Makoto Yamaguchi

List of Publications by Year
in descending order

40 papers	1,132 citations	567281 15 h-index	377865 34 g-index
40 all docs	40 docs citations	40 times ranked	1489 citing authors

#	Article	IF	Citations
1	DFT Study on Side Chain Detachment of Perfluorosulfonic Acid Ionomers by Radical-Assisted Nucleophilic Attack of Water. Polymer Degradation and Stability, 2022, 196, 109832.	5.8	4
2	DFT Study on the Chemical Degradation Mechanism of Perfluorobis(sulfonyl)imide Sulfonic Acid Ionomer Membranes. Journal of Physical Chemistry C, 2021, 125, 1929-1939.	3.1	5
3	Thermal desorption and pyrolysis direct analysis in real time mass spectrometry of Nafion membrane. Journal of Applied Polymer Science, 2021, 138, 50172.	2.6	6
4	Size and shape of Nafion particles in water after highâ€temperature treatment. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 813-818.	2.1	8
5	Gamma radiolysis of perfluorosulfonic acid ionomers and their side chain model compounds in water. Radiation Physics and Chemistry, 2019, 159, 89-94.	2.8	4
6	DFT Studies of Perfluorosulfonic Acid Ionomer Degradation in Fuel Cells. Journal of Physical Chemistry C, 2018, 122, 20135-20143.	3.1	15
7	DFT calculation of isotropic hyperfine coupling constants of spin adducts of 5,5-dimethyl-1-pyrroline-N-oxide in benzene and water. Computational and Theoretical Chemistry, 2017, 1104, 24-31.	2.5	2
8	Development of novel three-dimensional reconstruction method for porous media for polymer electrolyte fuel cells using focused ion beam-scanning electron microscope tomography. Journal of Power Sources, 2017, 347, 108-113.	7.8	40
9	Ab initio molecular dynamics simulation of infrared absorption spectra of crystalline sulfuric acid mono- and tetra-hydrates. Computational and Theoretical Chemistry, 2016, 1089, 54-58.	2.5	4
10	Prototype Dithiolene Radical Anion (Sâ•CHâ€“CHâ•Sâ€¢â€“) As Derived from Electron Attachment to 1,4-Dithiane: Experimental and Computational Studies on Electronic Structure. Journal of Physical Chemistry A, 2016, 120, 3570-3577.	2.5	4
11	Ab Initio Molecular Dynamics Simulation of Infrared Absorption Spectra of H3O+ and H5O+2 in Nonaqueous Solutions of Trifluoromethanesulfonic Acid Hydrates. Journal of Solution Chemistry, 2016, 45, 1548-1559.	1.2	1
12	Density functional theory calculation of Î¼-oxo and Î¼-hydroxo bridged iron(III) aqua dimer complexes in perfluorinated sulfonic acid ionomer membranes. Computational and Theoretical Chemistry, 2015, 1071, 61-67.	2.5	3
13	Dispersion of Rod-like Particles of Nafion in Salt-Free Water/1-Propanol and Water/Ethanol Solutions. Journal of Physical Chemistry B, 2014, 118, 141210091239007.	2.6	40
14	Calculation of infrared absorption intensities of combination bands of cyclic acid dimers by vibrational second order perturbation theory. Computational and Theoretical Chemistry, 2013, 1022, 70-74.	2.5	2
15	Vibrational Analysis of Side Chain Model Compounds of Perfluorinated Alkyl Sulfonic Acid Ionomers. Journal of Physical Chemistry A, 2012, 116, 10850-10863.	2.5	14
16	Hemibonding of Hydroxyl Radical and Halide Anion in Aqueous Solution. Journal of Physical Chemistry A, 2011, 115, 14620-14628.	2.5	30
17	Multireference Configuration Interaction Study of the Vibronic Transitions and Photodissociation of Vinyl Bromide and Vinyl Chloride Radical Cations in the Second Excited State. Journal of Physical Chemistry A, 2010, 114, 7937-7944.	2.5	2
18	An approach of NMR relaxometry for understanding water in saturated compacted bentonite. Physics and Chemistry of the Earth, 2008, 33, S169-S176.	2.9	29

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19	Multireference Configuration Interaction Calculation of the BÌƒ2Aâ€˜Ââ€˜â^'XÌƒ2Aâ€˜Ââ€˜ Transition of Halogen- and Methyl-Substituted Vinoxy Radicals. Journal of Physical Chemistry A, 2006, 110, 12419-12426.	2.5	8
20	Dye-sensitized solar cells with ionic gel electrolytes prepared from imidazolium salts and agarose. Comptes Rendus Chimie, 2006, 9, 611-616.	0.5	39
21	Imaging of water distribution in thermally fractured granites by SPRITE. Magnetic Resonance Imaging, 2005, 23, 325-327.	1.8	2
22	A new alkyl-imidazole polymer prepared as an inonic polymer electrolyte by in situ polymerization of dye sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 164, 81-85.	3.9	78
23	Network structure of B2O3â€“PbO and B2O3â€“PbOâ€“PbBr2 glasses analyzed by pulsed neutron diffraction and Raman spectroscopy. Journal of Alloys and Compounds, 2004, 377, 167-173.	5.5	35
24	Synthesis, characterization and some adsorption properties of TMMA chelating resin. Journal of Solid State Chemistry, 2003, 171, 353-357.	2.9	9
25	Application of Carbon Nanotubes to Counter Electrodes of Dye-sensitized Solar Cells. Chemistry Letters, 2003, 32, 28-29.	1.3	463
26	Laser-induced fluorescence of the CHXCFO (X=F,Cl) radicals. Journal of Chemical Physics, 2002, 116, 6961-6972.	3.0	9
27	Anion Intercalation and Anion Exchange in Bismuth Compounds. Materials Research Society Symposia Proceedings, 2002, 755, 1.	0.1	0
28	Laser-Induced Fluorescence of the CHClCHO Radical and Reaction of Oxygen Atoms with Halogenated Ethylenes. Journal of Physical Chemistry A, 2001, 105, 7559-7568.	2.5	10
29	A new family of anion exchangers: mixed hydroxide carbonates of Bi3+ and divalent metals showing high selectivity for SeO32â^'. Materials Research Bulletin, 2000, 35, 2109-2121.	5.2	15
30	Characterization of Ag/Al2O3 de-NOx catalysts by probing surface acidity and basicity of the supporting substrate. Physical Chemistry Chemical Physics, 2000, 2, 3007-3015.	2.8	32
31	Laser-induced fluorescence of the CD2CFO radical. Journal of Chemical Physics, 1999, 111, 6356-6362.	3.0	8
32	Selective catalytic reduction of NO over Ag/Al2O3: Inhibition effect by surface nitrate. Studies in Surface Science and Catalysis, 1999, , 371-374.	1.5	11
33	Analysis of laser-induced fluorescence spectra of the (â€³)â€“(â€³) transition with calculated Franckâ€“Condon factors of CH2CFO. Chemical Physics Letters, 1998, 298, 93-100.	2.6	6
34	Decomposition of adsorbed nitromethane on [gamma]-alumina. Journal of the Chemical Society, Faraday Transactions, 1997, 93, 3581-3586.	1.7	38
35	A CASSCF study of photochemical cyclization of the first excited Ãƒ 2B1 state of the allyl radical. Computational and Theoretical Chemistry, 1996, 365, 143-149.	1.5	19
36	A CASSCF study on potential energy curves of vinoxy radical in excited states. Chemical Physics Letters, 1994, 221, 531-536.	2.6	36

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37	Formation of the radical anions of thiocarbonyl compounds by electron attachment to organic sulfides in glassy matrices. International Journal of Radiation Applications and Instrumentation Nuclear Tracks and Radiation Measurements, 1990, 36, 791-799.	0.0	1
38	Electronic structure of vinylthio radical (CH2CHS): A theoretical study. Journal of Chemical Physics, 1990, 93, 4223-4229.	3.0	13
39	Calculation of hyperfine coupling constant by symmetry adapted cluster expansion configuration interaction theory. II. Anisotropic constants. Journal of Chemical Physics, 1990, 93, 7284-7292.	3.0	19
40	Vibrational analysis and calculation of Franckâ€“Condon factors for the vinoxy radical XÌƒ(2Aâ€˜) and BÌƒ(2Aâ€˜) states. Journal of Chemical Physics, 1990, 93, 4211-4222.	3.0	68