Israel E Wachs

List of Publications by Year
in descending order

341 papers	35,892 citations	1299 109 h-index	4223 174 g-index
363 all docs	363 docs citations	363 times ranked	18835 citing authors

#	Article	IF	Citations
1	Molecular structure and catalytic promotional effect of Mn on supported Na2WO4/SiO2 catalysts for oxidative coupling of methane (OCM) reaction. Catalysis Today, 2023, 416, 113837.	2.2	10
2	Number of surface sites and turnover frequencies for oxide catalysts. Journal of Catalysis, 2022, 405, 462-472.	3.1	10
3	Induced activation of the commercial Cu/ZnO/Al2O3 catalyst for the steam reforming of methanol. Nature Catalysis, 2022, 5, 99-108.	16.1	155
4	The effect of non-redox promoters (AlOx, POx, SiOx and ZrOx) and surface sulfates on supported V2O5-WO3/TiO2 catalysts in selective catalytic reduction of NO with NH3. Applied Catalysis B: Environmental, 2022, 306, 121128.	10.8	3
5	Effect of redox promoters (CeOx and CuOx) and surface sulfates on the selective catalytic reduction (SCR) of NO with NH3 by supported V2O5-WO3/TiO2 catalysts. Applied Catalysis B: Environmental, 2022, 306, 121108.	10.8	12
6	Molecular Design of Supported MoO<i>_x</i>Catalysts with Surface TaO<i>_x</i>Promotion for Olefin Metathesis. ACS Catalysis, 2022, 12, 3226-3237.	5.5	13
7	Redox Dynamics of Active VO<i>_x</i> Sites Promoted by TiO<i>_x</i> during Oxidative Dehydrogenation of Ethanol Detected by <i>Operando</i> Quick XAS. Jacs Au, 2022, 2, 762-776.	3.6	14
8	Nature and Reactivity of Oxygen Species on/in Silver Catalysts during Ethylene Oxidation. ACS Catalysis, 2022, 12, 4375-4381.	5.5	17
9	Experimental methods in chemical engineering: Temperature programmed surface reaction spectroscopyâ€”<scp>TPSR</scp>. Canadian Journal of Chemical Engineering, 2021, 99, 423-434.	0.9	7
10	Identifying the Catalytic Active Site for Propylene Metathesis by Supported ReO_{<i>x</i>} Catalysts. ACS Catalysis, 2021, 11, 1962-1976.	5.5	14
11	Tuning the Number of Active Sites and Turnover Frequencies by Surface Modification of Supported ReO₄/(SiO₂â€“Al₂O₃) Catalysts for Olefin Metathesis. ACS Catalysis, 2021, 11, 2412-2421.	5.5	12
12	Role of chromium in Crâ€“Fe oxide catalysts for high temperature water-gas shift reaction â€“ A DFT study. International Journal of Hydrogen Energy, 2021, 46, 17154-17162.	3.8	9
13	Impact of Hydration on Supported V2O5/TiO2 Catalysts as Explored by Magnetic Resonance Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 16766-16775.	1.5	3
14	Elucidating the Effects of Mn Promotion on SiO₂-Supported Na-Promoted Tungsten Oxide Catalysts for Oxidative Coupling of Methane (OCM). ACS Catalysis, 2021, 11, 10131-10137.	5.5	23
15	New Mechanistic and Reaction Pathway Insights for Oxidative Coupling of Methane (OCM) over Supported Na₂WO₄/SiO₂ Catalysts. Angewandte Chemie - International Edition, 2021, 60, 21502-21511.	7.2	45
16	New Mechanistic and Reaction Pathway Insights for Oxidative Coupling of Methane (OCM) over Supported Na 2 WO 4 /SiO 2 Catalysts. Angewandte Chemie, 2021, 133, 21672-21681.	1.6	3
17	Formation and influence of surface hydroxyls on product selectivity during CO2 hydrogenation by Ni/SiO2 catalysts. Journal of Catalysis, 2021, 400, 228-233.	3.1	27
18	Resolving the Types and Origin of Active Oxygen Species Present in Supported Mn-Na₂WO₄/SiO₂ Catalysts for Oxidative Coupling of Methane. ACS Catalysis, 2021, 11, 10288-10293.	5.5	29

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19	Structureâ€"Activity Relationships of Copper- and Potassium-Modified Iron Oxide Catalysts during Reverse Waterâ€"Gas Shift Reaction. ACS Catalysis, 2021, 11, 12609-12619.	5.5	48
20	Structureâ€"Activity Relationships of Hydrothermally Aged Titania-Supported Vanadiumâ€"Tungsten Oxide Catalysts for SCR of NO_{<i>x</i>} Emissions with NH₃. ACS Catalysis, 2021, 11, 12096-12111.	5.5	20
21	Methane activation by ZSM-5-supported transition metal centers. Chemical Society Reviews, 2021, 50, 1251-1268.	18.7	77
22	A combined computational and experimental study of methane activation during oxidative coupling of methane (OCM) by surface metal oxide catalysts. Chemical Science, 2021, 12, 14143-14158.	3.7	5
23	Activation and deactivation of the commercialâ€type CuOâ€"Cr₂O₃â€"Fe₂O₃ high temperature shift catalyst. AIChE Journal, 2020, 66, e16846.	1.8	14
24	Role of Local Structure on Catalytic Reactivity: Comparison of Methanol Oxidation by Aqueous Bioinorganic Enzyme Mimic (Vanadium Haloperoxidase) and Vanadia-Based Heterogeneous Catalyst (Supported VO4/SiO2). ACS Catalysis, 2020, 10, 1566-1574.	5.5	7
25	Initial Steps in the Selective Catalytic Reduction of NO with NH₃ by TiO₂-Supported Vanadium Oxides. ACS Catalysis, 2020, 10, 13918-13931.	5.5	22
26	Nature of Reactive Oxygen Intermediates on Copper-Promoted Ironâ€"Chromium Oxide Catalysts during CO₂ Activation. ACS Catalysis, 2020, 10, 7857-7863.	5.5	44
27	Existence and Properties of Isolated Catalytic Sites on the Surface of Î²-Cristobalite-Supported, Doped Tungsten Oxide Catalysts (WO_{<i>x</i>}/Î²-SiO₂,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 427 Td (Na-W Oxidative Coupling of Methane (OCM): A Combined Periodic DFT and Experimental Study. ACS Catalysis, 2020, 10, 4580-4592.	5.5	33
28	Probing the surface of promoted CuO-Cr2O3-Fe2O3 catalysts during CO2 activation. Applied Catalysis B: Environmental, 2020, 271, 118943.	10.8	24
29	Synthesis and molecular structure of model silica-supported tungsten oxide catalysts for oxidative coupling of methane (OCM). Catalysis Science and Technology, 2020, 10, 3334-3345.	2.1	35
30	Cr-Free, Cu Promoted Fe Oxide-Based Catalysts for High-Temperature Water-Gas Shift (HT-WGS) Reaction. Catalysts, 2020, 10, 305.	1.6	12
31	Molybdenum Oxide, Oxycarbide, and Carbide: Controlling the Dynamic Composition, Size, and Catalytic Activity of Zeolite-Supported Nanostructures. Journal of Physical Chemistry C, 2019, 123, 22281-22292.	1.5	46
32	Mechanism by which Tungsten Oxide Promotes the Activity of Supported V₂O₅/TiO₂ Catalysts for NO_{<i>X</i>} Abatement: Structural Effects Revealed by ⁵¹V MAS NMR Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 12609-12616.	7.2	96
33	Mechanism by which Tungsten Oxide Promotes the Activity of Supported V₂O₅/TiO₂ Catalysts for NO_{<i>X</i>} Abatement: Structural Effects Revealed by ⁵¹V MAS NMR Spectroscopy. Angewandte Chemie, 2019, 131, 12739-12746.	1.6	45
34	Overview of Selective Oxidation of Ethylene to Ethylene Oxide by Ag Catalysts. ACS Catalysis, 2019, 9, 10727-10750.	5.5	104
35	InnenrÃ¼cktitelbild: Mechanism by which Tungsten Oxide Promotes the Activity of Supported V₂O₅/TiO₂ Catalysts for NO_{<i>X</i>} Abatement: Structural Effects Revealed by ⁵¹V MAS NMR Spectroscopy (Angew. Chem. 36/2019). Angewandte Chemie, 2019, 131, 12847-12847.	1.6	1
36	Oxidative Coupling of Methane (OCM) by SiO₂-Supported Tungsten Oxide Catalysts Promoted with Mn and Na. ACS Catalysis, 2019, 9, 5912-5928.	5.5	136

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37	Strong Metalâ€“Support Interactions between Copper and Iron Oxide during the Highâ€Temperature Waterâ€Gas Shift Reaction. Angewandte Chemie - International Edition, 2019, 58, 9083-9087.	7.2	82
38	Strong Metalâ€“Support Interactions between Copper and Iron Oxide during the Highâ€Temperature Waterâ€Gas Shift Reaction. Angewandte Chemie, 2019, 131, 9181-9185.	1.6	22
39	Activation Mechanism and Surface Intermediates during Olefin Metathesis by Supported MoO<i>_x</i>/Al₂O₃ Catalysts. Journal of Physical Chemistry C, 2019, 123, 12367-12375.	1.5	16
40	Elucidation of the Reaction Mechanism for High-Temperature Water Gas Shift over an Industrial-Type Copperâ€“Chromiumâ€“Iron Oxide Catalyst. Journal of the American Chemical Society, 2019, 141, 7990-7999.	6.6	60
41	Critical review on the active site structure of sulfated zirconia catalysts and prospects in fuel production. Applied Catalysis A: General, 2019, 572, 210-225.	2.2	69
42	Proof of Equivalent Catalytic Functionality upon Photonâ€Induced and Thermal Activation of Supported Isolated Vanadia Species in Methanol Oxidation. ChemCatChem, 2018, 10, 2360-2364.	1.8	12
43	Molecular Structureâ€“Reactivity Relationships for Olefin Metathesis by Al₂O₃-Supported Surface MoO_{<i>x</i>} Sites. ACS Catalysis, 2018, 8, 949-959.	5.5	55
44	Molecular structure and sour gas surface chemistry of supported K2O/WO3/Al2O3 catalysts. Applied Catalysis B: Environmental, 2018, 232, 146-154.	10.8	19
45	Revealing structure-activity relationships in chromium free high temperature shift catalysts promoted by earth abundant elements. Applied Catalysis B: Environmental, 2018, 232, 205-212.	10.8	27
46	A perspective on chromium-Free iron oxide-based catalysts for high temperature water-gas shift reaction. Catalysis Today, 2018, 311, 2-7.	2.2	22
47	Nature of surface oxygen intermediates on TiO2 during photocatalytic splitting of water. Chinese Chemical Letters, 2018, 29, 769-772.	4.8	17
48	Formation of N2O greenhouse gas during SCR of NO with NH3 by supported vanadium oxide catalysts. Applied Catalysis B: Environmental, 2018, 224, 836-840.	10.8	72
49	Pyrolysis of the Cellulose Fraction of Biomass in the Presence of Solid Acid Catalysts: An Operando Spectroscopy and Theoretical Investigation. ChemSusChem, 2018, 11, 4044-4059.	3.6	7
50	Photocatalytic Methanol Oxidation by Supported Vanadium Oxide Species: Influence of Support and Degree of Oligomerization. European Journal of Inorganic Chemistry, 2018, 2018, 3725-3735.	1.0	12
51	A Perspective on the Selective Catalytic Reduction (SCR) of NO with NH₃ by Supported V₂O₅â€“WO₃/TiO₂ Catalysts. ACS Catalysis, 2018, 8, 6537-6551.	5.5	342
52	Proof of Equivalent Catalytic Functionality upon Photonâ€Induced and Thermal Activation of Supported Isolated Vanadia Species in Methanol Oxidation. ChemCatChem, 2018, 10, 2325-2325.	1.8	0
53	Anatomy of a Visible Light Activated Photocatalyst for Water Splitting. ACS Catalysis, 2018, 8, 6650-6658.	5.5	24
54	Investigation of Silica-Supported Vanadium Oxide Catalysts by High-Field ⁵¹V Magic-Angle Spinning NMR. Journal of Physical Chemistry C, 2017, 121, 6246-6254.	1.5	39

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55	Nature of Catalytically Active Sites in the Supported WO₃/ZrO₂ Solid Acid System: A Current Perspective. ACS Catalysis, 2017, 7, 2181-2198.	5.5	77
56	Catalyst Activation and Kinetics for Propylene Metathesis by Supported WO_{<i>x</i>}/SiO₂ Catalysts. ACS Catalysis, 2017, 7, 573-580.	5.5	31
57	A decade+ of operando spectroscopy studies. Catalysis Today, 2017, 283, 27-53.	2.2	126
58	Nature of Active Sites and Surface Intermediates during SCR of NO with NH₃ by Supported V₂O₅â€"WO₃/TiO₂ Catalysts. Journal of the American Chemical Society, 2017, 139, 15624-15627.	6.6	266
59	Vibrational Spectroscopy of Oxide Overlayers. Topics in Catalysis, 2017, 60, 1577-1617.	1.3	41
60	Reaction Pathways and Kinetics for Selective Catalytic Reduction (SCR) of Acidic NO_{<i>x</i>} Emissions from Power Plants with NH₃. ACS Catalysis, 2017, 7, 8358-8361.	5.5	78
61	Analysis of corrosion layers in ancient Roman silver coins with high resolution surface spectroscopic techniques. Applied Surface Science, 2016, 376, 241-251.	3.1	17
62	Resolving the Reaction Mechanism for H₂ Formation from High-Temperature Waterâ€"Gas Shift by Chromiumâ€"Iron Oxide Catalysts. ACS Catalysis, 2016, 6, 2827-2830.	5.5	48
63	Operando Molecular Spectroscopy During Ethylene Polymerization by Supported CrO x /SiO2 Catalysts: Active Sites, Reaction Intermediates, and Structure-Activity Relationship. Topics in Catalysis, 2016, 59, 725-739.	1.3	51
64	Nature of WO_{<i>x</i>} Sites on SiO₂ and Their Molecular Structureâ€"Reactivity/Selectivity Relationships for Propylene Metathesis. ACS Catalysis, 2016, 6, 3061-3071.	5.5	86
65	Influence of catalyst synthesis method on selective catalytic reduction (SCR) of NO by NH3 with V2O5-WO3/TiO2 catalysts. Applied Catalysis B: Environmental, 2016, 193, 141-150.	10.8	136
66	Catalysis by Mixed Oxides. Catalysis Today, 2016, 277, 201.	2.2	2
67	Surface Structure and Photocatalytic Properties of Bi₂WO₆ Nanoplatelets Modified by Molybdena Islands from Chemical Vapor Deposition. Journal of Physical Chemistry C, 2016, 120, 18191-18200.	1.5	27
68	Promotion Mechanisms of Iron Oxide-Based High Temperature Waterâ€"Gas Shift Catalysts by Chromium and Copper. ACS Catalysis, 2016, 6, 4455-4464.	5.5	98
69	Dynamics of CrO₃â€"Fe₂O₃ Catalysts during the High-Temperature Water-Gas Shift Reaction: Molecular Structures and Reactivity. ACS Catalysis, 2016, 6, 4786-4798.	5.5	68
70	Iron-Based Catalysts for the High-Temperature Waterâ€"Gas Shift (HT-WGS) Reaction: A Review. ACS Catalysis, 2016, 6, 722-732.	5.5	267
71	Reaction Mechanism and Kinetics of Olefin Metathesis by Supported ReOx/Al2O3Catalysts. ACS Catalysis, 2016, 6, 272-278.	5.5	19
72	Revisiting formic acid decomposition on metallic powder catalysts: Exploding the HCOOH decomposition volcano curve. Surface Science, 2016, 650, 103-110.	0.8	40

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73	Selective catalytic reduction of NO by NH3 with WO3-TiO2 catalysts: Influence of catalyst synthesis method. Applied Catalysis B: Environmental, 2016, 188, 123-133.	10.8	51
74	Determining Number of Active Sites and TOF for the High-Temperature Water Gas Shift Reaction by Iron Oxide-Based Catalysts. ACS Catalysis, 2016, 6, 1764-1767.	5.5	36
75	Surface ReO_{<i>x</i>} Sites on Al₂O₃ and Their Molecular Structureâ€œReactivity Relationships for Olefin Metathesis. ACS Catalysis, 2015, 5, 1432-1444.	5.5	64
76	Spectroscopic and Computational Study of Cr Oxide Structures and Their Anchoring Sites on ZSM-5 Zeolites. ACS Catalysis, 2015, 5, 3078-3092.	5.5	68
77	The Nature of Surface CrOx Sites on SiO2 in Different Environments. Catalysis Letters, 2015, 145, 985-994.	1.4	36
78	Identification of molybdenum oxide nanostructures on zeolites for natural gas conversion. Science, 2015, 348, 686-690.	6.0	310
79	Activation of Surface ReO_{<i>x</i>} Sites on Al₂O₃ Catalysts for Olefin Metathesis. ACS Catalysis, 2015, 5, 6807-6814.	5.5	26
80	Determination of Number of Activated Sites Present during Olefin Metathesis by Supported ReO_{<i>x</i>}/Al₂O₃ Catalysts. ACS Catalysis, 2015, 5, 6823-6827.	5.5	10
81	<i>In Situ</i> and <i>Operando</i> Raman Spectroscopy of Oxidation Catalysts. , 2014, , 420-446.		3
82	Monitoring Solid Oxide CO₂ Capture Sorbents in Action. ChemSusChem, 2014, 7, 3459-3466.	3.6	36
83	Olefin Metathesis by Supported Metal Oxide Catalysts. ACS Catalysis, 2014, 4, 2505-2520.	5.5	238
84	Critical Literature Review of the Kinetics for the Oxidative Dehydrogenation of Propane over Well-Defined Supported Vanadium Oxide Catalysts. ACS Catalysis, 2014, 4, 3357-3380.	5.5	453
85	Structure of Mo₂C_{<i>x</i>} and Mo₄C_{<i>x</i>} Molybdenum Carbide Nanoparticles and Their Anchoring Sites on ZSM-5 Zeolites. Journal of Physical Chemistry C, 2014, 118, 4670-4679.	1.5	88
86	How Strain Affects the Reactivity of Surface Metal Oxide Catalysts. Angewandte Chemie - International Edition, 2013, 52, 13553-13557.	7.2	124
87	Reporting of Reactivity for Heterogeneous Photocatalysis. ACS Catalysis, 2013, 3, 2606-2611.	5.5	48
88	Catalysis science of supported vanadium oxide catalysts. Dalton Transactions, 2013, 42, 11762.	1.6	324
89	Anomalous reactivity of supported V2O5 nanoparticles for propane oxidative dehydrogenation: influence of the vanadium oxide precursor. Dalton Transactions, 2013, 42, 12644.	1.6	88
90	Nature of Catalytic Active Sites Present on the Surface of Advanced Bulk Tantalum Mixed Oxide Photocatalysts. ACS Catalysis, 2013, 3, 2920-2929.	5.5	56

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91	Fundamental Bulk/Surface Structureâ€“Photoactivity Relationships of Supported (Rh2â€“yCryO3)/GaN Photocatalysts. Journal of Physical Chemistry Letters, 2013, 4, 3719-3724.	2.1	32
92	Nanostructural and chemical characterization of supported metal oxide catalysts by aberration corrected analytical electron microscopy. Current Opinion in Solid State and Materials Science, 2012, 16, 10-22.	5.6	58
93	Spectroscopic Characterization of Mixed Feâ€“Ni Oxide Electrocatalysts for the Oxygen Evolution Reaction in Alkaline Electrolytes. ACS Catalysis, 2012, 2, 1793-1801.	5.5	423
94	Catalysis Science of Bulk Mixed Oxides. ACS Catalysis, 2012, 2, 1235-1246.	5.5	177
95	Catalysis Science of Methanol Oxidation over Iron Vanadate Catalysts: Nature of the Catalytic Active Sites. ACS Catalysis, 2011, 1, 54-66.	5.5	133
96	Aberrationâ€corrected Analytical Microscopy Characterization of Doubleâ€Supported WO₃/TiO₂/SiO₂ Solid Acid Catalysts. ChemCatChem, 2011, 3, 1045-1050.	1.8	5
97	Dynamic Surface Structures and Reactivity of Vanadium-Containing Molybdophosphoric Acid (H_{3+<i>x</i>}PMo_{12â€“<i>x</i>}V_{<i>x</i>}O₄₀) Keggin Catalysts during Methanol Oxidation and Dehydration. ACS Catalysis, 2011, 1, 1536-1548.	5.5	52
98	The generality of surface vanadium oxide phases in mixed oxide catalysts. Applied Catalysis A: General, 2011, 391, 36-42.	2.2	67
99	Origin of the synergistic interaction between MoO3 and iron molybdate for the selective oxidation of methanol to formaldehyde. Journal of Catalysis, 2010, 275, 84-98.	3.1	110
100	Anomalous Surface Compositions of Stoichiometric Mixed Oxide Compounds. Angewandte Chemie - International Edition, 2010, 49, 8037-8041.	7.2	41
101	Characterization of Hydrothermally Prepared Titanate Nanotube Powders by Ambient and In Situ Raman Spectroscopy. Journal of Physical Chemistry Letters, 2010, 1, 130-135.	2.1	71
102	Presence of Surface Vanadium Peroxo-oxo Umbrella Structures in Supported Vanadium Oxide Catalysts: Fact or Fiction?. Journal of the American Chemical Society, 2010, 132, 12559-12561.	6.6	57
103	Relating <i>n</i>-Pentane Isomerization Activity to the Tungsten Surface Density of WO_{<i>x</i>}/ZrO₂. Journal of the American Chemical Society, 2010, 132, 13462-13471.	6.6	94
104	Molecular Structural Determination of Molybdena in Different Environments: Aqueous Solutions, Bulk Mixed Oxides, and Supported MoO₃ Catalysts. Journal of Physical Chemistry C, 2010, 114, 14110-14120.	1.5	146
105	Monitoring surface metal oxide catalytic active sites with Raman spectroscopy. Chemical Society Reviews, 2010, 39, 5002.	18.7	264
106	Tuning the Electronic and Molecular Structures of Catalytic Active Sites with Titania Nanoligands. Journal of the American Chemical Society, 2009, 131, 680-687.	6.6	48
107	Identification of active Zrâ€“WOx clusters on a ZrO2 support for solid acid catalysts. Nature Chemistry, 2009, 1, 722-728.	6.6	150
108	Applications of High Sensitivity-Low Energy Ion Scattering (HS-LEIS) in heterogeneous catalysis. Catalysis Today, 2009, 140, 197-201.	2.2	79

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109	Insights into Oxygen Exchange Between Gaseous O₂and Supported Vanadium Oxide Catalysts via¹⁷O NMR. Chemistry of Materials, 2009, 21, 4127-4134.	3.2	15
110	Surface and Bulk Aspects of Mixed Oxide Catalytic Nanoparticles: Oxidation and Dehydration of CH₃OH by Polyoxometallates. Journal of the American Chemical Society, 2009, 131, 15544-15554.	6.6	87
111	Microstructural Development of Supported Pt/ZrO2/SiO2 Catalysts: The Effect of ZrO2 Nanoligands. Microscopy and Microanalysis, 2009, 15, 1414-1415.	0.2	0
112	Study on the Reaction Mechanism for Soot Oxidation Over TiO2 or ZrO2-supported Vanadium Oxide Catalysts by Means of In-situ UV-Raman. Catalysis Letters, 2008, 120, 148-153.	1.4	23
113	In-situ UV-Raman study on soot combustion over TiO2 or ZrO2-supported vanadium oxide catalysts. Science in China Series B: Chemistry, 2008, 51, 551-561.	0.8	10
114	CH3OH oxidation over well-defined supported V2O5/Al2O3 catalysts: Influence of vanadium oxide loading and surface vanadiumâ€"oxygen functionalities. Journal of Catalysis, 2008, 255, 197-205.	3.1	118
115	New insights into the nature of the acidic catalytic active sites present in ZrO2-supported tungsten oxide catalysts. Journal of Catalysis, 2008, 256, 108-125.	3.1	200
116	Is there a relationship between the MO bond length (strength) of bulk mixed metal oxides and their catalytic activity?. Journal of Catalysis, 2008, 256, 145-153.	3.1	42
117	Selective oxidation of propylene over model supported V2O5 catalysts: Influence of surface vanadia coverage and oxide support. Journal of Catalysis, 2008, 257, 181-189.	3.1	58
118	Surface chemistry and reactivity of well-defined multilayered supported M1Ox/M2Ox/SiO2 catalysts. Journal of Catalysis, 2008, 258, 103-110.	3.1	29
119	Structural Characterization of WO₃/ZrO₂ Catalysts using HAADF Imaging. Microscopy and Microanalysis, 2008, 14, 1350-1351.	0.2	4
120	In Situ Raman Spectroscopy of SiO₂-Supported Transition Metal Oxide Catalysts:â€‰ An Isotopic ¹⁸Oâˆ'¹⁶O Exchange Study. Journal of Physical Chemistry C, 2008, 112, 6487-6498.	1.5	182
121	Influence of Vanadium Location in Titania Supported Vanadomolybdophosphoric Acid Catalysts and Its Effect on the Oxidation and Ammoxidation Functionalities. Journal of Physical Chemistry C, 2008, 112, 8294-8300.	1.5	34
122	Molecular Design and In Situ Spectroscopic Investigation of Multilayered Supported M₁Ox/M₂Ox/SiO₂ Catalysts. Journal of Physical Chemistry C, 2008, 112, 20418-20428.	1.5	50
123	Probing Metalâˆ'Support Interactions under Oxidizing and Reducing Conditions:â€‰ In Situ Raman and Infrared Spectroscopic and Scanning Transmission Electron Microscopicâˆ'X-ray Energy-Dispersive Spectroscopic Investigation of Supported Platinum Catalysts. Journal of Physical Chemistry C, 2008, 112, 5942-5951.	1.5	118
124	An<i>Operando</i>Raman, IR, and TPSR Spectroscopic Investigation of the Selective Oxidation of Propylene to Acrolein over a Model Supported Vanadium Oxide Monolayer Catalyst. Journal of Physical Chemistry C, 2008, 112, 11363-11372.	1.5	53
125	Nature of Catalytic Active Sites for Sbâˆ'Vâˆ'O Mixed Metal Oxides. Journal of Physical Chemistry C, 2008, 112, 16858-16863.	1.5	19
126	In Situ Spectroscopic Investigation of the Molecular and Electronic Structures of SiO₂ Supported Surface Metal Oxides. Journal of Physical Chemistry C, 2007, 111, 14410-14425.	1.5	284

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127	Structural Determination of Bulk and Surface Tungsten Oxides with UVâˆ'vis Diffuse Reflectance Spectroscopy and Raman Spectroscopy. Journal of Physical Chemistry C, 2007, 111, 15089-15099.	1.5	358
128	Photocatalytic Activity of Vanadium-Substituted ETS-10. Journal of Physical Chemistry C, 2007, 111, 7029-7037.	1.5	42
129	Structural characteristics and reactivity properties of the tantalum modified mesoporous silicalite (MCM-41) catalysts. Microporous and Mesoporous Materials, 2007, 99, 299-307.	2.2	16
130	Molecular/electronic structureâ€"surface acidity relationships of model-supported tungsten oxide catalysts. Journal of Catalysis, 2007, 246, 370-381.	3.1	177
131	Quantitative Determination of the Speciation of Surface Vanadium Oxides and Their Catalytic Activity. Journal of Physical Chemistry B, 2006, 110, 9593-9600.	1.2	216
132	Catalysis science of the solid acidity of model supported tungsten oxide catalysts. Catalysis Today, 2006, 116, 162-168.	2.2	154
133	Selective oxidation of propylene to acrolein over supported V2O5/Nb2O5 catalysts: An in situ Raman, IR, TPSR and kinetic study. Catalysis Today, 2006, 118, 332-343.	2.2	82
134	Effects of alkali metal cations on the structures, physico-chemical properties and catalytic behaviors of silica-supported vanadium oxide catalysts for the selective oxidation of ethane and the complete oxidation of diesel soot. Topics in Catalysis, 2006, 38, 309-325.	1.3	18
135	Oxidative dehydrogenation of ethane to ethylene over alumina-supported vanadium oxide catalysts: Relationship between molecular structures and chemical reactivity. Catalysis Today, 2006, 118, 279-287.	2.2	171
136	Promotion of the propane ODH reaction over supported V2O5/Al2O3 catalyst with secondary surface metal oxide additives. Journal of Catalysis, 2006, 240, 151-159.	3.1	54
137	Synthesis and characterization of Niâ€"Mo bimetallic nitride from the mixture of nitrogen and hydrogen. Materials Research Bulletin, 2006, 41, 2334-2340.	2.7	7
138	Comparison of alcohol and alkane oxidative dehydrogenation reactions over supported vanadium oxide catalysts: in situ infrared, Raman and UVâ€"vis spectroscopic studies of surface alkoxide intermediates and of their surface chemistry. Catalysis Today, 2005, 99, 105-114.	2.2	55
139	Recent conceptual advances in the catalysis science of mixed metal oxide catalytic materials. Catalysis Today, 2005, 100, 79-94.	2.2	511
140	Oxidative dehydrogenation of propane over V/MCM-41 catalysts: comparison of O2 and N2O as oxidants. Journal of Catalysis, 2005, 234, 131-142.	3.1	151
141	Recent Conceptual Advances in the Catalysis Science of Mixed Metal Oxide Catalytic Materials. ChemInform, 2005, 36, no.	0.1	0
142	Determination of the Chemical Nature of Active Surface Sites Present on Bulk Mixed Metal Oxide Catalystsâ€. Journal of Physical Chemistry B, 2005, 109, 2275-2284.	1.2	113
143	Comparison of UV and Visible Raman Spectroscopy of Bulk Metal Molybdate and Metal Vanadate Catalysts. Journal of Physical Chemistry B, 2005, 109, 23491-23499.	1.2	143
144	Designing the activity/selectivity of surface acidic, basic and redox active sites in the supported KO?VO/AlO catalytic system. Catalysis Today, 2004, 96, 211-222.	2.2	49

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