Wang-Jae Chun

List of Publications by Year
in descending order

109 papers	4,271 citations	186265 28 h-index	114465 63 g-index
113 all docs	113 docs citations	113 times ranked	5205 citing authors

#	Article	IF	Citations
1	Conduction and Valence Band Positions of Ta2O5, TaON, and Ta3N5by UPS and Electrochemical Methods. Journal of Physical Chemistry B, 2003, 107, 1798-1803.	2.6	917
2	Size-specific catalytic activity of platinum clusters enhances oxygen reduction reactions. Nature Chemistry, 2009, 1, 397-402.	13.6	518
3	Active phase of Ni2P/SiO2 in hydroprocessing reactions. Journal of Catalysis, 2004, 221, 263-273.	6.2	222
4	Magic Number Pt₁₃ and Misshapen Pt₁₂ Clusters: Which One is the Better Catalyst?. Journal of the American Chemical Society, 2013, 135, 13089-13095.	13.7	179
5	A Solid Chelating Ligand: Periodic Mesoporous Organosilica Containing 2,2â€²-Bipyridine within the Pore Walls. Journal of the American Chemical Society, 2014, 136, 4003-4011.	13.7	166
6	Platinum clusters with precise numbers of atoms for preparative-scale catalysis. Nature Communications, 2017, 8, 688.	12.8	137
7	Effect of cyclic phosphate additive in non-flammable electrolyte. Journal of Power Sources, 2003, 119-121, 393-398.	7.8	128
8	Photocatalytic O₂ Evolution of Rhodium and Antimony-Codoped Rutile-Type TiO₂ under Visible Light Irradiation. Journal of Physical Chemistry C, 2007, 111, 17420-17426.	3.1	128
9	Finding the Most Catalytically Active Platinum Clusters With Low Atomicity. Angewandte Chemie - International Edition, 2015, 54, 9810-9815.	13.8	124
10	Catalysis and characterization of carbon-supported ruthenium for cellulose hydrolysis. Applied Catalysis A: General, 2011, 407, 188-194.	4.3	107
11	Finely controlled multimetallic nanocluster catalysts for solvent-free aerobic oxidation of hydrocarbons. Science Advances, 2017, 3, e1700101.	10.3	96
12	EXAFS measurements of a working catalyst in the liquid phase: An in situ study of a Ni2P hydrodesulfurization catalyst. Journal of Catalysis, 2006, 241, 20-24.	6.2	81
13	Kinetic Study of Catalytic Conversion of Cellulose to Sugar Alcohols under Lowâ€Pressure Hydrogen. ChemCatChem, 2014, 6, 230-236.	3.7	54
14	Polarization-Dependent Total-Reflection Fluorescence XAFS Study of Mo Oxides on a Rutile TiO2(110) Single Crystal Surface. Journal of Physical Chemistry B, 1998, 102, 9006-9014.	2.6	53
15	The First Atomic-scale Observation of a Ni2P(0001) Single Crystal Surface. Chemistry Letters, 2006, 35, 90-91.	1.3	52
16	In-Situ Polarization-Dependent Total-Reflection Fluorescence XAFS Studies on the Structure Transformation of Pt Clusters on Î±-Al2O3(0001). Journal of Physical Chemistry B, 1997, 101, 5549-5556.	2.6	51
17	X-ray absorption fine structure (XAFS) analyses of Ni species trapped in graphene sheet of carbon nanofibers. Physical Review B, 2006, 73, .	3.2	48
18	Synthesis of Silica-Supported Compact Phosphines and Their Application to Rhodium-Catalyzed Hydrosilylation of Hindered Ketones with Triorganosilanes. Organometallics, 2008, 27, 6495-6506.	2.3	47

#	ARTICLE	IF	CITATIONS
19	Three-Dimensional Structure Analyses of Cu Species Dispersed on TiO2(110) Surfaces Studied by Polarization-Dependent Total-Reflection Fluorescence X-ray Absorption Fine Structure (PTRF-XAFS). Journal of Physical Chemistry B, 2003, 107, 12917-12929.	2.6	37
20	Structure of low coverage Ni atoms on the TiO2(110) surface â€“ Polarization dependent total-reflection fluorescence EXAFS study. Chemical Physics Letters, 2006, 421, 27-30.	2.6	35
21	PtL3-edge XANES studies about the hydrogen adsorption on small Pt particles. Journal of Synchrotron Radiation, 1999, 6, 439-441.	2.4	31
22	Development of anin situpolarization-dependent total-reflection fluorescence XAFS measurement system. Journal of Synchrotron Radiation, 2001, 8, 168-172.	2.4	31
23	Self-regulated Ni cluster formation on the TiO2(110) terrace studied using scanning tunneling microscopy. Surface Science, 2006, 600, 117-121.	1.9	30
24	Preparation of atomically dispersed Cu species on a TiO2 (110) surface premodified with an organic compound. Chemical Physics Letters, 2007, 433, 345-349.	2.6	30
25	Scanning Tunneling Microscopy and Photoemission Electron Microscopy Studies on Single Crystal Ni₂P Surfaces. Journal of Nanoscience and Nanotechnology, 2009, 9, 195-201.	0.9	30
26	Heterogeneous double-activation catalysis: Rh complex and tertiary amine on the same solid surface for the 1,4-addition reaction of aryl- and alkylboronic acids. Catalysis Science and Technology, 2015, 5, 2714-2727.	4.1	30
27	Room-temperature-adsorption behavior of acetic anhydride on a TiO2(110) surface. Surface Science, 2007, 601, 1822-1830.	1.9	29
28	SiO₂-Supported Rh Catalyst for Efficient Hydrosilylation of Olefins Improved by Simultaneously Immobilized Tertiary Amines. ACS Catalysis, 2017, 7, 4637-4641.	11.2	29
29	Surface structures of Ni2P (0001)â€"scanning tunneling microscopy (STM) and low-energy electron diffraction (LEED) characterizations. Surface and Interface Analysis, 2006, 38, 1611-1614.	1.8	27
30	Anisotropic structure analysis for Mo oxides on TiO2(110) single crystal surface by polarization-dependent total-reflection fluorescence EXAFS. Chemical Physics Letters, 1998, 288, 868-872.	2.6	26
31	Probing the temperature of supported platinum nanoparticles under microwave irradiation by in situ and operando XAFS. Communications Chemistry, 2020, 3, .	4.5	26
32	A Pdâ€“bisphosphine complex and organic functionalities immobilized on the same SiO₂ surface: detailed characterization and its use as an efficient catalyst for allylation. Catalysis Science and Technology, 2016, 6, 5380-5388.	4.1	24
33	A local structure of low coverage Ni species on the Î±-Al2O3 (0001) surface â€“ a polarization dependent EXAFS study. Chemical Physics Letters, 2004, 384, 134-138.	2.6	23
34	Origin of Self-Regulated Cluster Growth on the TiO₂(110) Surface Studied Using Polarization-Dependent Total Reflection Fluorescence XAFS. Journal of Physical Chemistry C, 2008, 112, 4667-4675.	3.1	22
35	Molecular Catalysts Confined on and Within Molecular Layers Formed on a Si(111) Surface with Direct Siâ€“C Bonds. Advanced Materials, 2012, 24, 268-272.	21.0	22
36	Preparation and structure of a single Au atom on the TiO2(110) surface: control of the Auâ€“metal oxide surface interaction. Faraday Discussions, 2013, 162, 165.	3.2	22

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37	Coâ€Immobilization of a Palladiumâ€"Bisphosphine Complex and Strong Organic Base on a Silica Surface for Heterogeneous Synergistic Catalysis. ChemCatChem, 2016, 8, 331-335.	3.7	22
38	Concerted Catalysis in Tight Spaces: Palladiumâ€Catalyzed Allylation Reactions Accelerated by Accumulated Active Sites in Mesoporous Silica. ChemCatChem, 2017, 9, 2924-2929.	3.7	22
39	Design of a high-temperature and high-pressure liquid flow cell for x-ray absorption fine structure measurements under catalytic reaction conditions. Review of Scientific Instruments, 2008, 79, 014101.	1.3	21
40	Polarization-Dependent Total-Reflection Fluorescence X-ray Absorption Fine Structure for 3D Structural Determination and Surface Fine Tuning. Topics in Catalysis, 2013, 56, 1477-1487.	2.8	18
41	Surface structure change of a [Pt4(Âµ-CH3COO)8]/SiO2catalyst active for the decomposition of formic acid. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 4161-4170.	1.7	16
42	Title is missing!. Topics in Catalysis, 2000, 10, 209-219.	2.8	16
43	A Scanning Tunneling Microscopy Observation of ($sqrt{3}imessqrt{3}$) R30Â° Reconstructed Ni2P(0001). Japanese Journal of Applied Physics, 2008, 47, 6088-6091.	1.5	16
44	Silica Supportâ€Enhanced Pdâ€Catalyzed Allylation Using Allylic Alcohols. ChemCatChem, 2018, 10, 4536-4544.	3.7	16
45	Lowâ€Temperature H₂ Reduction of Copper Oxide Subnanoparticles. Chemistry - A European Journal, 2021, 27, 8452-8456.	3.3	16
46	In Situ X-ray Absorption Fine Structure Studies on the Structure of Nickel Phosphide Catalyst Supported on K-USY. Chemistry Letters, 2003, 32, 956-957.	1.3	15
47	Dehydrogenative Coupling of Alkanes and Benzene Enhanced by Slurry-Phase Interparticle Hydrogen Transfer. Jacs Au, 2021, 1, 124-129.	7.9	15
48	Fine tuning and orientation control of surface Cu complexes on TiO2(110) premodified with mercapto compounds: the effect of different mercapto group positions. Physical Chemistry Chemical Physics, 2013, 15, 14080.	2.8	14
49	Simultaneous formation of sorbitol and gluconic acid from cellobiose using carbon-supported ruthenium catalysts. Journal of Energy Chemistry, 2013, 22, 290-295.	12.9	14
50	Development of imaging energy analyzer using multipole Wien filter. Applied Surface Science, 2005, 241, 131-134.	6.1	13
51	Atomically dispersed Cu species on a TiO2(110) surface precovered with acetic anhydride. Chemical Physics Letters, 2009, 470, 99-102.	2.6	13
52	Various Active Metal Species Incorporated within Molecular Layers on Si(111) Electrodes for Hydrogen Evolution and CO₂ Reduction Reactions. Journal of Physical Chemistry C, 2016, 120, 16200-16210.	3.1	13
53	Multifunctional Catalytic Surface Design for Concerted Acceleration of One-Pot Hydrosilylationâ€"CO2 Cycloaddition. Organic Letters, 2019, 21, 9372-9376.	4.6	13
54	The structure analysis of MoOx/TiO2(110) by polarization-dependent total-reflection fluorescence X-ray absorption fine structure. Catalysis Today, 1998, 44, 309-314.	4.4	12

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55	Three-dimensional analysis of the local structure of Cu on TiO2(110) byin situpolarization-dependent total-reflection fluorescence XAFS. Journal of Synchrotron Radiation, 2001, 8, 508-510.	2.4	12
56	Adsorption structure of acetic anhydride on a TiO2(110) surface observed by scanning tunneling microscopy. Surface Science, 2009, 603, 552-557.	1.9	12
57	In-situ asymmetric structure analysis of Pt clusters on Î±-Al2O3(0 0 0 1) in H2 reduction and NO adsorption. Physica B: Condensed Matter, 1995, 208-209, 637-640.	2.7	11
58	Aberration-corrected multipole Wien filter for energy-filtered x-ray photoemission electron microscopy. Review of Scientific Instruments, 2007, 78, 063710.	1.3	11
59	Au Clusters on TiO₂(110) (1 Ã— 1) and (1 Ã— 2) Surfaces Examined by Polarization-Dependent Total Reflection Fluorescence XAFS. Journal of Physical Chemistry C, 2013, 117, 252-257.	3.1	11
60	Structures and dynamic behavior of catalyst model surfaces characterized by modern physical techniques. Research on Chemical Intermediates, 1998, 24, 151-168.	2.7	10
61	A Possibility of XANAM (X-ray Aided Non-contact Atomic Force Microscopy). Chemistry Letters, 2004, 33, 636-637.	1.3	10
62	EXAFS Studies about the Sorption of Cadmium Ions on Montmorillonite. Chemistry Letters, 2006, 35, 224-225.	1.3	10
63	Chemical States of Ag in Ag(DMe-DCNQI)2 Photoproducts and a Proposal for Its Photoinduced Conductivity Change Mechanism. Chemistry Letters, 2007, 36, 1008-1009.	1.3	10
64	Angle resolved total reflection fluorescence XAFS and its application to Au clusters on TiO2(110) (1 *) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.[illegible]	10
65	A New Indicator for Single Metal Dispersion on a TiO₂(110) Surface Premodified with a Mercapto Compound. Journal of Physical Chemistry C, 2016, 120, 15785-15791.	3.1	10
66	Influence of a Co-immobilized Tertiary Amine on the Structure and Reactivity of a Rh Complex: Accelerating Effect on Heterogeneous Hydrosilylation. Journal of Physical Chemistry C, 2019, 123, 14556-14563.	3.1	10
67	Controllable Factors of Supported Ir Complex Catalysis for Aromatic Câ€"H Borylation. ACS Catalysis, 2020, 10, 14552-14559.	11.2	10
68	Accumulation of Active Species in Silica Mesopore: Effect of the Pore Size and Free Base Additives on Pdâ€catalyzed Allylation using Allylic Alcohol. ChemCatChem, 2020, 12, 2783-2791.	3.7	10
69	PTRF X-ray absorption fine structure as a new technique for catalyst characterization. Journal of Molecular Catalysis A, 1996, 107, 55-65.	4.8	9
70	Surface structure analysis of dispersed metal sites on single crystal metal oxides by means of polarization-dependent total-reflection fluorescent EXAFS. Applied Surface Science, 1996, 100-101, 143-146.	6.1	9
71	Surface Reactions on MoO3Induced by Tunable Pulse Infrared Free Electron Laser. Chemistry Letters, 2004, 33, 558-559.	1.3	9
72	What is the Interaction between Atomically Dispersed Ni and Oxide Surfaces?. Materials Transactions, 2009, 50, 509-515.	1.2	9

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73	Field emission from N-doped diamond doped with dimethylurea. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 506-510.	1.2	9
74	Porous FeO(OH) Dispersed on Mgâ€Al Hydrotalcite Surface for Oneâ€Pot Synthesis of Quinoline Derivatives. ChemCatChem, 2021, 13, 2915-2921.	3.7	9
75	Application of a CdTe Solid-State Detector to Polarization-Dependent Total-Reflection Fluorescence XAFS Measurements. Journal of Synchrotron Radiation, 1996, 3, 160-162.	2.4	8
76	Conduction and Valence Band Positions of Ta2O5, TaON, and Ta3N5 by UPS and Electrochemical Methods.. ChemInform, 2003, 34, no.	0.0	8
77	X-ray Absorption Fine Structure Studies on the Local Structures of Ni Impurities in a Carbon Nanotube. Chemistry Letters, 2005, 34, 382-383.	1.3	8
78	Correlation between low threshold emission and Câ€“N bond in nitrogen-doped diamond films. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 02B119.	1.2	8
79	Subnano-transformation of molybdenum carbide to oxycarbide. Nanoscale, 2020, 12, 15814-15822.	5.6	8
80	Anisotropic Arrangement of Mo Species Highly Dispersed on TiO₂(110) Surface Demonstrated by Polarization Dependent Total Reflection Fluorescence EXAFS. Japanese Journal of Applied Physics, 1999, 38, 40.	1.5	8
81	Anisotropic ordering of Mo species deposited on TiO2(1 1 0) characterized by polarization-dependent total reflection fluorescence EXAFS (PTRF-EXAFS). Catalysis Today, 2001, 66, 97-103.	4.4	7
82	Preparation and Characterization of a Microfabricated Oxide-on-Oxide Catalyst of Î±-Sb2O4/VSbO4. Bulletin of the Chemical Society of Japan, 2005, 78, 435-442.	3.2	7
83	Development of in-lab energy-filtered X-ray photoemission electron microscope using air-core-coil-type multipole Wien filter. Surface Science, 2007, 601, 4742-4747.	1.9	7
84	Theoretical Debyeâ€“Waller factors of Î±-MoO3estimated by an equation-of-motion method. Journal of Synchrotron Radiation, 2004, 11, 291-294.	2.4	6
85	Anisotropic growth of a nickel trimer formed on a highly-stepped TiO2(110) surface. Chemical Physics Letters, 2013, 570, 64-69.	2.6	6
86	Thin Film Structures of Metal-Organic Framework [Cu3(BTC)2(H2O)3]n on TiO2(110). Electrochemistry, 2014, 82, 335-337.	1.4	6
87	Mesoporous silica-supported rhodium complexes alongside organic functional groups for catalysing the 1,4-addition reaction of arylboronic acid in water. Green Chemistry, 2022, 24, 3269-3276.	9.0	6
88	An approach to nano-chemical analysis through NC-AFM technique. Catalysis Today, 2006, 117, 80-83.	4.4	5
89	Development of <i>Operando</i> Polarization-Dependent Total Reflection Fluorescence X-ray Absorption Fine Structure Technique for Three-Dimensional Structure Determination of Active Metal Species on a Model Catalyst Surface under Working Conditions. Journal of Physical Chemistry C, 2021, 125, 12424-12432.	3.1	5
90	Nanographene growth from benzene on Pt(111). Surface Science, 2021, 711, 121874.	1.9	5

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91	Title is missing!. Topics in Catalysis, 2002, 20, 89-95.	2.8	4
92	Recent progress in energy-filtered high energy X-ray photoemission electron microscopy using a Wien filter type energy analyzer. Applied Surface Science, 2004, 237, 637-640.	6.1	4
93	Effects of Mesopore Internal Surfaces on the Structure of Immobilized Pd-Bisphosphine Complexes Analyzed by Variable-Temperature XAFS and Their Catalytic Performances. Catalysts, 2018, 8, 106.	3.5	4
94	Metallic Tungsten Nanoparticles That Exhibit an Electronic State Like Carbides during the Carbothermal Reduction of WCl₆ by Hydrogen. Inorganic Chemistry, 2020, 59, 15690-15695.	4.0	4
95	A useful preparation of ultrasmall iron oxide particles by using arc plasma deposition. RSC Advances, 2020, 10, 41523-41531.	3.6	4
96	In Situ EXAFS Studies on Ni2P Hydrodesulfurization Catalysts in the Presence of High Pressure and High Temperature Oil. AIP Conference Proceedings, 2007, , .	0.4	3
97	Rh-catalyzed 1,4-addition reactions of arylboronic acids accelerated by co-immobilized tertiary amine in silica mesopores. Molecular Catalysis, 2019, 472, 1-9.	2.0	3
98	Multipleâ€Oxidationâ€State Tungstenâ€Oxide Clusters on a Carbon Surface as an Intersection between Molecular and Bulk Oxides. European Journal of Inorganic Chemistry, 2021, 2021, 1111-1116.	2.0	3
99	Rhodiumâ€“Iodide Complex on a Catalytically Active SiO₂ Surface for Oneâ€Pot Hydrosilylationâ€“CO₂ Cycloaddition. Chemistry - A European Journal, 2022, 28, .	3.3	3
100	Layer-by-Layer Construction of Three-Dimensional MOF [Cu₂(bdc)₂dabco]_non Au Surface. ECS Transactions, 2017, 75, 49-53.	0.5	2
101	Principles Pertaining to the Metal-support Interaction on Metal Oxide Surfaces. Hyomen Kagaku, 2009, 30, 84-91.	0.0	2
102	X-Ray Absorption Fine Structure Analysis of Catalytic Nanomaterials. , 2016, , 609-664.		1
103	Silica Support-Enhanced Pd-Catalyzed Allylation Using Allylic Alcohols. ChemCatChem, 2018, 10, 4476-4476.	3.7	1
104	Variable-Temperature XAFS Analysis of SiO2-Supported Pdâ€“Bisphosphine Complexes With/Without Co-immobilized Organic Functionality. Topics in Catalysis, 2018, 61, 1408-1413.	2.8	1
105	Lowâ€Temperature H 2 Reduction of Copper Oxide Subnanoparticles. Chemistry - A European Journal, 2021, 27, 8410-8410.	3.3	1
106	Synthesis and magnetic properties of sub-nanosized iron carbides on a carbon support. RSC Advances, 2022, 12, 3238-3242.	3.6	1
107	Organic group decorated heterogeneous Pd complex on mesoporous silica toward catalytic allylation in aqueous media. Catalysis Today, 2023, 411-412, 113829.	4.4	1
108	The Adsorption Site and Structure of Metal Atoms on Oxide Single Crystals. Hyomen Kagaku, 2006, 27, 414-419.	0.0	0

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109	Copper-bismuth Binary Oxide Clusters: An Efficient Catalyst for Selective Styrene Bisperoxidation. Chemistry Letters, 2022, 51, 317-320.	1.3	0