

Mark D Ediger

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9439016/publications.pdf>

Version: 2024-02-01

248
papers

18,518
citations

16451
64
h-index

13771
129
g-index

249
all docs

249
docs citations

249
times ranked

6629
citing authors

#	ARTICLE	IF	CITATIONS
1	SPATIALLY HETEROGENEOUS DYNAMICS IN SUPERCOOLED LIQUIDS. Annual Review of Physical Chemistry, 2000, 51, 99-128.	10.8	2,135
2	Supercooled Liquids and Glasses. The Journal of Physical Chemistry, 1996, 100, 13200-13212.	2.9	1,893
3	Organic Glasses with Exceptional Thermodynamic and Kinetic Stability. Science, 2007, 315, 353-356.	12.6	647
4	Perspective: Supercooled liquids and glasses. Journal of Chemical Physics, 2012, 137, 080901.	3.0	427
5	Dynamics near Free Surfaces and the Glass Transition in Thin Polymer Films: A View to the Future. Macromolecules, 2014, 47, 471-478.	4.8	424
6	Enhanced translation of probe molecules in supercooled <i>o</i> -terphenyl: Signature of spatially heterogeneous dynamics?. Journal of Chemical Physics, 1996, 104, 7210-7218.	3.0	420
7	How do molecules move near T _g ? Molecular rotation of six probes in <i>o</i> -terphenyl across 14 decades in time. Journal of Chemical Physics, 1995, 102, 471-479.	3.0	354
8	Relaxation of spatially heterogeneous dynamic domains in supercooled <i>ortho</i> -terphenyl. Journal of Chemical Physics, 1995, 103, 5684-5692.	3.0	348
9	Direct Measurement of Molecular Motion in Freestanding Polystyrene Thin Films. Journal of the American Chemical Society, 2011, 133, 8444-8447.	13.7	310
10	Crystal growth kinetics exhibit a fragility-dependent decoupling from viscosity. Journal of Chemical Physics, 2008, 128, 034709.	3.0	272
11	Direct Measurement of Molecular Mobility in Actively Deformed Polymer Glasses. Science, 2009, 323, 231-234.	12.6	254
12	Surface Self-Diffusion of an Organic Glass. Physical Review Letters, 2011, 106, 256103.	7.8	244
13	Anomalous Diffusion of Probe Molecules in Polystyrene: Evidence for Spatially Heterogeneous Segmental Dynamics. Macromolecules, 1995, 28, 8224-8232.	4.8	240
14	Self-Diffusion of <i>tris</i> -Naphthylbenzene near the Glass Transition Temperature. Physical Review Letters, 2003, 90, 015901.	7.8	226
15	Ultrastable glasses from <i>in silico</i> vapour deposition. Nature Materials, 2013, 12, 139-144.	27.5	213
16	Self-Diffusion of Supercooled <i>o</i> -Terphenyl near the Glass Transition Temperature. Journal of Physical Chemistry B, 2006, 110, 507-511.	2.6	205
17	Hiking down the Energy Landscape: Progress Toward the Kauzmann Temperature via Vapor Deposition. Journal of Physical Chemistry B, 2008, 112, 4934-4942.	2.6	192
18	Tunable molecular orientation and elevated thermal stability of vapor-deposited organic semiconductors. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4227-4232.	7.1	188

#	ARTICLE	IF	CITATIONS
19	Length scale of dynamic heterogeneity in supercooled glycerol near T _g . Journal of Chemical Physics, 2001, 114, 7299-7302.	3.0	173
20	Perspective: Highly stable vapor-deposited glasses. Journal of Chemical Physics, 2017, 147, 210901.	3.0	167
21	Influence of substrate temperature on the stability of glasses prepared by vapor deposition. Journal of Chemical Physics, 2007, 127, 154702.	3.0	165
22	Rapid Poly(ethylene oxide) Segmental Dynamics in Blends with Poly(methyl methacrylate). Macromolecules, 2003, 36, 1724-1730.	4.8	140
23	Facets of glass physics. Physics Today, 2016, 69, 40-46.	0.3	132
24	Length Scale of Dynamic Heterogeneity in Supercooled D-Sorbitol: A Comparison to Model Predictions. Journal of Physical Chemistry B, 2003, 107, 459-464.	2.6	123
25	Glasses crystallize rapidly at free surfaces by growing crystals upward. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5990-5995.	7.1	120
26	Composition and Temperature Dependence of Terminal and Segmental Dynamics in Polyisoprene/Poly(vinylethylene) Blends. Macromolecules, 2003, 36, 6142-6151.	4.8	116
27	Crystallization near Glass Transition: A Transition from Diffusion-Controlled to Diffusionless Crystal Growth Studied with Seven Polymorphs. Journal of Physical Chemistry B, 2008, 112, 5594-5601.	2.6	116
28	Molecular mobility in supported thin films of polystyrene, poly(methyl methacrylate), and poly(2-vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.7	116
29	Segmental and terminal dynamics in miscible polymer mixtures: Tests of the Lodge-McLeish model. Journal of Chemical Physics, 2003, 119, 9956-9965.	3.0	115
30	Suppression of $\langle \ddot{r}^2 \rangle$ Relaxation in Vapor-Deposited Ultrastable Glasses. Physical Review Letters, 2015, 115, 185501.	7.8	114
31	How Long Do Regions of Different Dynamics Persist in Supercooled o-Terphenyl?. Journal of Physical Chemistry B, 1999, 103, 4177-4184.	2.6	110
32	Translational Diffusion on Heterogeneous Lattices: A Model for Dynamics in Glass Forming Materials. Journal of Physical Chemistry B, 1997, 101, 8727-8734.	2.6	109
33	Deformation-Induced Mobility in Polymer Glasses during Multistep Creep Experiments and Simulations. Macromolecules, 2009, 42, 4328-4336.	4.8	108
34	Translational and Rotational Motion of Probes in Supercooled 1,3,5-Tris(naphthyl)benzene. The Journal of Physical Chemistry, 1996, 100, 18249-18257.	2.9	106
35	Free Volume and Finite-Size Effects in a Polymer Glass under Stress. Physical Review Letters, 2007, 99, 215501.	7.8	106
36	High-Modulus Organic Glasses Prepared by Physical Vapor Deposition. Advanced Materials, 2010, 22, 39-42.	21.0	106

#	ARTICLE	IF	CITATIONS
37	Molecular Motion in Free-Standing Thin Films of Poly(methyl methacrylate), Poly(4- <i>tert</i> -butylstyrene), Poly(\pm -methylstyrene), and Poly(2-vinylpyridine). <i>Macromolecules</i> , 2011, 44, 7034-7042.	4.8	105
38	Molecular Dynamics of a 1,4-Polybutadiene Melt. Comparison of Experiment and Simulation. <i>Macromolecules</i> , 1999, 32, 8857-8865.	4.8	104
39	Glass transition of small polystyrene spheres in aqueous suspensions. <i>Journal of Chemical Physics</i> , 2003, 119, 8730-8735.	3.0	100
40	Heterogeneous dynamics during deformation of a polymer glass. <i>Soft Matter</i> , 2010, 6, 287-291.	2.7	96
41	Molecular Motions and Viscoelasticity of Amorphous Polymers near T _g . <i>Macromolecules</i> , 1995, 28, 3425-3433.	4.8	94
42	Temperature Dependence of Segmental and Terminal Relaxation in Atactic Polypropylene Melts. <i>Macromolecules</i> , 2001, 34, 6159-6160.	4.8	94
43	High-Throughput Ellipsometric Characterization of Vapor-Deposited Indomethacin Glasses. <i>Journal of Physical Chemistry B</i> , 2013, 117, 15415-15425.	2.6	93
44	Photobleaching technique for measuring ultraslow reorientation near and below the glass transition: tetracene in <i>o</i> -terphenyl. <i>The Journal of Physical Chemistry</i> , 1993, 97, 10489-10497.	2.9	91
45	Stable Glass Transformation to Supercooled Liquid via Surface-Initiated Growth Front. <i>Physical Review Letters</i> , 2009, 102, 065503.	7.8	86
46	Increasing the kinetic stability of bulk metallic glasses. <i>Acta Materialia</i> , 2016, 104, 25-32.	7.9	86
47	Anisotropic Structure and Transformation Kinetics of Vapor-Deposited Indomethacin Glasses. <i>Journal of Physical Chemistry B</i> , 2011, 115, 455-463.	2.6	85
48	Self-Diffusion of Supercooled Tris-naphthylbenzene. <i>Journal of Physical Chemistry B</i> , 2009, 113, 4600-4608.	2.6	84
49	Comparing surface and bulk flow of a molecular glass former. <i>Soft Matter</i> , 2012, 8, 2206.	2.7	84
50	Molecular Orientation in Stable Glasses of Indomethacin. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1229-1233.	4.6	84
51	Physical vapor deposition as a route to hidden amorphous states. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 15165-15170.	7.1	82
52	Time-Resolved Optical Studies of Local Polymer Dynamics. <i>Annual Review of Physical Chemistry</i> , 1991, 42, 225-250.	10.8	81
53	One Micrometer Length Scale Controls Kinetic Stability of Low-Energy Glasses. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 388-392.	4.6	79
54	Self-diffusion of the amorphous pharmaceutical indomethacin near T _g . <i>Soft Matter</i> , 2011, 7, 10339.	2.7	79

#	ARTICLE	IF	CITATIONS
55	Model vapor-deposited glasses: Growth front and composition effects. Journal of Chemical Physics, 2013, 139, 144505.	3.0	79
56	Structural Characterization of Vapor-Deposited Glasses of an Organic Hole Transport Material with X-ray Scattering. Chemistry of Materials, 2015, 27, 3341-3348.	6.7	78
57	¹³ C NMR Spin Lattice Relaxation and Conformational Dynamics in a 1,4-Polybutadiene Melt. Macromolecules, 2001, 34, 5192-5199.	4.8	74
58	Local dynamics of polyisoprene in toluene. Macromolecules, 1991, 24, 4270-4277.	4.8	71
59	Comparison of Equilibrium and Dynamic Properties of Polymethylene Melts of n-C ₄₄ H ₉₀ Chains from Simulations and Experiments. Macromolecules, 1994, 27, 5563-5569.	4.8	70
60	Dye reorientation as a probe of stress-induced mobility in polymer glasses. Journal of Chemical Physics, 2008, 128, 134902.	3.0	68
61	Molecular mobility of poly(methyl methacrylate) glass during uniaxial tensile creep deformation. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 1713-1727.	2.1	67
62	Anisotropic Vapor-Deposited Glasses: Hybrid Organic Solids. Accounts of Chemical Research, 2019, 52, 407-414.	15.6	67
63	Carbon-13 nuclear magnetic resonance measurements of local segmental dynamics of polyisoprene in dilute solution: nonlinear viscosity dependence. Macromolecules, 1990, 23, 3520-3530.	4.8	66
64	Role of Fragility in the Formation of Highly Stable Organic Glasses. Physical Review Letters, 2014, 113, 045901.	7.8	66
65	Component Dynamics in Polyisoprene/Polyvinylethylene Blends Well above T _g . Macromolecules, 2001, 34, 4466-4475.	4.8	65
66	<i>In situ</i> investigation of vapor-deposited glasses of toluene and ethylbenzene via alternating current chip-nanocalorimetry. Journal of Chemical Physics, 2013, 138, 024501.	3.0	65
67	Picosecond studies of excitation transport in a finite volume: The clustered transport system octadecyl rhodamine B in triton X100 micelles. Journal of Chemical Physics, 1984, 80, 1246-1253.	3.0	64
68	Viscosity dependence of the local segmental dynamics of anthracene-labeled polystyrene in dilute solution. Macromolecules, 1991, 24, 3147-3153.	4.8	62
69	Lifetime of spatially heterogeneous dynamic domains in polystyrene melts. Journal of Chemical Physics, 2000, 112, 6933-6937.	3.0	62
70	Highly Stable Indomethacin Glasses Resist Uptake of Water Vapor. Journal of Physical Chemistry B, 2009, 113, 2422-2427.	2.6	62
71	Two DSC Glass Transitions in Miscible Blends of Polyisoprene/Poly(4- <i>tert</i> -butylstyrene). Macromolecules, 2009, 42, 6777-6783.	4.8	62
72	Molecular packing in highly stable glasses of vapor-deposited tris-naphthylbenzene isomers. Journal of Chemical Physics, 2012, 136, 094505.	3.0	62

#	ARTICLE	IF	CITATIONS
73	Measurement of Segmental Mobility during Constant Strain Rate Deformation of a Poly(methyl Tj ETQq1 1 0.784314 rgBT /Qyerlock 10	4.8	62
74	Influence of Molecular Shape on the Thermal Stability and Molecular Orientation of Vapor-Deposited Organic Semiconductors. Journal of Physical Chemistry Letters, 2017, 8, 3380-3386.	4.6	62
75	Influence of spatially heterogeneous dynamics on physical aging of polystyrene. Journal of Chemical Physics, 2002, 116, 9089-9099.	3.0	60
76	Observation of low heat capacities for vapor-deposited glasses of indomethacin as determined by AC nanocalorimetry. Journal of Chemical Physics, 2010, 133, 014702.	3.0	60
77	Density and birefringence of a highly stable $\hat{1}_{\pm}, \hat{1}_{\pm}, \hat{1}_{\pm}^2$ -trisnaphthylbenzene glass. Journal of Chemical Physics, 2012, 136, 204501.	3.0	60
78	How much time is needed to form a kinetically stable glass? AC calorimetric study of vapor-deposited glasses of ethylcyclohexane. Journal of Chemical Physics, 2015, 142, 054506.	3.0	60
79	Chiral Studies in Amorphous Solids:Â The Effect of the Polymeric Glassy State on the Racemization Kinetics of Bridged Paddled Binaphthyls. Journal of the American Chemical Society, 2001, 123, 49-56.	13.7	59
80	Orientational anisotropy in simulated vapor-deposited molecular glasses. Journal of Chemical Physics, 2015, 143, 094502.	3.0	59
81	Viscosity dependence of the local segmental dynamics of anthracene-labeled polyisoprene in dilute solution. Macromolecules, 1992, 25, 867-872.	4.8	58
82	NMR Experiments and Molecular Dynamics Simulations of the Segmental Dynamics of Polystyrene. Macromolecules, 2004, 37, 5032-5039.	4.8	58
83	Diffusionless Crystal Growth from Glass Has Precursor in Equilibrium Liquid. Journal of Physical Chemistry B, 2008, 112, 661-664.	2.6	58
84	Mechanical Rejuvenation in Poly(methyl methacrylate) Glasses? Molecular Mobility after Deformation. Macromolecules, 2010, 43, 5863-5873.	4.8	58
85	Brownian dynamics simulations of local motions in polyisoprene. Macromolecules, 1991, 24, 5834-5842.	4.8	57
86	New approach to probing polymer and polymer blend structure using electronic excitation transport. Macromolecules, 1983, 16, 1839-1844.	4.8	56
87	Computer Simulations of Polyisoprene Local Dynamics in Vacuum, Solution, and the Melt:Â Are Conformational Transitions Always Important?. Macromolecules, 1996, 29, 5484-5492.	4.8	56
88	Electronic excited state transport among molecules distributed randomly in a finite volume. Journal of Chemical Physics, 1983, 78, 2518-2524.	3.0	55
89	Self-Diffusion and Viscosity of Low Molecular Weight Polystyrene over a Wide Temperature Range. Macromolecules, 2004, 37, 1558-1564.	4.8	55
90	Molecular Dynamics Computer Simulation of Polyisoprene Local Dynamics in Dilute Toluene Solution. Macromolecules, 1995, 28, 2329-2338.	4.8	53

#	ARTICLE	IF	CITATIONS
91	Structural Variations of an Organic Glassformer Vapor-Deposited onto a Temperature Gradient Stage. Journal of Physical Chemistry Letters, 2011, 2, 423-427.	4.6	50
92	Stable glasses of indomethacin and $\hat{1}\pm, \hat{1}\pm, \hat{1}^2$ -tris-naphthylbenzene transform into ordinary supercooled liquids. Journal of Chemical Physics, 2012, 137, 204508.	3.0	49
93	Thermal stability of vapor-deposited stable glasses of an organic semiconductor. Journal of Chemical Physics, 2015, 142, 134504.	3.0	49
94	Origin of Anisotropic Molecular Packing in Vapor-Deposited Alq3 Glasses. Journal of Physical Chemistry Letters, 2019, 10, 164-170.	4.6	49
95	Rotational dynamics of anthracene and 9,10-dimethylantracene in polyisoprene. Journal of Chemical Physics, 1990, 92, 1036-1044.	3.0	48
96	Dilute Polymer Blends: Are the Segmental Dynamics of Isolated Polyisoprene Chains Slaved to the Dynamics of the Host Polymer?. Macromolecules, 2004, 37, 6440-6448.	4.8	47
97	Highly Stable Glasses of <i>cis</i> -Decalin and <i>cis</i> / <i>trans</i> -Decalin Mixtures. Journal of Physical Chemistry B, 2013, 117, 12724-12733.	2.6	46
98	Fast Crystal Growth in <i>o</i> -Terphenyl Glasses: A Possible Role for Fracture and Surface Mobility. Journal of Physical Chemistry B, 2015, 119, 10124-10130.	2.6	46
99	Molecular view of the isothermal transformation of a stable glass to a liquid. Journal of Chemical Physics, 2008, 128, 214514.	3.0	45
100	¹³ C NMR Study of Segmental Dynamics of Atactic Polypropylene Melts. Macromolecules, 2000, 33, 2145-2152.	4.8	44
101	Cooperativity of local conformational dynamics in simulations of polyisoprene and polyethylene. Macromolecules, 1992, 25, 1074-1078.	4.8	43
102	Local and Global Dynamics of Unentangled Polyethylene Melts by ¹³ C NMR. Macromolecules, 2000, 33, 490-498.	4.8	43
103	Diffusion-controlled and -diffusionless crystal growth near the glass transition temperature: Relation between liquid dynamics and growth kinetics of seven ROY polymorphs. Journal of Chemical Physics, 2009, 131, 074506.	3.0	43
104	Manipulating the properties of stable organic glasses using kinetic facilitation. Journal of Chemical Physics, 2013, 138, 12A517.	3.0	43
105	Change in the temperature dependence of segmental dynamics in deeply supercooled polycarbonate. Journal of Chemical Physics, 2003, 118, 1996-2004.	3.0	42
106	Segmental Dynamics of Dilute Polystyrene Chains in Miscible Blends and Solutions. Macromolecules, 2005, 38, 9826-9835.	4.8	42
107	Transformation of Stable Glasses into Supercooled Liquids: Growth Fronts and Anomalously Fast Liquid Diffusion. Journal of Physical Chemistry B, 2010, 114, 2635-2643.	2.6	42
108	Evolution of glassy gratings with variable aspect ratios under surface diffusion. Journal of Chemical Physics, 2011, 134, 194704.	3.0	41

#	ARTICLE	IF	CITATIONS
109	Photostability Can Be Significantly Modulated by Molecular Packing in Glasses. Journal of the American Chemical Society, 2016, 138, 11282-11289.	13.7	41
110	Substrate temperature controls molecular orientation in two-component vapor-deposited glasses. Soft Matter, 2016, 12, 3265-3270.	2.7	41
111	Comparison of various measurements of microscopic friction in polymer solutions. Macromolecules, 1993, 26, 512-519.	4.8	40
112	Age and structure of a model vapour-deposited glass. Nature Communications, 2016, 7, 13062.	12.8	39
113	Calorimetric Evidence for Two Distinct Molecular Packing Arrangements in Stable Glasses of Indomethacin. Journal of Physical Chemistry B, 2009, 113, 1579-1586.	2.6	38
114	Vapor-deposited alcohol glasses reveal a wide range of kinetic stability. Journal of Chemical Physics, 2016, 145, 174506.	3.0	38
115	Organic Glasses with Tunable Liquid-Crystalline Order. Physical Review Letters, 2018, 120, 055502.	7.8	38
116	Controlling Structure and Properties of Vapor-Deposited Glasses of Organic Semiconductors: Recent Advances and Challenges. Journal of Physical Chemistry Letters, 2020, 11, 6935-6945.	4.6	38
117	Enhanced Translational Diffusion of 9,10-Bis(phenylethynyl)anthracene (BPEA) in Polystyrene. Macromolecules, 1997, 30, 4770-4771.	4.8	37
118	Highly Stable Vapor-Deposited Glasses of Four Tris-naphthylbenzene Isomers. Journal of Physical Chemistry Letters, 2011, 2, 2683-2687.	4.6	37
119	Nanosecond and microsecond study of probe reorientation in orthoterphenyl. Journal of Chemical Physics, 1990, 93, 2274-2279.	3.0	36
120	Comparison of the Composition and Temperature Dependences of Segmental and Terminal Dynamics in Polybutadiene/Poly(vinyl ethylene) Blends. Macromolecules, 2004, 37, 9889-9898.	4.8	36
121	Local and global dynamics of atactic polypropylene melts by multiple field ^{13}C nuclear magnetic resonance. Journal of Chemical Physics, 2000, 113, 2918-2926.	3.0	35
122	Differential alternating current chip calorimeter for <i>in situ</i> investigation of vapor-deposited thin films. Review of Scientific Instruments, 2012, 83, 033902.	1.3	35
123	Dynamics of glass-forming liquids. XVI. Observation of ultrastable glass transformation via dielectric spectroscopy. Journal of Chemical Physics, 2013, 138, 12A519.	3.0	35
124	Calculation of the coherent dynamic structure factor of polyisoprene from molecular dynamics simulations. Physical Review E, 1999, 59, 623-630.	2.1	34
125	Interaction between physical aging, deformation, and segmental mobility in poly(methyl methacrylate) glasses. Journal of Chemical Physics, 2010, 133, 014901.	3.0	34
126	Kinetic stability and heat capacity of vapor-deposited glasses of <i>o</i> -terphenyl. Journal of Chemical Physics, 2015, 143, 084511.	3.0	34

#	ARTICLE	IF	CITATIONS
127	Vapor-Deposited Glass Structure Determined by Deposition Rate–Substrate Temperature Superposition Principle. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3536-3542.	4.6	33
128	Surface diffusion in glasses of rod-like molecules posaconazole and itraconazole: effect of interfacial molecular alignment and bulk penetration. <i>Soft Matter</i> , 2020, 16, 5062-5070.	2.7	33
129	Anomalous Translational Diffusion: A New Constraint for Models of Molecular Motion Near the Glass Transition Temperature. <i>Journal of Physical Chemistry B</i> , 2000, 104, 1724-1728.	2.6	32
130	Miscible Polyisoprene/Polystyrene Blends: A Distinct Segmental Dynamics but Homogeneous Terminal Dynamics. <i>Macromolecules</i> , 2005, 38, 6216-6226.	4.8	32
131	Organic Glass-Forming Materials: 1,3,5-Tris(naphthyl)benzene Derivatives. <i>Journal of Organic Chemistry</i> , 2007, 72, 10051-10057.	3.2	32
132	Glass Surfaces Not So Glassy. <i>Science</i> , 2008, 319, 577-578.	12.6	32
133	Molecular modeling of vapor-deposited polymer glasses. <i>Journal of Chemical Physics</i> , 2014, 140, 204504.	3.0	32
134	Termination of Solid-State Crystal Growth in Molecular Glasses by Fluidity. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1705-1710.	4.6	32
135	Surface diffusion and surface crystal growth of <i>tris</i> -naphthyl benzene glasses. <i>Journal of Chemical Physics</i> , 2016, 145, .	3.0	32
136	Vapor deposition of a smectic liquid crystal: highly anisotropic, homogeneous glasses with tunable molecular orientation. <i>Soft Matter</i> , 2016, 12, 2942-2947.	2.7	32
137	Determination of the guest radius of gyration in polymer blends: time-resolved measurements of excitation transport induced fluorescence depolarization. <i>Macromolecules</i> , 1985, 18, 1182-1190.	4.8	31
138	Local polymer and solvent dynamics in Aroclor solutions: implications for solvent modification. <i>Macromolecules</i> , 1992, 25, 1284-1293.	4.8	31
139	Temperature-ramping measurement of dye reorientation to probe molecular motion in polymer glasses. <i>Journal of Chemical Physics</i> , 2011, 134, 024901.	3.0	31
140	Highly Organized Smectic-like Packing in Vapor-Deposited Glasses of a Liquid Crystal. <i>Chemistry of Materials</i> , 2017, 29, 849-858.	6.7	30
141	Vapor deposition of a nonmesogen prepares highly structured organic glasses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 21421-21426.	7.1	30
142	Vapor-Deposited Ethylbenzene Glasses Approach Ideal Glass Density. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4069-4075.	4.6	29
143	Local segmental dynamics of polyisoprene in concentrated solutions and in the bulk. <i>Macromolecules</i> , 1989, 22, 2253-2259.	4.8	28
144	Enhanced translational diffusion of rubrene and tetracene in polysulfone. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003, 34, 2853-2861.	2.1	28

#	ARTICLE	IF	CITATIONS
145	Isothermal desorption measurements of self-diffusion in supercooled o-terphenyl. Journal of Chemical Physics, 2006, 124, 054710.	3.0	28
146	Influence of Hydrogen Bonding on the Kinetic Stability of Vapor-Deposited Glasses of Triazine Derivatives. Journal of Physical Chemistry B, 2017, 121, 2350-2358.	2.6	28
147	Viscosity Dependence of Polystyrene Local Dynamics in Dilute Solution. Macromolecules, 1997, 30, 1205-1210.	4.8	27
148	Anisotropic organic glasses. Current Opinion in Solid State and Materials Science, 2018, 22, 49-57.	11.5	27
149	Local segmental dynamics of polyisoprene in dilute solution: picosecond holographic grating experiments. Macromolecules, 1986, 19, 2533-2538.	4.8	26
150	Local segmental dynamics of polyisoprene in dilute solution: solvent and molecular weight effects. Macromolecules, 1989, 22, 1345-1351.	4.8	26
151	Translational diffusion of rubrene and tetracene in polyisobutylene. Rheologica Acta, 1997, 36, 209-216.	2.4	26
152	Vapor-deposited glasses of methyl- <i>m</i> -toluate: How uniform is stable glass transformation?. Journal of Chemical Physics, 2015, 143, 244509.	3.0	26
153	A new technique for measuring ultraslow molecular reorientation near and below the glass transition. Journal of Chemical Physics, 1992, 97, 2156-2159.	3.0	25
154	Vapor-Deposited Glasses with Long-Range Columnar Liquid Crystalline Order. Chemistry of Materials, 2017, 29, 9110-9119.	6.7	25
155	Activation Entropy as a Key Factor Controlling the Memory Effect in Glasses. Physical Review Letters, 2020, 125, 135501.	7.8	25
156	NMR Investigation of Segmental Dynamics in Disordered Styrene- <i>b</i> -Isoprene Tetrablock Copolymers. Macromolecules, 2003, 36, 8040-8048.	4.8	24
157	Dynamics in glass-forming mixtures: Comparison of behavior of polymeric and non-polymeric components. Journal of Non-Crystalline Solids, 2006, 352, 4718-4723.	3.1	24
158	Deuterium NMR Characterization of 1,2-Polybutadiene Local Dynamics in Dilute Solution. Macromolecules, 1995, 28, 7549-7557.	4.8	23
159	Spatially heterogeneous dynamics during physical aging far below the glass transition temperature. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 2463-2472.	2.1	23
160	Neutron reflectivity measurements of the translational motion of tris(naphthylbenzene) at the glass transition temperature. Journal of Chemical Physics, 2006, 124, 184501.	3.0	23
161	Does Brillouin light scattering probe the primary glass transition process at temperatures well above glass transition?. Journal of Chemical Physics, 2010, 132, 074906.	3.0	23
162	Glass transition and stable glass formation of tetrachloromethane. Journal of Chemical Physics, 2016, 144, 244503.	3.0	23

#	ARTICLE	IF	CITATIONS
163	Dynamics of supercooled liquid and plastic crystalline ethanol: Dielectric relaxation and AC nanocalorimetry distinguish structural α - and Debye relaxation processes. Journal of Chemical Physics, 2017, 147, 014502.	3.0	23
164	Influence of Substrate Temperature on the Transformation Front Velocities That Determine Thermal Stability of Vapor-Deposited Glasses. Journal of Physical Chemistry B, 2015, 119, 3875-3882.	2.6	22
165	Effect of Temperature on Postyield Segmental Dynamics of Poly(methyl methacrylate) Glasses: Thermally Activated Transitions Are Important. Macromolecules, 2015, 48, 6736-6744.	4.8	22
166	How to "measure" a structural relaxation time that is too long to be measured?. Journal of Chemical Physics, 2020, 153, 044501.	3.0	22
167	Over What Length Scale Does an Inorganic Substrate Perturb the Structure of a Glassy Organic Semiconductor?. ACS Applied Materials & Interfaces, 2020, 12, 26717-26726.	8.0	22
168	Molecular motion during physical aging in polystyrene: Investigation using probe reorientation. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 68-79.	2.1	21
169	Vapor-deposited α , β -tris-naphthylbenzene glasses with low heat capacity and high kinetic stability. Journal of Chemical Physics, 2012, 137, 154502.	3.0	21
170	Dielectric spectroscopy of thin films by dual-channel impedance measurements on differential interdigitated electrode arrays. European Physical Journal B, 2012, 85, 1.	1.5	21
171	Influence of Vapor Deposition on Structural and Charge Transport Properties of Ethylbenzene Films. ACS Central Science, 2017, 3, 415-424.	11.3	21
172	Limited surface mobility inhibits stable glass formation for 2-ethyl-1-hexanol. Journal of Chemical Physics, 2017, 146, 203317.	3.0	21
173	Fast Crystal Growth from Organic Glasses: Comparison of α -Terphenyl with its Structural Analogs. Journal of Physical Chemistry B, 2014, 118, 8203-8209.	2.6	20
174	Reversing Strain Deformation Probes Mechanisms for Enhanced Segmental Mobility of Polymer Glasses. Macromolecules, 2017, 50, 1016-1026.	4.8	20
175	Comparison of mechanical and molecular measures of mobility during constant strain rate deformation of a PMMA glass. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1957-1967.	2.1	19
176	Effect of molecular size and hydrogen bonding on three surface-facilitated processes in molecular glasses: Surface diffusion, surface crystal growth, and formation of stable glasses by vapor deposition. Journal of Chemical Physics, 2019, 150, 024502.	3.0	19
177	Molecular Orientation for Vapor-Deposited Organic Glasses Follows Rate-Temperature Superposition: The Case of Posaconazole. Journal of Physical Chemistry B, 2020, 124, 2505-2513.	2.6	19
178	Segmental dynamics in a blend of alkanes: Nuclear magnetic resonance experiments and molecular dynamics simulation. Journal of Chemical Physics, 2002, 116, 8209-8217.	3.0	18
179	Poly(ethylene oxide) Dynamics in Blends with Poly(vinyl acetate): Comparison of Segmental and Terminal Dynamics. Macromolecules, 2008, 41, 8030-8037.	4.8	18
180	Nematic-like stable glasses without equilibrium liquid crystal phases. Journal of Chemical Physics, 2017, 146, 054503.	3.0	18

#	ARTICLE	IF	CITATIONS
181	Prediction of Segmental and Global Dynamics in Disordered Styrene- <i>is</i> -Isoprene Tetrablock Copolymers. <i>Macromolecules</i> , 2003, 36, 9170-9175.	4.8	17
182	Using Deposition Rate and Substrate Temperature to Manipulate Liquid Crystal-Like Order in a Vapor-Deposited Hexagonal Columnar Glass. <i>Journal of Physical Chemistry B</i> , 2021, 125, 2761-2770.	2.6	17
183	MATERIALS SCIENCE: Movies of the Glass Transition. <i>Science</i> , 2000, 287, 604-605.	12.6	16
184	Fast Crystal Growth Induces Mobility and Tension in Supercooled <i>p</i> -Terphenyl. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 2562-2567.	4.6	16
185	Influence of Hydrogen Bonding on the Surface Diffusion of Molecular Glasses: Comparison of Three Triazines. <i>Journal of Physical Chemistry B</i> , 2017, 121, 7221-7227.	2.6	16
186	Tenfold increase in the photostability of an azobenzene guest in vapor-deposited glass mixtures. <i>Journal of Chemical Physics</i> , 2018, 149, 204503.	3.0	16
187	Local Dynamics of Poly(ethylene oxide) in Solution. 1. Localization of Chain Motion. <i>Macromolecules</i> , 1997, 30, 5704-5713.	4.8	15
188	Vapor-deposited glasses provide clearer view of two-level systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 11232-11233.	7.1	14
189	Generic packing motifs in vapor-deposited glasses of organic semiconductors. <i>Soft Matter</i> , 2019, 15, 7590-7595.	2.7	14
190	PHYSICAL CHEMISTRY: Single Molecules Rock and Roll Near the Glass Transition. <i>Science</i> , 2001, 292, 233-234.	12.6	14
191	Temperature dependence of molecular motions in bulk polystyrene. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1994, 32, 2595-2604.	2.1	13
192	Local Dynamics of Poly(ethylene oxide) in Solution. 2. Vector Autocorrelation Functions and Motional Anisotropy. <i>Macromolecules</i> , 1997, 30, 5714-5720.	4.8	13
193	Branching effects on the segmental dynamics of polyethylene melts. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 2634-2643.	2.1	13
194	Effect of tacticity on the segmental dynamics of polypropylene melts investigated by ¹³ C nuclear magnetic resonance. <i>Journal of Chemical Physics</i> , 2001, 115, 4961-4965.	3.0	13
195	Glass Structure Controls Crystal Polymorph Selection in Vapor-Deposited Films of 4,4'-Bis(<i>N</i> -carbazolyl)-1,1'-biphenyl. <i>Crystal Growth and Design</i> , 2018, 18, 5800-5807.	3.0	13
196	Controlling the Columnar Order in a Discotic Liquid Crystal by Kinetic Arrest of Disc Tumbling. <i>Chemistry of Materials</i> , 2021, 33, 4757-4764.	6.7	13
197	Surface Diffusion Is Controlled by Bulk Fragility across All Glass Types. <i>Physical Review Letters</i> , 2022, 128, 075501.	7.8	13
198	Concentration and temperature dependence of local motions in polyisoprene/tetrahydrofuran. <i>Macromolecules</i> , 1992, 25, 873-879.	4.8	12

#	ARTICLE	IF	CITATIONS
199	Carbon-13 NMR measurments of polybutadiene local dynamics in dilute solution: Further evidence for non-Kramers' behavior. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 2251-2262.	2.1	12
200	Glasses of three alkyl phosphates show a range of kinetic stabilities when prepared by physical vapor deposition. Journal of Chemical Physics, 2018, 148, 174503.	3.0	12
201	Ultrastable and polyamorphic states of vapor-deposited 2-methyltetrahydrofuran. Journal of Chemical Physics, 2019, 150, 214502.	3.0	12
202	Extreme Elasticity Anisotropy in Molecular Glasses. Advanced Functional Materials, 2020, 30, 2001481.	14.9	12
203	<i>In situ</i> observation of fast surface dynamics during the vapor-deposition of a stable organic glass. Soft Matter, 2020, 16, 10860-10864.	2.7	11
204	Surface equilibration mechanism controls the molecular packing of glassy molecular semiconductors at organic interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	11
205	Vapor-deposited organic glasses exhibit enhanced stability against photodegradation. Soft Matter, 2018, 14, 2827-2834.	2.7	10
206	Enhanced Segmental Dynamics of Poly(lactic acid) Glasses during Constant Strain Rate Deformation. Macromolecules, 2019, 52, 6428-6437.	4.8	10
207	Relationship between aged and vapor-deposited organic glasses: Secondary relaxations in methyl- <i>m</i> -toluate. Journal of Chemical Physics, 2019, 151, 144502.	3.0	10
208	Molecular Orientation Depth Profiles in Organic Glasses Using Polarized Resonant Soft X-ray Reflectivity. Chemistry of Materials, 2020, 32, 6295-6309.	6.7	10
209	Polyisoprene local dynamics in solution: Comparison between molecular dynamics simulations and optimized Rouse-Zimm local dynamics. Journal of Chemical Physics, 1998, 108, 1245-1252.	3.0	9
210	From gas to nanoglobular glass. Nature Materials, 2012, 11, 267-268.	27.5	9
211	Modifying hydrogen-bonded structures by physical vapor deposition: 4-methyl-3-heptanol. Journal of Chemical Physics, 2017, 147, 194504.	3.0	9
212	Time-resolved optical study of the rotational mobility of small probe molecules in bulk polyisoprene. Macromolecules, 1989, 22, 1510-1512.	4.8	8
213	Probe rotation near and below the glass transition temperature: Relationship to viscoelasticity and physical aging. Macromolecular Symposia, 1996, 101, 139-146.	0.7	8
214	Segmental Dynamics of Dilute Poly(ethylene oxide) in Low and High Molecular Weight Glass-Formers. Macromolecules, 2011, 44, 9046-9053.	4.8	8
215	Direct Comparison of Probe Reorientation and Linear Mechanical Measurements of Segmental Dynamics in Glassy Poly(methyl methacrylate). Macromolecules, 2018, 51, 7785-7793.	4.8	8
216	Linear Stress Relaxation and Probe Reorientation: Comparison of the Segmental Dynamics of Two Glassy Polymers during Physical Aging. Macromolecules, 2019, 52, 8177-8186.	4.8	8

#	ARTICLE	IF	CITATIONS
217	Polyamorphism in vapor-deposited 2-methyltetrahydrofuran: A broadband dielectric relaxation study. Journal of Chemical Physics, 2021, 154, 024502.	3.0	8
218	Surface mobility in amorphous selenium and comparison with organic molecular glasses. Journal of Chemical Physics, 2021, 154, 074703.	3.0	8
219	Glass Dynamics Deep in the Energy Landscape. Journal of Physical Chemistry B, 2021, 125, 9052-9068.	2.6	8
220	Vapor deposition rate modifies anisotropic glassy structure of an anthracene-based organic semiconductor. Journal of Chemical Physics, 2022, 156, 014504.	3.0	8
221	Spatially heterogeneous dynamics in thermoset resins below the glass-transition temperature. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2232-2239.	2.1	7
222	Dense Glass Packing Can Slow Reactions with an Atmospheric Gas. Journal of Physical Chemistry B, 2019, 123, 10124-10130.	2.6	7
223	Physical vapor deposition of a polyamorphic system: Triphenyl phosphite. Journal of Chemical Physics, 2020, 153, 124511.	3.0	7
224	Stable Glasses of Organic Semiconductor Resist Crystallization. Journal of Physical Chemistry B, 2021, 125, 461-466.	2.6	7
225	Surface diffusion of a glassy discotic organic semiconductor and the surface mobility gradient of molecular glasses. Journal of Chemical Physics, 2022, 156, 094710.	3.0	7
226	Entanglement Effects in Polyethylene Melts: ^{13}C NMR Relaxation Experiments. Macromolecules, 2002, 35, 1691-1698.	4.8	6
227	Rejuvenation Versus Overaging: The Effect of Cyclic Loading/Unloading on the Segmental Dynamics of Poly(methyl methacrylate) Glasses. Macromolecules, 2020, 53, 8467-8475.	4.8	6
228	Molecular weight dependence of polystyrene segmental dynamics in dilute blends with poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.1	5
229	Characterization of the Interfacial Orientation and Molecular Conformation in a Glass-Forming Organic Semiconductor. ACS Applied Materials & Interfaces, 2022, 14, 3455-3466.	8.0	5
230	Polystyrene local dynamics in dilute solution: Temperature and solvent dependence of C-D vector correlation function shape. Journal of Polymer Science, Part B: Polymer Physics, 1997, 35, 1241-1250.	2.1	4
231	Surface transport mechanisms in molecular glasses probed by the exposure of nano-particles. Journal of Chemical Physics, 2017, 146, 203324.	3.0	3
232	Dielectric properties of vapor-deposited propylbenzenes. Journal of Chemical Physics, 2019, 151, 174503.	3.0	3
233	Varying kinetic stability, icosahedral ordering, and mechanical properties of a model Zr-Cu-Al metallic glass by sputtering. Physical Review Materials, 2021, 5, .	2.4	3
234	Molecular motion during physical aging in polystyrene: Investigation using probe reorientation. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 68.	2.1	3

#	ARTICLE	IF	CITATIONS
235	Translational diffusion of rubrene and tetracene in polyisobutylene. Rheologica Acta, 1997, 36, 209-216.	2.4	3
236	A molecular perspective on the yield and flow of polymer glasses: The role of enhanced segmental dynamics during active deformation. , 2016, , 357-374.		3
237	A liquid with distinct metastable structures: Supercooled butyronitrile. Journal of Chemical Physics, 2022, 156, 044501.	3.0	3
238	Extraordinarily Stable Organic Glasses Prepared by Vapor Deposition: Dependence of Stability and Dynamics upon Deposition Temperature. AIP Conference Proceedings, 2008, , .	0.4	2
239	Photopatterning of Indomethacin Thin Films: a Solvent-Free Vapor-Deposited Photoresist. ACS Applied Materials & Interfaces, 2015, 7, 23398-23401.	8.0	2
240	JCP Emerging Investigator Special Collection 2019. Journal of Chemical Physics, 2020, 153, 110402.	3.0	2
241	Spatially heterogeneous dynamics in deeply supercooled liquids. , 1999, , .		1
242	Self-diffusion and Spatially Heterogeneous Dynamics in Supercooled Liquids Near T _g . AIP Conference Proceedings, 2004, , .	0.4	1
243	Fluctuation Electron Microscopy and Computational Structure Refinement for the Structure of Amorphous Materials. Microscopy and Microanalysis, 2016, 22, 486-487.	0.4	1
244	Branching effects on the segmental dynamics of polyethylene melts. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2634-2643.	2.1	1
245	Time-Resolved Optical Spectroscopy as a Probe of Local Polymer Motions. ACS Symposium Series, 1987, , 68-82.	0.5	0
246	Fluctuation Electron Microscopy Study of Medium-Range Packing Order in Ultrastable Indomethacin Glass Thin Films. Materials Research Society Symposia Proceedings, 2015, 1757, 32.	0.1	0
247	Preface: Special Topic on Dynamics of Polymer Materials in Thin Films and Related Geometries. Journal of Chemical Physics, 2017, 146, 203001.	3.0	0
248	Extreme Elasticity Anisotropy: Extreme Elasticity Anisotropy in Molecular Glasses (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	14.9	6