

Theo Odijk

List of Publications by Citations

Source: <https://exaly.com/author-pdf/138320/theo-odijk-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

78
papers

4,484
citations

28
h-index

66
g-index

80
ext. papers

4,701
ext. citations

4.4
avg, IF

5.76
L-index

#	Paper	IF	Citations
78	Polyelectrolytes near the rod limit. <i>Journal of Polymer Science, Polymer Physics Edition</i> , 1977 , 15, 477-483		562
77	The statistics and dynamics of confined or entangled stiff polymers. <i>Macromolecules</i> , 1983 , 16, 1340-1344	4.5	502
76	Theory of lyotropic polymer liquid crystals. <i>Macromolecules</i> , 1986 , 19, 2313-2329	5.5	425
75	Stiff Chains and Filaments under Tension. <i>Macromolecules</i> , 1995 , 28, 7016-7018	5.5	337
74	Possible Scaling Relations for Semidilute Polyelectrolyte Solutions. <i>Macromolecules</i> , 1979 , 12, 688-693	5.5	321
73	A single-molecule barcoding system using nanoslits for DNA analysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 2673-8	11.5	265
72	On the theory of the excluded-volume effect of a polyelectrolyte in a 1-1 electrolyte solution. <i>Journal of Polymer Science, Polymer Physics Edition</i> , 1978 , 16, 627-639		222
71	Osmotic compaction of supercoiled DNA into a bacterial nucleoid. <i>Biophysical Chemistry</i> , 1998 , 73, 23-9	3.5	114
70	Polymer-mediated compaction and internal dynamics of isolated Escherichia coli nucleoids. <i>Journal of Structural Biology</i> , 2001 , 136, 53-66	3.4	111
69	Hexagonally packed DNA within bacteriophage T7 stabilized by curvature stress. <i>Biophysical Journal</i> , 1998 , 75, 1223-7	2.9	93
68	DNA confined in nanochannels: hairpin tightening by entropic depletion. <i>Journal of Chemical Physics</i> , 2006 , 125, 204904	3.9	84
67	Elastic constants of nematic solutions of rod-like and semi-flexible polymers. <i>Liquid Crystals</i> , 1986 , 1, 553-559	2.3	82
66	Protein-Macromolecule Interactions. <i>Macromolecules</i> , 1996 , 29, 1842-1843	5.5	74
65	Induced chain rigidity, splay modulus and other properties of nematic polymer liquid crystals. <i>Macromolecules</i> , 1988 , 21, 2848-2858	5.5	72
64	Multimolecular aggregation of mononucleosomal DNA in concentrated isotropic solutions. <i>Macromolecules</i> , 1995 , 28, 2315-2328	5.5	70
63	Electrostatic-undulatory theory of plectonemically supercoiled DNA. <i>Biophysical Journal</i> , 1999 , 76, 2502-19	4.9	64
62	Binding of Long Flexible Chains to a Rodlike Macromolecule. <i>Macromolecules</i> , 1980 , 13, 1542-1546	5.5	49

61	DNA in a liquid-crystalline environment: Tight bends, rings, supercoils. <i>Journal of Chemical Physics</i> , 1996 , 105, 1270-1286	3.9	48
60	Statistical theory and structure factor of a semidilute solution of rodlike macromolecules interacting by van der Waals forces. <i>Journal of Chemical Physics</i> , 1992 , 97, 515-524	3.9	48
59	Many-body depletion interactions among protein spheres in a semidilute polymer solution. <i>Journal of Chemical Physics</i> , 1997 , 106, 3402-3406	3.9	47
58	Depletion theory of protein transport in semi-dilute polymer solutions. <i>Biophysical Journal</i> , 2000 , 79, 2314-21	2.9	45
57	Isolation of the Escherichia coli nucleoid. <i>Biochimie</i> , 2001 , 83, 149-54	4.6	42
56	Undulation-enhanced electrostatic forces in hexagonal polyelectrolyte gels. <i>Biophysical Chemistry</i> , 1993 , 46, 69-75	3.5	40
55	Physics of tightly curved semiflexible polymer chains. <i>Macromolecules</i> , 1993 , 26, 6897-6902	5.5	39
54	Presentation of large DNA molecules for analysis as nanoconfined dumbbells. <i>Macromolecules</i> , 2013 , 46, 8356-8368	5.5	36
53	Microfibrillar buckling within fibers under compression. <i>Journal of Chemical Physics</i> , 1998 , 108, 6923-6928	3.9	36
52	Nonuniform Donnan Equilibrium within Bacteriophages Packed with DNA. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 8074-8077	3.4	31
51	Optimized Baxter model of protein solutions: electrostatics versus adhesion. <i>Journal of Chemical Physics</i> , 2004 , 121, 6525-37	3.9	28
50	Ordered phases of elongated micelles. <i>Current Opinion in Colloid and Interface Science</i> , 1996 , 1, 337-340	7.6	28
49	Electrostatic interactions in a solution of linear micelles. <i>Journal of Chemical Physics</i> , 1990 , 93, 5172-5176	3.9	28
48	Elastic moduli of a nematic liquid-crystalline solution of polyelectrolytes. <i>Journal of Chemical Physics</i> , 1987 , 87, 4223-4232	3.9	27
47	Long-Range Attraction in Polyelectrolyte Solutions. <i>Macromolecules</i> , 1994 , 27, 4998-5003	5.5	25
46	Similarity applied to the statistics of confined stiff polymers. <i>Macromolecules</i> , 1984 , 17, 502-503	5.5	24
45	Diffusion in protein crystals—a computer simulation. <i>ChemPhysChem</i> , 2004 , 5, 1596-9	3.2	23
44	Formation of polyelectrolyte-micelle complexes. <i>Langmuir</i> , 1991 , 7, 1991-1992	4	23

43	Multimolecular aggregation in concentrated isotropic solutions of mononucleosomal DNA in 1 M sodium chloride. <i>Macromolecules</i> , 1994 , 27, 306-308	5.5	21
42	Electrostatic confinement and manipulation of DNA molecules for genome analysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 13400-13405	11.5	20
41	Novel dynamic scaling hypothesis for semidilute and concentrated solutions of polymers and polyelectrolytes. <i>Macromolecules</i> , 1993 , 26, 6489-6497	5.5	20
40	The influence of chain-flexibility on the colligative properties of polyelectrolyte solutions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1978 , 93, 298-306	3.3	20
39	Diffusion of water and sodium counter-ions in nanopores of a β -lactoglobulin crystal: a molecular dynamics study. <i>Nanotechnology</i> , 2005 , 16, S522-30	3.4	19
38	Structure of DNA within the Bacterial Cell: Physics and Physiology 2014 , 171-187		18
37	Depletion around a Protein Sphere Interacting with a Semidilute Polymer Solution. <i>Langmuir</i> , 1997 , 13, 3579-3581	4	18
36	Growth of linear charged micelles. <i>Biophysical Chemistry</i> , 1991 , 41, 23-9	3.5	18
35	Self-consistent theory of a charged multimembrane system. <i>Langmuir</i> , 1992 , 8, 1690-1691	4	18
34	Impact of nonuniform counterion condensation on the growth of linear charged micelles. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1991 , 176, 201-205	3.3	17
33	Characterization of Escherichia coli nucleoids released by osmotic shock. <i>Journal of Structural Biology</i> , 2012 , 178, 260-9	3.4	16
32	Depletion theory and the precipitation of protein by polymer. <i>Journal of Physical Chemistry B</i> , 2009 , 113, 3941-6	3.4	16
31	Fluid-crystal coexistence for proteins and inorganic nanocolloids: Dependence on ionic strength. <i>Journal of Chemical Physics</i> , 2006 , 125, 074903	3.9	16
30	Collective diffusion coefficient of proteins with hydrodynamic, electrostatic, and adhesive interactions. <i>Journal of Chemical Physics</i> , 2007 , 127, 115102	3.9	16
29	Structure factor of a semidilute solution of rodlike macromolecules. <i>Macromolecules</i> , 1990 , 23, 4181-4182	3.5	16
28	Adsorption of a polymer to a randomly interacting surface. <i>Macromolecules</i> , 1990 , 23, 1875-1876	5.5	15
27	On the limiting law solution of the cylindrical Poisson-Boltzmann equation for polyelectrolytes. <i>Chemical Physics Letters</i> , 1983 , 100, 145-150	2.5	13
26	Osmotic pressure of a nematic solution of polydisperse rod-like macromolecules. <i>Liquid Crystals</i> , 1986 , 1, 97-100	2.3	12

25	Translational friction coefficient of hydrodynamically screened rodlike macromolecules. <i>Macromolecules</i> , 1986 , 19, 2073-2074	5.5	12
24	Viscosity of Wormlike Micelles: Determination of the End Cap Energy and Persistence Length. <i>Langmuir</i> , 1996 , 12, 4718-4722	4	11
23	Compaction of isolated Escherichia coli nucleoids: Polymer and H-NS protein synergetics. <i>Journal of Structural Biology</i> , 2016 , 194, 129-37	3.4	9
22	Dynamic sedimentation of linear micellar aggregates in a centrifugal field. <i>Journal of Chemical Physics</i> , 1994 , 100, 4569-4574	3.9	9
21	Disentanglement of rods in semidilute and liquid-crystalline solutions in elongational flow. <i>Macromolecules</i> , 1988 , 21, 3511-3515	5.5	9
20	Dimensions of a plectonemic DNA supercoil under fairly general perturbations. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998 , 252, 61-66	3.3	7
19	Static and dynamic light scattering from liquid crystalline solutions of rodlike macromolecules. <i>Journal of Chemical Physics</i> , 1990 , 93, 3580-3592	3.9	7
18	Depletion layer of a lyotropic polymer liquid crystal at the air-solution interface. <i>Macromolecules</i> , 1987 , 20, 1423-1424	5.5	6
17	Turbulent drag reduction in one and two dimensions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2001 , 298, 140-154	3.3	5
16	Equilibrium distribution of linear micellar aggregates in a gravitational or centrifugal field. <i>Langmuir</i> , 1993 , 9, 1160-1161	4	5
15	Aggregation in solutions of poly(β -benzyl-L-glutamate) monitored by static and dynamic light scattering. <i>Polymer</i> , 1992 , 33, 5328-5330	3.9	5
14	Analysis of the stability of the nematic phase consisting of semiflexible surfaces. <i>Journal of Chemical Physics</i> , 1988 , 88, 7167-7171	3.9	4
13	Unfolding Kinetics of a Wormlike Chain under Elongational Flow. <i>Polymers</i> , 2017 , 9,	4.5	3
12	Polymer-induced vortex modification in decaying two-dimensional turbulence. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998 , 258, 329-340	3.3	3
11	Convective depletion during the fast propagation of a nanosphere through a polymer solution. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004 , 337, 389-397	3.3	3
10	A tree swaying in a turbulent wind: a scaling analysis. <i>Journal of Biological Physics</i> , 2015 , 41, 1-7	1.6	2
9	Application of the optimized Baxter model to the hard-core attractive Yukawa system. <i>Journal of Chemical Physics</i> , 2006 , 125, 194506	3.9	2
8	Undulation-Enhanced Forces in Hexagonal Gels of Semiflexible Polyelectrolytes. <i>ACS Symposium Series</i> , 1993 , 86-97	0.4	2

7	Material line fluctuations slaved to bulk correlations in two-dimensional turbulence. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2017 , 467, 180-183	3.3	1
6	Ilya M. Lifshitz. An appreciation. <i>Physics Reports</i> , 1997 , 288, 9-12	27.7	1
5	Rarefaction in the Sedimentation of Polymerlike Micelles. <i>Langmuir</i> , 1998 , 14, 2577-2578	4	1
4	Static and dynamic light scattering by semidilute rod-like polyelectrolyte solutions. <i>Biochemical Society Transactions</i> , 1991 , 19, 482-3	5.1	1
3	Remarks on the Hierarchical Organization of Fibers. <i>Macromolecules</i> , 1996 , 29, 4796-4798	5.5	
2	Light scattering from liquid crystalline solutions of rod-like macromolecules. <i>Biochemical Society Transactions</i> , 1991 , 19, 503	5.1	
1	Mean-field theory of the interaction of the magnesium ion with biopolymers: the case of lysozyme. <i>Journal of Biological Physics</i> , 2021 , 47, 521-528	1.6	