792)
- *Multi-scale strain-stiffening of semiflexible bundle networks*
I.K. Piechocka, K.A. Jansen, C.P. Broedersz, N.A Kurniawan, F.C. MacKintosh, G.H. Koenderink, Soft Matter, **12**, 2145 – 2156 (preprint: arXiv:1206.3894)

2015

- *Shape control of lipid bilayer membranes by confined actin bundles*
F.C. Tsai, G.H. Koenderink, Soft Matter, **11**, 8834-8847
- *A guide to mechanobiology: where biology and physics meet*
K.A. Jansen, D.M. Donato, H.E. Balcioglu, T. Schmidt, E.H. Danen, G.H. Koenderink, BBA – Mol. Cell Res. **1853**: 3043-3052
- *Inherently unstable networks collapse to a critical point*
M. Sheinman, A. Sharma, J. Alvarado, G.H. Koenderink, F.C. MacKintosh, Phys. Rev. E. **92**, 012710: 1-6
- *Anomalous discontinuity at the percolation critical point of active gels*
M. Sheinman, A. Sharma, J. Alvarado, G.H. Koenderink, F.C. MacKintosh, Phys. Rev. Lett. **114**: 098104 1-8
- *SOAX: A Software for Quantification of 3D Biopolymer Networks*
T. Xu, D. Vavylonis, F-C. Tsai, G.H. Koenderink, W. Nie, E. Yusuf, I-Ju Lee, J.Q. Wu, X. Huang, Scientific Reports **5**: 9081
- *Cytoskeletal crosstalk: when three different personalities team up*
F. Huber, A. Boire, M.P. Lopez, G.H. Koenderink, Curr. Opin. Cell Biol. **32**: 39-47
- *Nanoscale Heterogeneity of the Molecular Structure of Individual hIAPP Amyloid Fibrils Revealed with Tip-Enhanced Raman Spectroscopy*
C.C. vandenAkker, T. Deckert-Gaudig, M. Schleegeer, K.P. Velikov, V. Deckert, M. Bonn and G.H. Koenderink, Small, **11**: 4131- 4139

2014

- *Direct visualization of flow-induced conformational transitions of single actin filaments in entangled solutions*
I. Kirchenbuechler, D. Guu, N.A. Kurniawan, G.H. Koenderink, M.P. Lettinga, Nat. Comm. **5**: 5060
Press:
www.kennislink.nl, “Van spaghetti’s lierten naar haarspelden”, 10-10-2014
www.schildersvak.nl, “De werking van verfroeren ontdekt”, 14-10-2014
www.c2w.nl, “Verf in close-up: Modelsysteem maakt werking van shear-thinning vloeistoffen duidelijk”, 10-10-2014

- *Actin-microtubule coordination at growing microtubule ends*
M. Preciado Lopez, F. Huber, I. Grigoriev, M.O. Steinmetz, A. Akhmanova, G.H. Koenderink, M. Dogterom, Nat. Comm. 5: 4778
- *Time-resolved microrheology of actively remodeling actomyosin networks*
M. Soares e Silva, B. Stuhmann, T. Betz and G.H. Koenderink, , New J. Phys. 16: 075010 1-21
- *Colloidal liquid crystals in rectangular confinement: theory and experiment*
A.H. Lewis, I. Garlea, J. Alvarado, O.J. Dammone, P.D. Howell, A. Majumdar, B.M. Mulder, M.P. Lettinga, G.H. Koenderink, D.G. Aarts, Soft Matter 10: 7865-73
- *Factor XIII stiffens fibrin clots by causing fiber compaction*
N.A. Kurniawan, J. Grimbergen, J. Koopman, G.H. Koenderink, J. Thromb. Haemost. 12: 1687-96
- *Septins promote F-actin ring formation by cross-linking actin filaments into curved bundles*
M. Mavrikakis, Y. Azou-Gros, F.-C. Tsai, J. Alvarado, A. Bertin, F. Iv, A. Kress, S. Brasselet, G.H. Koenderink and Thomas Lecuit, Nature Cell Biology 16: 322-334 (2014)
- *Alignment of nematic and bundled semiflexible polymers in cell-sized confinement*
J. Alvarado, B.M. Mulder and G.H. Koenderink, Soft Matter 10: 2329-2468 (2014) *Cover article.
- *Scale-dependent nonaffine elasticity of semiflexible polymer networks*
M. Atakhorrami, G.H. Koenderink, J.F. Paliarne, F.C. MacKintosh and C.F. Schmidt, Phys. Rev. Lett. 112: 088101 1-5 (2014)

2013

- *Thermal memory in self-assembled collagen fibril networks.*
M. de Wild, W. Pomp, G.H. Koenderink, Biophys J. 105:200-10 (2013)
- *Cells actively stiffen fibrin networks by generating contractile stress*
K.A. Jansen, R.G. Bacabac, I.K. Piechocka and G.H. Koenderink, Biophys. J. **105**: 2240-2251 (2013).
- *Molecular motors robustly drive active gels to a critically connected state*
J. Alvarado, M. Sheinman, A. Sharma, F.C. MacKintosh and G.H. Koenderink, Nature Phys. **9**: 591–597 (2013). *Cover article.
- *Gel-assisted formation of giant unilamellar vesicles,*
A. Weinberger, F.-C. Tsai, G.H. Koenderink, T.F. Schmidt, R. Itri, W. Meier, T. Schmatko, A. Schröder and C.M. Marques, Biophys. J. **105**: 154-164 (2013).
- *Cell-sized liposomes reveal how actomyosin cortical tension drives shape change*
K. Carvalho, F.-C. Tsai, E. Lees, R. Voituriez, G.H. **Koenderink**, C. Sykes, Proc Natl Acad Sci U S A. 110:16456-61 (2013)
- *Biomechanical and rheological characterisation of mild intervertebral disc degeneration in a large animal model*
S.E.L. Detiger, R.J.W. Hoogendoorn, A.J. van der Veen, B.J. van Royen, M.N. Helder, G.H. Koenderink, Th. Smit, J. Orthoped. Res. 31: 703-709 (2013)
Dutch Spine Society Award 2013
- *Amyloids: from molecular structure to mechanical properties*
M. Schleeger, C.C. vandenAkker, T. Deckert-Gaudig, V. Deckert, K.P. Velikov, G.H. Koenderink, M. Bonn, Polymer 54: 2473-2488 (2013)
- *The specificity of the interaction between α B-crystallin and desmin filaments and its impact on filament aggregation and cell viability*
J.L. Elliott, M Der Perng, A.R. Prescott, K.A. Jansen, G.H. Koenderink, R.A. Quinlan, Phil. Trans. R. Soc. B 368: 20120375 1-15 (2013)
- *Lipid Nanotechnology*
S. Mashagi, T. Jadidi, G.H. Koenderink, A. Mashagi, Int. J. Mol. Sci. 14: 4242-4282 (2013)

2012

- *Multiple actin binding domains of Ena/VASP Proteins determine actin network stiffening*

B.S. Gentry, S. van der Meulen, P. Noguera, B. Alonso-Latorre, J. Plastino, G.H. Koenderink, The European Biophysical Journal 41: 979-990 (2012)

- *The polyphenol EGCG inhibits amyloid formation less efficiently at phospholipid interfaces than in bulk solution*
MF Engel, CC Vandenakker, M. Schleegeer, KP Velikov, G.H. Koenderink, M. Bonn, J. Am. Chem. Soc. 134: 14781-8 (2012)
[highlight op C2W website: <http://www.c2w.nl/waarom-alzheimermedicatie-niet-werkt.282794.lynkx>]
- *Nonequilibrium fluctuations of a remodeling in vitro cytoskeleton*
B. Stuhmann, M. Soares e Silva, F.C. MacKintosh, G.H. Koenderink, Phys. Rev. E 86, 020901(R) (2012)
[APS highlight Aug 27, 2012, "The skeleton dance", <http://physics.aps.org/synopsis-for/10.1103/PhysRevE.86.020901>]

2011

- *Cell-membrane mechanics: Vesicles in and tubes out*
M. Dogterom and G.H. Koenderink, Nat. Mater. 10, 561–562 (2011)
- *Morphology and persistence length of amyloid fibrils are correlated to peptide molecular structure*
C.C. vandenAkker, M.F.M. Engel, K.P. Velikov, M. Bonn and G.H. Koenderink, J. Am. Chem. Soc. **133**, 18030–18033 (2011).
- *Engineering alginate for intervertebral disc repair*
J.L. Bron, L.A. Vonk, T.H. Smit and G.H. Koenderink, J. Mech. Behav. Biomed. Mater. **4**, 1196-1205 (2011).
- *Active multistage coarsening of actin networks driven by myosin motors*
M. Soares e Silva, M. Depken, B. Stuhmann, M. Korsten, F.C. MacKintosh and G.H. Koenderink, PNAS **108**, 9408-9413 (2011).
Press: *Net van trekdraden geeft cellen vorm*, De Volkskrant, May 23, 2011
- *Rheology of heterotypic collagen networks*
I. Piechocka, A.S.G. van Oosten, Roel G.M. Breuls and G.H. Koenderink, Biomacromolecules **12**, 2797-2805 (2011).
- *Encapsulation of active cytoskeletal protein networks in cell-sized liposomes*
F-C. Tsai, B. Stuhmann and G.H. Koenderink, Langmuir **27**, 10061–10071 (2011).
- *Self-organized patterns of actin filaments in cell-sized confinement*
M. Soares e Silva, J. Alvarado, Jeanette Nguyen, Nefeli Georgoulia, B.M. Mulder and G.H. Koenderink, Soft Matter **7**, 10631-10641 (2011).
- *Control of non-linear elasticity in F-actin networks with microtubules*
Y.C. Lin, G.H. Koenderink, F.C. MacKintosh, D.A. Weitz, Soft Matter **7**: 902-906 (2011)

2010

- *Structural hierarchy governs fibrin gel mechanics*
I.K. Piechocka, R.G. Bacabac, M. Potters, F.C. MacKintosh, G.H. Koenderink, Biophys. J. 98: 2281-2289 (2010)
- *Actin filament length tunes elasticity of flexibly crosslinked actin networks*
K.E. Kasza, C.P. Broedersz, G.H. Koenderink, Y.C. Lin, W. Messner, E.A. Millman, F. Nakamura, T.P. Stossel, F.C. MacKintosh, D.A. Weitz, Biophys. J. 99: 1091-1100 (2010)

2009

- *Rheological characterization of the nucleus pulposus and dense collagen scaffolds intended for functional replacement*
J. Bron, G.H. Koenderink, V. Everts, T. Smit, J. Orthopaedic Research, **27**: 620-626 (2009).

- *An active biopolymer network controlled by molecular motors*
G.H. Koenderink, Z. Dogic, F. Nakamura, P.M. Bendix, F.C. MacKintosh, J.H. Hartwig, T.P. Stossel, D.A. Weitz, Proc. Natl Acad Sci. USA. 106: 15192-15197 (2009)
- *Intracellular transport by active diffusion*
C.P. Brangwynne, G.H. Koenderink, F.C. MacKintosh, D.A. Weitz, Trends Cell Biol., 19: 423-427 (2009).
- *Nonlinear elasticity of stiff biopolymers connected by flexible linkers*
K.E. Kasza, G.H. Koenderink, Y.C. Lin, C.P. Broedersz, W. Messner, F. Nakamura, T.P. Stossel, F.C. MacKintosh, D.A. Weitz, D.A., Phys. Rev. E., 79: 041928 (2009).

2008

- *Cytoplasmic diffusion: molecular motors mix it up*
C.P. Brangwynne, G.H. Koenderink, F.C. MacKintosh, D.A. Weitz, J. Cell Biology, 183: 583-587 (2008).
- *Short-time inertial response of viscoelastic fluids measured with Brownian motion and with active probes*
M. Atakhorrami, D. Mizuno, G.H. Koenderink, F.C. MacKintosh, C.F. Schmidt, Phys. Rev. E 77: 061508 (2008).
- *Nonequilibrium microtubule fluctuations in a model cytoskeleton*
C.P. Brangwynne, G.H. Koenderink, F.C. MacKintosh, D.A. Weitz, Phys. Rev. Lett. 100: 118104 (2008).
- *A quantitative analysis of contractility in active cytoskeletal protein networks*
P.M. Bendix, G.H. Koenderink, D. Cuvelier, Z. Dogic, B. Koeleman, W.M. Briehar, C.M. Field, L. Mahadevan, D.A. Weitz, Biophys J. 94: 3126-2136 (2008).

2007

- *Viscoelastic properties of microtubule networks*
Y.-C. Lin, G.H. Koenderink, F.C. MacKintosh, D.A. Weitz, Macromolecules 40:7714 (2007).
- *The cell as a material*
K.E. Kasza, A.C. Rowat, J. Liu, T.E. Angelini, C.P. Brangwynne, G.H. Koenderink, D.A. Weitz, Curr. Opin. Cell Biol. 19: 101-107 (2007).
- *Visualizing the strain field in semiflexible polymer networks: strain fluctuations and nonlinear rheology of F-actin gels*
J. Liu, G.H. Koenderink, K.E. Kasza, F.C. MacKintosh, D.A. Weitz, Phys. Rev. Lett. 98: 198304 (2007).
- *Bending dynamics of fluctuating biopolymers probed by automated high-resolution filament tracking*
C.P. Brangwynne, G.H. Koenderink, E. Barry, Z. Dogic, F.C. MacKintosh, D.A. Weitz, Biophys. J. 93: 346-359 (2007).

2006

- *High-frequency stress relaxation in semiflexible polymer solutions and networks*
G.H. Koenderink, M. Atakhorrami, F.C. MacKintosh, C.F. Schmidt, Phys. Rev. Lett. 96: 13807 (2006).
- *Correlated fluctuations of microparticles in viscoelastic solutions: Quantitative measurement of material properties by microrheology in the presence of optical traps*
M. Atakhorrami, J.I. Sulkowska, K.M. Addas, G.H. Koenderink, J.X. Tang, A.J. Levine, F.C. MacKintosh, C.F. Schmidt, Phys. Rev. E 73: 061501 (2006).

2005

- *Short-time inertial response of viscoelastic fluids: observation of vortex propagation*
M. Atakhorrami, G.H. Koenderink, F.C. MacKintosh, C.F. Schmidt, Phys. Rev. Lett. 95: 208302 (2005).
- *Monodisperse DNA restriction fragments. I: Synthesis and characterization*
K. Planken, G.H. Koenderink, R. Roozendaal, A.P. Philipse, J. Colloid Interface Sci. 291: 120-125 (2005).
- *Monodisperse DNA restriction fragments. II: Sedimentation velocity and equilibrium measurements*
G.H. Koenderink, K. Planken, R. Roozendaal, A.P. Philipse, J. Colloid Interface Sci. 291:126-134 (2005)

2004

- *Rotational dynamics of colloidal spheres probed with fluorescence recovery after photobleaching*
M.P. Lettinga, G.H. Koenderink, B.W.M. Kuipers, E. Bessels, A.P. Philipse, J. Chem. Phys. 120: 4517-4529 (2004).
- *Rotational and translational diffusion of fluorocarbon tracer spheres in semidilute xanthan solutions*
G.H. Koenderink, S. Sacanna, D.G.A.L. Aarts, A.P. Philipse, Phys. Rev. E 69: 021804 (2004).
- *Depletion potentials of charged rods*
L. Helden, G.H. Koenderink, A. Phillipse, P. Leiderer, C. Bechinger, Langmuir 20: 5662-5665 (2004).
- *Microemulsion synthesis of fluorinated latex spheres*
S. Sacanna, G.H. Koenderink, A.P. Philipse, Langmuir 20: 8398-8400 (2004).

2003

- *Morphology and kinetics of phase separating transparent xanthan-colloid mixtures*
G.H. Koenderink, D.G.A.L. Aarts, V.W.A. de Villeneuve, A.P. Philipse, R. Tuinier, H.N.W. Lekkerkerker, Biomacromolecules 4: 129-136 (2003).
- *On the validity of Stokes-Einstein-Debye relations for rotational diffusion in colloidal suspensions*
G.H. Koenderink, H. Zhang, D.G.A.L. Aarts, M.P. Lettinga, A.P. Philipse, G. Nägele, Faraday Discuss 123: 335-354 (2003).
- *Direct measurement of entropic forces induced by rigid rods*
L. Helden, R. Roth, G.H. Koenderink, P. Leiderer, C. Bechinger, Phys. Rev. Lett. 90: 048301 (2003).
- *Sedimentation-diffusion profiles and layered sedimentation of charged colloids at low ionic strength*
Philipse AP, G.H. Koenderink, Adv. Colloid Interfac. Sci. 100: 613-639 (2003).
- *Rotational dynamics of colloidal tracer spheres in suspensions of charged rigid rods*
G.H. Koenderink, D.G.A.L. Aarts, A.P. Philipse, J. Chem. Phys. 119: 4490-4499 (2003).

2002

- *Rotational dynamics of charged colloidal spheres: Role of particle interactions*
G.H. Koenderink, M.P. Lettinga, A.P. Philipse, J. Chem. Phys. 117: 7751-7764 (2002).
- *Preparation and properties of optically transparent aqueous dispersions of monodisperse fluorinated colloids*
G.H. Koenderink, S. Sacanna, C. Pathmamanoharan, M. Rasa, and A.P. Philipse, Langmuir 17: 6086-6093 (2001).

2001

- *Rotational tracer diffusion in binary colloidal sphere mixtures*
G.H. Koenderink, H. Zhang, M.P. Lettinga, G. Nägele, A.P. Philipse, Phys. Rev. E 64: 022401 (2001).

2000

- *Self-diffusion and sedimentation of tracer spheres in (semi)dilute dispersions of rigid colloidal rods*
S.G.J.M. Kluijtmans, G.H. Koenderink, A.P. Philipse, Phys. Rev. E 61: 626-636 (2000).
- *Rotational and translational self-diffusion in colloidal sphere suspensions and the applicability of generalized Stokes-Einstein relations*
G.H. Koenderink, A.P. Philipse, Langmuir 16: 5631-5638 (2000).
- *On Stokes-Einstein and Debye behaviour in colloidal fluids*
G.H. Koenderink, A.P. Philipse, J. Phys. IV France 10: Pr7-295 (2000).
- *Sphere dynamics in isotropic colloidal rod fluids*
G.H. Koenderink, A.P. Philipse, S.G.J.M. Kluijtmans, J. Phys.: Condens. Matter 12: A339-A343 (2000).
- *Effect of the initial stages of leaching on the surface of alkaline earth sodium silicate glasses*
G.H. Koenderink, R.H. Brzesowsky, A.R. Balkenende, J. Non-Crystalline Solids 262: 80-98 (2000).

1999

- *Depletion-induced crystallization in colloidal rod-sphere mixtures*
G.H. Koenderink, G.A. Vliegenthart, S.G.J.M. Kluijtmans, A. van Blaaderen, A.P. Philipse, H.N.W. Lekkerkerker, Langmuir 15: 4693-4696 (1999).
- *On the synthesis of colloidal imogolite fibers*
G.H. Koenderink, S.G.J.M. Kluijtmans, A.P. Philipse, J. Colloid Interface Sci. 216: 429-431 (1999).

Book sections and conference proceedings

- *Chapter 18: Purification of recombinant human and Drosophila hexamers for in vitro reconstitution of septin filament assemblies in solution using TIRF microscopy*, M. Mavrikakis, F.C. Tsai, G.H. Koenderink, in: Septins, Methods in Cell Biology 136 (August 2016)/Edited by A. Gladfelter, Amsterdam: Elsevier
- *Reconstituting cytoskeletal contraction events with biomimetic actin-myosin active gels*
J. Alvarado, G.H. Koenderink, In: Building a cell from its component parts / edited by J. Ross and W. Marshall - Amsterdam: Elsevier, Methods in Cell Biology 128 (2015) 83-103
- *Active mechanics of the cytoskeleton*
J. Alvarado and G.H. Koenderink, In: Cell and Matrix Mechanics / eds. R. Kaunas and A. Zemel. - London: Taylor & Francis, 2014
- *In vitro reconstitution of dynamic microtubules interacting with actin filament networks*
M. Preciado Lopez, F. Huber, I. Grigoriev, M.O. Steinmetz, A. Akhmanova, M. Dogterom and G.H. Koenderink, Chapter 17: 301-20 in "Methods in Enzymology" volume 540, Edited by R.D. Vale, Amsterdam: Elsevier (2014)
- *Biomimetic liposome model systems to study cell shape control by the cytoskeleton*
F.-C. Tsai, S. Roth, M. Dogterom and G.H. Koenderink, Chapter 6: 139-174 in "Advances in Planar Lipid Bilayers and Liposomes" volume 19, Edited by A. Iglic and C. Kulkarni, Amsterdam: Elsevier (2014)
- *Structural basis for the polymorphism of β -lactoglobulin amyloid-like fibrils*
C.C. VandenAkke, M. Schleege, M. Bonn and G.H. Koenderink, Chapter 31: 333-343 in "Bio-nanoimaging, Protein Misfolding and Aggregation", Edited by V.N. Uversky and Y.L. Lyubchenko, Amsterdam: Elsevier/Academic Press (2014)
- *Mechanical properties of living cells: on mechanosensing and microgravity*
R. G. Bacabac, D. Mizuno and G.H. Koenderink, p. 23-54 in "Cell Mechanochemistry", Edited by M. Monici and J. van Loon. - Kerala/India: Transworld Research Network (2010).
- *Laser trapping and laser interferometry for high-bandwidth micromechanical probing of biomaterials*
D. Mizuno, M. Atakhorrami, K.M. Addas, J.X. Tang, G.H. Koenderink, F.C. MacKintosh, C.F. Schmidt, IEEE Xplore: Proceedings of the IEEE (2008).

- *Active gels: structure and dynamics of actin-myosin networks*
G.H. Koenderink, Chapter C11, 39th IFF Spring School 2008 – Soft Matter: From synthetic to biological materials”, Schriften des Forschungszentrums Juelich, Key Technologies, Volume 1 (ISBN 1866-1807, 987-3-89336-517-3).

Popular publications

- *Actieve vezelnetwerken*
J. Alvarado, M. Sheinman, A. Sharma, F.C. MacKintosh, G.H. Koenderink, Nederlands Tijdschrift voor Natuurkunde 80: 40-43 (2014).
- *Moleculaire motoren*,
J. Alvarado and G.H. Koenderink, Rubriek ‘Ingelijst’: Nederlands Tijdschrift voor Natuurkunde 80: 133 (2014).
- *Aktieve materiaaleigenschappen van de levende cel*
G.H. Koenderink, F.C. MacKintosh, Nederlands Tijdschrift voor Natuurkunde 76: 146-150 (2010).
- *Staafjes Brengen Bolletjes Bij Elkaar*
Martijn Oversteegen, Gijsje Koenderink, Judith Wijnhoven, Henk Lekkerkerker, Chemisch Weekblad, 99: 14-15 (2003).

PhD Theses as promotor

1. K. A. Jansen, *Extracellular matrix mechanics and implications for cellular mechanosensing*, Vrije Universiteit Amsterdam (11-02-2016)
2. J. (T.T.) Nguyen, *A twisted breakup story: flow behavior of chiral nematic fluids*, Vrije Universiteit Amsterdam (15-04-2015)
3. M. Preciado Lopez, *In vitro studies of actin-microtubule coordination*, Vrije Universiteit Amsterdam (9-03-2015)
4. C.C. VandenAkker, *Amyloids: from molecular structure to mechanical properties*, Vrije Universiteit Amsterdam (2-10-2014)
5. F.-C. Tsai, *Cytoskeletal organization in biomimetic liposomes*, Vrije Universiteit Amsterdam (15-1-2014)
6. J. Alvarado, *Biological polymers: confined, bent, and driven*, Vrije Universiteit Amsterdam (17-6-2013)
7. H. Bron, *Novel regenerative strategies for the treatment of intervertebral disc herniation*, Vrije Universiteit Amsterdam (27-11-2012) (* co-promotor). ARGOSpine Thesis Award.
8. I.K. Piechocka, *Biopolymers: from structural hierarchy to nonlinear rheology*, Vrije Universiteit Amsterdam (23-11-2011)
9. M. Soares e Silva, *Structure and dynamics of active actin myosin networks: an in vitro perspective*, Vrije Universiteit Amsterdam (21-10-2011)

PhD Thesis

- *Rotational and translational self-diffusion in colloidal mixtures* (Cum Laude, May 2003, University of Utrecht, advisor: Prof. dr. A.P. Philipse)