# Hiroshi Kondoh

List of Publications by Year
in descending order



| 78 | 1,724 | 304743 22 | 302126 39 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 79 | 79 | 79 | 2346 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Ligand effects on surface oxide at RhPd(100) alloy surfaces: A density functional theory calculation study. Surface Science, 2022, 716, 121958. | 1.9 | 3 |
| 2 | 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. Physical Chemistry Chemical Physics, 2022, 24, 2988-2996. | 2.8 | 2 |
| 3 | 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 |
| 4 | Substrate Effect of Ir and Rh on Surface ReO<sub>x</sub> Species under a Hydrogen Atmosphere Studied by NAP-XPS. Journal of Physical Chemistry C, 2022, 126, 11544-11552. | 3.1 | 2 |
| 5 | Detailed Characterization of MoO<sub>x</sub>-Modified Rh Metal Particles by Ambient-Pressure XPS and DFT Calculations. Journal of Physical Chemistry C, 2021, 125, 4540-4549. | 3.1 | 21 |
| 6 | In situ AP-XPS study on reduction of oxidized Rh catalysts under CO exposure and catalytic reaction conditions. Journal Physics D: Applied Physics, 2021, 54, 204005. | 2.8 | 4 |
| 7 | Formation and Behavior of Carbonates on Ag(110) in the Presence of Ethylene and Oxygen. Journal of Physical Chemistry C, 2021, 125, 9032-9037. | 3.1 | 4 |
| 8 | In Situ 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 |
| 9 | Assessing nickel oxide electrocatalysts incorporating diamines and having improved oxygen evolution activity using operando UV/visible and X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 23280-23287. | 2.8 | 6 |
| 10 | Operando observations of reactive metalâ€“Oxide structure formation on the Pt3Ni(111) surface at near-ambient pressure. Journal of Electron Spectroscopy and Related Phenomena, 2020, 238, 146857. | 1.7 | 6 |
| 11 | Promotional Effect of La in the Three-Way Catalysis of La-Loaded Al<sub>2</sub>O<sub>3</sub>-Supported Pd Catalysts (Pd/La/Al<sub>2</sub>O<sub>3</sub>). ACS Catalysis, 2020, 10, 1010-1023. | 11.2 | 46 |
| 12 | Improvement in Cobalt Phosphate Electrocatalyst Activity toward Oxygen Evolution from Water by Glycine Molecule Addition and Functional Details. Analytical Sciences, 2020, 36, 35-39. | 1.6 | 9 |
| 13 | Orientation-Dependent Hindrance to the Oxidation of Pdâ€“Au Alloy Surfaces. Journal of Physical Chemistry Letters, 2020, 11, 9249-9254. | 4.6 | 6 |
| 14 | Initial oxidation of GaAs(100) under near-realistic environments revealed by in situ AP-XPS. Chemical Communications, 2020, 56, 14905-14908. | 4.1 | 4 |
| 15 | In situ AP-XPS analysis of a Pt thin-film sensor for highly sensitive H<sub>2</sub> detection. Chemical Communications, 2020, 56, 10147-10150. | 4.1 | 12 |
| 16 | Operando Observations of a Manganese Oxide Electrocatalyst for Water Oxidation Using Hard/Tender/Soft X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 23611-23618. | 3.1 | 22 |
| 17 | How Rh surface breaks CO2 molecules under ambient pressure. Nature Communications, 2020, 11, 5649. | 12.8 | 24 |
| 18 |  Operando  study of Pd(100) surface during CO oxidation using ambient pressure x-ray photoemission spectroscopy. AIP Advances, 2019, 9, . | 1.3 | 10 |

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|---|---|---|---|
| 19 | Formation of Carbonate on Ag(111) under Exposure to Ethylene and Oxygen Gases Evidenced by Near Ambient Pressure XPS and NEXAFS. Chemistry Letters, 2019, 48, 159-162. | 1.3 | 16 |
| 20 | Influence of Surface Orientation on Electrochemical Properties of Boron-Doped Diamond. Journal of Physical Chemistry C, 2019, 123, 5336-5344. | 3.1 | 52 |
| 21 | Ambient Pressure X-Ray Photoelectron Spectroscopy. , 2018, , 15-19. | | 0 |
| 22 | Dehydration Pathway for the Dissociation of Gas-Phase Formic Acid on Pt(111) Surface Observed via Ambient-Pressure XPS. Journal of Physical Chemistry C, 2018, 122, 2064-2069. | 3.1 | 16 |
| 23 | Element selective oxidation on Rhâ€“Pd bimetallic alloy surfaces. Physical Chemistry Chemical Physics, 2018, 20, 28419-28424. | 2.8 | 3 |
| 24 | Chemical state changes of Nafion in model polymer electrolyte fuel cell under oxygen/hydrogen gas atmosphere observed by S-K XANES spectroscopy. RSC Advances, 2018, 8, 38204-38209. | 3.6 | 11 |
| 25 | Operando NAP-XPS Observation and Kinetics Analysis of NO Reduction over Rh(111) Surface: Characterization of Active Surface and Reactive Species. ACS Catalysis, 2018, 8, 11663-11670. | 11.2 | 25 |
| 26 | Adsorbate-driven reactive interfacial Pt-NiO <sub> 1â˜’ x </sub> nanostructure formation on the Pt <sub>3</sub> Ni(111) alloy surface. Science Advances, 2018, 4, eaat3151. | 10.3 | 76 |
| 27 | Operando Observation of NO Reduction by CO on Ir(111) Surface Using NAP-XPS and Mass Spectrometry: Dominant Reaction Pathway to N<sub>2</sub> Formation under Near Realistic Conditions. Journal of Physical Chemistry C, 2017, 121, 1763-1769. | 3.1 | 19 |
| 28 | Integration of Active Nickel Oxide Clusters by Amino Acids for Water Oxidation. Journal of Physical Chemistry C, 2017, 121, 255-260. | 3.1 | 15 |
| 29 | Catalytic CO oxidation over Pd<sub>70</sub>Au<sub>30</sub>(111) alloy surfaces: spectroscopic evidence for Pd ensemble dependent activity. Chemical Communications, 2017, 53, 12657-12660. | 4.1 | 4 |
| 30 | Chemical states of surface oxygen during CO oxidation on Pt(1â€‰1â€‰0) surface revealed by ambient pressure XPS. Journal of Physics Condensed Matter, 2017, 29, 464001. | 1.8 | 16 |
| 31 | In Situ Observations of Oxygen Evolution Cocatalysts on Photoelectrodes by X-ray Absorption Spectroscopy: Comparison between Cobalt-Phosphate and Cobalt-Borate. Electrochemistry, 2016, 84, 779-783. | 1.4 | 14 |
| 32 | In situ S-K XANES study of polymer electrolyte fuel cells: changes in the chemical states of sulfonic groups depending on humidity. Physical Chemistry Chemical Physics, 2016, 18, 25183-25190. | 2.8 | 17 |
| 33 | Structural Relationship between CoO<sub>6</sub>Cluster and Phosphate Species in a Cobaltâ€“Phosphate Water Oxidation Catalyst Investigated by Co and P K-edge XAFS. Chemistry Letters, 2016, 45, 277-279. | 1.3 | 21 |
| 34 | CO Adsorption on Pdâ€“Au Alloy Surface: Reversible Adsorption Site Switching Induced by High-Pressure CO. Journal of Physical Chemistry C, 2016, 120, 416-421. | 3.1 | 15 |
| 35 | 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 |
| 36 | In-situobservations of catalytic surface reactions with soft x-rays under working conditions. Journal of Physics Condensed Matter, 2015, 27, 083003. | 1.8 | 34 |

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| 37 | High-Pressure NO-Induced Mixed Phase on Rh(111): Chemically Driven Replacement. Journal of Physical Chemistry C, 2015, 119, 3033-3039. | 3.1 | 12 |
| 38 | Direct Observation of Active Nickel Oxide Cluster in Nickelâ€“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 |
| 39 | A near-ambient pressure XPS study on catalytic CO oxidation reaction over a Ru(<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf | 1.9 | 11 |
| 40 | Surface Science, 2014, 621, 128-132.<br><scp>I</scp>n Situ Observation of Model Catalysts under Reaction Conditions Using <scp>X</scp>â€ray Coreâ€Level Spectroscopy. Chemical Record, 2014, 14, 806-818. | 5.8 | 9 |
| 41 | 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 |
| 42 | Photoexcited Hole Transfer to a MnOxCocatalyst on a SrTiO3Photoelectrode during Oxygen Evolution Studied by In Situ X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 24302-24309. | 3.1 | 42 |
| 43 | Electrochromic Characteristics of a Nickel Borate Thin Film Investigated by In Situ XAFS and UV/vis Spectroscopy. Electrochemistry, 2014, 82, 355-358. | 1.4 | 13 |
| 44 | Structure and Photo-Induced Charge Transfer of Pyridine Molecules Adsorbed on TiO2(110): A NEXAFS and Core-Hole-Clock Study. Electrochemistry, 2014, 82, 341-345. | 1.4 | 2 |
| 45 | In Situ XAFS Study of the Photoinduced Potential Shift of a MnOx Cocatalyst on a SrTiO3 Photocatalyst. Chemistry Letters, 2014, 43, 1725-1727. | 1.3 | 8 |
| 46 | The Development of Ambient Pressure X-Ray Photoelectron Spectroscopy and Its Application to Surface Science. , 2014, , 197-229. | | 2 |
| 47 | Photoelectron spectroscopic study of CO and NO adsorption on Pd(100) surface under ambient pressure conditions. Surface Science, 2013, 615, 33-40. | 1.9 | 15 |
| 48 | In Situ Photoemission Observation of Catalytic CO Oxidation Reaction on Pd(110) under Near-Ambient Pressure Conditions: Evidence for the Langmuirâ€“Hinshelwood Mechanism. Journal of Physical Chemistry C, 2013, 117, 20617-20624. | 3.1 | 26 |
| 49 | In situ observation of carrier transfer in the Mn-oxide/Nb:SrTiO3 photoelectrode by X-ray absorption spectroscopy. Chemical Communications, 2013, 49, 7848. | 4.1 | 32 |
| 50 | 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 |
| 51 | Molecular orientation change during adsorption of NO and N2O on Ir(111) observed by real-time wavelength-dispersive x-ray absorption spectroscopy with polarization switching. Applied Physics Letters, 2012, 101, . | 3.3 | 3 |
| 52 | 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 |
| 53 | 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 |
| 54 | 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. Applied Physics Letters, 2011, 99, . | 3.3 | 16 |

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| 55 | Mechanism of Ammonia Formation on Rh(111) Studied by Dispersive Near-Edge X-ray Absorption Fine Structure Spectroscopy. Journal of Physical Chemistry C, 2010, 114, 2164-2170. | 3.1 | 7 |
| 56 | Chemical Reactions on Platinum-Group Metal Surfaces Studied by Synchrotron-Radiation-Based Spectroscopy. Journal of the Vacuum Society of Japan, 2009, 52, 73-79. | 0.3 | 2 |
| 57 | 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 |
| 58 | Pretreatment Dependence of Adsorption Properties of Merocyanine Dye at Rutile (110) and (100) TiO<sub>2</sub> Surfaces Studied by C K-Edge NEXAFS. Journal of Physical Chemistry C, 2009, 113, 17254-17261. | 3.1 | 9 |
| 59 | Mechanism of N + NO Reaction on Rh(111) Surfaces: A precursor-Mediated Reaction. Journal of Physical Chemistry C, 2009, 113, 13257-13265. | 3.1 | 26 |
| 60 | Geometric and electronic structures of NO dimer layers on Rh(111) studied with near edge x-ray absorption fine structure spectroscopy: Experiment and theory. Journal of Chemical Physics, 2007, 127, 024701. | 3.0 | 10 |
| 61 | 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 |
| 62 | N+NO Reaction on Rh(111) Surfaces Studied with Fast Near-Edge X-ray Absorption Fine Structure Spectroscopy:Â Role of NO Dimer as an Extrinsic Precursor. Journal of Physical Chemistry B, 2006, 110, 25578-25581. | 2.6 | 16 |
| 63 | 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 |
| 64 | Growth of nanographite on Pt(111) and its edge state. Applied Physics Letters, 2006, 88, 153126. | 3.3 | 56 |
| 65 | Report of the 25th SSSJ Annual Meeting. Hyomen Kagaku, 2006, 27, 123-125. | 0.0 | 0 |
| 66 | Mechanism of Water Formation on Pt(111) Revealed by Time-resolved NEXAFS Experiment and Kinetic Monte Carlo Simulation. Hyomen Kagaku, 2005, 26, 378-384. | 0.0 | 1 |
| 67 | Water formation reaction on Pt(111): Role of the proton transfer. Journal of Chemical Physics, 2005, 122, 204704. | 3.0 | 17 |
| 68 | Metal-induced gap states in epitaxial organic-insulator/metal interfaces. Physical Review B, 2005, 72, . | 3.2 | 19 |
| 69 | Self-Assembly of Co Nanoplatelets into Spheres:â€‰ Synthesis and Characterization. Chemistry of Materials, 2005, 17, 3994-3996. | 6.7 | 117 |
| 70 | Magnetic Properties and Fabrication of Monodisperse FePd Nanoparticles. Materials Research Society Symposia Proceedings, 2004, 818, 206. | 0.1 | 0 |
| 71 | 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 |
| 72 | Water formation reaction on Pt(111): Near edge x-ray absorption fine structure experiments and kinetic Monte Carlo simulations. Journal of Chemical Physics, 2003, 119, 9233-9241. | 3.0 | 21 |

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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 | Structure of 2-Mercaptomethylthiophene Monolayers on Au(111). Molecular Crystals and Liquid Crystals, 2002, 377, 45-48. | 0.9 | 2 |
| 75 | 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 |
| 76 | Studies on Surface and Interface with X-ray Absorption Fine Structure (XAFS). XAFS Study of Self-Assembled Monolayers.. Hyomen Kagaku, 2002, 23, 351-358. | 0.0 | 1 |
| 77 | Low temperature electrochemical synthesis of titanium nitride. Chemical Communications, 2001, , 579-580. | 4.1 | 21 |
| 78 | Scanning Tunneling Microscopy Observations of [7]Thiahelicene Adsorbed on Au(111). Molecular Crystals and Liquid Crystals, 1999, 337, 273-276. | 0.3 | 3 |