

Hiroshi Kondoh

List of Publications by Year in descending order

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citations

304743

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79
docs citations

79
times ranked

2346
citing authors

#	ARTICLE	IF	CITATIONS
1	In Situ Ambient Pressure XPS Study of CO Oxidation Reaction on Pd(111) Surfaces. Journal of Physical Chemistry C, 2012, 116, 18691-18697.	3.1	135
2	Self-Assembly of Co Nanoplatelets into Spheres: Synthesis and Characterization. Chemistry of Materials, 2005, 17, 3994-3996.	6.7	117
3	A soft X-ray beamline for surface chemistry at the Photon Factory. Journal of Electron Spectroscopy and Related Phenomena, 2002, 124, 151-164.	1.7	84
4	Direct Observation of Active Nickel Oxide Cluster in Nickel-Borate Electrocatalyst for Water Oxidation by In Situ O K-Edge X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 19279-19286.	3.1	80
5	Adsorbate-driven reactive interfacial Pt-NiO nanostructure formation on the Pt ₃ Ni(111) alloy surface. Science Advances, 2018, 4, eaat3151.	10.3	76
6	Active Surface Oxygen for Catalytic CO Oxidation on Pd(100) Proceeding under Near Ambient Pressure Conditions. Journal of Physical Chemistry Letters, 2012, 3, 3182-3187.	4.6	67
7	Growth of nanographite on Pt(111) and its edge state. Applied Physics Letters, 2006, 88, 153126.	3.3	56
8	Development of soft x-ray time-resolved photoemission spectroscopy system with a two-dimensional angle-resolved time-of-flight analyzer at SPring-8 BL07LSU. Review of Scientific Instruments, 2012, 83, 023109.	1.3	52
9	Influence of Surface Orientation on Electrochemical Properties of Boron-Doped Diamond. Journal of Physical Chemistry C, 2019, 123, 5336-5344.	3.1	52
10	Mechanism of CO oxidation reaction on O-covered Pd(111) surfaces studied with fast x-ray photoelectron spectroscopy: Change of reaction path accompanying phase transition of O domains. Journal of Chemical Physics, 2006, 124, 224712.	3.0	50
11	Promotional Effect of La in the Three-Way Catalysis of La-Loaded Al ₂ O ₃ -Supported Pd Catalysts (Pd/La/Al ₂ O ₃). ACS Catalysis, 2020, 10, 1010-1023.	11.2	46
12	CO oxidation reaction on Pt(111) studied by the dynamic Monte Carlo method including lateral interactions of adsorbates. Journal of Chemical Physics, 2007, 126, 044704.	3.0	44
13	In situ analysis of catalytically active Pd surfaces for CO oxidation with near ambient pressure XPS. Catalysis Today, 2016, 260, 14-20.	4.4	44
14	Photoexcited Hole Transfer to a MnOxCocatalyst on a SrTiO ₃ Photoelectrode during Oxygen Evolution Studied by In Situ X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 24302-24309.	3.1	42
15	A high-pressure-induced dense CO overlayer on a Pt(111) surface: a chemical analysis using in situ near ambient pressure XPS. Physical Chemistry Chemical Physics, 2014, 16, 23564-23567.	2.8	40
16	Towards 3-D Spherical Self-Assembly by Ternary Surfactant Combinations: The Case of Magnetite Nanoparticles. European Journal of Inorganic Chemistry, 2004, 2004, 1169-1173.	2.0	39
17	In-situ observations of catalytic surface reactions with soft x-rays under working conditions. Journal of Physics Condensed Matter, 2015, 27, 083003.	1.8	34
18	In-situ study of the catalytic oxidation of CO on a Pt(110) surface using ambient pressure X-ray photoelectron spectroscopy. Surface Science, 2009, 603, L35-L38.	1.9	33

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19	In situ observation of carrier transfer in the Mn-oxide/Nb:SrTiO ₃ photoelectrode by X-ray absorption spectroscopy. <i>Chemical Communications</i> , 2013, 49, 7848.	4.1	32
20	Mechanism of N + NO Reaction on Rh(111) Surfaces: A precursor-Mediated Reaction. <i>Journal of Physical Chemistry C</i> , 2009, 113, 13257-13265.	3.1	26
21	In Situ Photoemission Observation of Catalytic CO Oxidation Reaction on Pd(110) under Near-Ambient Pressure Conditions: Evidence for the Langmuir-Hinshelwood Mechanism. <i>Journal of Physical Chemistry C</i> , 2013, 117, 20617-20624.	3.1	26
22	Operando NAP-XPS Observation and Kinetics Analysis of NO Reduction over Rh(111) Surface: Characterization of Active Surface and Reactive Species. <i>ACS Catalysis</i> , 2018, 8, 11663-11670.	11.2	25
23	How Rh surface breaks CO ₂ molecules under ambient pressure. <i>Nature Communications</i> , 2020, 11, 5649.	12.8	24
24	Operando Observations of a Manganese Oxide Electrocatalyst for Water Oxidation Using Hard/Tender/Soft X-ray Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23611-23618.	3.1	22
25	Low temperature electrochemical synthesis of titanium nitride. <i>Chemical Communications</i> , 2001, , 579-580.	4.1	21
26	Water formation reaction on Pt(111): Near edge x-ray absorption fine structure experiments and kinetic Monte Carlo simulations. <i>Journal of Chemical Physics</i> , 2003, 119, 9233-9241.	3.0	21
27	Structural Relationship between CoO ₆ Cluster and Phosphate Species in a Cobalt-Phosphate Water Oxidation Catalyst Investigated by Co and P K-edge XAFS. <i>Chemistry Letters</i> , 2016, 45, 277-279.	1.3	21
28	Detailed Characterization of MoO _x -Modified Rh Metal Particles by Ambient-Pressure XPS and DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2021, 125, 4540-4549.	3.1	21
29	Metal-induced gap states in epitaxial organic-insulator/metal interfaces. <i>Physical Review B</i> , 2005, 72, .	3.2	19
30	Operando Observation of NO Reduction by CO on Ir(111) Surface Using NAP-XPS and Mass Spectrometry: Dominant Reaction Pathway to N ₂ Formation under Near Realistic Conditions. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1763-1769.	3.1	19
31	Water formation reaction on Pt(111): Role of the proton transfer. <i>Journal of Chemical Physics</i> , 2005, 122, 204704.	3.0	17
32	In situ S-K XANES study of polymer electrolyte fuel cells: changes in the chemical states of sulfonic groups depending on humidity. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 25183-25190.	2.8	17
33	N+NO Reaction on Rh(111) Surfaces Studied with Fast Near-Edge X-ray Absorption Fine Structure Spectroscopy: A Role of NO Dimer as an Extrinsic Precursor. <i>Journal of Physical Chemistry B</i> , 2006, 110, 25578-25581.	2.6	16
34	Real-time observation of CO oxidation reaction on Ir(111) surface at 33 ms resolution by means of wavelength-dispersive near-edge x-ray absorption fine structure spectroscopy. <i>Applied Physics Letters</i> , 2011, 99, .	3.3	16
35	Chemical states of surface oxygen during CO oxidation on Pt(100) surface revealed by ambient pressure XPS. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 464001.	1.8	16
36	Dehydration Pathway for the Dissociation of Gas-Phase Formic Acid on Pt(111) Surface Observed via Ambient-Pressure XPS. <i>Journal of Physical Chemistry C</i> , 2018, 122, 2064-2069.	3.1	16

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37	Formation of Carbonate on Ag(111) under Exposure to Ethylene and Oxygen Gases Evidenced by Near Ambient Pressure XPS and NEXAFS. <i>Chemistry Letters</i> , 2019, 48, 159-162.	1.3	16
38	Photoelectron spectroscopic study of CO and NO adsorption on Pd(100) surface under ambient pressure conditions. <i>Surface Science</i> , 2013, 615, 33-40.	1.9	15
39	CO Adsorption on Pd–Au Alloy Surface: Reversible Adsorption Site Switching Induced by High-Pressure CO. <i>Journal of Physical Chemistry C</i> , 2016, 120, 416-421.	3.1	15
40	Integration of Active Nickel Oxide Clusters by Amino Acids for Water Oxidation. <i>Journal of Physical Chemistry C</i> , 2017, 121, 255-260.	3.1	15
41	In Situ Observations of Oxygen Evolution Cocatalysts on Photoelectrodes by X-ray Absorption Spectroscopy: Comparison between Cobalt-Phosphate and Cobalt-Borate. <i>Electrochemistry</i> , 2016, 84, 779-783.	1.4	14
42	Electrochromic Characteristics of a Nickel Borate Thin Film Investigated by In Situ XAFS and UV/vis Spectroscopy. <i>Electrochemistry</i> , 2014, 82, 355-358.	1.4	13
43	High-Pressure NO-Induced Mixed Phase on Rh(111): Chemically Driven Replacement. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3033-3039.	3.1	12
44	In situ AP-XPS analysis of a Pt thin-film sensor for highly sensitive H ₂ detection. <i>Chemical Communications</i> , 2020, 56, 10147-10150.	4.1	12
45	A near-ambient-pressure XPS study on catalytic CO oxidation reaction over a Ru(<i>Journal of Physical Chemistry C</i> , 2014, 118, 128-132.	1.9	11
46	Chemical state changes of Nafion in model polymer electrolyte fuel cell under oxygen/hydrogen gas atmosphere observed by S-K XANES spectroscopy. <i>RSC Advances</i> , 2018, 8, 38204-38209.	3.6	11
47	Geometric and electronic structures of NO dimer layers on Rh(111) studied with near edge x-ray absorption fine structure spectroscopy: Experiment and theory. <i>Journal of Chemical Physics</i> , 2007, 127, 024701.	3.0	10
48	Operando study of Pd(100) surface during CO oxidation using ambient pressure x-ray photoemission spectroscopy. <i>AIP Advances</i> , 2019, 9, .	1.3	10
49	Pretreatment Dependence of Adsorption Properties of Merocyanine Dye at Rutile (110) and (100) TiO ₂ Surfaces Studied by C K-Edge NEXAFS. <i>Journal of Physical Chemistry C</i> , 2009, 113, 17254-17261.	3.1	9
50	In Situ Observation of Model Catalysts under Reaction Conditions Using X-ray Core-Level Spectroscopy. <i>Chemical Record</i> , 2014, 14, 806-818.	5.8	9
51	Improvement in Cobalt Phosphate Electrocatalyst Activity toward Oxygen Evolution from Water by Glycine Molecule Addition and Functional Details. <i>Analytical Sciences</i> , 2020, 36, 35-39.	1.6	9
52	In Situ XAFS Study of the Photoinduced Potential Shift of a MnO _x Cocatalyst on a SrTiO ₃ Photocatalyst. <i>Chemistry Letters</i> , 2014, 43, 1725-1727.	1.3	8
53	Mechanism of Ammonia Formation on Rh(111) Studied by Dispersive Near-Edge X-ray Absorption Fine Structure Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2010, 114, 2164-2170.	3.1	7
54	Operando observations of reactive metal–Oxide structure formation on the Pt ₃ Ni(111) surface at near-ambient pressure. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2020, 238, 146857.	1.7	6

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55	Orientation-Dependent Hindrance to the Oxidation of Pd–Au Alloy Surfaces. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 9249-9254.	4.6	6
56	Assessing nickel oxide electrocatalysts incorporating diamines and having improved oxygen evolution activity using <i>operando</i> UV/visible and X-ray absorption spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 23280-23287.	2.8	6
57	Catalytic CO oxidation over Pd ₇₀ Au ₃₀ (111) alloy surfaces: spectroscopic evidence for Pd ensemble dependent activity. <i>Chemical Communications</i> , 2017, 53, 12657-12660.	4.1	4
58	Initial oxidation of GaAs(100) under near-realistic environments revealed by <i>in situ</i> AP-XPS. <i>Chemical Communications</i> , 2020, 56, 14905-14908.	4.1	4
59	<i>In situ</i> AP-XPS study on reduction of oxidized Rh catalysts under CO exposure and catalytic reaction conditions. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 204005.	2.8	4
60	Formation and Behavior of Carbonates on Ag(110) in the Presence of Ethylene and Oxygen. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9032-9037.	3.1	4
61	Scanning Tunneling Microscopy Observations of [7]Thiahehelicene Adsorbed on Au(111). <i>Molecular Crystals and Liquid Crystals</i> , 1999, 337, 273-276.	0.3	3
62	Molecular orientation change during adsorption of NO and N ₂ O on Ir(111) observed by real-time wavelength-dispersive x-ray absorption spectroscopy with polarization switching. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	3
63	Element selective oxidation on Rh–Pd bimetallic alloy surfaces. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 28419-28424.	2.8	3
64	Ligand effects on surface oxide at RhPd(100) alloy surfaces: A density functional theory calculation study. <i>Surface Science</i> , 2022, 716, 121958.	1.9	3
65	Structure of 2-Mercaptomethylthiophene Monolayers on Au(111). <i>Molecular Crystals and Liquid Crystals</i> , 2002, 377, 45-48.	0.9	2
66	Chemical Reactions on Platinum-Group Metal Surfaces Studied by Synchrotron-Radiation-Based Spectroscopy. <i>Journal of the Vacuum Society of Japan</i> , 2009, 52, 73-79.	0.3	2
67	Structure and Photo-Induced Charge Transfer of Pyridine Molecules Adsorbed on TiO ₂ (110): A NEXAFS and Core-Hole-Clock Study. <i>Electrochemistry</i> , 2014, 82, 341-345.	1.4	2
68	The Development of Ambient Pressure X-Ray Photoelectron Spectroscopy and Its Application to Surface Science. , 2014, , 197-229.		2
69	A newly designed compact CEY-XAFS cell in the soft X-ray region and its application to surface XAFS measurements under ambient-pressure conditions without photoinduced side effects. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 2988-2996.	2.8	2
70	Substrate Effect of Ir and Rh on Surface ReO _x Species under a Hydrogen Atmosphere Studied by NAP-XPS. <i>Journal of Physical Chemistry C</i> , 2022, 126, 11544-11552.	3.1	2
71	Mechanism of Water Formation on Pt(111) Revealed by Time-resolved NEXAFS Experiment and Kinetic Monte Carlo Simulation. <i>Hyomen Kagaku</i> , 2005, 26, 378-384.	0.0	1
72	Studies on Surface and Interface with X-ray Absorption Fine Structure (XAFS). XAFS Study of Self-Assembled Monolayers.. <i>Hyomen Kagaku</i> , 2002, 23, 351-358.	0.0	1

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73	Structure Analyses of Methylthiolate Adsorbed on Au(111) by Photoelectron Diffraction. Hyomen Kagaku, 2003, 24, 448-454.	0.0	1
74	Materials Science Research by Ambient Pressure X-ray Photoelectron Spectroscopy Systems at Synchrotron Radiation Facilities in Japan: Applications in Energy, Catalysis, and Sensors. Synchrotron Radiation News, 2022, 35, 19-25.	0.8	1
75	Magnetic Properties and Fabrication of Monodisperse FePd Nanoparticles. Materials Research Society Symposia Proceedings, 2004, 818, 206.	0.1	0
76	Ambient Pressure X-Ray Photoelectron Spectroscopy. , 2018, , 15-19.		0
77	<i>In Situ</i> Observation of Molecular Processes at Surfaces and Interfaces by Soft X-Ray Absorption Spectroscopy. Vacuum and Surface Science, 2021, 64, 212-217.	0.1	0
78	Report of the 25th SSSJ Annual Meeting. Hyomen Kagaku, 2006, 27, 123-125.	0.0	0