Takashi Uneyama

List of Publications by Year
in descending order

55 papers	1,087 citations	471509 17 h-index	414414 32 g-index
55 all docs	55 docs citations	55 times ranked	769 citing authors

#	Article	IF	Citations
1	Multi-chain slip-spring model for entangled polymer dynamics. Journal of Chemical Physics, 2012, 137, 154902.	3.0	104
2	Nonlinear Rheology of Telechelic Associative Polymer Networks: Shear Thickening and Thinning Behavior of Hydrophobically Modified Ethoxylated Urethane (HEUR) in Aqueous Solution. Macromolecules, 2012, 45, 888-898.	4.8	95
3	Density functional simulation of spontaneous formation of vesicle in block copolymer solutions. Journal of Chemical Physics, 2007, 126, 114902.	3.0	88
4	Concentration dependence of rheological properties of telechelic associative polymer solutions. Physical Review E, 2012, 86, 031802.	2.1	64
5	Fluctuation analysis of time-averaged mean-square displacement for the Langevin equation with time-dependent and fluctuating diffusivity. Physical Review E, 2015, 92, 032140.	2.1	63
6	Density Functional Theory for Block Copolymer Melts and Blends. Macromolecules, 2005, 38, 196-205.	4.8	60
7	Concentration Dependence of Nonlinear Rheological Properties of Hydrophobically Modified Ethoxylated Urethane Aqueous Solutions. Macromolecules, 2013, 46, 3497-3504.	4.8	56
8	Calculation of the Micellar Structure of Polymer Surfactant on the Basis of the Density Functional Theory. Macromolecules, 2005, 38, 5817-5825.	4.8	42
9	Structure of entangled polymer network from primitive chain network simulations. Journal of Chemical Physics, 2010, 132, 134902.	3.0	33
10	Comparison among multi-chain models for entangled polymer dynamics. Soft Matter, 2018, 14, 5986-5994.	2.7	33
11	Detailed balance condition and effective free energy in the primitive chain network model. Journal of Chemical Physics, 2011, 135, 184904.	3.0	31
12	Brownian motion with alternately fluctuating diffusivity: Stretched-exponential and power-law relaxation. Physical Review E, 2019, 100, 012116.	2.1	26
13	Single Chain Slip-Spring Model for Fast Rheology Simulations of Entangled Polymers on GPU. Nihon Reoroji Gakkaishi, 2011, 39, 135-152.	1.0	25
14	Relaxation functions of the Ornstein-Uhlenbeck process with fluctuating diffusivity. Physical Review E, 2019, 99, 032127.	2.1	25
15	Anisotropic mobility model for polymers under shear and its linear response functions. Physical Review E, 2011, 83, 061802.	2.1	21
16	A Note for Kohlrausch-Williams-Watts Relaxation Function. Nihon Reoroji Gakkaishi, 2011, 39, 127-131.	1.0	20
17	Transparent Woody Film Made by Dissolution of Finely Divided Japanese Beech in Formic Acid at Room Temperature. ACS Sustainable Chemistry and Engineering, 2017, 5, 11536-11542.	6.7	19
18	A theoretical analysis of rheodielectric response of typeâ€A polymer chains. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 1039-1057.	2.1	18

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19	Retardation of the reaction kinetics of polymers due to entanglement in the post-gel stage in multi-chain slip-spring simulations. Soft Matter, 2019, 15, 5109-5115.	2.7	18
20	Primitive chain network simulations for entangled DNA solutions. Journal of Chemical Physics, 2009, 131, 114906.	3.0	17
21	Crossover time in relative fluctuations characterizes the longest relaxation time of entangled polymers. Journal of Chemical Physics, 2012, 137, 114903.	3.0	17
22	Rheo-Dielectric Responses of Entangled cis-Polyisoprene under Uniform Steady Shear and LAOS. Macromolecules, 2014, 47, 246-255.	4.8	17
23	Plateau Moduli of Several Single-Chain Slip-Link and Slip-Spring Models. Macromolecules, 2021, 54, 1338-1353.	4.8	16
24	Equilibrium statistics of weakly slipâ€linked Gaussian polymer chains. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 966-977.	2.1	15
25	Formation of globules and aggregates of DNA chains in DNA/polyethylene glycol/monovalent salt aqueous solutions. Journal of Chemical Physics, 2009, 131, 094901.	3.0	13
26	Rheology of Aqueous Solution of Hydrophobically Modified Ethoxylated Urethane (HEUR) with Fluorescent Probes at Chain Ends: Thinning Mechanism. Nihon Reoroji Gakkaishi, 2012, 40, 31-36.	1.0	13
27	Entanglement Molecular Weight. Nihon Reoroji Gakkaishi, 2020, 48, 177-183.	1.0	13
28	Numerical study of chain conformation on shear banding using diffusive Rolie-Poly model. Rheologica Acta, 2011, 50, 753-766.	2.4	11
29	Orientational cross correlations between entangled branch polymers in primitive chain network simulations. Journal of Chemical Physics, 2017, 147, 184903.	3.0	10
30	Unveiling diffusive states from center-of-mass trajectories in glassy dynamics. Journal of Chemical Physics, 2019, 151, 034502.	3.0	9
31	A multiscale simulation of polymer processing using parameterâ€based bridging in melt rheology. Journal of Applied Polymer Science, 2012, 125, 2740-2747.	2.6	7
32	Multi-chain slip-spring simulations for polyisoprene melts. Korea Australia Rheology Journal, 2019, 31, 241-248.	1.7	7
33	Coarse-Grained Brownian Dynamics Simulations for Symmetric Diblock Copolymer Melts Based on the Soft Dumbbell Model. Nihon Reoroji Gakkaishi, 2009, 37, 81-90.	1.0	7
34	Wall boundary model for primitive chain network simulations. Journal of Chemical Physics, 2009, 130, 214907.	3.0	6
35	A transient bond model for dynamic constraints in meso-scale coarse-grained systems. Journal of Chemical Physics, 2019, 150, 024901.	3.0	6
36	Effect of Inertia on Linear Viscoelasticity of Harmonic Dumbbell Model. Nihon Reoroji Gakkaishi, 2019, 47, 143-154.	1.0	6

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37	Comparison among Multi-Chain Simulations for Entangled Polymers under Fast Shear. ECS Transactions, 2018, 88, 161-167.	0.5	5
38	Coarse-graining of microscopic dynamics into a mesoscopic transient potential model. Physical Review E, 2020, 101, 032106.	2.1	5
39	Soft-core Interaction Between Entanglement Segments for Primitive Chain Network Simulations. Nihon Reoroji Gakkaishi, 2012, 40, 21-30.	1.0	5
40	Effect of pore size distribution on compressive behavior of moderately expanded lowâ€density polyethylene foams. Polymer Engineering and Science, 2019, 59, 510-518.	3.1	4
41	Primitive chain network simulations for the interrupted shear response of entangled polymeric liquids. Soft Matter, 2020, 16, 6654-6661.	2.7	4
42	Rheological properties of linear and short-chain branched polyethylene with nearly monodispersed molecular weight distribution. Rheologica Acta, 2021, 60, 511-519.	2.4	4
43	Linear Rheological Properties of Poly(Propylene Carbonate) with Different Molecular Weights. Nihon Reoroji Gakkaishi, 2021, 49, 267-274.	1.0	4
44	Primitive Chain Network Simulations of Conformational Relaxation for Individual Molecules in the Entangled State. II. Retraction from Stretched States.. Nihon Reoroji Gakkaishi, 2009, 37, 65-68.	1.0	3
45	Linear viscoelasticity of unentangled corona blocks and star arms. Rheologica Acta, 2014, 53, 701-714.	2.4	3
46	Compressive Behavior of Moderately Expanded Low Density Polyethylene (LDPE) Foams. Nihon Reoroji Gakkaishi, 2016, 44, 29-38.	1.0	3
47	Linear Viscoelasticity of Dumbbells Interacting via Gaussian Soft-Core Potential. Nihon Reoroji Gakkaishi, 2021, 49, 61-71.	1.0	3
48	Effects of Slip-Spring Parameters and Rouse Bead Density on Polymer Dynamics in Multichain Slip-Spring Simulations. Journal of Physical Chemistry B, 2022, , .	2.6	3
49	Self-consistent field model simulations for statistics of amorphous polymer chains in crystalline lamellar structures. Journal of Chemical Physics, 2014, 141, 164906.	3.0	2
50	Characterization of critical gel state of polyamides by viscoelastic, thermal, and IR measurements. Rheologica Acta, 2019, 58, 281-290.	2.4	2
51	Short-time dynamics of a tracer in an ideal gas. Physical Review E, 2020, 102, 032104.	2.1	2
52	Dissipation in Langevin Equation and Construction of Mobility Tensor from Dissipative Heat Flow. Nihon Reoroji Gakkaishi, 2020, 48, 65-78.	1.0	2
53	Application of projection operator method to coarse-grained dynamics with transient potential. Physical Review E, 2022, 105, 044117.	2.1	2
54	Optimization of the Multishift QR Algorithm with Coprocessors for Non-Hermitian Eigenvalue Problems. East Asian Journal on Applied Mathematics, 2011, 1, 187-196.	0.9	0

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55	Modeling Viscoelasticity By Mesoscopic Coarse-Grained Models with Transient Bonds. ECS Meeting Abstracts, 2018, , .	0.0	0