Shin Yagihara

List of Publications by Year
in descending order

110 papers	2,837 citations	159573 30 h-index	197805 49 g-index
112 all docs	112 docs citations	112 times ranked	1555 citing authors

#	Article	IF	Citations
1	Dielectric relaxation time and structure of bound water in biological materials. The Journal of Physical Chemistry, 1987, 91, 6337-6338.	2.9	174
2	The dielectric relaxation of mixtures of water and primary alcohol. Journal of Chemical Physics, 1989, 90, 3292-3294.	3.0	145
3	Dynamics of Water in a Polymer Matrix Studied by a Microwave Dielectric Measurement. Journal of Physical Chemistry B, 1998, 102, 3249-3251.	2.6	129
4	Glass Transitions in Aqueous Solutions of Protein (Bovine Serum Albumin). Journal of Physical Chemistry B, 2009, 113, 14448-14456.	2.6	116
5	Dielectric Relaxation Time and Relaxation Time Distribution of Alcoholâ^'Water Mixtures. Journal of Physical Chemistry A, 2002, 106, 458-464.	2.5	104
6	Dielectric study on hydration of B-, A-, and Z-DNA. Biopolymers, 1990, 30, 649-656.	2.4	95
7	Shape of dielectric relaxation curves of ethylene glycol oligomerâ€“water mixtures. Journal of Chemical Physics, 1998, 109, 9843-9847.	3.0	84
8	Microwave dielectric study on hydration of moist collagen. Biopolymers, 1990, 29, 1185-1191.	2.4	74
9	Dielectric study on dynamics of water in polymer matrix using a frequency range 106â€“1010 Hz. Journal of Chemical Physics, 1990, 93, 760-764.	3.0	72
10	The structure of water and methanol in pâ€dioxane as determined by microwave dielectric spectroscopy. Journal of Chemical Physics, 1992, 96, 6358-6361.	3.0	72
11	Broadband dielectric study of Î±â€“Î² separation for supercooled glycerolâ€“water mixtures. Journal of Non-Crystalline Solids, 2002, 307-310, 356-363.	3.1	72
12	The symmetric broadening of the water relaxation peak in polymerâ€“water mixtures and its relationship to the hydrophilic and hydrophobic properties of polymers. Journal of Chemical Physics, 2002, 116, 8610.	3.0	71
13	Dielectric study of water structure in polymer solution. The Journal of Physical Chemistry, 1994, 98, 13612-13615.	2.9	67
14	Dielectric study of the Î± and Î² processes in supercooled ethylene glycol oligomerâ€“water mixtures. Journal of Chemical Physics, 2004, 121, 7332-7340.	3.0	61
15	Dielectric study on dynamics and structure of water bound to DNA using a frequency range 107-1010 Hz. The Journal of Physical Chemistry, 1989, 93, 4963-4967.	2.9	53
16	Comparison of Dielectric Relaxations of Water Mixtures of Poly(vinylpyrrolidone) and 1-Vinyl-2-pyrrolidinone. Journal of Physical Chemistry B, 1999, 103, 4481-4484.	2.6	49
17	Dynamical structure of water around biopolymers investigated by microwave dielectric measurements using time domain reflectometry method. Journal of Non-Crystalline Solids, 2002, 305, 328-332.	3.1	47
18	The dielectric relaxation of supercooled ethyleneglycol-water mixtures. Journal of Molecular Liquids, 2001, 90, 113-120.	4.9	46

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19	X-Ray diffraction studies on the structure of hydrated collagen. Biopolymers, 1983, 22, 2539-2547.	2.4	43
20	Dynamics of Water in Partially Crystallized Polymer/Water Mixtures Studied by Dielectric Spectroscopy. Journal of Physical Chemistry B, 2007, 111, 10079-10087.	2.6	41
21	Thermoreversible gelation of isotactic-rich poly(N-isopropylacrylamide) in water. Journal of Chemical Physics, 2011, 135, 114903.	3.0	41
22	Molecular Dynamics of Hinge-Bending Motion of IgG Vanishing with Hydrolysis by Papain. Biophysical Journal, 2000, 79, 1023-1029.	0.5	39
23	Microwave Dielectric Study of Water Structure in the Hydration Process of Cement Paste. Journal of the American Ceramic Society, 1998, 81, 213-216.	3.8	39
24	Free water content and monitoring of healing processes of skin burns studied by microwave dielectric spectroscopyin vivo. Physics in Medicine and Biology, 2005, 50, 599-612.	3.0	38
25	Dielectric Properties of Ethyleneglycolâ^'1,4-Dioxane Mixtures Using TDR Method. Journal of Physical Chemistry A, 2007, 111, 2993-2998.	2.5	38
26	Dielectric Relaxation Time of Ice-Ih with Different Preparation. Journal of Physical Chemistry B, 2016, 120, 3950-3953.	2.6	36
27	Dielectric relaxation measurement and analysis of restricted water structure in rice kernels. Measurement Science and Technology, 2007, 18, 983-990.	2.6	34
28	Structural Behavior of Alcoholâ^'1,4-Dioxane Mixtures through Dielectric Properties Using TDR. Journal of Physical Chemistry A, 2009, 113, 10196-10201.	2.5	34
29	Recognition of a new permittivity function for glycerol by the use of the eigen-coordinates method. Journal of Non-Crystalline Solids, 2002, 305, 96-111.	3.1	33
30	Dielectric study on Î±- and Î²-processes in supercooled diethyleneglycolâ€“ and pentaethyleneglycolâ€“water mixtures. Journal of Non-Crystalline Solids, 2002, 305, 197-203.	3.1	31
31	Ordering in aqueous polysaccharide solutions. I. Dielectric relaxation in aqueous solutions of a triple-helical polysaccharide schizophyllan. Biopolymers, 2002, 63, 21-31.	2.4	30
32	Molecular Dynamics of Poly(N-isopropylacrylamide) in Protic and Aprotic Solvents Studied by Dielectric Relaxation Spectroscopy. Journal of Physical Chemistry B, 2012, 116, 775-781.	2.6	30
33	Ludwig-Soret effect of aqueous solutions of ethylene glycol oligomers, crown ethers, and glycerol: Temperature, molecular weight, and hydrogen bond effect. Journal of Chemical Physics, 2015, 143, 124504.	3.0	30
34	Dynamics and structure of water bound to DNA. The Journal of Physical Chemistry, 1988, 92, 4839-4841.	2.9	29
35	Study of hydrogen bonding and thermodynamic behavior in waterâ€“1,4-dioxane mixture using time domain reflectometry. Physica B: Condensed Matter, 2013, 421, 1-7.	2.7	28
36	Dielectric relaxation of oxide polymers in dilute solution. Macromolecules, 1984, 17, 630-634.	4.8	26

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37	Globule-coil transition of denatured globular protein investigated by a microwave dielectric technique. Biopolymers, 2000, 54, 388-397.	2.4	25
38	Segmental Relaxation of Hydrophilic Poly(vinylpyrrolidone) in Chloroform Studied by Broadband Dielectric Spectroscopy. Macromolecules, 2011, 44, 2140-2148.	4.8	25
39	Dielectric study on coupling constant of lower critical solution of poly (vinylmethylether) in water. Journal of Chemical Physics, 1996, 104, 6877-6880.	3.0	24
40	Microwave dielectric analysis of human stratum corneum in vivo. Biochimica Et Biophysica Acta - General Subjects, 1998, 1381, 293-304.	2.4	24
41	Phase Behavior of Co-Nonsolvent Systems: Poly(N-isopropylacrylamide) in Mixed Solvents of Water and Methanol. Langmuir, 2018, 34, 3003-3009.	3.5	22
42	Glass transition of partially crystallized gelatin-water mixtures studied by broadband dielectric spectroscopy. Journal of Chemical Physics, 2014, 140, 124506.	3.0	21
43	Dielectric study on chain dynamics of poly(glutamic acid) in aqueous solution using the frequency range 107-1010 Hz. Macromolecules, 1989, 22, 1285-1288.	4.8	20
44	Dielectric relaxation strength and magnitude of dipole moment of poly(vinyl pyrrolidone)in polar solutions. Journal of Molecular Liquids, 2013, 181, 110-114.	4.9	20
45	Dynamics of Uncrystallized Water, Ice, and Hydrated Protein in Partially Crystallized Gelatinâ€“Water Mixtures Studied by Broadband Dielectric Spectroscopy. Journal of Physical Chemistry B, 2017, 121, 265-272.	2.6	20
46	Ordering in aqueous polysaccharide solutions. II. Optical rotation and heat capacity of aqueous solutions of a triple-helical polysaccharide schizophyllan. Biopolymers, 2002, 63, 370-381.	2.4	18
47	Rotational motions of solvent siteâ€“dipole field around a protein. Chemical Physics Letters, 2003, 374, 453-458.	2.6	18
48	Thermally induced coupling of phase separation and gelation in an aqueous solution of hydroxypropylmethylcellulose (HPMC). Physica A: Statistical Mechanics and Its Applications, 2003, 319, 56-64.	2.6	18
49	Glass Transition and Dynamics of the Polymer and Water in the Poly(vinylpyrrolidone)â€“Water Mixtures Studied by Dielectric Relaxation Spectroscopy. Journal of Physical Chemistry B, 2016, 120, 6882-6889.	2.6	18
50	Broadband dielectric spectroscopy of a nematic liquid crystal in benzene. Journal of Chemical Physics, 2008, 129, 164509.	3.0	17
51	Recent Trends of Polymer Mediated Liposomal Gene Delivery System. BioMed Research International, 2014, 2014, 1-15.	1.9	17
52	Dielectric study on hierarchical water structures restricted in cement and wood materials. Measurement Science and Technology, 2017, 28, 044008.	2.6	16
53	Dielectric study of side-group rotation of methyl methacrylate in copolymers. Journal of Polymer Science, Polymer Physics Edition, 1978, 16, 1761-1771.	1.0	15
54	Title is missing!. Subsurface Sensing Technologies and Applications, 2001, 2, 15-30.	0.9	15

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55	Elementary processes in side-chain motions of poly(Î±-amino acids). Macromolecules, 1984, 17, 2700-2702.	4.8	14
56	Dynamical behavior of unfreezable molecules restricted in a frozen matrix. Journal of Non-Crystalline Solids, 2005, 351, 2629-2634.	3.1	14
57	Dielectric Relaxation for Studying Molecular Dynamics of Pullulan in Water. Journal of Physical Chemistry B, 2013, 117, 9034-9041.	2.6	14
58	Complementary analyses of fractal and dynamic water structures in proteinâ€“water mixtures and cheeses. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 440, 42-48.	4.7	14
59	Evaluation of dielectric relaxation spectrum of phospholipids in solution by time domain reflectometry. Journal of Chemical Physics, 1986, 84, 6511-6517.	3.0	13
60	Physical Meanings of Fractal Behaviors of Water in Aqueous and Biological Systems with Open-Ended Coaxial Electrodes. Sensors, 2019, 19, 2606.	3.8	13
61	Self-assembly of acetylated dextran with various acetylation degrees in aqueous solutions: Studied by light scattering. Carbohydrate Polymers, 2017, 159, 171-177.	10.2	12
62	Physical properties of tofu gel probed by water translational/rotational dynamics. Food Hydrocolloids, 2018, 77, 474-481.	10.7	12
63	Broadband dielectric study on the water-concentration dependence of the primary and secondary processes for triethyleneglycol-water mixtures. Physical Review E, 2008, 78, 011501.	2.1	11
64	Molecular dynamics of poly(methyl methacrylate) determined by dielectric relaxation spectroscopy. , 2013, , .		11
65	Dielectric Relaxation of Ice in Gelatinâ€“Water Mixtures. Journal of Physical Chemistry B, 2017, 121, 2896-2901.	2.6	11
66	Enthalpy and Dielectric Relaxation of Poly(vinyl methyl ether). Macromolecules, 2018, 51, 5806-5811.	4.8	11
67	Dielectric Properties of Glass Beads with Talc as a Reference Material for Calibration and Verification of Dielectric Methods and Devices for Measuring Soil Moisture. Materials, 2020, 13, 1968.	2.9	11
68	Dynamics of the Poly(N-Isopropylacrylamide) Microgel Aqueous Suspension Investigated by Dielectric Relaxation Spectroscopy. Macromolecules, 2022, 55, 1218-1229.	4.8	11
69	Electricâ€field penetration depth and dielectric spectroscopy observations of human skin. Skin Research and Technology, 2020, 26, 255-262.	1.6	10
70	How does thermodiffusion of aqueous solutions depend on concentration and hydrophobicity?. European Physical Journal E, 2014, 37, 94.	1.6	9
71	Dynamic Behaviors of Solvent Molecules Restricted in Poly (Acryl Amide) Gels Analyzed by Dielectric and Diffusion NMR Spectroscopy. Gels, 2018, 4, 56.	4.5	9
72	Structured water mobile below the freezing point in aqueous solutions of a triple-helical polysaccharide schizophyllan.. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 1998, 74, 1-5.	3.8	8

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73	Relaxation dynamics of liposomes in an aqueous solution. Physical Chemistry Chemical Physics, 2015, 17, 18449-18455.	2.8	8
74	Dynamics of Uncrystallized Water, Ice, and Hydrated Polymer in Partially Crystallized Poly(vinylpyrrolidone)â€“Water Mixtures. Journal of Physical Chemistry B, 2020, 124, 1521-1530.	2.6	8
75	Phase Transition and Abnormal Behavior of a Nematic Liquid Crystal in Benzene. Journal of Physical Chemistry B, 2009, 113, 11109-11114.	2.6	7
76	Microwave Dielectric Study of an Oligomeric Electrolyte Gelator by Time Domain Reflectometry. Journal of Physical Chemistry B, 2009, 113, 10112-10116.	2.6	7
77	Dynamics of uncrystallized water in partially crystallized poly(ethylene glycol)â€“water mixtures studied by dielectric spectroscopy. Polymer Journal, 2017, 49, 511-518.	2.7	7
78	Structural and kinetic modification of aqueous hydroxypropylmethylcellulose (HPMC) induced by electron beam irradiation. Physica A: Statistical Mechanics and Its Applications, 2005, 353, 9-20.	2.6	6
79	Broadband Dielectric Spectroscopy of Ferroelectric Liquid Crystal. Japanese Journal of Applied Physics, 2007, 46, 3211-3213.	1.5	6
80	Dynamics of Polymer and Glass Transition in Partially Crystallized Polymer Solution Studied by Dielectric Spectroscopy. Journal of Biomaterials Science, Polymer Edition, 2010, 21, 1937-1946.	3.5	6
81	DIELECTRIC RELAXATION OF 1-PROPANOL IN 1,4-DIOXANE AND CYCLOHEXANE. Chemistry Letters, 1985, 14, 137-140.	1.3	5
82	Dielectric relaxation of amorphous poly(propylene oxide)s at gigahertz frequencies. Polymer, 1994, 35, 1166-1170.	3.8	5
83	Dielectric study on temperatureâ€“concentration superposition of liquid to glass in fructoseâ€“water mixtures. Journal of Molecular Liquids, 2015, 206, 39-46.	4.9	5
84	Evaluation of water structures in cotton cloth by fractal analysis with broadband dielectric spectroscopy. Journal of Materials Science, 2021, 56, 17844-17859.	3.7	5
85	Dielectric Study on Cooperative Motion of Side Chain of Copoly(Î³-methyl L-glutamate, Î³-p-chlorobenzyl) Tj ETQq1 1 0.784314 rgBT /	2.7	4
86	Dielectric relaxation and glass transition temperature of copolymers. Journal of Polymer Science, Polymer Physics Edition, 1981, 19, 1333-1337.	1.0	4
87	Cooperative Interaction on Side-Chain Motion of Poly(Î±-amino acid). Polymer Journal, 1982, 14, 233-240.	2.7	4
88	Universality of Separation Behavior of Relaxation Processes in Supercooled Aqueous Solutions As Revealed by Broadband Dielectric Measurements. Journal of Physical Chemistry B, 2009, 113, 11448-11452.	2.6	4
89	Anesthetic Molecule Interaction of Noble Gases with Proteins and Lipids and their Effect: A Review. Current Drug Delivery, 2018, 15, 1381-1392.	1.6	4
90	Dynamics of Water Structure in Biological System and Broadband Dielectric Spectroscopy.. Seibutsu Butsuri, 2004, 44, 4-9.	0.1	3

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91	Abnormal dielectric relaxation phenomena in mixture of polar liquid and conductive particles. Journal of Applied Physics, 2002, 91, 4506-4510.	2.5	2
92	Ludwig-Soret effect of non-ionic surfactant aqueous solution studied by beam deflection method. , 2013, , .		2
93	Elbowâ€•and hingeâ€bending motions of <scp>I</scp>g<scp>G</scp>: Dielectric response and dynamic feature. Biopolymers, 2016, 105, 626-632.	2.4	2
94	Dynamics of amyloid-like aggregation and gel formation of hen egg-white lysozyme in highly concentrated ethanol solution. Journal of Biorheology, 2017, 31, 21-28.	0.5	2
95	Electrocapillary Phenomena at Edible Oil/Saline Interfaces. Journal of Oleo Science, 2017, 66, 235-249.	1.4	2
96	Heterogeneous Solvent Dielectric Relaxation in Polymer Solutions of Water and Alcohols. Frontiers in Physics, 2020, 8, .	2.1	2
97	Dielectric Relaxation and Dynamic Light Scattering Study of Liposome in the Aqueous Solution. Materials Research Society Symposia Proceedings, 2007, 1019, 1.	0.1	1
98	Temperature dependent study of thermal diffusion for aqueous solutions of Î±-, Î²-, and Î³- cyclodextrin. , 2013, , .		1
99	Dielectric properties of ferroelectric and antiferroelectric liquid crystals. Transactions of the Materials Research Society of Japan, 2014, 39, 385-400.	0.2	1
100	Physical Meanings of Fractal Behaviors of Water in Aqueous and Biological Systems. , 2018, , .		1
101	Analytical approach to spatial distribution of water molecules by dielectric measurements. , 2021, , .		1
102	Recent Developments on Dielectric Spectroscopy -1ST International Conference on Dielectric Spectroscopy in Physical, Chemical, and Biological Applications-. Seibutsu Butsuri, 2001, 41, 240-243.	0.1	1
103	Investigation of dynamical properties of free water in hydroxypropyl celluloseâ€“water mixture by PFG-NMR. Physica D: Nonlinear Phenomena, 2022, , 133348.	2.8	1
104	Fractal water structures affected by softener agent in cotton cloths. Journal of Materials Science, 2022, 57, 13060-13077.	3.7	1
105	Broadband Dielectric Study on Alpha- and Beta-Process for Poly(Ethylene Glycol)-Water Mixtures. AIP Conference Proceedings, 2004, , .	0.4	0
106	Johari-Goldstein process of solute in high-water-content aqueous solutions. Physical Review E, 2013, 87, 042309.	2.1	0
107	Investigation of the molecular dynamics of water in void spaces of wood using dielectric measurements. , 2021, , .		0
108	Dynamics of Protein and Water Structure in Various Time-Space Domains. Seibutsu Butsuri, 2007, 47, 302-308.	0.1	0

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109	Swelling Equilibrium of a Gel in Binary Mixed Solvents. , 2009, , 101-105.		0
110	Dynamics of water in the partially crystallized gelatin water mixture. Journal of Advanced Science, 2012, 24, 41-44.	0.1	0