

# Takashi Toyao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5297262/publications.pdf>

Version: 2024-02-01

136  
papers

5,470  
citations

87843

38  
h-index

95218

68  
g-index

146  
all docs

146  
docs citations

146  
times ranked

6452  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ga speciation and ethane dehydrogenation catalysis of Ga-CHA and MOR: Comparative investigation with Ga-MFI. <i>Catalysis Today</i> , 2023, 411-412, 113824.	2.2	5
2	Propane Dehydrogenation Catalysis of Titanium Hydrides: Positive Effect of Hydrogen Co-feeding. <i>Chemistry Letters</i> , 2022, 51, 88-90.	0.7	2
3	High-loading Ga-exchanged MFI zeolites as selective and coke-resistant catalysts for nonoxidative ethane dehydrogenation. <i>Catalysis Science and Technology</i> , 2022, 12, 986-995.	2.1	9
4	Machine Learning Analysis of Literature Data on the Water Gas Shift Reaction toward Extrapolative Prediction of Novel Catalysts. <i>Chemistry Letters</i> , 2022, 51, 269-273.	0.7	7
5	Role of Ba in an Al <sub>2</sub> O <sub>3</sub> -supported Pd-based Catalyst under Practical Three-Way Catalysis Conditions. <i>ChemCatChem</i> , 2022, 14, .	1.8	4
6	Catalytic Methylation of Benzene over Pt/MoO <sub>x</sub> /TiO <sub>2</sub> and Zeolite Catalyst Using CO <sub>2</sub> and H <sub>2</sub> . <i>Chemistry Letters</i> , 2022, 51, 149-152.	0.7	1
7	Continuous CO <sub>2</sub> Capture and Selective Hydrogenation to CO over Na-Promoted Pt Nanoparticles on Al <sub>2</sub> O <sub>3</sub> . <i>ACS Catalysis</i> , 2022, 12, 2639-2650.	5.5	22
8	Understanding and controlling the formation of surface anion vacancies for catalytic applications. <i>Catalysis Science and Technology</i> , 2022, 12, 2398-2410.	2.1	2
9	Experimental and Theoretical Investigation of Metal-Support Interactions in Metal-Oxide-Supported Rhenium Materials. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4472-4482.	1.5	5
10	Mechanistic study on three-way catalysis over Pd/La/Al <sub>2</sub> O <sub>3</sub> with high La loading. <i>Catalysis Today</i> , 2022, , .	2.2	1
11	Enhancement of the hydrodesulfurization and C-S bond cleavage activities of rhodium phosphide catalysts by platinum addition. <i>Journal of Catalysis</i> , 2022, 408, 294-302.	3.1	8
12	Redox-Driven Reversible Structural Evolution of Isolated Silver Atoms Anchored to Specific Sites on γ-Al <sub>2</sub> O <sub>3</sub> . <i>ACS Catalysis</i> , 2022, 12, 544-559.	5.5	16
13	Effect of oxygen storage materials on the performance of Pt-based three-way catalysts. <i>Catalysis Science and Technology</i> , 2022, 12, 3534-3548.	2.1	6
14	Oxidation Catalysis over Solid-State Keggin-Type Phosphomolybdic Acid with Oxygen Defects. <i>Journal of the American Chemical Society</i> , 2022, 144, 7693-7708.	6.6	30
15	Super Mg <sup>2+</sup> Conductivity around 10 <sup>3</sup> S cm <sup>-1</sup> Observed in a Porous Metal-Organic Framework. <i>Journal of the American Chemical Society</i> , 2022, 144, 8669-8675.	6.6	17
16	Catalytic Decomposition of N <sub>2</sub> O in the Presence of O <sub>2</sub> through Redox of Rh Oxide in a RhO <sub>x</sub> /ZrO <sub>2</sub> Catalyst. <i>ACS Catalysis</i> , 2022, 12, 6325-6333.	5.5	14
17	Trends in Surface Oxygen Formation Energy in Perovskite Oxides. <i>ACS Omega</i> , 2022, 7, 18427-18433.	1.6	2
18	Layered silicate stabilises diiron to mimic UV-shielding TiO <sub>2</sub> nanoparticle. <i>Materials Today Nano</i> , 2022, 19, 100227.	2.3	5

#	ARTICLE	IF	CITATIONS
19	Application to Electroluminescence Devices with Dimethylformamide-Stabilized Niobium Oxide Nanoparticles. ACS Applied Nano Materials, 2022, 5, 7658-7663.	2.4	2
20	<i>N,N</i> -Dimethylformamide-stabilized ruthenium nanoparticle catalyst for $\beta$ -alkylated dimer alcohol formation via Guerbet reaction of primary alcohols. RSC Advances, 2022, 12, 16599-16603.	1.7	2
21	<i>In Situ</i> Spectroscopic Studies of the Redox Catalytic Cycle in $\text{NH}_3$ -SCR over Chromium-Exchanged Zeolites. Journal of Physical Chemistry C, 2022, 126, 11082-11090.	1.5	7
22	Mechanism of Standard $\text{NH}_3$ -SCR over Cu-CHA via $\text{NO}^+$ and HONO Intermediates. Journal of Physical Chemistry C, 2022, 126, 11594-11601.	1.5	10
23	<i>In situ/operando</i> spectroscopic studies on $\text{NH}_3$ -SCR reactions catalyzed by a phosphorus-modified Cu-CHA zeolite. Catalysis Today, 2021, 376, 73-80.	2.2	12
24	Kinetic and spectroscopic insights into the behaviour of Cu active site for $\text{NH}_3$ -SCR over zeolites with several topologies. Catalysis Science and Technology, 2021, 11, 2718-2733.	2.1	10
25	High dimensionally structured W-V oxides as highly effective catalysts for selective oxidation of toluene. Catalysis Today, 2021, 363, 60-66.	2.2	6
26	Greener and facile synthesis of Cu/ZnO catalysts for $\text{CO}_2$ hydrogenation to methanol by urea hydrolysis of acetates. RSC Advances, 2021, 11, 14323-14333.	1.7	6
27	Hydrolysis of amides to carboxylic acids catalyzed by $\text{Nb}_2\text{O}_5$ . Catalysis Science and Technology, 2021, 11, 1949-1960.	2.1	18
28	Reverse Water-Gas Shift Reaction via Redox of Re Nanoclusters Supported on $\text{TiO}_2$ . Chemistry Letters, 2021, 50, 158-161.	0.7	11
29	Surface activation by electron scavenger metal nanorod adsorption on $\text{TiH}_2$ , TiC, TiN, and $\text{Ti}_2\text{O}_3$ . Physical Chemistry Chemical Physics, 2021, 23, 16577-16593.	1.3	9
30	Bulk tungsten-substituted vanadium oxide for low-temperature $\text{NO}_x$ removal in the presence of water. Nature Communications, 2021, 12, 557.	5.8	92
31	Reverse water-gas shift reaction over $\text{Pt}/\text{MoO}_x/\text{TiO}_2$ : reverse Mars-van Krevelen mechanism via redox of supported $\text{MoO}_x$ . Catalysis Science and Technology, 2021, 11, 4172-4180.	2.1	20
32	Local structure and NO adsorption/desorption property of $\text{Pd}^{2+}$ cations at different paired Al sites in CHA zeolite. Physical Chemistry Chemical Physics, 2021, 23, 22273-22282.	1.3	15
33	Factors determining surface oxygen vacancy formation energy in ternary spinel structure oxides with zinc. Physical Chemistry Chemical Physics, 2021, 23, 23768-23777.	1.3	12
34	Alkyl decorated metal-organic frameworks for selective trapping of ethane from ethylene above ambient pressures. Dalton Transactions, 2021, 50, 10423-10435.	1.6	15
35	Transformation of Bulk Pd to Pd Cations in Small-Pore CHA Zeolites Facilitated by NO. JACS Au, 2021, 1, 201-211.	3.6	34
36	Effect of Oxygen Vacancies on Adsorption of Small Molecules on Anatase and Rutile $\text{TiO}_2$ Surfaces: A Frontier Orbital Approach. Journal of Physical Chemistry C, 2021, 125, 3827-3844.	1.5	18

#	ARTICLE	IF	CITATIONS
37	Single-Atom High-Valent Fe(IV) for Promoted Photocatalytic Nitrogen Hydrogenation on Porous TiO <sub>2</sub> -SiO <sub>2</sub> . ACS Catalysis, 2021, 11, 4362-4371.	5.5	70
38	Catalytic Methylation of <i>m</i> -Xylene, Toluene, and Benzene Using CO <sub>2</sub> and H <sub>2</sub> over TiO <sub>2</sub> -Supported Re and Zeolite Catalysts: Machine-Learning-Assisted Catalyst Optimization. ACS Catalysis, 2021, 11, 5829-5838.	5.5	25
39	In Situ/Operando IR and Theoretical Studies on the Mechanism of NH <sub>3</sub> -SCR of NO/NO <sub>2</sub> over H $\beta$ -CHA Zeolites. Journal of Physical Chemistry C, 2021, 125, 13889-13899.	1.5	23
40	Analysis of Updated Literature Data up to 2019 on the Oxidative Coupling of Methane Using an Extrapolative Machine-Learning Method to Identify Novel Catalysts. ChemCatChem, 2021, 13, 3636-3655.	1.8	33
41	Roles of the basic metals La, Ba, and Sr as additives in Al <sub>2</sub> O <sub>3</sub> -supported Pd-based three-way catalysts. Journal of Catalysis, 2021, 400, 387-396.	3.1	25
42	Analogous Mechanistic Features of NH <sub>3</sub> -SCR over Vanadium Oxide and Copper Zeolite Catalysts. ACS Catalysis, 2021, 11, 11180-11192.	5.5	33
43	Mechanism of NH <sub>3</sub> -Selective Catalytic Reduction (SCR) of NO/NO <sub>2</sub> (Fast SCR) over Cu-CHA Zeolites Studied by <i>In Situ/Operando</i> Infrared Spectroscopy and Density Functional Theory. Journal of Physical Chemistry C, 2021, 125, 21975-21987.	1.5	21
44	Lean NO <sub>x</sub> Reduction by In-Situ-Formed NH <sub>3</sub> under Periodic Lean/Rich Conditions over Rhodium-Loaded Al-Rich Beta Zeolites. ACS Catalysis, 2021, 11, 12293-12300.	5.5	8
45	Lean NO <sub>x</sub> Capture and Reduction by NH <sub>3</sub> <i>via</i> NO <sub>x</sub> Intermediates over H-CHA at Room Temperature. Journal of Physical Chemistry C, 2021, 125, 1913-1922.	1.5	15
46	Selective catalytic reduction of NO over Cu-AFX zeolites: mechanistic insights from <i>in situ/operando</i> spectroscopic and DFT studies. Catalysis Science and Technology, 2021, 11, 4459-4470.	2.1	6
47	Synthesis of Zeolitic Ti, Zr-Substituted Vanadotungstates and Investigation of Their Catalytic Activities for Low Temperature NH <sub>3</sub> -SCR. ACS Catalysis, 2021, 11, 14016-14025.	5.5	7
48	High-silica H $\beta$ zeolite catalyzed methanolysis of triglycerides to form fatty acid methyl esters (FAMES). Fuel Processing Technology, 2020, 197, 106204.	3.7	17
49	Formation and Reactions of NH <sub>4</sub> NO <sub>3</sub> during Transient and Steady-State NH <sub>3</sub> -SCR of NO <sub>x</sub> over H-AFX Zeolites: Spectroscopic and Theoretical Studies. ACS Catalysis, 2020, 10, 2334-2344.	5.5	67
50	Design of Fe-MOF-bpdc deposited with cobalt oxide (CoO <sub>x</sub> ) nanoparticles for enhanced visible-light-promoted water oxidation reaction. Research on Chemical Intermediates, 2020, 46, 2003-2015.	1.3	4
51	Machine Learning for Catalysis Informatics: Recent Applications and Prospects. ACS Catalysis, 2020, 10, 2260-2297.	5.5	309
52	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.	5.5	46
53	A CHA zeolite supported Ga-oxo cluster for partial oxidation of CH <sub>4</sub> at room temperature. Catalysis Today, 2020, 352, 118-126.	2.2	13
54	Thermally Induced Transformation of Sb-Containing Trigonal Mo <sub>3</sub> VO <sub>x</sub> to Orthorhombic Mo <sub>3</sub> VO <sub>x</sub> and Its Effect on the Catalytic Ammoxidation of Propane. Chemistry of Materials, 2020, 32, 1506-1516.	3.2	8

#	ARTICLE	IF	CITATIONS
55	Coordinated Water as New Binding Sites for the Separation of Light Hydrocarbons in Metal-Organic Frameworks with Open Metal Sites. ACS Applied Materials & Interfaces, 2020, 12, 9448-9456.	4.0	11
56	In-Exchanged CHA Zeolites for Selective Dehydrogenation of Ethane: Characterization and Effect of Zeolite Framework Type. Catalysts, 2020, 10, 807.	1.6	14
57	Changes in Surface Oxygen Vacancy Formation Energy at Metal/Oxide Perimeter Sites: A Systematic Study on Metal Nanoparticles Deposited on an In <sub>2</sub> O <sub>3</sub> (111) Support. Journal of Physical Chemistry C, 2020, 124, 27621-27630.	1.5	22
58	The design and development of MOF photocatalysts and their applications for water-splitting reaction. , 2020, , 323-338.		1
59	Frontier Molecular Orbital Based Analysis of Solid-Adsorbate Interactions over Group 13 Metal Oxide Surfaces. Journal of Physical Chemistry C, 2020, 124, 15355-15365.	1.5	22
60	Isolated Indium Hydrides in CHA Zeolites: Speciation and Catalysis for Nonoxidative Dehydrogenation of Ethane. Journal of the American Chemical Society, 2020, 142, 4820-4832.	6.6	86
61	In Situ Spectroscopic Studies on the Redox Cycle of NH <sub>3</sub> -SCR over Cu-CHA Zeolites. ChemCatChem, 2020, 12, 3050-3059.	1.8	64
62	Selective C3-alkenylation of oxindole with aldehydes using heterogeneous CeO <sub>2</sub> catalyst. Chinese Journal of Catalysis, 2020, 41, 970-976.	6.9	9
63	Mechanistic insights into the oxidation of copper species during NH <sub>3</sub> -SCR over Cu-CHA zeolites: a DFT study. Catalysis Science and Technology, 2020, 10, 3586-3593.	2.1	25
64	Surface Oxygen Vacancy Formation Energy Calculations in 34 Orientations of $\beta$ -Ga <sub>2</sub> O <sub>3</sub> and $\gamma$ -Al <sub>2</sub> O <sub>3</sub> . Journal of Physical Chemistry C, 2020, 124, 10509-10522.	1.5	19
65	Catalytic Methylation of Aromatic Hydrocarbons using CO <sub>2</sub> /H <sub>2</sub> over Re/TiO <sub>2</sub> and H-MOR Catalysts. ChemCatChem, 2020, 12, 2215-2220.	1.8	24
66	Machine Learning Predictions of Adsorption Energies of CH <sub>4</sub> -Related Species. , 2020, , 135-149.		0
67	Esterification of Tertiary Amides by Alcohols Through C-N Bond Cleavage over CeO <sub>2</sub> . ChemCatChem, 2019, 11, 449-456.	1.8	21
68	Linear Correlations between Adsorption Energies and HOMO Levels for the Adsorption of Small Molecules on TiO <sub>2</sub> Surfaces. Journal of Physical Chemistry C, 2019, 123, 20988-20997.	1.5	23
69	A Cu-Pd single-atom alloy catalyst for highly efficient NO reduction. Chemical Science, 2019, 10, 8292-8298.	3.7	105
70	Statistical Analysis and Discovery of Heterogeneous Catalysts Based on Machine Learning from Diverse Published Data. ChemCatChem, 2019, 11, 4537-4547.	1.8	54
71	Heterogeneous Pt and MoO <sub>3</sub> Co-Loaded TiO <sub>2</sub> Catalysts for Low-Temperature CO <sub>2</sub> Hydrogenation To Form CH <sub>3</sub> OH. ACS Catalysis, 2019, 9, 8187-8196.	5.5	66
72	Direct Phenolysis Reactions of Unactivated Amides into Phenolic Esters Promoted by a Heterogeneous CeO <sub>2</sub> Catalyst. Chemistry - A European Journal, 2019, 25, 10515-10515.	1.7	0

#	ARTICLE	IF	CITATIONS
73	Formation of Highly Active Superoxide Sites on CuO Nanoclusters Encapsulated in SAPO-34 for Catalytic Selective Ammonia Oxidation. ACS Catalysis, 2019, 9, 10398-10408.	5.5	39
74	Statistical Analysis and Discovery of Heterogeneous Catalysts Based on Machine Learning from Diverse Published Data. ChemCatChem, 2019, 11, 4445-4445.	1.8	6
75	Acetalization of glycerol with ketones and aldehydes catalyzed by high silica H <sub>2</sub> zeolite. Molecular Catalysis, 2019, 479, 110608.	1.0	20
76	Bulk Vanadium Oxide versus Conventional V <sub>2</sub> O <sub>5</sub> /TiO <sub>2</sub> : NH <sub>3</sub> -SCR Catalysts Working at a Low Temperature Below 150 °C. ACS Catalysis, 2019, 9, 9327-9331.	5.5	82
77	Mechanistic study of the selective hydrogenation of carboxylic acid derivatives over supported rhenium catalysts. Catalysis Science and Technology, 2019, 9, 5413-5424.	2.1	25
78	Direct Phenolysis Reactions of Unactivated Amides into Phenolic Esters Promoted by a Heterogeneous CeO <sub>2</sub> Catalyst. Chemistry - A European Journal, 2019, 25, 10594-10605.	1.7	17
79	Experimental and theoretical study of multinuclear indium-oxo clusters in CHA zeolite for CH <sub>4</sub> activation at room temperature. Physical Chemistry Chemical Physics, 2019, 21, 13415-13427.	1.3	18
80	Innenteilbild: MOF-on-MOF: Oriented Growth of Multiple Layered Thin Films of Metal-Organic Frameworks (Angew. Chem. 21/2019). Angewandte Chemie, 2019, 131, 6856-6856.	1.6	1
81	Design of Pd-based pseudo-binary alloy catalysts for highly active and selective NO reduction. Chemical Science, 2019, 10, 4148-4162.	3.7	41
82	Selective Transformations of Triglycerides into Fatty Amines, Amides, and Nitriles by using Heterogeneous Catalysis. ChemSusChem, 2019, 12, 3115-3125.	3.6	25
83	MOF-on-MOF: Oriented Growth of Multiple Layered Thin Films of Metal-Organic Frameworks. Angewandte Chemie, 2019, 131, 6960-6964.	1.6	37
84	MOF-on-MOF: Oriented Growth of Multiple Layered Thin Films of Metal-Organic Frameworks. Angewandte Chemie - International Edition, 2019, 58, 6886-6890.	7.2	145
85	Low-Temperature Hydrogenation of CO <sub>2</sub> to Methanol over Heterogeneous TiO <sub>2</sub> -Supported Re Catalysts. ACS Catalysis, 2019, 9, 3685-3693.	5.5	82
86	N-Methylation of amines and nitroarenes with methanol using heterogeneous platinum catalysts. Journal of Catalysis, 2019, 371, 47-56.	3.1	48
87	Catalytic Activity of Rhodium Phosphide for Selective Hydrodeoxygenation of Phenol. Chemistry Letters, 2019, 48, 471-474.	0.7	6
88	Esterification of Tertiary Amides by Alcohols Through C-N Bond Cleavage over CeO <sub>2</sub> . ChemCatChem, 2019, 11, 15-15.	1.8	0
89	Lewis Acid Catalysis of Nb <sub>2</sub> O <sub>5</sub> for Reactions of Carboxylic Acid Derivatives in the Presence of Basic Inhibitors. ChemCatChem, 2019, 11, 383-396.	1.8	53
90	C-Methylation of Alcohols, Ketones, and Indoles with Methanol Using Heterogeneous Platinum Catalysts. ACS Catalysis, 2018, 8, 3091-3103.	5.5	85

#	ARTICLE	IF	CITATIONS
91	Water oxidation reaction promoted by MIL-101(Fe) photoanode under visible light irradiation. Research on Chemical Intermediates, 2018, 44, 4755-4764.	1.3	10
92	Toward Effective Utilization of Methane: Machine Learning Prediction of Adsorption Energies on Metal Alloys. Journal of Physical Chemistry C, 2018, 122, 8315-8326.	1.5	140
93	Direct Synthesis of Lactams from Keto Acids, Nitriles, and H <sub>2</sub> by Heterogeneous Pt Catalysts. ChemCatChem, 2018, 10, 789-795.	1.8	28
94	Combined theoretical and experimental study on alcoholysis of amides on CeO <sub>2</sub> surface: A catalytic interplay between Lewis acid and base sites. Catalysis Today, 2018, 303, 256-262.	2.2	13
95	Catalytic NO <sub>x</sub> /CO Reactions over La-Al <sub>2</sub> O <sub>3</sub> Supported Pd: Promotion Effect of La. Chemistry Letters, 2018, 47, 1036-1039.	0.7	17
96	The Catalytic Reduction of Carboxylic Acid Derivatives and CO <sub>2</sub> by Metal Nanoparticles on Lewis Acidic Supports. Chemical Record, 2018, 18, 1374-1393.	2.9	18
97	Density Functional Theory Calculations of Oxygen Vacancy Formation and Subsequent Molecular Adsorption on Oxide Surfaces. Journal of Physical Chemistry C, 2018, 122, 29435-29444.	1.5	103
98	Origin of Nb <sub>2</sub> O <sub>5</sub> Lewis Acid Catalysis for Activation of Carboxylic Acids in the Presence of a Hard Base. ChemPhysChem, 2018, 19, 2809-2809.	1.0	0
99	Acceptorless Dehydrogenative Synthesis of Pyrimidines from Alcohols and Amidines Catalyzed by Supported Platinum Nanoparticles. ACS Catalysis, 2018, 8, 11330-11341.	5.5	58
100	High-silica H <sub>2</sub> zeolites for catalytic hydration of hydrophobic epoxides and alkynes in water. Journal of Catalysis, 2018, 368, 145-154.	3.1	26
101	Acceptorless dehydrogenative coupling reactions with alcohols over heterogeneous catalysts. Green Chemistry, 2018, 20, 2933-2952.	4.6	114
102	Design of Interfacial Sites between Cu and Amorphous ZrO <sub>2</sub> Dedicated to CO <sub>2</sub> -to-Methanol Hydrogenation. ACS Catalysis, 2018, 8, 7809-7819.	5.5	159
103	Origin of Nb <sub>2</sub> O <sub>5</sub> Lewis Acid Catalysis for Activation of Carboxylic Acids in the Presence of a Hard Base. ChemPhysChem, 2018, 19, 2848-2857.	1.0	28
104	Heterogeneous Platinum Catalysts for Direct Synthesis of Trimethylamine by <i>N</i> -Methylation of Ammonia and Its Surrogates with CO <sub>2</sub> /H <sub>2</sub> . Chemistry Letters, 2017, 46, 68-70.	0.7	19
105	Hydrodeoxygenation of Fatty Acids, Triglycerides, and Ketones to Liquid Alkanes by a Pt <sup>0</sup> /MoO <sub>x</sub> /TiO <sub>2</sub> Catalyst. ChemCatChem, 2017, 9, 2822-2827.	1.8	53
106	Oxidant-free Dehydrogenation of Glycerol to Lactic Acid by Heterogeneous Platinum Catalysts. ChemCatChem, 2017, 9, 2816-2821.	1.8	26
107	Fe <sub>3</sub> O <sub>4</sub> @HKUST-1 and Pd/Fe <sub>3</sub> O <sub>4</sub> @HKUST-1 as magnetically recyclable catalysts prepared via conversion from a Cu-based ceramic. CrystEngComm, 2017, 19, 4201-4210.	1.3	28
108	Heterogeneous catalysts for the cyclization of dicarboxylic acids to cyclic anhydrides as monomers for bioplastic production. Green Chemistry, 2017, 19, 3238-3242.	4.6	22

#	ARTICLE	IF	CITATIONS
109	TiO <sub>2</sub> -Supported Re as a General and Chemoselective Heterogeneous Catalyst for Hydrogenation of Carboxylic Acids to Alcohols. <i>Chemistry - A European Journal</i> , 2017, 23, 980-980.	1.7	3
110	Rhenium-Loaded TiO <sub>2</sub> : A Highly Versatile and Chemoselective Catalyst for the Hydrogenation of Carboxylic Acid Derivatives and the N-Methylation of Amines Using H <sub>2</sub> and CO <sub>2</sub> . <i>Chemistry - A European Journal</i> , 2017, 23, 14848-14859.	1.7	76
111	TiO <sub>2</sub> -Supported Re as a General and Chemoselective Heterogeneous Catalyst for Hydrogenation of Carboxylic Acids to Alcohols. <i>Chemistry - A European Journal</i> , 2017, 23, 1001-1006.	1.7	45
112	Acceptorless dehydrogenation of N-heterocycles by supported Pt catalysts. <i>Catalysis Today</i> , 2017, 281, 507-511.	2.2	38
113	Supported rhenium nanoparticle catalysts for acceptorless dehydrogenation of alcohols: structure-activity relationship and mechanistic studies. <i>Catalysis Science and Technology</i> , 2016, 6, 5864-5870.	2.1	24
114	Metal-Organic Framework (MOF) and Porous Coordination Polymer (PCP)-Based Photocatalysts. <i>Nanostructure Science and Technology</i> , 2016, , 479-489.	0.1	3
115	Lewis Acid-Promoted Heterogeneous Platinum Catalysts for Hydrogenation of Amides to Amines. <i>ChemistrySelect</i> , 2016, 1, 736-740.	0.7	42
116	Construction of Pt complex within Zr-based MOF and its application for hydrogen production under visible-light irradiation. <i>Research on Chemical Intermediates</i> , 2016, 42, 7679-7688.	1.3	32
117	Catalytic hydrolysis of hydrophobic esters on/in water by high-silica large pore zeolites. <i>Journal of Catalysis</i> , 2016, 344, 741-748.	3.1	18
118	An in situ porous cuprous oxide/nitrogen-rich graphitic carbon nanocomposite derived from a metal-organic framework for visible light driven hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18037-18042.	5.2	27
119	NH <sub>3</sub> -efficient ammoxidation of toluene by hydrothermally synthesized layered tungsten-vanadium complex metal oxides. <i>Journal of Catalysis</i> , 2016, 344, 346-353.	3.1	24
120	Synthesis of 2,5-disubstituted pyrroles via dehydrogenative condensation of secondary alcohols and 1,2-amino alcohols by supported platinum catalysts. <i>Organic Chemistry Frontiers</i> , 2016, 3, 846-851.	2.3	35
121	Visible-light-driven photocatalytic water oxidation catalysed by iron-based metal-organic frameworks. <i>Chemical Communications</i> , 2016, 52, 5190-5193.	2.2	96
122	Design of Zeolitic Imidazolate Framework Derived Nitrogen-Doped Nanoporous Carbons Containing Metal Species for Carbon Dioxide Fixation Reactions. <i>ChemSusChem</i> , 2015, 8, 3905-3912.	3.6	53
123	Zeolitic imidazolate frameworks as heterogeneous catalysts for a one-pot P-C bond formation reaction via Knoevenagel condensation and phospho-Michael addition. <i>RSC Advances</i> , 2015, 5, 24687-24690.	1.7	27
124	Positioning of the HKUST-1 metal-organic framework (Cu <sub>3</sub> (BTC) <sub>2</sub> ) through conversion from insoluble Cu-based precursors. <i>Inorganic Chemistry Frontiers</i> , 2015, 2, 434-441.	3.0	54
125	Immobilization of Cu Complex into Zr-Based MOF with Bipyridine Units for Heterogeneous Selective Oxidation. <i>Journal of Physical Chemistry C</i> , 2015, 119, 8131-8137.	1.5	89
126	Visible-light, photoredox catalyzed, oxidative hydroxylation of arylboronic acids using a metal-organic framework containing tetrakis(carboxyphenyl)porphyrin groups. <i>Chemical Communications</i> , 2015, 51, 16103-16106.	2.2	93



#	ARTICLE	IF	CITATIONS
127	Development of a novel one-pot reaction system utilizing a bifunctional Zr-based metal-organic framework. <i>Catalysis Science and Technology</i> , 2014, 4, 625.	2.1	63
128	Development of a Ru complex-incorporated MOF photocatalyst for hydrogen production under visible-light irradiation. <i>Chemical Communications</i> , 2014, 50, 6779.	2.2	145
129	Enhanced photoelectrochemical properties of visible light-responsive TiO <sub>2</sub> photoanode for separate-type Pt-free photofuel cells by Rh <sup>3+</sup> addition. <i>Research on Chemical Intermediates</i> , 2013, 39, 1603-1611.	1.3	4
130	Efficient hydrogen production and photocatalytic reduction of nitrobenzene over a visible-light-responsive metal-organic framework photocatalyst. <i>Catalysis Science and Technology</i> , 2013, 3, 2092.	2.1	198
131	Application of an amino-functionalised metal-organic framework: an approach to a one-pot acid-base reaction. <i>RSC Advances</i> , 2013, 3, 21582.	1.7	67
132	FT-IR study of the reaction mechanisms for photocatalytic reduction of NO with CO promoted by various single-site photocatalysts. <i>Journal of Catalysis</i> , 2013, 299, 232-239.	3.1	9
133	Development of dye-sensitized solar cells based on visible-light-responsive TiO <sub>2</sub> thin films with a unique columnar structure. <i>Research on Chemical Intermediates</i> , 2013, 39, 415-424.	1.3	6
134	Effect of pore sizes on catalytic activities of arenetricarbonyl metal complexes constructed within Zr-based MOFs. <i>Dalton Transactions</i> , 2013, 42, 9444.	1.6	37
135	Recent advances in visible-light-responsive photocatalysts for hydrogen production and solar energy conversion from semiconducting TiO <sub>2</sub> to MOF/PCP photocatalysts. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 13243.	1.3	139
136	Visible-Light-Promoted Photocatalytic Hydrogen Production by Using an Amino-Functionalized Ti(IV) Metal-Organic Framework. <i>Journal of Physical Chemistry C</i> , 2012, 116, 20848-20853.	1.5	551