

Menno Prins

List of Publications by Year in descending order

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58
papers

1,793
citations

394421

19
h-index

276875

41
g-index

58
all docs

58
docs citations

58
times ranked

2615
citing authors

#	ARTICLE	IF	CITATIONS
1	Real-Time Monitoring of Biomolecules: Dynamic Response Limits of Affinity-Based Sensors. ACS Sensors, 2022, 7, 286-295.	7.8	12
2	How Reactivity Variability of Biofunctionalized Particles Is Determined by Superpositional Heterogeneities. ACS Nano, 2021, 15, 1331-1341.	14.6	13
3	Click-Coupling to Electrostatically Grafted Polymers Greatly Improves the Stability of a Continuous Monitoring Sensor with Single-Molecule Resolution. ACS Sensors, 2021, 6, 1980-1986.	7.8	12
4	Real-Time Detection of State Transitions in Stochastic Signals from Biological Systems. ACS Omega, 2021, 6, 17726-17733.	3.5	5
5	Antimicrobial stewardship, therapeutic drug monitoring and infection management in the ICU: results from the international A-TEAMICU survey. Annals of Intensive Care, 2021, 11, 131.	4.6	22
6	Sensing Methodology for the Rapid Monitoring of Biomolecules at Low Concentrations over Long Time Spans. ACS Sensors, 2021, 6, 4471-4481.	7.8	17
7	Multivalent weak interactions enhance selectivity of interparticle binding. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22690-22697.	7.1	31
8	Inter-particle biomolecular reactivity tuned by surface crowders. Nanoscale, 2020, 12, 14605-14614.	5.6	3
9	Continuous Small-Molecule Monitoring with a Digital Single-Particle Switch. ACS Sensors, 2020, 5, 1168-1176.	7.8	25
10	Multiplexed Continuous Biosensing by Single-Molecule Encoded Nanoswitches. Nano Letters, 2020, 20, 2296-2302.	9.1	20
11	Rate of Dimer Formation in Stable Colloidal Solutions Quantified Using an Attractive Interparticle Force. Langmuir, 2019, 35, 10533-10541.	3.5	6
12	Single-Dimer Formation Rate Reveals Heterogeneous Particle Surface Reactivity. Langmuir, 2019, 35, 14272-14281.	3.5	2
13	Rotating magnetic particles for lab-on-chip applications – a comprehensive review. Lab on A Chip, 2019, 19, 919-933.	6.0	47
14	Conformation switching of single native proteins revealed by nanomechanical probing without a pulling force. Nanoscale, 2019, 11, 19933-19942.	5.6	3
15	Nanoscale Interparticle Distance within Dimers in Solution Measured by Light Scattering. Langmuir, 2018, 34, 179-186.	3.5	6
16	Continuous biomarker monitoring by particle mobility sensing with single molecule resolution. Nature Communications, 2018, 9, 2541.	12.8	70
17	How Actuated Particles Effectively Capture Biomolecular Targets. Analytical Chemistry, 2017, 89, 3402-3410.	6.5	6
18	Interparticle Capillary Forces at a Fluid–Fluid Interface with Strong Polymer-Induced Aging. Langmuir, 2017, 33, 696-705.	3.5	12

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19	The influence of covalent immobilization conditions on antibody accessibility on nanoparticles. <i>Analyst</i> , 2017, 142, 4247-4256.	3.5	60
20	Distance within colloidal dimers probed by rotation-induced oscillations of scattered light. <i>Optics Express</i> , 2016, 24, A123.	3.4	5
21	Interfacial rheometry of polymer at a water-oil interface by intra-pair magnetophoresis. <i>Soft Matter</i> , 2016, 12, 5551-5562.	2.7	7
22	Mechanical properties of single supramolecular polymers from correlative AFM and fluorescence microscopy. <i>Polymer Chemistry</i> , 2016, 7, 7260-7268.	3.9	19
23	Single-Bond Association Kinetics Determined by Tethered Particle Motion: Concept and Simulations. <i>Biophysical Journal</i> , 2016, 111, 1612-1620.	0.5	5
24	Particle Motion Analysis Reveals Nanoscale Bond Characteristics and Enhances Dynamic Range for Biosensing. <i>ACS Nano</i> , 2016, 10, 3093-3101.	14.6	27
25	Evanescent Field Biosensor Using Polymer Slab Waveguide-Based Cartridges for the Optical Detection of Nanoparticles. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2016, 22, 319-326.	2.9	3
26	Dynamic wetting: status and prospective of single particle based experiments and simulations. <i>New Biotechnology</i> , 2015, 32, 420-432.	4.4	19
27	Transportation, dispersion and ordering of dense colloidal assemblies by magnetic interfacial rotaphoresis. <i>Lab on A Chip</i> , 2015, 15, 2864-2871.	6.0	15
28	Molecular interference in antibody-antigen interaction studied with magnetic force immunoassay. <i>New Biotechnology</i> , 2015, 32, 450-457.	4.4	1
29	Surfactants modify the torsion properties of proteins: a single molecule study. <i>New Biotechnology</i> , 2015, 32, 441-449.	4.4	6
30	Ara h 1 protein-antibody dissociation study: evidence for binding inhomogeneities on a molecular scale. <i>New Biotechnology</i> , 2015, 32, 458-466.	4.4	2
31	Stochastic Protein Interactions Monitored by Hundreds of Single-Molecule Plasmonic Biosensors. <i>Nano Letters</i> , 2015, 15, 3507-3511.	9.1	125
32	Chaotic fluid mixing by alternating microparticle topologies to enhance biochemical reactions. <i>Microfluidics and Nanofluidics</i> , 2014, 16, 265-274.	2.2	36
33	Dynamics of magnetic particles near a surface: Model and experiments on field-induced disaggregation. <i>Physical Review E</i> , 2014, 89, 042306.	2.1	8
34	Integrated lab-on-chip biosensing systems based on magnetic particle actuation - a comprehensive review. <i>Lab on A Chip</i> , 2014, 14, 1966-1986.	6.0	219
35	How Antibody Surface Coverage on Nanoparticles Determines the Activity and Kinetics of Antigen Capturing for Biosensing. <i>Analytical Chemistry</i> , 2014, 86, 8158-8166.	6.5	141
36	Quantification of platelet-surface interactions in real-time using intracellular calcium signaling. <i>Biomedical Microdevices</i> , 2014, 16, 217-227.	2.8	7

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37	The influence of inhomogeneous adhesion on the detachment dynamics of adhering cells. <i>European Biophysics Journal</i> , 2013, 42, 419-426.	2.2	3
38	Accurate quantification of magnetic particle properties by intra-pair magnetophoresis for nanobiotechnology. <i>Applied Physics Letters</i> , 2013, 103, 043704.	3.3	11
39	Accelerated Particle-Based Target Capture—The Roles of Volume Transport and Near-Surface Alignment. <i>Journal of Physical Chemistry B</i> , 2013, 117, 1210-1218.	2.6	13
40	Disaggregation of microparticle clusters by induced magnetic dipole—dipole repulsion near a surface. <i>Lab on A Chip</i> , 2013, 13, 1394.	6.0	50
41	Magneto-capillary valve for integrated purification and enrichment of nucleic acids and proteins. <i>Lab on A Chip</i> , 2013, 13, 106-118.	6.0	53
42	Torsion Profiling of Proteins Using Magnetic Particles. <i>Biophysical Journal</i> , 2013, 104, 1073-1080.	0.5	19
43	Measurement of platelet responsiveness using antibody-coated magnetic beads for lab-on-a-chip applications. <i>Platelets</i> , 2012, 23, 626-632.	2.3	1
44	Quantification of Protein—Ligand Dissociation Kinetics in Heterogeneous Affinity Assays. <i>Analytical Chemistry</i> , 2012, 84, 9287-9294.	6.5	21
45	Interactions between Protein Coated Particles and Polymer Surfaces Studied with the Rotating Particles Probe. <i>Langmuir</i> , 2012, 28, 8149-8155.	3.5	4
46	One-Step Homogeneous Magnetic Nanoparticle Immunoassay for Biomarker Detection Directly in Blood Plasma. <i>ACS Nano</i> , 2012, 6, 3134-3141.	14.6	117
47	Probing the Cell Membrane by Magnetic Particle Actuation and Euler Angle—Tracking. <i>Biophysical Journal</i> , 2012, 102, 698-708.	0.5	25
48	Frequency-Selective Rotation of Two-Particle Nanoactuators for Rapid and Sensitive Detection of Biomolecules. <i>Nano Letters</i> , 2011, 11, 2017-2022.	9.1	53
49	Torsion Stiffness of a Protein Pair Determined by Magnetic Particles. <i>Biophysical Journal</i> , 2011, 100, 2262-2267.	0.5	17
50	Reversionary rotation of actuated particles for microfluidic near-surface mixing. <i>Applied Physics Letters</i> , 2011, 99, 024103.	3.3	1
51	Multibody interactions of actuated magnetic particles used as fluid drivers in microchannels. <i>Microfluidics and Nanofluidics</i> , 2010, 9, 357-364.	2.2	11
52	Bond characterization by detection and manipulation of particle mobility in an optical evanescent field biosensor. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 385501.	2.8	4
53	Mobility and height detection of particle labels in an optical evanescent wave biosensor with single-label resolution. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 155501.	2.8	8
54	Magnetically controlled rotation and torque of uniaxial microactuators for lab-on-a-chip applications. <i>Lab on A Chip</i> , 2010, 10, 179-188.	6.0	36

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55	Analysis of individual magnetic particle motion near a chip surface. Journal of Applied Physics, 2009, 105, 104905.	2.5	14
56	Controlled torque on superparamagnetic beads for functional biosensors. Biosensors and Bioelectronics, 2009, 24, 1937-1941.	10.1	113
57	Rapid integrated biosensor for multiplexed immunoassays based on actuated magnetic nanoparticles. Lab on A Chip, 2009, 9, 3504.	6.0	194
58	Self-organized twinning of actuated particles for microfluidic pumping. Applied Physics Letters, 2008, 92, 024104.	3.3	8