

# Mario Beiner

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Influence of Cooperative $\alpha$ Dynamics on Local $\beta$ Relaxation during the Development of the Dynamic Glass Transition in Poly(n-alkyl methacrylate)s. <i>Macromolecules</i> , 1996, 29, 247-253.	4.8	282
2	Nanophase separation and hindered glass transition in side-chain polymers. <i>Nature Materials</i> , 2003, 2, 595-599.	27.5	253
3	Manipulating the Crystalline State of Pharmaceuticals by Nanoconfinement. <i>Nano Letters</i> , 2007, 7, 1381-1385.	9.1	156
4	Detection of Surface-Immobilized Components and Their Role in Viscoelastic Reinforcement of Rubber-Silica Nanocomposites. <i>ACS Macro Letters</i> , 2014, 3, 481-485.	4.8	139
5	Stabilization of the amorphous state of pharmaceuticals in nanopores. <i>Journal of Materials Chemistry</i> , 2008, 18, 2537.	6.7	125
6	Multiple Glass Transition and Nanophase Separation in Poly(n-alkyl methacrylate) Homopolymers. <i>Macromolecules</i> , 1999, 32, 6278-6282.	4.8	120
7	Relaxation in Poly(alkyl methacrylate)s: Crossover Region and Nanophase Separation. <i>Macromolecular Rapid Communications</i> , 2001, 22, 869-895.	3.9	120
8	Mechanical Properties and Cross-Link Density of Styrene-Butadiene Model Composites Containing Fillers with Bimodal Particle Size Distribution. <i>Macromolecules</i> , 2012, 45, 6504-6515.	4.8	118
9	Fine Structure of the Main Transition in Amorphous Polymers: Entanglement Spacing and Characteristic Length of the Glass Transition. Discussion of Examples. <i>Macromolecules</i> , 1996, 29, 6589-6600.	4.8	111
10	Self-Healing Materials from V <sub>2</sub> O <sub>5</sub> and H <sub>2</sub> O Shaped Supramolecular Architectures. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 10188-10192.	13.8	110
11	Two crossover regions in the dynamics of glass forming epoxy resins. <i>Journal of Chemical Physics</i> , 2002, 117, 2435-2448.	3.0	108
12	Dielectric Spectroscopy in the $\alpha$ Splitting Region of Glass Transition in Poly(ethyl methacrylate) and Poly(n-butyl methacrylate): A Different Evaluation Methods and Experimental Conditions. <i>Macromolecules</i> , 1998, 31, 8966-8972.	4.8	103
13	Crossover region of dynamic glass transition: general trends and individual aspects. <i>Journal of Non-Crystalline Solids</i> , 2001, 279, 126-135.	3.1	90
14	Comparison of DSC heating rate and HCS frequency at the glass transition. <i>Thermochimica Acta</i> , 1997, 304-305, 239-249.	2.7	87
15	Side-Chain Dynamics and Crystallization in a Series of Regiorandom Poly(3-alkylthiophenes). <i>Macromolecules</i> , 2009, 42, 716-724.	4.8	84
16	Temperature Dependence of the Primary Relaxation in 1-Hexyl-3-methylimidazolium bis{(trifluoromethyl)sulfonyl}imide. <i>Journal of Physical Chemistry B</i> , 2009, 113, 8469-8474.	2.6	76
17	Nanophase separation in side chain polymers: new evidence from structure and dynamics. <i>New Journal of Physics</i> , 2004, 6, 10-10.	2.9	75
18	Interrelation between side chain crystallization and dynamic glass transitions in higher poly(n-alkyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.7	68

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19	Temperature dependence of glass-transition cooperativity from heat-capacity spectroscopy: Two post-Adam-Gibbs variants. <i>Physical Review B</i> , 2000, 61, 15092-15101.	3.2	66
20	Interrelation between Primary and Secondary Relaxations in Polymerizing Systems Based on Epoxy Resins. <i>Macromolecules</i> , 2005, 38, 7033-7042.	4.8	64
21	Size-dependent growth of polymorphs in nanopores and Ostwald's step rule of stages. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 21367.	2.8	64
22	Relaxation in poly(alkyl methacrylate)s: Change of intermolecular coupling with molecular structure, tacticity, molecular weight, copolymerization, crosslinking, and nanoconfinement. <i>Polymer</i> , 2006, 47, 7222-7230.	3.8	62
23	The role of linked phospholipids in the rubber-filler interaction in carbon nanotube (CNT) filled natural rubber (NR) composites. <i>Polymer</i> , 2014, 55, 4738-4747.	3.8	60
24	Heat Capacity Spectroscopy Compared to Other Linear Response Methods at the Dynamic Glass Transition in Poly(vinyl acetate). <i>Macromolecules</i> , 1996, 29, 5183-5189.	4.8	58
25	Confined Dynamics and Crystallization in Self-Assembled Alkyl Nanodomains. <i>Journal of Physical Chemistry B</i> , 2010, 114, 15459-15465.	2.6	52
26	Pressure-Induced Compatibility in a Model Polymer Blend. <i>Physical Review Letters</i> , 1998, 81, 594-597.	7.8	48
27	Temperature modulated DSC for the multiple glass transition in poly(n-alkyl methacrylates). <i>Thermochimica Acta</i> , 2002, 391, 219-225.	2.7	48
28	Temperature dependence of a glass transition cooperativity. <i>Acta Polymerica</i> , 1997, 48, 369-378.	0.9	46
29	On the crystallization behavior of frustrated alkyl groups in poly(n-octadecyl methacrylate). <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 5013-5020.	3.1	44
30	Two calorimetrically distinct parts of the dynamic glass transition. <i>Europhysics Letters</i> , 1998, 44, 321-327.	2.0	41
31	Linearity of heat capacity step near the onset of $T_g$ glass transition in poly(n-alkylmethacrylate)s. <i>Acta Polymerica</i> , 1996, 47, 525-529.	0.9	40
32	Glass transition cooperativity from heat capacity spectroscopy's temperature dependence and experimental uncertainties. <i>Thermochimica Acta</i> , 2001, 377, 113-124.	2.7	40
33	Nanoconfinement as a tool to study early stages of polymer crystallization. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 1556-1561.	2.1	40
34	High Temperature Thermoplastic Elastomers Synthesized by Living Anionic Polymerization in Hydrocarbon Solvent at Room Temperature. <i>Macromolecules</i> , 2016, 49, 2646-2655.	4.8	39
35	Foundation of the Outstanding Toughness in Biomimetic and Natural Spider Silk. <i>Biomacromolecules</i> , 2017, 18, 3954-3962.	5.4	38
36	Molecular cooperativity against locality at glass transition onset in poly(n butyl methacrylate). <i>Journal of Physics Condensed Matter</i> , 1994, 6, 6941-6945.	1.8	37

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37	Characteristic length of the glass transition. Journal of Physics Condensed Matter, 2001, 13, L451-L462.	1.8	37
38	Identification of Slow Dynamic Processes in Poly(n-hexyl Methacrylate) by Solid-State 1D-MAS Exchange NMR. Macromolecules, 2003, 36, 3992-4003.	4.8	37
39	Structural and dynamic nanoheterogeneities in higher poly(alkyl methacrylate)s. Journal of Non-Crystalline Solids, 2002, 307-310, 658-666.	3.1	36
40	Crossover Region of Dynamic Glass Transition in Poly(n-hexyl methacrylate) by Heat Capacity Spectroscopy. Macromolecules, 1998, 31, 8973-8980.	4.8	34
41	Secondary Relaxation of the Johari~Goldstein Kind in Alkyl Nanodomains. Macromolecules, 2004, 37, 8123-8127.	4.8	34
42	Long-term behavior and side chain crystallization of poly(3-alkyl thiophenes). Soft Matter, 2010, 6, 3506.	2.7	33
43	3D Printing of Supramolecular Polymers: Impact of Nanoparticles and Phase Separation on Printability. Macromolecular Rapid Communications, 2019, 40, e1900467.	3.9	33
44	Crystallization Behavior of Acetaminophen in Nanopores. The Open Physical Chemistry Journal, 2007, 1, 18-24.	0.4	31
45	Blends of ethylene~octene copolymers with different chain architectures ~ Morphology, thermal and mechanical behavior. Polymer, 2013, 54, 5207-5213.	3.8	29
46	Relaxation behavior of polyurethane networks with different composition and crosslinking density. Polymer, 2017, 111, 83-90.	3.8	29
47	Poly(~caprolactone)~poly(isobutylene): A crystallizing, hydrogen~bonded pseudo~block copolymer. Journal of Polymer Science Part A, 2011, 49, 3404-3416.	2.3	27
48	Morphology of Porous Hosts Directs Preferred Polymorph Formation and Influences Kinetics of Solid/Solid Transitions of Confined Pharmaceuticals. Crystal Growth and Design, 2014, 14, 78-86.	3.0	27
49	Quantification of different contributions to dissipation in elastomer nanoparticle composites. Polymer, 2017, 111, 48-52.	3.8	24
50	Effect of Non~rubber Components of ~NR on the Carbon Nanotube (~CNT) Localization in ~SBR/~NR Blends. Macromolecular Materials and Engineering, 2014, 299, 569-582.	3.6	23
51	~Click~Triggered Self~Healing Graphene Nanocomposites. Macromolecular Rapid Communications, 2016, 37, 1715-1722.	3.9	23
52	Confirmation of a calorimetric peculiarity in the crossover region of glass transition in poly(n-hexyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.6	22
53	Dynamic shear modulus in the splitting region of poly(alkyl methacrylates). Colloid and Polymer Science, 1994, 272, 1439-1446.	2.1	21
54	About different packing states of alkyl groups in comb-like polymers with rigid backbones. Soft Matter, 2016, 12, 8093-8097.	2.7	20

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55	Influence of structure gradients in injection moldings of isotactic polypropylene on their mechanical properties. <i>Polymer</i> , 2020, 200, 122556.	3.8	18
56	Dynamic Glass Transition above the Cooperativity Onset in Poly(n-octyl methacrylate). <i>Macromolecules</i> , 1997, 30, 8420-8424.	4.8	17
57	Low-Temperature Heat Capacity, Glass-Transition Cooperativity, and Glass-Structure Vault Breakdown in a Series of Poly(n-alkyl methacrylate)s. <i>Macromolecules</i> , 2001, 34, 5927-5935.	4.8	17
58	Side chain crystallization in microphase-separated poly(styrene-block-octadecylmethacrylate) copolymers. <i>Thermochimica Acta</i> , 2005, 432, 254-261.	2.7	17
59	Relaxation Behavior and Crystallization Kinetics of Amorphous Acetaminophen. <i>Letters in Drug Design and Discovery</i> , 2006, 3, 723-730.	0.7	17
60	Interrelations Between Side Chain and Main Chain Packing in Different Crystal Modifications of Alkoxylated Polyesters. <i>Journal of Physical Chemistry B</i> , 2017, 121, 4583-4591.	2.6	16
61	Effect of Molecular Weight on $\beta$ Splitting Region of Dynamic Glass Transition in Poly(ethyl Tj ETQq1 1 0.784314 rgBT /Overlock 10	4.8	15
62	Pharmaceutical nanocrystals confined in porous host systems – interfacial effects and amorphous interphases. <i>Chemical Communications</i> , 2016, 52, 4466-4469.	4.1	15
63	Ageing effects on dynamic shear moduli at the onset of the dynamic glass transition in two poly(alkyl) Tj ETQq1 1 0.784314 rgBT /Over	3.8	14
64	Synthesis of supramolecular precision polymers: Crystallization under conformational constraints. <i>Journal of Polymer Science Part A</i> , 2017, 55, 3736-3748.	2.3	13
65	Thermal response in the splitting region of the dynamic glass transition. <i>Journal of Non-Crystalline Solids</i> , 1994, 172-174, 191-196.	3.1	12
66	Hierarchical Nanostructures in Semifluorinated Norbornene Block Copolymers. <i>Macromolecules</i> , 2011, 44, 958-965.	4.8	12
67	Influence of shear processing on morphology orientation and mechanical properties of styrene butadiene triblock copolymers. <i>Polymer</i> , 2014, 55, 3782-3791.	3.8	12
68	Structure formation in nanophase-separated systems with lamellar morphology: Comb-like vs. linear precision polymers. <i>European Polymer Journal</i> , 2018, 103, 116-123.	5.4	12
69	On the effective elastic properties of isotactic polypropylene. <i>Polymer</i> , 2019, 160, 291-302.	3.8	12
70	The influence of copolymerization and plasticization on the $\beta$ splitting behaviour of the glass transition in poly(n-alkylmethacrylate)s. <i>Polymer</i> , 1997, 38, 4011-4018.	3.8	11
71	The glass-softening temperature range and non-Arrhenius dynamics: the case of vitrified water. <i>Journal of Non-Crystalline Solids</i> , 2000, 278, 58-68.	3.1	11
72	From small molecules to polymers: Relaxation behavior of n-butyl methacrylate based systems. <i>Journal of Non-Crystalline Solids</i> , 2007, 353, 3976-3983.	3.1	11

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73	Confined relaxation dynamics in long range ordered polyesters with comb-like architecture. <i>Polymer</i> , 2014, 55, 6844-6852.	3.8	11
74	Crystallization of Frustrated Alkyl Groups in Polymeric Systems Containing Octadecylmethacrylate. , 2007, , 201-228.		11
75	Confirmation of Plazek's Slight Shoulder in the Shear Retardation Spectrum of Poly(vinyl acetate) at the Dynamic Glass Transition. <i>Macromolecules</i> , 1995, 28, 5394-5395.	4.8	10
76	Strong isotopic labeling effects on the pressure dependent thermodynamics of polydimethylsiloxane/polyethylmethylsiloxane blends. <i>Journal of Chemical Physics</i> , 2002, 116, 1185-1192.	3.0	10
77	Relation between structural relaxation time and configurational entropy: A test of the Adam-Gibbs model on epoxy resins. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2002, 82, 339-346.	0.6	10
78	Onset of the dynamic glass transition in poly(n butyl methacrylate). <i>Physica A: Statistical Mechanics and Its Applications</i> , 1993, 201, 72-78.	2.6	8
79	On the Difference Between the Tensile Stiffness of Bulk and Slice Samples of Microstructured Materials. <i>Applied Composite Materials</i> , 2020, 27, 969-988.	2.5	7
80	Effects of quenching and physical aging on the relaxation behavior of nanophase-separated side chain polymers. <i>Journal of Physics: Conference Series</i> , 2006, 40, 67-75.	0.4	6
81	Proteins: is the folding process dynamically encoded?. <i>Soft Matter</i> , 2007, 3, 391.	2.7	6
82	Diblock-Copolymer-Based Composites for Tire-Tread Applications with Improved Filler Network Topology. <i>ACS Applied Nano Materials</i> , 2018, 1, 1003-1008.	5.0	6
83	Silanization of Silica Nanoparticles and Their Processing as Nanostructured Micro"Raspberry Powders" A Route to Control the Mechanical Properties of Isoprene Rubber Composites. <i>Polymer Composites</i> , 2019, 40, E732.	4.6	6
84	Polymorphic states and phase transitions in a comb-like polymer having a rigid polyester backbone and flexible side chains. <i>Thermochimica Acta</i> , 2019, 677, 162-168.	2.7	6
85	Investigation of slow dynamic processes in natural abundance polymeric systems by novel 1D-MAS exchange NMR methods. <i>Macromolecular Symposia</i> , 2002, 184, 175-182.	0.7	5
86	Structure and Dynamics in a Polymorphic Nanophase-Separated Stiff Comblike Polymer. <i>Macromolecules</i> , 2019, 52, 6943-6952.	4.8	5
87	Self-assembled structure and relaxation dynamics of diblock copolymers made of polybutadiene and styrene/butadiene rubber. <i>RSC Advances</i> , 2016, 6, 50460-50470.	3.6	4
88	Morphology orientation of comb-like polymers with rigid backbones under the influence of shear fields. <i>AIMS Materials Science</i> , 2017, 4, 970-981.	1.4	4
89	Struik law for enthalpy retardation at the glass transition in poly(n-alkylmethacrylates) measured by DSC aging experiments. <i>Colloid and Polymer Science</i> , 1995, 273, 1151-1155.	2.1	3
90	Diffusion coefficients of polyurethane coatings by swelling experiments using dielectric spectroscopy. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49174.	2.6	3

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91	Common Origin of Filler Network Related Contributions to Reinforcement and Dissipation in Rubber Composites. <i>Polymers</i> , 2021, 13, 2534.	4.5	3
92	Stability of the $T_{FT} < T_g$ relation between Vogel temperatures of flow and glass transition against determination variants. <i>Rheologica Acta</i> , 1997, 36, 187-196.	2.4	2
93	Mössbauer and dielectric spectroscopy of the dynamic glass transition of a block copolymer. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 961-970.	1.8	2
94	Confined Dynamics in Nanophase-Separated Side Chain Polymers. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	2
95	INTERRELATIONS BETWEEN MORPHOLOGY AND SOFTENING BEHAVIOR IN SELF-ASSEMBLED POLY (BUTADIENE-BLOCK-(STYRENE-STAT-BUTADIENE)) COPOLYMERS. <i>Rubber Chemistry and Technology</i> , 2016, 89, 392-405.	1.2	2
96	Tuning layered superstructures in precision polymers. <i>Scientific Reports</i> , 2020, 10, 12119.	3.3	2
97	Stability of the $T_{FT} < T_g$ relation between Vogel temperatures of flow and glass transition against determination variants. <i>Rheologica Acta</i> , 1997, 36, 187-196.	2.4	2
98	Phase Transitions in Polymers Containing Long Self-Assembled $CH_2$ Sequences in the Side Chain: A Positron Lifetime Study. <i>Materials Science Forum</i> , 2010, 666, 71-74.	0.3	1
99	Side chain crystallization and non-equilibrium phenomena in nanophase separated poly(3-alkyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.4	1