

Dario J Stacchiola

List of Publications by Citations

Source: <https://exaly.com/author-pdf/236320/dario-j-stacchiola-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

191
papers

9,164
citations

49
h-index

89
g-index

205
ext. papers

10,075
ext. citations

7.3
avg, IF

5.98
L-index

#	Paper	IF	Citations
191	Catalysis. Highly active copper-ceria and copper-ceria-titania catalysts for methanol synthesis from CO ₂ . <i>Science</i> , 2014 , 345, 546-50	33.3	895
190	A new type of strong metal-support interaction and the production of H ₂ through the transformation of water on Pt/CeO ₂ (111) and Pt/CeO(x)/TiO ₂ (110) catalysts. <i>Journal of the American Chemical Society</i> , 2012 , 134, 8968-74	16.4	536
189	3D honeycomb-like structured graphene and its high efficiency as a counter-electrode catalyst for dye-sensitized solar cells. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 9210-4	16.4	308
188	Hydrogenation of CO ₂ to Methanol: Importance of Metal-Oxide and Metal-Carbide Interfaces in the Activation of CO ₂ . <i>ACS Catalysis</i> , 2015 , 5, 6696-6706	13.1	278
187	Importance of the metal-oxide interface in catalysis: in situ studies of the water-gas shift reaction by ambient-pressure X-ray photoelectron spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 5101-5	16.4	245
186	High catalytic activity of Au/CeO _x /TiO ₂ (110) controlled by the nature of the mixed-metal oxide at the nanometer level. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 4975-80	11.5	241
185	Gold, copper, and platinum nanoparticles dispersed on CeO(x)/TiO(2)(110) surfaces: high water-gas shift activity and the nature of the mixed-metal oxide at the nanometer level. <i>Journal of the American Chemical Society</i> , 2010 , 132, 356-63	16.4	232
184	Water-gas shift reaction on a highly active inverse CeO _x /Cu(111) catalyst: unique role of ceria nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 8047-50	16.4	228
183	Dry Reforming of Methane on a Highly-Active Ni-CeO ₂ Catalyst: Effects of Metal-Support Interactions on C-H Bond Breaking. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 7455-9	16.4	196
182	Interaction of Gold with Cerium Oxide Supports: CeO ₂ (111) Thin Films vs CeO _x Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 6042-6049	3.8	183
181	Steam Reforming of Ethanol on Ni/CeO ₂ : Reaction Pathway and Interaction between Ni and the CeO ₂ Support. <i>ACS Catalysis</i> , 2013 , 3, 975-984	13.1	175
180	Role of ceria in oxidative dehydrogenation on supported vanadia catalysts. <i>Journal of the American Chemical Society</i> , 2010 , 132, 2345-9	16.4	171
179	Low Pressure CO ₂ Hydrogenation to Methanol over Gold Nanoparticles Activated on a CeO(x)/TiO ₂ Interface. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10104-7	16.4	166
178	Unique properties of ceria nanoparticles supported on metals: novel inverse ceria/copper catalysts for CO oxidation and the water-gas shift reaction. <i>Accounts of Chemical Research</i> , 2013 , 46, 1702-11	24.3	162
177	Understanding the Role of Oxygen Vacancies in the Water Gas Shift Reaction on Ceria-Supported Platinum Catalysts. <i>ACS Catalysis</i> , 2014 , 4, 2088-2096	13.1	130
176	Resolving the atomic structure of vanadia monolayer catalysts: monomers, trimers, and oligomers on ceria. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 8006-9	16.4	127
175	Hydrogenation of CO ₂ to Methanol on CeO _x /Cu(111) and ZnO/Cu(111) Catalysts: Role of the Metal-Oxide Interface and Importance of Ce ³⁺ Sites. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 1778-1784	23.8	122

174	In situ studies of CeO ₂ -supported Pt, Ru, and PtRu alloy catalysts for the water-gas shift reaction: Active phases and reaction intermediates. <i>Journal of Catalysis</i> , 2012 , 291, 117-126	7.3	114
173	Unraveling the Dynamic Nature of a CuO/CeO ₂ Catalyst for CO Oxidation in Operando: A Combined Study of XANES (Fluorescence) and DRIFTS. <i>ACS Catalysis</i> , 2014 , 4, 1650-1661	13.1	106
172	Probing the reaction intermediates for the water-gas shift over inverse CeO _x /Au(1 1 1) catalysts. <i>Journal of Catalysis</i> , 2010 , 271, 392-400	7.3	102
171	Enantioselective chemisorption on a chirally modified surface in ultrahigh vacuum: adsorption of propylene oxide on 2-butoxide-covered palladium(111). <i>Journal of the American Chemical Society</i> , 2002 , 124, 8984-9	16.4	100
170	Inverse Oxide/Metal Catalysts in Fundamental Studies and Practical Applications: A Perspective of Recent Developments. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 2627-39	6.4	86
169	Cloud point extraction, preconcentration and spectrophotometric determination of erbium(III)-2-(3,5-dichloro-2-pyridylazo)-5-dimethylaminophenol. <i>Analytica Chimica Acta</i> , 1997 , 342, 229-238	6.6	84
168	Interaction of CO with OH on Au(111): HCOO, CO ₃ , and HOCO as Key Intermediates in the Water-Gas Shift Reaction. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 19536-19544	3.8	83
167	An Investigation of the Reaction Pathway for Ethylene Hydrogenation on Pd(111). <i>Journal of Physical Chemistry B</i> , 2001 , 105, 11233-11239	3.4	82
166	The conversion of CO ₂ to methanol on orthorhombic β -Mo ₂ C and Cu/ β -Mo ₂ C catalysts: mechanism for admetal induced change in the selectivity and activity. <i>Catalysis Science and Technology</i> , 2016 , 6, 6766-6777	5.5	74
165	The activation of gold and the water-gas shift reaction: insights from studies with model catalysts. <i>Accounts of Chemical Research</i> , 2014 , 47, 773-82	24.3	73
164	In situ/operando studies for the production of hydrogen through the water-gas shift on metal oxide catalysts. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 12004-25	3.6	73
163	Identification of 5-7 defects in a copper oxide surface. <i>Journal of the American Chemical Society</i> , 2011 , 133, 11474-7	16.4	71
162	Fundamental studies of well-defined surfaces of mixed-metal oxides: special properties of MO(x)/TiO ₂ (110) {M = V, Ru, Ce, or W}. <i>Chemical Reviews</i> , 2013 , 113, 4373-90	68.1	70
161	Ethylene adsorption on Pd(111) studied using infrared reflection-absorption spectroscopy. <i>Surface Science</i> , 2002 , 511, 215-228	1.8	70
160	3D Honeycomb-Like Structured Graphene and Its High Efficiency as a Counter-Electrode Catalyst for Dye-Sensitized Solar Cells. <i>Angewandte Chemie</i> , 2013 , 125, 9380-9384	3.6	67
159	Relating methanol oxidation to the structure of ceria-supported vanadia monolayer catalysts. <i>Journal of Catalysis</i> , 2010 , 272, 82-91	7.3	67
158	In situ imaging of Cu ₂ O under reducing conditions: formation of metallic fronts by mass transfer. <i>Journal of the American Chemical Society</i> , 2013 , 135, 16781-4	16.4	66
157	An Ideal Electrode Material, 3D Surface-Microporous Graphene for Supercapacitors with Ultrahigh Areal Capacitance. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 24655-24661	9.5	65

156	Adsorbate-driven morphological changes of a gold surface at low temperatures. <i>Journal of the American Chemical Society</i> , 2008 , 130, 17272-3	16.4	64
155	Ambient pressure XPS and IRRAS investigation of ethanol steam reforming on Ni-CeO ₂ (111) catalysts: an in situ study of C-C and O-H bond scission. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 16621-8	3.6	64
154	Visible Light-Driven H ₂ Production over Highly Dispersed Ruthenia on Rutile TiO ₂ Nanorods. <i>ACS Catalysis</i> , 2016 , 6, 407-417	13.1	63
153	Requirements for the formation of a chiral template. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 851-6	3.4	63
152	On the Reaction Pathway for the Hydrogenation of Acetylene and Vinylidene on Pd(111) \square <i>Journal of Physical Chemistry B</i> , 2000 , 104, 3107-3115	3.4	63
151	Exploring the Structural and Electronic Properties of Pt/Ceria-Modified TiO ₂ and Its Photocatalytic Activity for Water Splitting under Visible Light. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 14062-14070	3.8	61
150	Vinyl acetate formation by the reaction of ethylene with acetate species on oxygen-covered Pd(111). <i>Journal of the American Chemical Society</i> , 2004 , 126, 15384-5	16.4	61
149	Catalysis and the nature of mixed-metal oxides at the nanometer level: special properties of MO(x)/TiO ₂ (110) {M= V, W, Ce} surfaces. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 9557-65	3.6	60
148	Synthesis of \square MoC _{1-x} and \square MoC _y Catalysts for CO ₂ Hydrogenation by Thermal Carburization of Mo-oxide in Hydrocarbon and Hydrogen Mixtures. <i>Catalysis Letters</i> , 2014 , 144, 1418-1424	2.8	59
147	Elucidation of the reaction mechanism for the palladium-catalyzed synthesis of vinyl acetate. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 4572-4	16.4	57
146	Redox-Mediated Reconstruction of Copper during Carbon Monoxide Oxidation. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 15902-15909	3.8	53
145	Electronic MetalSupport Interactions and the Production of Hydrogen Through the Water-Gas Shift Reaction and Ethanol Steam Reforming: Fundamental Studies with Well-Defined Model Catalysts. <i>Topics in Catalysis</i> , 2013 , 56, 1488-1498	2.3	51
144	Coverage effects on the palladium-catalyzed synthesis of vinyl acetate: comparison between theory and experiment. <i>Journal of the American Chemical Society</i> , 2010 , 132, 2202-7	16.4	50
143	Direct epoxidation of propylene over stabilized Cu(+) surface sites on titanium-modified Cu ₂ O. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 11946-51	16.4	49
142	Water Nucleation on Gold: Existence of a Unique Double Bilayer. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 15102-15105	3.8	48
141	The structure of formate species on Pd(111) calculated by density functional theory and determined using low energy electron diffraction. <i>Surface Science</i> , 2005 , 574, 166-174	1.8	48
140	Determining the behavior of RuO(x) nanoparticles in mixed-metal oxides: structural and catalytic properties of RuO ₂ /TiO ₂ (110) surfaces. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 10198-202	16.4	47
139	Potassium-chemical synthesis of 3D graphene from CO ₂ and its excellent performance in HTM-free perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 7749-7752	13	46

138	On the geometrical and electronic structure of an ultra-thin crystalline silica film grown on Mo(112). <i>Surface Science</i> , 2007 , 601, 4849-4861	1.8	46
137	Stabilization of catalytically active Cu ⁺ surface sites on titanium-copper mixed-oxide films. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 5336-40	16.4	44
136	One-dimensional supramolecular surface structures: 1,4-diisocyanobenzene on Au(111) surfaces. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 11624-9	3.6	44
135	CeO ₂ <-r>CuO _x Interactions and the Controlled Assembly of CeO ₂ (111) and CeO ₂ (100) Nanoparticles on an Oxidized Cu(111) Substrate. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 23062-23066	3.8	42
134	The adsorption and reaction of 2-iodoethanol on Ag(111). <i>Surface Science</i> , 2000 , 463, 81-92	1.8	42
133	Formation of an Ordered Ice Layer on a Thin Silica Film. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 759-764	1.8	40
132	Three-dimensional ruthenium-doped TiO ₂ sea urchins for enhanced visible-light-responsive H ₂ production. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 15972-9	3.6	40
131	The Carburization of Transition Metal Molybdates (MxMoO ₄ , M = Cu, Ni or Co) and the Generation of Highly Active Metal/Carbide Catalysts for CO ₂ Hydrogenation. <i>Catalysis Letters</i> , 2015 , 145, 1365-1373	2.8	39
130	The effect of subsurface hydrogen on the adsorption of ethylene on Pd(111). <i>Surface Science</i> , 2003 , 540, L600-L604	1.8	39
129	A reflection-absorption infrared spectroscopic study of the adsorption of ethylene and ethylene oxide on oxygen-covered Ag(111). <i>Surface Science</i> , 2001 , 486, 9-23	1.8	38
128	Synthesis and structure of ultrathin aluminosilicate films. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 7636-9	16.4	37
127	The adsorption and structure of carbon monoxide on ethylidyne-covered Pd(111). <i>Surface Science</i> , 2000 , 470, L32-L38	1.8	37
126	Hydrocarbon conversion on palladium catalysts. <i>Journal of Molecular Catalysis A</i> , 2005 , 228, 35-45		36
125	The kinetics of ethylene hydrogenation catalyzed by metallic palladium. <i>Catalysis Letters</i> , 2005 , 101, 145-149	2.8	36
124	Nanopatterning in CeO _x /Cu(111): A New Type of Surface Reconstruction and Enhancement of Catalytic Activity. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 839-43	6.4	35
123	Water-Gas Shift Reaction on a Highly Active Inverse CeO _x /Cu(111) Catalyst: Unique Role of Ceria Nanoparticles. <i>Angewandte Chemie</i> , 2009 , 121, 8191-8194	3.6	35
122	Tuning the properties of copper-based catalysts based on molecular in situ studies of model systems. <i>Accounts of Chemical Research</i> , 2015 , 48, 2151-8	24.3	33
121	Mechanistic Insights of Ethanol Steam Reforming over NiTeO _x (111): The Importance of Hydroxyl Groups for Suppressing Coke Formation. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 18248-18256	3.8	33

120	Ethanol Photoreaction on RuOx/Ru-Modified TiO ₂ (110). <i>Journal of Physical Chemistry C</i> , 2013 , 117, 11149-11158	3.8	32
119	Selenium-sulfur (SeS) fast charging cathode for sodium and lithium metal batteries. <i>Energy Storage Materials</i> , 2019 , 20, 71-79	19.4	32
118	Adsorption of hydrogen on the surface and sub-surface of Cu(111). <i>Journal of Chemical Physics</i> , 2013 , 139, 044712	3.9	32
117	Oxygen adsorption on Mo(112) surface studied by ab initio genetic algorithm and experiment. <i>Journal of Chemical Physics</i> , 2007 , 126, 234710	3.9	32
116	Structure and decomposition pathways of vinyl acetate on Pd(111). <i>Surface Science</i> , 2005 , 598, 263-275	1.8	32
115	Enantioselective Chemisorption on Model Chirally Modified Surfaces: 2-Butanol on β (1-Naphthyl)ethylamine/Pd(111). <i>Journal of Physical Chemistry C</i> , 2009 , 113, 13877-13885	3.8	31
114	Potassium-Induced Effect on the Structure and Chemical Activity of the Cu _x O/Cu(1 1 1) (x \geq 2) Surface: A Combined Scanning Tunneling Microscopy and Density Functional Theory Study. <i>ChemCatChem</i> , 2015 , 7, 3865-3872	5.2	30
113	Importance of the MetalOxide Interface in Catalysis: In Situ Studies of the WaterGas Shift Reaction by Ambient-Pressure X-ray Photoelectron Spectroscopy. <i>Angewandte Chemie</i> , 2013 , 125, 5205-5209	2.6	30
112	Determination of the structure of disordered overlayers of ethylene on clean and hydrogen-covered Pd(111) by low-energy electron diffraction. <i>Surface Science</i> , 2004 , 564, 71-78	1.8	30
111	Energy Level Shifts at the Silica/Ru(0001) Heterojunction Driven by Surface and Interface Dipoles. <i>Topics in Catalysis</i> , 2017 , 60, 481-491	2.3	27
110	Adsorption of Au and Pd Atoms on Thin SiO ₂ Films: the Role of Atomic Structure. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 3405-3409	3.8	27
109	On the reaction pathway for the formation of benzene from acetylene catalyzed by palladium. <i>Catalysis Letters</i> , 1999 , 60, 11-14	2.8	27
108	Structural Changes of Cu(110) and Cu(110)-(2 \times 1)-O Surfaces under Carbon Monoxide in the Torr Pressure Range Studied with Scanning Tunneling Microscopy and Infrared Reflection Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 8227-8231	3.8	26
107	Pulsed-reactant in situ studies of ceria/CuO catalysts using simultaneous XRD, PDF and DRIFTS measurements. <i>Catalysis Today</i> , 2014 , 229, 64-71	5.3	26
106	Assisted deprotonation of formic acid on Cu(111) and self-assembly of 1D chains. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 12291-8	3.6	26
105	Mechanistic Study of CO Titration on Cu _x O/Cu(1 1 1) (x \geq 2) Surfaces. <i>ChemCatChem</i> , 2014 , 6, 2364-2372	5.2	26
104	Interplay between theory and experiment in the quest for silica with reduced dimensionality grown on a Mo(112) surface. <i>Chemical Physics Letters</i> , 2006 , 424, 115-119	2.5	26
103	The adsorption of ethylene on ethylidyne-covered Pd(). <i>Surface Science</i> , 2002 , 513, L431-L435	1.8	26

102	Theoretical analysis of the coverage dependence of enantioselective chemisorption on a chirally templated surface. <i>Journal of Chemical Physics</i> , 2003 , 118, 6030-6037	3.9	26
101	Special Chemical Properties of RuOx Nanowires in RuOx/TiO2(110): Dissociation of Water and Hydrogen Production. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 4767-4773	3.8	25
100	Reversible graphene-metal contact through hydrogenation. <i>Physical Review B</i> , 2012 , 86,	3.3	25
99	Reaction of tributyl phosphate with oxidized iron: surface chemistry and tribological significance. <i>Tribology Letters</i> , 2005 , 18, 377-384	2.8	25
98	Probing adsorption sites for CO on ceria. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 15856-62	3.6	24
97	Surface Reduction Mechanism of Cerium-Calcium Mixed Oxides with Enhanced Redox Properties. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 8822-8831	3.8	24
96	Ice-Assisted Preparation of Silica-Supported Vanadium Oxide Particles. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 5337-5344	3.8	24
95	Probing enantioselective chemisorption in ultrahigh vacuum. <i>Journal of Molecular Catalysis A</i> , 2004 , 216, 215-221		24
94	Structure and reactivity of propylene on clean and hydrogen-covered Pd(111). <i>Surface Science</i> , 2003 , 542, 129-141	1.8	24
93	Lattice-gas modeling of enantioselective adsorption by template chiral substrates. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004 , 338, 493-510	3.3	23
92	KINETIC AND REACTIVE PROPERTIES OF ETHYLENE ON CLEAN AND HYDROGEN-COVERED Pd(111). <i>Surface Review and Letters</i> , 2003 , 10, 909-916	1.1	23
91	Dry Reforming of Methane on a Highly-Active Ni-CeO2 Catalyst: Effects of Metal-Support Interactions on C-H Bond Breaking. <i>Angewandte Chemie</i> , 2016 , 128, 7581-7585	3.6	23
90	Immobilization of single argon atoms in nano-cages of two-dimensional zeolite model systems. <i>Nature Communications</i> , 2017 , 8, 16118	17.4	22
89	Resolving the Atomic Structure of Vanadia Monolayer Catalysts: Monomers, Trimers, and Oligomers on Ceria. <i>Angewandte Chemie</i> , 2009 , 121, 8150-8153	3.6	22
88	The Kinetics of Ethylidyne Formation from Ethylene on Pd(111). <i>Journal of Physical Chemistry C</i> , 2009 , 113, 8000-8001	3.8	22
87	The Unique Properties of the Oxide-Metal Interface: Reaction of Ethanol on an Inverse Model CeOx/Au(111) Catalyst. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 25057-25064	3.8	21
86	Formation of one-dimensional molybdenum oxide on Mo(1 1 2). <i>Surface Science</i> , 2008 , 602, 3338-3342	1.8	21
85	Oxygen-Promoted Methane Activation on Copper. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 855-863	3.4	20

84	Palladium-catalyzed cyclotrimerization and hydrogenation: from ultrahigh vacuum to high-pressure catalysis. <i>Catalysis Today</i> , 2001 , 65, 3-11	5.3	20
83	Direct conversion of CO ₂ to meso/macro-porous frameworks of surface-microporous graphene for efficient asymmetrical supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 23252-23258	13	19
82	Selective molecular adsorption in sub-nanometer cages of a Cu ₂ O surface oxide. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 10726-31	3.6	19
81	In situ time-resolved X-ray diffraction study of the synthesis of Mo ₂ C with different carburization agents. <i>Canadian Journal of Chemistry</i> , 2013 , 91, 573-582	0.9	19
80	Structure of Copper-Cobalt Surface Alloys in Equilibrium with Carbon Monoxide Gas. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6575-6581	16.4	18
79	High Activity of Au/K/TiO ₂ (110) for CO Oxidation: Alkali-Metal-Enhanced Dispersion of Au and Bonding of CO. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 4324-4330	3.8	17
78	Interfacial Cu ⁺ promoted surface reactivity: Carbon monoxide oxidation reaction over polycrystalline copper/titania catalysts. <i>Surface Science</i> , 2016 , 652, 206-212	1.8	17
77	An Investigation of the Chemistry of Molybdenum Hexacarbonyl on Thin Dehydroxylated Alumina Films in Ultrahigh Vacuum. <i>Catalysis Letters</i> , 2003 , 91, 83-88	2.8	17
76	Redox Properties of Cu ₂ O(100) and (111) Surfaces. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 28684-28691	3.9	17
75	Facilitating hydrogen atom migration via a dense phase on palladium islands to a surrounding silver surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 22657-22664	11.5	16
74	A Study of the Stereoselectivity in the Dimerization of Ethylidene To Form 2-Butene on Ag(111). <i>Journal of the American Chemical Society</i> , 2000 , 122, 8232-8237	16.4	15
73	Potassium-Promoted Reduction of Cu ₂ O/Cu(111) by CO. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 8057-8066	3.8	15
72	Molecular beam and infrared spectroscopic studies of the thermodynamics of CO on clean and vinylidene-covered Pd(111). <i>Journal of Chemical Physics</i> , 2001 , 115, 3315-3321	3.9	14
71	Reactivity of a Zirconia-Copper Inverse Catalyst for CO ₂ Hydrogenation. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 22158-22172	3.8	14
70	Kinetic Parameters for the Elementary Steps in the Palladium-Catalyzed Synthesis of Vinyl Acetate. <i>Catalysis Letters</i> , 2010 , 138, 135-142	2.8	13
69	Elucidation of Active Sites for the Reaction of Ethanol on TiO ₂ /Au(111). <i>Journal of Physical Chemistry C</i> , 2017 , 121, 7794-7802	3.8	12
68	Ionization-Facilitated Formation of 2D (Alumino)Silicate Noble Gas Clathrate Compounds. <i>Advanced Functional Materials</i> , 2019 , 29, 1806583	15.6	12
67	Intermediates Arising from the Water-Gas Shift Reaction over Cu Surfaces: From UHV to Near Atmospheric Pressures. <i>Topics in Catalysis</i> , 2015 , 58, 271-280	2.3	12

66	Potassium and Water Coadsorption on TiO(110): OH-Induced Anchoring of Potassium and the Generation of Single-Site Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 3866-3872	6.4	12
65	Reactivity and Morphology of Oxygen-Modified Au Surfaces. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 18292-18299	3.8	12
64	On the effect of hydrogen on the palladium-catalyzed formation of benzene from acetylene. <i>Catalysis Letters</i> , 2001 , 71, 1-4	2.8	12
63	Design and Synthesis of 3D Potassium-Ion Pre-Intercalated Graphene for Supercapacitors. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 3610-3616	3.9	11
62	Studying two-dimensional zeolites with the tools of surface science: MFI nanosheets on Au(111). <i>Catalysis Today</i> , 2017 , 280, 283-288	5.3	11
61	The Tribological Properties of Monolayer KCl Films on Iron in Ultrahigh Vacuum: Modeling the Extreme-Pressure Lubricating Interface. <i>Tribology Letters</i> , 2003 , 14, 99-104	2.8	11
60	An infrared spectroscopic and temperature-programmed desorption study of methyl iodide hydrogenation on Pd(). <i>Surface Science</i> , 2003 , 524, 173-182	1.8	11
59	Water-gas shift reaction over gold nanoparticles dispersed on nanostructured CeOxTiO2(110) surfaces: Effects of high ceria coverage. <i>Surface Science</i> , 2016 , 650, 34-39	1.8	11
58	Lithium-Chemical Synthesis of Highly Conductive 3D Mesoporous Graphene for Highly Efficient New Generation Solar Cells. <i>ACS Applied Energy Materials</i> , 2019 , 2, 1445-1451	6.1	10
57	Porous MoxCy/SiO2 Material for CO2 Hydrogenation. <i>Topics in Catalysis</i> , 2019 , 62, 1026-1034	2.3	10
56	3D graphene from CO2 and K as an excellent counter electrode for dye-sensitized solar cells. <i>International Journal of Energy Research</i> , 2017 , 41, 2502-2508	4.5	10
55	Near band edge photoluminescence of ZnO nanowires: Optimization via surface engineering. <i>Applied Physics Letters</i> , 2017 , 111, 231901	3.4	10
54	Monte Carlo Theory Analysis of Thermal Programmed Desorption of Chiral Propylene Oxide from Pd(111) Surfaces. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 3254-3258	3.8	10
53	Probing reaction pathways on model catalyst surfaces: Vinyl acetate synthesis and olefin metathesis. <i>Journal of Molecular Catalysis A</i> , 2008 , 281, 14-23		10
52	Vulcan/Pt/Ce Catalysts Prepared by Impregnation Using EDTA for Direct Methanol Fuel Cell, Direct Ethanol Fuel Cell, and Polymer Electrolyte Membrane Fuel Cell. <i>Smart Grid and Renewable Energy</i> , 2013 , 04, 1-9	0.4	10
51	In Situ Probing of Ion Ordering at an Electrified Ionic Liquid/Au Interface. <i>Advanced Materials</i> , 2017 , 29, 1606357	24	9
50	Isolation and characterization of formates on CeOxTiOyO/Cu(1 1 1). <i>Catalysis Today</i> , 2015 , 240, 190-200	5.3	9
49	Stabilization of Oxidized Copper Nanoclusters in Confined Spaces. <i>Topics in Catalysis</i> , 2018 , 61, 419-427	2.3	9

48	How to stabilize highly active Cu ⁺ cations in a mixed-oxide catalyst. <i>Catalysis Today</i> , 2016 , 263, 4-10	5.3	9
47	Multi-modal surface analysis of porous films under operando conditions. <i>AIP Advances</i> , 2020 , 10, 085109	1.5	9
46	Characterization of one-dimensional molecular chains of 4,4'-biphenyl diisocyanide on Au(111) by scanning tunneling microscopy. <i>Journal of Chemical Physics</i> , 2015 , 142, 101901	3.9	8
45	Imaging the ordering of a weakly adsorbed two-dimensional condensate: ambient-pressure microscopy and spectroscopy of CO molecules on rutile TiO ₂ (110). <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 13122-13126	3.6	8
44	In-situ Infrared Spectroscopy on Model Catalysts 2013 , 209-239		8
43	Stand-alone polarization-modulation infrared reflection absorption spectroscopy instrument optimized for the study of catalytic processes at elevated pressures. <i>Review of Scientific Instruments</i> , 2017 , 88, 105109	1.7	8
42	Synthese und Struktur eines ultradünnen Alumosilicatfilms. <i>Angewandte Chemie</i> , 2006 , 118, 7798-7801	3.6	8
41	Reversible oxidation and reduction of gold-supported iron oxide islands at room temperature. <i>Journal of Chemical Physics</i> , 2020 , 152, 074710	3.9	7
40	Morphology and reactivity of size-selected titanium oxide nanoclusters on Au(111). <i>Journal of Chemical Physics</i> , 2020 , 152, 054714	3.9	7
39	EDTA-Ce(III) Modified Pt Vulcan XC-72 Catalyst Synthesis for Methanol Oxidation in Acid Solution. <i>Electrocatalysis</i> , 2014 , 5, 50-61	2.7	7
38	Stabilization of Catalytically Active Cu ⁺ Surface Sites on Titanium-Copper Mixed-Oxide Films. <i>Angewandte Chemie</i> , 2014 , 126, 5440-5444	3.6	7
37	Spectroscopic studies of ethylene adsorption on oxygen-modified Ag(1 1 1) at high pressures. <i>Journal of Molecular Catalysis A</i> , 2001 , 167, 13-22		7
36	Adsorption of a Lennard-Jones gas on random bivariate surfaces. <i>Surface Science</i> , 2000 , 449, 43-49	1.8	7
35	Ultrathin Amorphous Titania on Nanowires: Optimization of Conformal Growth and Elucidation of Atomic-Scale Motifs. <i>Nano Letters</i> , 2019 , 19, 3457-3463	11.5	6
34	NiO-MgO and CoO-MgO Thin-Film Solid Oxide Solutions on a Mo(100) Support: Formation, Reduction, and Influence of the Support. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 280-287	3.8	6
33	Stabilization of Carboxylate Surface Species on Pd(111). <i>Adsorption Science and Technology</i> , 2011 , 29, 603-611	3.6	6
32	Cooperative sequential adsorption processes on heterogeneous substrates. <i>Journal of Chemical Physics</i> , 1998 , 108, 1730-1739	3.9	6
31	New Role of Pd Hydride as a Sensor of Surface Pd Distributions in Pd ₂ Au Catalysts. <i>ChemCatChem</i> , 2020 , 12, 717-721	5.2	6

30	Cerium oxide as a promoter for the electro-oxidation reaction of ethanol: in situ XAFS characterization of the Pt nanoparticles supported on CeO ₂ nanoparticles and nanorods. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 32251-6	3.6	5
29	Adsorbate-driven morphological changes on Cu(111) nano-pits. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 3032-8	3.6	5
28	Enhancing the reactivity of gold: Nanostructured Au(111) adsorbs CO. <i>Surface Science</i> , 2016 , 650, 17-23	1.8	5
27	First-Principles Study of Interface Structures and Charge Rearrangement at the Aluminosilicate/Ru(0001) Heterojunction. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 7731-7739	3.8	5
26	Formation of β -Mo ₂ C below 600 °C using MoO ₂ nanoparticles as precursor. <i>Journal of Catalysis</i> , 2015 , 332, 83-94	7.3	4
25	Rotating Disk Slurry Au Electrodeposition at Unsupported Carbon Vulcan XC-72 and Ce ³⁺ Impregnation for Ethanol Oxidation in Alkaline Media. <i>Electrocatalysis</i> , 2017 , 8, 87-94	2.7	4
24	Direct Epoxidation of Propylene over Stabilized Cu ⁺ Surface Sites on Titanium-Modified Cu ₂ O. <i>Angewandte Chemie</i> , 2015 , 127, 12114-12119	3.6	4
23	Resolving the Evolution of Atomic Layer-Deposited Thin-Film Growth by Continuous In Situ X-Ray Absorption Spectroscopy. <i>Chemistry of Materials</i> , 2021 , 33, 1740-1751	9.6	4
22	Room-Temperature in Vacuo Chemisorption of Xenon Atoms on Ru(0001) under Interface Confinement. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 13578-13585	3.8	3
21	Reactivity and mass transfer of low-dimensional catalysts. <i>Chemical Record</i> , 2014 , 14, 857-68	6.6	3
20	Determining the Behavior of RuO _x Nanoparticles in Mixed-Metal Oxides: Structural and Catalytic Properties of RuO ₂ /TiO ₂ (110) Surfaces. <i>Angewandte Chemie</i> , 2011 , 123, 10380-10384	3.6	3
19	Zeolite Nanosheets Stabilize Catalyst Particles to Promote the Growth of Thermodynamically Unfavorable, Small-Diameter Carbon Nanotubes. <i>Small</i> , 2020 , 16, e2002120	11	3
18	Application of ultrathin TiO ₂ layers in solar energy conversion devices. <i>Energy Science and Engineering</i> ,	3.4	3
17	Morphology of Palladium Thin Film Deposited on a Two-Dimensional Bilayer Aluminosilicate. <i>Topics in Catalysis</i> , 2019 , 62, 1067-1075	2.3	2
16	Elucidation of the Reaction Mechanism for the Palladium-Catalyzed Synthesis of Vinyl Acetate. <i>Angewandte Chemie</i> , 2005 , 117, 4648-4650	3.6	2
15	Surface structure of mass-selected niobium oxide nanoclusters on Au(111). <i>Nanotechnology</i> , 2021 , 32,	3.4	2
14	Environmental TEM Studies Reveal Catalyst/Support Registry on 2D Zeolites. <i>Microscopy and Microanalysis</i> , 2019 , 25, 1458-1459	0.5	1
13	Frontispiece: Direct Epoxidation of Propylene over Stabilized Cu ⁺ Surface Sites on Titanium-Modified Cu ₂ O. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, n/a-n/a	16.4	1

12	Adsorption and thermal decomposition of 2-octylthieno[3,4-b]thiophene on Au(111). <i>Journal of Colloid and Interface Science</i> , 2012 , 384, 143-8	9.3	1
11	Stabilization of Cu ₂ O through Site-Selective Formation of a Co ₁ Cu Hybrid Single-Atom Catalyst. <i>Chemistry of Materials</i> ,	9.6	1
10	Enhanced Catalysis under 2D Silica: A CO Oxidation Study. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 10888-10894	16.4	1
9	Confinement Effects on Furfuryl Alcohol Reactions over Porous Bilayer Silica-Modified Pd(111). <i>Journal of Physical Chemistry C</i> , 2020 , 124, 25437-25446	3.8	0
8	Enhanced Catalysis under 2D Silica: A CO Oxidation Study. <i>Angewandte Chemie</i> , 2021 , 133, 10983-10989	3.6	0
7	Xenon Trapping in Metal-Supported Silica Nanocages. <i>Small</i> , 2021 , 17, e2103661	11	0
6	2D-(Alumino)Silicate-Noble Clathrates: Ionization-Facilitated Formation of 2D (Alumino)Silicate-Noble Gas Clathrate Compounds (Adv. Funct. Mater. 20/2019). <i>Advanced Functional Materials</i> , 2019 , 29, 1970137	15.6	
5	When ruthenia met titania: achieving extraordinary catalytic activity at low temperature by nanostructuring of oxides. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 26813-8	3.6	
4	Nanomaterials in Operando Conditions. <i>Microscopy and Microanalysis</i> , 2020 , 26, 776-776	0.5	
3	An Infrared Spectroscopic and Temperature-Programmed Desorption Study of 1,1-Difluoroethylene on Clean and Hydrogen-Covered Pd(111). <i>Adsorption Science and Technology</i> , 2011 , 29, 595-602	3.6	
2	Xenon Trapping in Metal-Supported Silica Nanocages (Small 39/2021). <i>Small</i> , 2021 , 17, 2170204	11	
1	Catalytic Chemistry on Oxide Nanostructures. <i>Springer Series in Materials Science</i> , 2016 , 251-280	0.9	