Isao Nakamura

List of Publications by Year
in descending order

64 papers	4,098 citations	126907 33 h-index	114465 63 g-index
67 all docs	67 docs citations	67 times ranked	4814 citing authors

#	Article	IF	Citations
1	Direct synthesis of triazines from alcohols and amidines using supported Pt nanoparticle catalysts <i>via</i> the acceptorless dehydrogenative methodology. Catalysis Science and Technology, 2022, 12, 4679-4687.	4.1	4
2	High-throughput development of highly active catalyst system to convert bioethanol to 1,3-butadiene. Reaction Chemistry and Engineering, 2021, 6, 1381-1385.	3.7	7
3	Flow reactor approach for the facile and continuous synthesis of efficient Pd@Pt core-shell nanoparticles for acceptorless dehydrogenative synthesis of pyrimidines from alcohols and amidines. Applied Catalysis A: General, 2021, 619, 118158.	4.3	9
4	Continuous-flow synthesis of Pd@Pt core-shell nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 620, 126607.	4.7	15
5	Fundamental roles of ZnO and ZrO₂in the conversion of ethanol to 1,3-butadiene over ZnOâ€“ZrO₂/SiO₂. Catalysis Science and Technology, 2020, 10, 7531-7541.	4.1	13
6	Effect of Catalyst Preparation Method on Ammonia Decomposition Reaction over Ru/MgO Catalyst. Bulletin of the Chemical Society of Japan, 2020, 93, 1186-1192.	3.2	16
7	H₂O Dissociation at the Perimeter Interface between Gold Nanoparticles and TiO₂ Is Crucial for Oxidation of CO. ACS Catalysis, 2020, 10, 2517-2521.	11.2	29
8	Catalytic performance of H-ZSM-5 zeolites for conversion of ethanol or ethylene to propylene: Effect of reaction pressure and SiO2/Al2O3 ratio. Catalysis Communications, 2017, 91, 62-66.	3.3	36
9	Highly selective catalytic conversion of ethanol to propylene over yttrium-modified zirconia catalyst. Catalysis Communications, 2017, 90, 10-13.	3.3	32
10	Role of metal oxide supports in NH 3 decomposition over Ni catalysts. Applied Catalysis A: General, 2016, 524, 45-49.	4.3	65
11	Mechanism and active sites of CO oxidation over single-crystal Au surfaces and a Au/TiO 2 (110) model surface. Chinese Journal of Catalysis, 2016, 37, 1676-1683.	14.0	8
12	Effects of particle size on catalytic conversion of ethanol to propylene over H-ZSM-5 catalystsâ€"Smaller is better. Catalysis Communications, 2016, 73, 27-33.	3.3	30
13	Effect of Water on Low-Temperature CO Oxidation Over a Au/Al2O3 Model Catalyst. Catalysis Letters, 2014, 144, 1113-1117.	2.6	2
14	Role of Water in CO Oxidation on Gold Catalysts. Catalysis Letters, 2014, 144, 1475-1486.	2.6	66
15	Difference between the mechanisms of propylene production from methanol and ethanol over ZSM-5 catalysts. Applied Catalysis A: General, 2013, 467, 380-385.	4.3	47
16	Characteristics and Photocatalytic Properties of Thin Film Prepared by Sputter Deposition and Post-N⁺Ion Implantation. Advances in Materials Science and Engineering, 2012, 2012, 1-7.	1.8	12
17	Heterogeneous Catalysis by Gold. Advances in Catalysis, 2012, 55, 1-126.	0.2	139
18	Influence of Au and TiO2 structures on hydrogen dissociation over TiO2/Au(100). Surface Science, 2012, 606, 1581-1585.	1.9	8

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19	Effects of added phosphorus on conversion of ethanol to propylene over ZSM-5 catalysts. Applied Catalysis A: General, 2012, 423-424, 162-167.	4.3	67
20	Active Sites for Hydrogen Dissociation over TiO_{<i>x</i>}/Au(111) Surfaces. Journal of Physical Chemistry C, 2011, 115, 16074-16080.	3.1	41
21	Mechanism and Active Sites of the Oxidation of CO over Au/TiO₂. Angewandte Chemie - International Edition, 2011, 50, 10144-10147.	13.8	206
22	Study of active sites on the MFI zeolite catalysts for the transformation of ethanol into propylene. Journal of Molecular Catalysis A, 2010, 328, 114-118.	4.8	48
23	Phosphorus-modified ZSM-5 for conversion of ethanol to propylene. Applied Catalysis A: General, 2010, 384, 201-205.	4.3	126
24	Adsorption and Reaction Properties of NO and CO over the Ir and Rh Surfaces. Journal of the Vacuum Society of Japan, 2009, 52, 61-66.	0.3	1
25	Effect of Al2O3 support on morphology and NO reactivity of Rh. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 895-899.	2.1	0
26	Hydrogen Dissociation by Gold Clusters. Angewandte Chemie - International Edition, 2009, 48, 9515-9518.	13.8	277
27	Selective Dissociation of O3 and Adsorption of CO on Various Au Single Crystal Surfaces. Catalysis Letters, 2009, 129, 400-403.	2.6	35
28	Adsorption Behavior and Reaction Properties of NO and CO on Ir(111) and Rh(111). Catalysis Surveys From Asia, 2009, 13, 22-29.	2.6	13
29	Kinetics and mechanism of NO reduction with CO on Ir surfaces. Journal of Catalysis, 2008, 253, 139-147.	6.2	29
30	Reaction properties of NO and CO over an Ir(211) surface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 1143-1146.	2.1	10
31	Adsorption and reactivity of SO2 on Ir(111) and Rh(111). Surface Science, 2007, 601, 1615-1622.	1.9	19
32	Excellent Promoting Effect of Ba Addition on the Catalytic Activity of Ir/WO3â€"SiO2for the Selective Reduction of NO with CO. Chemistry Letters, 2006, 35, 420-421.	1.3	17
33	Direct decomposition of nitrogen monoxide over a K-deposited Co(0001) surface: Comparison to K-doped cobalt oxide catalysts. Journal of Electron Spectroscopy and Related Phenomena, 2006, 150, 150-154.	1.7	10
34	Role of tungsten in promoting selective reduction of NO with CO over Ir/WO3â€"SiO2 catalysts. Catalysis Letters, 2006, 112, 133-138.	2.6	23
35	Adsorption behavior and reaction properties of NO and CO on Rh(111). Surface Science, 2006, 600, 3235-3242.	1.9	51
36	Structure and NO reactivity of Zr-deposited Pd surfaces. Applied Surface Science, 2005, 240, 77-84.	6.1	0

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37	Promotional effect of SO2 on the activity of Ir/SiO2 for NO reduction with CO under oxygen-rich conditions. Journal of Catalysis, 2005, 229, 197-205.	6.2	83
38	Effects of added 3d transition-metals on Ag-based catalysts for direct epoxidation of propylene by oxygen. Applied Catalysis A: General, 2005, 294, 34-39.	4.3	39
39	Catalytic Active Site for NO Decomposition Elucidated by Surface Science and Real Catalyst. Catalysis Surveys From Asia, 2005, 9, 207-215.	2.6	22
40	Reactivity of NO over K-deposited Pd(111) and surface structure of the catalyst. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 1051-1054.	2.1	0
41	A density functional study of NO adsorption and decomposition on Ni(211) and Pd(211) surfaces. Journal of Chemical Physics, 2005, 122, 014703.	3.0	15
42	Adsorption and Reactions of NO on Clean and CO-Precovered Ir(111). Journal of Physical Chemistry B, 2005, 109, 17603-17607.	2.6	48
43	Studies of NO Adsorption on Pt(110)-(1Ã—2) and (1Ã—1) Surfaces Using Density Functional Theory. Journal of Physical Chemistry B, 2005, 109, 10312-10318.	2.6	15
44	Adsorption and decomposition of NO on stepped and K-deposited Pd surfaces: a comparison of NO stretching vibrational frequencies calculated by density functional theory and measured by infrared spectroscopy. Surface Science, 2004, 571, 102-116.	1.9	13
45	NO Decomposition on an Mn-Deposited Pd(100) Surface. Catalysis Letters, 2003, 87, 91-96.	2.6	4
46	Adsorption and decomposition of NO on K-deposited Pd(111). Surface Science, 2003, 544, 45-50.	1.9	13
47	Effect of surface structure of supported palladium catalysts on the activity for direct decomposition of nitrogen monoxide. Journal of Catalysis, 2003, 218, 405-410.	6.2	33
48	Methanol Synthesis from CO and CO2Hydrogenations over Supported Palladium Catalysts. Bulletin of the Chemical Society of Japan, 2002, 75, 1393-1398.	3.2	56
49	Comprehensive study combining surface science and real catalyst for NO direct decomposition. Chemical Communications, 2002, , 2816-2817.	4.1	22
50	Adsorption and decomposition of NO on Pd surfaces. Surface Science, 2002, 514, 409-413.	1.9	47
51	Structure-Dependent Kinetics for Synthesis and Decomposition of Formate Species over Cu(111) and Cu(110) Model Catalysts. Journal of Physical Chemistry B, 2001, 105, 1355-1365.	2.6	79
52	Mechanism for NO Photooxidation over the Oxygen-Deficient TiO2Powder under Visible Light Irradiation. Chemistry Letters, 2000, 29, 1276-1277.	1.3	44
53	Preparation of Visible-Light-Responsive Titanium Oxide Photocatalysts by Plasma Treatment. Chemistry Letters, 2000, 29, 1354-1355.	1.3	85
54	Role of oxygen vacancy in the plasma-treated TiO2 photocatalyst with visible light activity for NO removal. Journal of Molecular Catalysis A, 2000, 161, 205-212.	4.8	1,110

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55	Synthesis and decomposition of formate on Cu(111) and Cu(110) surfaces: Structure sensitivity. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 1592-1595.	2.1	36
56	The synthesis of methanol and the reverse water-gas shift reaction over Zn-deposited Cu(100) and Cu(110) surfaces: comparison with Zn/Cu(111). Surface Science, 1998, 400, 387-400.	1.9	79
57	Evidence for a special formate species adsorbed on the Cuâ€"Zn active site for methanol synthesis. Surface Science, 1998, 402-404, 92-95.	1.9	75
58	The kinetics and mechanism of methanol synthesis by hydrogenation of CO2 over a Zn-deposited Cu(111) surface. Surface Science, 1997, 383, 285-298.	1.9	185
59	Methanol synthesis by hydrogenation of CO2 over a Zn-deposited Cu(111): formate intermediate. Applied Surface Science, 1997, 121-122, 583-586.	6.1	37
60	A model catalyst for methanol synthesis: Znâ€deposited and Znâ€free Cu surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 1464-1468.	2.1	71
61	A Surface Science Investigation of Methanol Synthesis over a Zn-Deposited Polycrystalline Cu Surface. Journal of Catalysis, 1996, 160, 65-75.	6.2	121
62	Model studies of methanol synthesis on copper catalysts. Studies in Surface Science and Catalysis, 1996, 101, 1389-1399.	1.5	61
63	Methanol synthesis by the hydrogenation of CO2 over Zn-deposited Cu(111) and Cu(110) surfaces. Catalysis Letters, 1995, 35, 297-302.	2.6	40
64	Methanol synthesis over a Zn-deposited copper model catalyst. Catalysis Letters, 1995, 31, 325-331.	2.6	72