Shun Nishimura

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8657346/publications.pdf

Version: 2024-02-01

93	4,789	109321 35	95266 68
papers	citations	h-index	g-index

102	102	102	5137
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrotalcite-supported gold-nanoparticle-catalyzed highly efficient base-free aqueous oxidation of 5-hydroxymethylfurfural into 2,5-furandicarboxylic acid under atmospheric oxygen pressure. Green Chemistry, 2011, 13, 824.	9.0	389
2	A one-pot reaction for biorefinery: combination of solid acid and base catalysts for direct production of 5-hydroxymethylfurfural from saccharides. Chemical Communications, 2009, , 6276.	4.1	299
3	One-Pot Synthesis of 2,5-Diformylfuran from Carbohydrate Derivatives by Sulfonated Resin and Hydrotalcite-Supported Ruthenium Catalysts. ACS Catalysis, 2011, 1, 1562-1565.	11.2	233
4	Characterization, synthesis and catalysis of hydrotalcite-related materials for highly efficient materials transformations. Green Chemistry, 2013, 15, 2026.	9.0	219
5	Selective hydrogenation of biomass-derived 5-hydroxymethylfurfural (HMF) to 2,5-dimethylfuran (DMF) under atmospheric hydrogen pressure over carbon supported PdAu bimetallic catalyst. Catalysis Today, 2014, 232, 89-98.	4.4	214
6	Direct Synthesis of 1,6â€Hexanediol from HMF over a Heterogeneous Pd/ZrP Catalyst using Formic Acid as Hydrogen Source. ChemSusChem, 2014, 7, 96-100.	6.8	196
7	Syntheses of 5-hydroxymethylfurfural and levoglucosan by selective dehydration of glucose using solid acid and base catalysts. Applied Catalysis A: General, 2010, 383, 149-155.	4.3	177
8	Synthesis of glycerol carbonate from glycerol and dialkyl carbonates using hydrotalcite as a reusable heterogeneous base catalyst. Green Chemistry, 2010, 12, 578.	9.0	170
9	Upgrading of pyrolysis bio-oil using nickel phosphide catalysts. Journal of Catalysis, 2016, 333, 115-126.	6.2	147
10	Metal-free oxidative synthesis of succinic acid from biomass-derived furan compounds using a solid acid catalyst with hydrogen peroxide. Applied Catalysis A: General, 2013, 458, 55-62.	4.3	124
11	Platinum/Gold Alloy Nanoparticles-Supported Hydrotalcite Catalyst for Selective Aerobic Oxidation of Polyols in Base-Free Aqueous Solution at Room Temperature. ACS Catalysis, 2013, 3, 2199-2207.	11.2	122
12	High-Throughput Experimentation and Catalyst Informatics for Oxidative Coupling of Methane. ACS Catalysis, 2020, 10, 921-932.	11.2	117
13	Production of Î³-valerolactone from biomass-derived compounds using formic acid as a hydrogen source over supported metal catalysts in water solvent. RSC Advances, 2014, 4, 10525.	3.6	105
14	Selective Oxidation of Glycerol by Using a Hydrotalciteâ€Supported Platinum Catalyst under Atmospheric Oxygen Pressure in Water. ChemSusChem, 2011, 4, 542-548.	6.8	100
15	Highly Efficient Aqueous Oxidation of Furfural to Succinic Acid Using Reusable Heterogeneous Acid Catalyst with Hydrogen Peroxide. Chemistry Letters, 2012, 41, 409-411.	1.3	91
16	The role of negatively charged Au states in aerobic oxidation of alcohols over hydrotalcite supported AuPd nanoclusters. Catalysis Science and Technology, 2013, 3, 351-359.	4.1	90
17	Catalytic Transformations of Biomass-Derived Materials into Value-Added Chemicals. Catalysis Surveys From Asia, 2012, 16, 164-182.	2.6	89
18	Role of base in the formation of silver nanoparticles synthesized using sodium acrylate as a dual reducing and encapsulating agent. Physical Chemistry Chemical Physics, 2011, 13, 9335.	2.8	87

#	Article	IF	Citations
19	One-pot Formation of Furfural from Xylose via Isomerization and Successive Dehydration Reactions over Heterogeneous Acid and Base Catalysts. Chemistry Letters, 2010, 39, 838-840.	1.3	78
20	One-Pot Synthesis of Furans from Various Saccharides Using a Combination of Solid Acid and Base Catalysts. Bulletin of the Chemical Society of Japan, 2012, 85, 275-281.	3.2	75
21	Reductive amination of furfural toward furfurylamine with aqueous ammonia under hydrogen over Ru-supported catalyst. Research on Chemical Intermediates, 2016, 42, 19-30.	2.7	75
22	The Rise of Catalyst Informatics: Towards Catalyst Genomics. ChemCatChem, 2019, 11, 1146-1152.	3.7	72
23	Synthesis of levulinic acid from fructose using Amberlyst-15 as a solid acid catalyst. Reaction Kinetics, Mechanisms and Catalysis, 2012, 106, 185-192.	1.7	70
24	X-ray Absorption Near-Edge Structure and X-ray Photoelectron Spectroscopy Studies of Interfacial Charge Transfer in Goldâ€“Silverâ€“Gold Double-Shell Nanoparticles. Journal of Physical Chemistry C, 2012, 116, 4511-4516.	3.1	69
25	Hydrolysis of Sugars Using Magnetic Silica Nanoparticles with Sulfonic Acid Groups. Chemistry Letters, 2011, 40, 1195-1197.	1.3	65
26	Base-free chemoselective transfer hydrogenation of nitroarenes to anilines with formic acid as hydrogen source by a reusable heterogeneous Pd/ZrP catalyst. RSC Advances, 2014, 4, 38241.	3.6	63
27	Unveiling Hidden Catalysts for the Oxidative Coupling of Methane based on Combining Machine Learning with Literature Data. ChemCatChem, 2018, 10, 3223-3228.	3.7	62
28	Synthesis of high-value organic acids from sugars promoted by hydrothermally loaded Cu oxide species on magnesia. Applied Catalysis B: Environmental, 2015, 162, 1-10.	20.2	54
29	Hydrotalcite-Supported Platinum Nanoparticles Prepared by a Green Synthesis Method for Selective Oxidation of Glycerol in Water Using Molecular Oxygen. Industrial & Engineering Chemistry Research, 2012, 51, 16182-16187.	3.7	47
30	Synthesis of Î±â€Amino Acids from Glucosamineâ€HCl and its Derivatives by Aerobic Oxidation in Water Catalyzed by Au Nanoparticles on Basic Supports. ChemSusChem, 2013, 6, 2259-2262.	6.8	46
31	Promotion effect of coexistent hydromagnesite in a highly active solid base hydrotalcite catalyst for transesterifications of glycols into cyclic carbonates. Catalysis Today, 2012, 185, 241-246.	4.4	44
32	In Situ Time-Resolved XAFS Study on the Formation Mechanism of Cu Nanoparticles Using Poly(N-vinyl-2-pyrrolidone) as a Capping Agent. Langmuir, 2010, 26, 4473-4479.	3.5	42
33	Data Driven Determination of Reaction Conditions in Oxidative Coupling of Methane via Machine Learning. ChemCatChem, 2019, 11, 4307-4313.	3.7	41
34	Gold Nanoparticles Supported on Alumina as a Catalyst for Surface Plasmon-Enhanced Selective Reductions of Nitrobenzene. ACS Omega, 2017, 2, 7066-7070.	3.5	39
35	Highly Selective Synthesis of 1,4-Butanediol via Hydrogenation of Succinic Acid with Supported Cuâ€“Pd Alloy Nanoparticles. ACS Sustainable Chemistry and Engineering, 2019, 7, 18483-18492.	6.7	39
36	One-pot synthesis of furfural derivatives from pentoses using solid acid and base catalysts. Catalysis Science and Technology, 2014, 4, 971-978.	4.1	37

#	Article	IF	Citations
37	Recent Advances in Heterogeneous Catalysis with Controlled Nanostructured Precious Monometals. ChemCatChem, 2016, 8, 2303-2316.	3.7	35
38	Preparation of zirconium carbonate as water-tolerant solid base catalyst for glucose isomerization and one-pot synthesis of levulinic acid with solid acid catalyst. Reaction Kinetics, Mechanisms and Catalysis, 2014, 111, 183-197.	1.7	34
39	Aerobic Oxidation of 5-Hydroxymethylfurfural into 2,5-Furandicarboxylic Acid over Gold Stabilized on Zirconia-Based Supports. ACS Sustainable Chemistry and Engineering, 2020, 8, 7150-7161.	6.7	32
40	Tailored design of palladium species grafted on an amino functionalized organozinc coordination polymer as a highly pertinent heterogeneous catalyst. Journal of Materials Chemistry A, 2014, 2, 18687-18696.	10.3	30
41	Genesis of Catalytically Active Gold Nanoparticles Supported on Hydrotalcite for Base-free Selective Oxidation of Glycerol in Water with Molecular Oxygen. Chemistry Letters, 2011, 40, 150-152.	1.3	29
42	Novel catalytic behavior of Cu/Al2O3 catalyst against daily start-up and shut-down (DSS)-like operation in the water gas shift reaction. Applied Catalysis A: General, 2010, 387, 185-194.	4.3	27
43	Fine-crystallized LDHs prepared with SiO₂ spheres as highly active solid base catalysts. Journal of Materials Chemistry A, 2017, 5, 6947-6957.	10.3	27
44	Oneâ€Pot Conversions of Raffinose into Furfural Derivatives and Sugar Alcohols by Using Heterogeneous Catalysts. ChemSusChem, 2014, 7, 260-267.	6.8	26
45	Selective synthesis of 3-methyl-2-cyclopentenone via intramolecular aldol condensation of 2,5-hexanedione with Î³-Al2O3/AlOOH nanocomposite catalyst. Fuel Processing Technology, 2019, 196, 106185.	7.2	25
46	Synthesis of Formic Acid from Monosaccharides Using Calcined Mg-Al Hydrotalcite as Reusable Catalyst in the Presence of Aqueous Hydrogen Peroxide. Organic Process Research and Development, 2015, 19, 449-453.	2.7	23
47	Direct Hydroxymethylation of Furaldehydes with Aqueous Formaldehyde over a Reusable Sulfuric Functionalized Resin Catalyst. ACS Omega, 2018, 3, 5988-5993.	3.5	22
48	Direct esterification of succinic acid with phenol using zeolite beta catalyst. Catalysis Communications, 2019, 122, 20-23.	3.3	22
49	Revisiting Machine Learning Predictions for Oxidative Coupling of Methane (OCM) based on Literature Data. ChemCatChem, 2020, 12, 5888-5892.	3.7	22
50	High sustainability of Cuâ€“Alâ€“Ox catalysts against daily start-up and shut-down (DSS)-like operation in the waterâ€“gas shift reaction. Catalysis Communications, 2009, 10, 1057-1061.	3.3	21
51	Effect of Stabilizing Polymers on Catalysis of Hydrotalcite-Supported Platinum Nanoparticles for Aerobic Oxidation of 1,2-Propanediol in Aqueous Solution at Room Temperature. Journal of Physical Chemistry C, 2014, 118, 11723-11730.	3.1	21
52	Genesis of a bi-functional acidâ€“base site on a Cr-supported layered double hydroxide catalyst surface for one-pot synthesis of furfurals from xylose with a solid acid catalyst. Catalysis Science and Technology, 2016, 6, 8200-8211.	4.1	21
53	Effect of support on the formation of CuPd alloy nanoparticles for the hydrogenation of succinic acid. Applied Catalysis B: Environmental, 2021, 282, 119619.	20.2	21
54	MgOâ€ZrO₂ Mixed Oxides as Effective and Reusable Base Catalysts for Glucose Isomerization into Fructose in Aqueous Media. Chemistry - an Asian Journal, 2020, 15, 294-300.	3.3	20

#	Article	IF	Citations
55	Monodisperse Iron Oxide Nanoparticles Embedded in Mgâ€“Al Hydrotalcite as a Highly Active, Magnetically Separable, and Recyclable Solid Base Catalyst. Bulletin of the Chemical Society of Japan, 2010, 83, 846-851.	3.2	19
56	Transfer hydrogenation of furaldehydes with sodium phosphinate as a hydrogen source using Pd-supported alumina catalyst. Journal of the Taiwan Institute of Chemical Engineers, 2017, 79, 97-102.	5.3	19
57	Data-Driven Identification of the Reaction Network in Oxidative Coupling of the Methane Reaction via Experimental Data. Journal of Physical Chemistry Letters, 2020, 11, 787-795.	4.6	18
58	Selective Oxidation of Methane to Formaldehyde over a Silica-Supported Cobalt Single-Atom Catalyst. Journal of Physical Chemistry C, 2022, 126, 1785-1792.	3.1	18
59	Direct design of active catalysts for low temperature oxidative coupling of methane via machine learning and data mining. Catalysis Science and Technology, 2021, 11, 524-530.	4.1	17
60	Relationships among the Catalytic Performance, Redox Activity, and Structure of Cu-CHA Catalysts for the Direct Oxidation of Methane to Methanol Investigated Using In Situ XAFS and UVâ€“Vis Spectroscopies. ACS Catalysis, 2022, 12, 2454-2462.	11.2	17
61	Selective Oxidation of 1,6â€Hexanediol to 6â€Hydroxycaproic Acid over Reusable Hydrotalciteâ€Supported Auâ€“Pd Bimetallic Catalysts. ChemSusChem, 2015, 8, 1862-1866.	6.8	16
62	Hydrothermal Preparation of a Robust Boehmiteâ€Supported N,Nâ€Dimethyldodecylamine Nâ€Oxideâ€Capped Cobalt and Palladium Catalyst for the Facile Utilization of Formic Acid as a Hydrogen Source. ChemCatChem, 2015, 7, 2361-2369.	3.7	16
63	Hydroxymethylation of Furfural to HMF with Aqueous Formaldehyde over Zeolite Beta Catalyst. Catalysts, 2019, 9, 314.	3.5	16
64	Catalytic oxidation of methane to methanol over Cu-CHA with molecular oxygen. Catalysis Science and Technology, 2021, 11, 6217-6224.	4.1	16
65	One-pot Synthesis of Furfural from Xylose using Al₂O₃â€“Ni-Al Layered Double Hydroxide Acid-Base Bi-functional Catalyst and Sulfonated Resin. Chemistry Letters, 2016, 45, 194-196.	1.3	15
66	Data science assisted investigation of catalytically active copper hydrate in zeolites for direct oxidation of methane to methanol using H2O2. Scientific Reports, 2021, 11, 2067.	3.3	15
67	Catalytic direct oxidation of methane to methanol by redox of copper mordenite. Catalysis Science and Technology, 2021, 11, 3437-3446.	4.1	15
68	In situ observation of the dynamic behavior of Cuâ€“Alâ€“Ox catalysts for water gas shift reaction during daily start-up and shut-down (DSS)-like operation. Catalysis Science and Technology, 2012, 2, 1685.	4.1	13
69	Selective Oxidation of Biomass-derived Alcohols with Supported Metal Catalysts. Journal of the Japan Petroleum Institute, 2017, 60, 72-84.	0.6	10
70	Change in reactivity of differently capped AuPd bimetallic nanoparticle catalysts for selective oxidation of aliphatic diols to hydroxycarboxylic acids in basic aqueous solution. Catalysis Today, 2016, 265, 231-239.	4.4	9
71	Surfactantâ€Assisted Suzukiâ€“Miyaura Coupling Reaction of Unreactive Chlorobenzene over Hydrotalciteâ€Supported Palladium Catalyst. Asian Journal of Organic Chemistry, 2017, 6, 274-277.	2.7	9
72	Aqueous Oxidation of Sugars into Sugar Acids Using Hydrotalcite-supported Gold Nanoparticle Catalyst under Atmospheric Molecular Oxygen. Chemistry Letters, 2016, 45, 843-845.	1.3	8

#	Article	IF	Citations
73	Effect of SiO₂ amount on heterogeneous base catalysis of SiO₂@Mgâ€“Al layered double hydroxide. RSC Advances, 2018, 8, 28024-28031.	3.6	7
74	Influence of metal ratio on alumina-supported CuPd catalysts for the production of tetrahydrofuran from succinic acid. Applied Catalysis A: General, 2021, 616, 118063.	4.3	7
75	Representing the Methane Oxidation Reaction via Linking First-Principles Calculations and Experiment with Graph Theory. Journal of Physical Chemistry Letters, 2021, 12, 558-568.	4.6	7
76	Formic Acid as a Hydrogen Source for the Additive-Free Reduction of Aromatic Carbonyl and Nitrile Compounds at Reusable Supported Pd Catalysts. Catalysts, 2020, 10, 875.	3.5	6
77	Factors to influence low-temperature performance of supported Mnâ€“Na2WO4 in oxidative coupling of methane. Molecular Catalysis, 2021, 516, 111976.	2.0	6
78	Reductive Amination of 5-Hydroxymethyl-2-furaldehyde Over Beta Zeolite-Supported Ruthenium Catalyst. Catalysis Letters, 2022, 152, 2860-2868.	2.6	6
79	High-throughput screening and literature data-driven machine learning-assisted investigation of multi-component La₂O₃-based catalysts for the oxidative coupling of methane. Catalysis Science and Technology, 2022, 12, 2766-2774.	4.1	6
80	Selective aerobic oxidation of 1,3-propanediol to 3-hydroxypropanoic acid using hydrotalcite supported bimetallic gold nanoparticle catalyst in water. AIP Conference Proceedings, 2015, , .	0.4	5
81	Boehmite-derived Aluminum Oxide Catalyst for a Continuous Intramolecular Aldol Condensation of 2,5-Hexanedione to 3-Methyl-2-cyclopentenone in a Liquid-flow Reactor System. Chemistry Letters, 2022, 51, 131-134.	1.3	5
82	Properties of bio-oil generated by a pyrolysis of forest cedar residuals with the movable Auger-type reactor. AIP Conference Proceedings, 2016, , .	0.4	4
83	Catalytic Conversions of Biomass-Derived Furaldehydes Toward Biofuels. , 0, , .		4
84	Machine Learning-Aided Catalyst Modification in Oxidative Coupling of Methane via Manganese Promoter. Industrial & Engineering Chemistry Research, 2022, 61, 8462-8469.	3.7	4
85	Tailoring Graphene Oxide Framework with N- and S- Containing Organic Ligands for the Confinement of Pd Nanoparticles Towards Recyclable Catalyst Systems. Catalysis Letters, 2021, 151, 247-254.	2.6	3
86	Selective hydrogenation of succinic acid to gamma-butyrolactone with PVP-capped CuPd catalysts. Catalysis Science and Technology, 2022, 12, 1060-1069.	4.1	2
87	Preparation and Evaluation of Bimetallic Au Nano-Catalyst with Aerobic Oxidation of 1-Phenylethanol. Materials Research Society Symposia Proceedings, 2015, 1758, 56.	0.1	1
88	Bimetallic PdCu Nanoparticle Catalyst Supported on Hydrotalcite for Selective Aerobic Oxidation of Benzyl Alcohol. Materials Research Society Symposia Proceedings, 2015, 1760, 157.	0.1	1
89	Fe(III)â€Exchanged Montmorillonite as Reusable Heterogeneous Protonic Acid Catalyst for Michael Addition of Indole in Water. ChemistrySelect, 2017, 2, 10814-10817.	1.5	1
90	Performance of compact fast pyrolysis reactor with Auger-type modules for the continuous liquid biofuel production. AIP Conference Proceedings, 2018, , .	0.4	1

#	Article	IF	Citations
91	Synthesis of Glycidamide from Acrylonitrile Using Basic Hydrotalcite Catalyst in the Presence of Aqueous Hydrogen Peroxide and Unsaturated Amide. Chemistry Letters, 2014, 43, 1716-1718.	1.3	0
92	Synthesis of N-hydroxysuccinimide from succinic acid and hydroxylammonium chloride using Amberlyst A21 as reusable solid base catalyst. AIP Conference Proceedings, 2018, , .	0.4	0
93	Design and Control of Bioinspired Millibots. Advanced Intelligent Systems, 2020, 2, 2000059.	6.1	0