Satoshi Nihonyanagi

List of Publications by Year in descending order

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68 papers

4,025 citations

32 h-index 59 g-index

70 all docs 70 docs citations

times ranked

70

2317 citing authors

#	Article	IF	CITATIONS
1	DNA-Induced Reorganization of Water at Model Membrane Interfaces Investigated by Heterodyne-Detected Vibrational Sum Frequency Generation Spectroscopy. Journal of Physical Chemistry B, 2022, 126, 840-846.	2.6	7
2	Ultrafast vibrational dynamics of the free OD at the air/water interface: Negligible isotopic dilution effect but large isotope substitution effect. Journal of Chemical Physics, 2022, 156, .	3.0	6
3	The photochemical reaction of phenol becomes ultrafast at the air–water interface. Nature Chemistry, 2021, 13, 306-311.	13.6	86
4	<i>In situ</i> observation of the potential-dependent structure of an electrolyte/electrode interface by heterodyne-detected vibrational sum frequency generation. Physical Chemistry Chemical Physics, 2020, 22, 2580-2589.	2.8	23
5	Resolving the Controversy over Dipole versus Quadrupole Mechanism of Bend Vibration of Water in Vibrational Sum Frequency Generation Spectra. Journal of Physical Chemistry Letters, 2020, 11, 9123-9130.	4.6	20
6	Reorientation-induced relaxation of free OH at the air/water interface revealed by ultrafast heterodyne-detected nonlinear spectroscopy. Nature Communications, 2020, 11, 5344.	12.8	27
7	Hidden Isolated OH at the Charged Hydrophobic Interface Revealed by Twoâ€Dimensional Heterodyneâ€Detected VSFG Spectroscopy. Angewandte Chemie, 2020, 132, 9585-9592.	2.0	1
8	Comment on "Phase-sensitive sum frequency vibrational spectroscopic study of air/water interfaces: H2O, D2O, and diluted isotopic mixtures―[J. Chem. Phys. 150, 144701 (2019)]. Journal of Chemical Physics, 2020, 152, 237101.	3.0	21
9	Hidden Isolated OH at the Charged Hydrophobic Interface Revealed by Twoâ€Dimensional Heterodyneâ€Detected VSFG Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 9498-9505.	13.8	11
10	Structure of water and polymer at the buried polymer/water interface unveiled using heterodyne-detected vibrational sum frequency generation. Physical Chemistry Chemical Physics, 2020, 22, 16527-16531.	2.8	8
11	Preferred orientations of organic cations at lead-halide perovskite interfaces revealed using vibrational sum-frequency spectroscopy. Materials Horizons, 2020, 7, 1348-1357.	12.2	15
12	Innenrücktitelbild: Hidden Isolated OH at the Charged Hydrophobic Interface Revealed by Twoâ€Dimensional Heterodyneâ€Detected VSFG Spectroscopy (Angew. Chem. 24/2020). Angewandte Chemie, 2020, 132, 9867-9867.	2.0	0
13	Vibrational relaxation of water at the air/H2O interface revealed by time-resolved heterodyne-detected vibrational sum-frequency generation in the OH stretch hot-band region. , 2020, , .		0
14	Probing Ultrafast Photochemical Reaction at Water Surface by Heterodyne-Detected Vibrational Sum Frequency Generation. , 2020, , .		0
15	Quadrupolar mechanism for vibrational sum frequency generation at air/liquid interfaces: Theory and experiment. Journal of Chemical Physics, 2019, 151, 064701.	3.0	11
16	In-situ Referencing Method for Heterodyne-detected Vibrational Sum Frequency Generation Measurements at Liquid/Metal Interfaces. Chemistry Letters, 2019, 48, 1387-1390.	1.3	7
17	Effect of Frequency-Dependent Fresnel Factor on the Vibrational Sum Frequency Generation Spectra for Liquid/Solid Interfaces. Journal of Physical Chemistry C, 2019, 123, 15665-15673.	3.1	25
18	Effect of hydrogen-bond on ultrafast spectral diffusion dynamics of water at charged monolayer interfaces. Journal of Chemical Physics, 2019, 150, 054705.	3.0	16

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19	Ultrafast Vibrational Dynamics at Aqueous Interfaces Studied by 2D Heterodyne-Detected Vibrational Sum Frequency Generation Spectroscopy. Springer Series in Optical Sciences, 2019, , 215-236.	0.7	7
20	Vibrational Sum Frequency Generation Spectroscopy. , 2018, , 801-807.		0
21	Structure at the air/water interface in the presence of phenol: a study using heterodyne-detected vibrational sum frequency generation and molecular dynamics simulation. Physical Chemistry Chemical Physics, 2018, 20, 3002-3009.	2.8	34
22	Molecular mechanism of charge inversion revealed by polar orientation of interfacial water molecules: A heterodyne-detected vibrational sum frequency generation study. Journal of Chemical Physics, 2018, 149, 024703.	3.0	19
23	The Topmost Water Structure at a Charged Silica/Aqueous Interface Revealed by Heterodyne-Detected Vibrational Sum Frequency Generation Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 4109-4114.	4.6	76
24	Ultrafast Dynamics at Water Interfaces Studied by Vibrational Sum Frequency Generation Spectroscopy. Chemical Reviews, 2017, 117, 10665-10693.	47.7	153
25	Change of the isoelectric point of hemoglobin at the air/water interface probed by the orientational flip-flop of water molecules. Physical Chemistry Chemical Physics, 2017, 19, 10292-10300.	2.8	30
26	Cooperative Hydrogen-Bond Dynamics at a Zwitterionic Lipid/Water Interface Revealed by 2D HD-VSFG Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 5160-5165.	4.6	40
27	Femtosecond Ultrafast Water Dynamics at Charged Lipid Interfaces Revealed by 2D Heterodyne-Detected Vibrational Sum Frequency Generation. , 2016, , .		0
28	Femtosecond Hydrogen Bond Dynamics of Bulkâ€like and Bound Water at Positively and Negatively Charged Lipid Interfaces Revealed by 2D HDâ€VSFG Spectroscopy. Angewandte Chemie - International Edition, 2016, 55, 10621-10625.	13.8	70
29	Femtosecond Hydrogen Bond Dynamics of Bulkâ€ike and Bound Water at Positively and Negatively Charged Lipid Interfaces Revealed by 2D HDâ€VSFG Spectroscopy. Angewandte Chemie, 2016, 128, 10779-10783.	2.0	6
30	Water Structure at the Buried Silica/Aqueous Interface Studied by Heterodyne-Detected Vibrational Sum-Frequency Generation. Journal of Physical Chemistry C, 2016, 120, 9357-9363.	3.1	115
31	Efficient Spectral Diffusion at the Air/Water Interface Revealed by Femtosecond Time-Resolved Heterodyne-Detected Vibrational Sum Frequency Generation Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 1811-1815.	4.6	45
32	Water Orientation at Ceramide/Water Interfaces Studied by Heterodyne-Detected Vibrational Sum Frequency Generation Spectroscopy and Molecular Dynamics Simulation. Journal of Physical Chemistry C, 2016, 120, 23692-23697.	3.1	12
33	Partially Hydrated Electrons at the Air/Water Interface Observed by UV-Excited Time-Resolved Heterodyne-Detected Vibrational Sum Frequency Generation Spectroscopy. Journal of the American Chemical Society, 2016, 138, 7551-7557.	13.7	48
34	Bend Vibration of Surface Water Investigated by Heterodyne-Detected Sum Frequency Generation and Theoretical Study: Dominant Role of Quadrupole. Journal of Physical Chemistry Letters, 2016, 7, 2597-2601.	4.6	53
35	Accurate determination of complex $\langle i \rangle \dot{z} \rangle \langle i \rangle$ spectrum of the air/water interface. Journal of Chemical Physics, 2015, 143, 124707.	3.0	149
36	2D heterodyne-detected sum frequency generation study on the ultrafast vibrational dynamics of H2O and HOD water at charged interfaces. Journal of Chemical Physics, 2015, 142, 212431.	3.0	78

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37	Interfacial water in the vicinity of a positively charged interface studied by steady-state and time-resolved heterodyne-detected vibrational sum frequency generation. Journal of Chemical Physics, 2014, 141, 18C527.	3.0	30
38	Counterion Effect on Interfacial Water at Charged Interfaces and Its Relevance to the Hofmeister Series. Journal of the American Chemical Society, 2014, 136, 6155-6158.	13.7	159
39	Title is missing!. Electrochemistry, 2014, 82, 766-770.	1.4	0
40	Ultrafast Vibrational Dynamics of Water Interfaces Revealed by Time-Resolved Heterodyne-Detected Vibrational Sum Frequency Generation Spectroscopy. Hyomen Kagaku, 2014, 35, 662-667.	0.0	0
41	Ultrafast vibrational dynamics of water at a zwitterionic lipid/water interface revealed by two-dimensional heterodyne-detected vibrational sum frequency generation (2D HD-VSFG)., 2014,,.		0
42	Structure and Dynamics of Interfacial Water Studied by Heterodyne-Detected Vibrational Sum-Frequency Generation. Annual Review of Physical Chemistry, 2013, 64, 579-603.	10.8	264
43	Observation of the Bending Mode of Interfacial Water at Silica Surfaces by Near-Infrared Vibrational Sum-Frequency Generation Spectroscopy of the [Stretch + Bend] Combination Bands. Journal of Physical Chemistry Letters, 2013, 4, 531-535.	4.6	35
44	Vibrational Sum Frequency Generation by the Quadrupolar Mechanism at the Nonpolar Benzene/Air Interface. Journal of Physical Chemistry Letters, 2013, 4, 1654-1658.	4.6	47
45	Communication: Ultrafast vibrational dynamics of hydrogen bond network terminated at the air/water interface: A two-dimensional heterodyne-detected vibrational sum frequency generation study. Journal of Chemical Physics, 2013, 139, 161101.	3.0	68
46	Ultrafast vibrational dynamics of water at a charged interface revealed by two-dimensional heterodyne-detected vibrational sum frequency generation. Journal of Chemical Physics, 2012, 137, 094706.	3.0	110
47	Ultrafast Vibrational Dynamics of a Charged Aqueous Interface by Femtosecond Time-Resolved Heterodyne-Detected Vibrational Sum Frequency Generation. Bulletin of the Chemical Society of Japan, 2012, 85, 758-760.	3.2	54
48	Spectroscopy and Dynamics of the Multiple Free OH Species at an Aqueous/Hydrophobic Interface. Journal of Physical Chemistry C, 2012, 116, 21734-21741.	3.1	15
49	Three Distinct Water Structures at a Zwitterionic Lipid/Water Interface Revealed by Heterodyne-Detected Vibrational Sum Frequency Generation. Journal of the American Chemical Society, 2012, 134, 7842-7850.	13.7	250
50	Unified Molecular View of the Air/Water Interface Based on Experimental and Theoretical I‡ ⁽²⁾ Spectra of an Isotopically Diluted Water Surface. Journal of the American Chemical Society, 2011, 133, 16875-16880.	13.7	245
51	Ultrafast vibrational dynamics and spectroscopy of a siloxane self-assembled monolayer. Journal of Chemical Physics, 2011, 134, 084701.	3.0	33
52	Structure and Orientation of Water at Charged Lipid Monolayer/Water Interfaces Probed by Heterodyne-Detected Vibrational Sum Frequency Generation Spectroscopy. Journal of the American Chemical Society, 2010, 132, 10656-10657.	13.7	212
53	Linking Surface Potential and Deprotonation in Nanoporous Silica: Second Harmonic Generation and Acid/Base Titration. Journal of Physical Chemistry C, 2010, 114, 18465-18473.	3.1	55
54	Water Hydrogen Bond Structure near Highly Charged Interfaces Is Not Like Ice. Journal of the American Chemical Society, 2010, 132, 6867-6869.	13.7	152

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55	Interfacial Molecular Structures of Polyelectrolyte Brush in Contact with Dry Nitrogen, Water Vapor, Liquid Water, and Aqueous Electrolyte Solution Studied by Sum Frequency Generation Spectroscopy. Journal of the American Chemical Society, 2010, 132, 17271-17276.	13.7	25
56	Novel Interface-Selective Even-Order Nonlinear Spectroscopy. Review of Polarography, 2009, 55, 83-96.	0.1	1
57	Direct evidence for orientational flip-flop of water molecules at charged interfaces: A heterodyne-detected vibrational sum frequency generation study. Journal of Chemical Physics, 2009, 130, 204704.	3.0	432
58	Self-Assembled Monolayer Compatible with Metal Surface Acoustic Wave Devices on Lithium Niobate. Langmuir, 2008, 24, 5161-5165.	3.5	19
59	Potential-dependent structure of the interfacial water on the gold electrode. Surface Science, 2004, 573, 11-16.	1.9	88
60	Decomposition Processes of an Organic Monolayer Formed on $Si(111)$ via a $SiliconCarbon$ Bond Induced by Exposure to UV Irradiation or Ozone. Langmuir, 2004, 20, 1207-1212.	3.5	55
61	Evidence for Epitaxial Arrangement and High Conformational Order of an Organic Monolayer on Si(111) by Sum Frequency Generation Spectroscopy. Journal of the American Chemical Society, 2004, 126, 7034-7040.	13.7	52
62	Interfacial Water Structure at As-Prepared and UV-Induced Hydrophilic TiO2Surfaces Studied by Sum Frequency Generation Spectroscopy and Quartz Crystal Microbalance. Journal of Physical Chemistry B, 2004, 108, 19086-19088.	2.6	104
63	Formation of Organic Monolayer on a Hydrogen Terminated Si(111) Surfacevia Silicon-Carbon Bond Monitored by ATR FT-IR and SFG Spectroscopy: Effect of Orientational Order on the Reaction Rate. Chemistry Letters, 2002, 31, 208-209.	1.3	22
64	Stability of the Si–H bond on the hydrogen-terminated Si(111) surface studied by sum frequency generation. Surface Science, 2001, 476, 121-128.	1.9	41
65	Sum frequency generation (SFG) study of the pH-dependent water structure on a fused quartz surface modified by an octadecyltrichlorosilane (OTS) monolayer. Physical Chemistry Chemical Physics, 2001, 3, 3463-3469.	2.8	171
66	Sum frequency generation study on the molecular structures at the interfaces between quartz modified with amino-terminated self-assembled monolayer and electrolyte solutions of various pH and ionic strengths. Electrochimica Acta, 2001, 46, 3057-3061.	5.2	46
67	pH-Dependent Water Structure at a Quartz Surface Modified with an Amino-Terminated Monolayer Studied by Sum Frequency Generation (SFG). Chemistry Letters, 2000, 29, 734-735.	1.3	21
68	'Just Vibing': Coupled Organic and Inorganic Sublattices in Organohalide Perovskite Solar Cells. , 0, , .		0