John T Bendler

List of Publications by Year
in descending order

59 papers	2,553 citations	318942 23 h-index	223390 49 g-index
59 all docs	59 docs citations	59 times ranked	1413 citing authors

#	Article	IF	Citations
1	Meanâ€Field Calculation of M Z for Randomly Branched Condensation Polymers. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1415-1422.	2.4	1
2	Dielectric Properties of Bisphenol A Polycarbonate and Its Tethered Nitrile Analogue. Macromolecules, 2013, 46, 4024-4033.	2.2	66
3	Effects of pressure, temperature and volume on the electrical conductivity of polymer electrolytes. Electrochimica Acta, 2011, 57, 160-164.	2.6	1
4	ELECTRICAL RELAXATION IN ULTEMÂ® AND ULTEMÂ® CONTAINING MESOPOROUS SILICA. AIP Conference Proceedings, 2008, , .	0.3	0
5	THE DEFECT DIFFUSION MODEL AND TIMES OF POLYMERS. AIP Conference Proceedings, 2008, , .	0.3	0
6	Anomalous diffusion producing normal relaxation and transport. Journal of Physics Condensed Matter, 2007, 19, 065121.	0.7	4
7	The defect diffusion model and the properties of glasses and liquids. Journal of Non-Crystalline Solids, 2006, 352, 4835-4842.	1.5	15
8	<title>Random processes underlying stretched times and divergent time scales near the glass transition (Invited Paper)</title>. , 2005, , .		0
9	Free-volume dynamics in glasses and supercooled liquids. Physical Review E, 2005, 71, 031508.	0.8	28
10	Ductile Polycarbonates Containing Bisaryl Units: Theory and Modeling. ACS Symposium Series, 2005, , 122-132.	0.5	0
11	Synthesis of 1,1-Dichloro-2,2-bis[4-(4â€²-Hydroxyphenyl)phenyl]ethene and Its Incorporation into Homo- and Heteropolycarbonates. ACS Symposium Series, 2005, , 133-146.	0.5	1
12	Synthesis of High Aspect Ratio Bisphenols and Polycarbonates Incorporating Bisaryl Units. Macromolecules, 2005, 38, 3622-3629.	2.2	17
13	Sources of exponents. Physica D: Nonlinear Phenomena, 2004, 193, 67-72.	1.3	2
14	Reply to comments on the need to reconsider traditional free volume theory for polymer electrolytes. Electrochimica Acta, 2004, 49, 5249-5252.	2.6	14
15	The need to reconsider traditional free volume theory for polymer electrolytes. Electrochimica Acta, 2003, 48, 2267-2272.	2.6	33
16	Physical basis of fragility. Journal of Chemical Physics, 2003, 118, 6713-6716.	1.2	19
17	WHY CONDUCTIVITY DECREASES WITH PRESSURE IN ION-DOPED POLYMERS. Fractals, 2003, 11, 93-97.	1.8	3
18	Anomalous defect diffusion near the glass transition. Chemical Physics, 2002, 284, 311-317.	0.9	13

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19	WHY CONDUCTIVITY DECREASES WITH PRESSURE IN ION-DOPED POLYMERS. , 2002, , .		0
20	Effect of high pressure on the electrical conductivity of ion conducting polymers. Electrochimica Acta, 2001, 46, 1615-1621.	2.6	28
21	A New Vogel-Like Law: Ionic Conductivity, Dielectric Relaxation, and Viscosity near the Glass Transition. Physical Review Letters, 2001, 87, 195503.	2.9	82
22	A dynamic n.m.r. study of dissolved and solid cyclohexyl polycarbonate. Polymer, 1998, 39, 1339-1344.	1.8	4
23	Diffusion Coefficients of Xenon in Polystyrene Determined by Xenon-129 NMR Spectroscopy. Macromolecules, 1996, 29, 2138-2142.	2.2	30
24	A spin-lattice relaxation study of dissolved cyclohexyl polycarbonate. Polymer, 1996, 37, 3783-3790.	1.8	3
25	Stretched Times and Divergent Time Scales. , 1995, , 189-196.		1
26	An NMR study of segmental motion in poly(isobutylene) and the relationship to translational diffusion of sorbed CO2. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 1707-1717.	2.4	24
27	Improved computational methods for the calculation of Kohlrausch-Williams/Watts (KWW) decay functions. Polymer, 1994, 35, 1880-1883.	1.8	27
28	Defect diffusion and a two-fluid model for structural relaxation near the glass-liquid transition. The Journal of Physical Chemistry, 1992, 96, 3970-3973.	2.9	53
29	Continuous-site model for Langmuir gas sorption in glassy polymers. Macromolecules, 1992, 25, 990-992.	2.2	31
30	Time-Scale Invariance in Transport and Relaxation. Physics Today, 1991, 44, 26-34.	0.3	516
31	Fractal clusters in the learning curve. Physica A: Statistical Mechanics and Its Applications, 1991, 177, 585-588.	1.2	3
32	Random walk model for viscoelastic response of glassy polymers. Physica A: Statistical Mechanics and Its Applications, 1990, 168, 592-601.	1.2	1
33	Tables of the inverse Laplace transform of the function e -S-Beta. Journal of Research of the National Institute of Standards and Technology, 1990, 95, 433.	0.4	25
34	The Arrhenius Law versus the Vogel Law. , 1990, , 161-166.		1
35	The Stretched Exponential, The Vogel Law, and All That. NATO ASI Series Series B: Physics, 1989, , 347-352.	0.2	1
36	Generalized Vogel law for glass-forming liquids. Journal of Statistical Physics, 1988, 53, 531-541.	0.5	96

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37	A first passage time problem for random walk occupancy. Journal of Statistical Physics, 1988, 50, 1069-1087.	0.5	2
38	Fractal time symmetry in the glass transition. Nuclear Physics, Section B, Proceedings Supplements, 1988, 5, 82-85.	0.5	11
39	Polymer melt dynamics model with a relaxation time exponent of 10/3. Macromolecules, 1988, 21, 521-523.	2.2	22
40	Defect-diffusion models of relaxation. Journal of Molecular Liquids, 1987, 36, 37-46.	2.3	66
41	Barrier Distributions and Defect Migration in Glasses. Annals of the New York Academy of Sciences, 1986, 484, 300-301.	1.8	0
42	The continuous-time random walk description of the non-equilibrium mechanical response of crosslinked elastomers. British Polymer Journal, 1985, 17, 126-128.	0.7	15
43	Analysis of dielectric loss data using the Williamsâ€“Watts function. Journal of Chemical Physics, 1985, 83, 1424-1427.	1.2	25
44	Derivation of the Kohlrausch-Williams/Watts decay law from activation-energy dispersion. Macromolecules, 1985, 18, 591-592.	2.2	101
45	Stable law densities and linear relaxation phenomena. Journal of Research of the National Bureau of Standards (United States), 1985, 90, 27.	0.3	53
46	Polymer Modeling Applications of Symbolic Computation. , 1985, , 169-182.		0
47	On LÃ©vy (or stable) distributions and the Williams-Watts model of dielectric relaxation. Journal of Statistical Physics, 1984, 34, 129-162.	0.5	297
48	Levy (stable) probability densities and mechanical relaxation in solid polymers. Journal of Statistical Physics, 1984, 36, 625-637.	0.5	54
49	Microscopic approach to volume recovery of polymers. Macromolecules, 1984, 17, 1174-1177.	2.2	19
50	Proton spin relaxation and molecular motion in a bulk polycarbonate. Macromolecules, 1983, 16, 658-665.	2.2	79
51	Phase behavior of polystyrene, poly(2,6-dimethyl-1,4-phenylene oxide), and their brominated derivatives. Macromolecules, 1983, 16, 753-757.	2.2	481
52	Internal molecular motions and the elastic constants of polymer glasses. Macromolecules, 1982, 15, 1325-1328.	2.2	3
53	SEMI-EMPIRICAL SCF-MO CALCULATIONS OF BACKBONE CONFORMATIONAL STATES IN SOME GLASSY POLYMERS. Annals of the New York Academy of Sciences, 1981, 371, 299-300.	1.8	4
54	SEMI-EMPIRICAL SCF-MO CALCULATIONS OF BACKBONE CONFORMATIONAL STATES IN SOME GLASSY POLYMERS. Annals of the New York Academy of Sciences, 1981, 371, 299-300.	1.8	12

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55	A Solvable Model of Polymer Main-Chain Dynamics with Applications to Spin Relaxation. Macromolecules, 1978, 11, 650-655.	2.2	48
56	Resonance calculations for arbitrary potentials. Physical Review A, 1978, 18, 1816-1825.	1.0	75
57	Biellipsoidal Model for AB Block Copolymers. Excluded Volume Effect in Isolated Molecules. Macromolecules, 1977, 10, 635-646.	2.2	18
58	Phenomenology of Short-Range Order in n-Alkane Liquids. Macromolecules, 1977, 10, 162-168.	2.2	18
59	Monte Carlo studies of isolated AB block copolymer molecules. Polymer Engineering and Science, 1977, 17, 622-626.	1.5	7