

# Dario J Stacchiola

## List of Publications by Year in descending order

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186  
papers

11,017  
citations

34076

52  
h-index

34964

98  
g-index

205  
all docs

205  
docs citations

205  
times ranked

10701  
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly active copper-ceria and copper-ceria-titania catalysts for methanol synthesis from CO <sub>2</sub> . <i>Science</i> , 2014, 345, 546-550.	6.0	1,114
2	A New Type of Strong Metal-Support Interaction and the Production of H <sub>2</sub> through the Transformation of Water on Pt/CeO <sub>2</sub> (111) and Pt/CeO <sub>x</sub> /TiO <sub>2</sub> (110) Catalysts. <i>Journal of the American Chemical Society</i> , 2012, 134, 8968-8974.	6.6	682
3	Hydrogenation of CO <sub>2</sub> to Methanol: Importance of Metal-Oxide and Metal-Carbide Interfaces in the Activation of CO <sub>2</sub> . <i>ACS Catalysis</i> , 2015, 5, 6696-6706.	5.5	374
4	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, 9210-9214.	7.2	340
5	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, 5101-5105.	7.2	280
6	Dry Reforming of Methane on a Highly-Active Ni-CeO <sub>2</sub> Catalyst: Effects of Metal-Support Interactions on C-H Bond Breaking. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 7455-7459.	7.2	276
7	Water-Gas Shift Reaction on a Highly Active Inverse CeO <sub>x</sub> /Cu(111) Catalyst: Unique Role of Ceria Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8047-8050.	7.2	262
8	High catalytic activity of Au/CeO <sub>x</sub> /TiO <sub>2</sub> (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, 4975-4980.	3.3	257
9	Gold, Copper, and Platinum Nanoparticles Dispersed on CeO <sub>x</sub> /TiO <sub>2</sub> (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, 356-363.	6.6	247
10	Steam Reforming of Ethanol on Ni/CeO <sub>2</sub> : Reaction Pathway and Interaction between Ni and the CeO <sub>2</sub> Support. <i>ACS Catalysis</i> , 2013, 3, 975-984.	5.5	210
11	Low Pressure CO <sub>2</sub> Hydrogenation to Methanol over Gold Nanoparticles Activated on a CeO <sub>x</sub> /TiO <sub>2</sub> Interface. <i>Journal of the American Chemical Society</i> , 2015, 137, 10104-10107.	6.6	200
12	Interaction of Gold with Cerium Oxide Supports: CeO <sub>2</sub> (111) Thin Films vs CeO <sub>x</sub> Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2009, 113, 6042-6049.	1.5	198
13	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, 1702-1711.	7.6	198
14	Role of Ceria in Oxidative Dehydrogenation on Supported Vanadia Catalysts. <i>Journal of the American Chemical Society</i> , 2010, 132, 2345-2349.	6.6	191
15	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.	5.5	176
16	Hydrogenation of CO <sub>2</sub> to Methanol on CeO <sub>x</sub> /Cu(111) and ZnO/Cu(111) Catalysts: Role of the Metal-Oxide Interface and Importance of Ce <sup>3+</sup> Sites. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1778-1784.	1.5	156
17	Resolving the Atomic Structure of Vanadia Monolayer Catalysts: Monomers, Trimers, and Oligomers on Ceria. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8006-8009.	7.2	138
18	In situ studies of CeO <sub>2</sub> -supported Pt, Ru, and Pt-Ru alloy catalysts for the water-gas shift reaction: Active phases and reaction intermediates. <i>Journal of Catalysis</i> , 2012, 291, 117-126.	3.1	133

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19	Unraveling the Dynamic Nature of a CuO/CeO <sub>2</sub> Catalyst for CO Oxidation in <i>Operando</i> : A Combined Study of XANES (Fluorescence) and DRIFTS. ACS Catalysis, 2014, 4, 1650-1661.	5.5	128
20	Inverse Oxide/Metal Catalysts in Fundamental Studies and Practical Applications: A Perspective of Recent Developments. Journal of Physical Chemistry Letters, 2016, 7, 2627-2639.	2.1	120
21	Probing the reaction intermediates for the water-gas shift over inverse CeO <sub>x</sub> /Au(111) catalysts. Journal of Catalysis, 2010, 271, 392-400.	3.1	110
22	Enantioselective Chemisorption on a Chirally Modified Surface in Ultrahigh Vacuum: Adsorption of Propylene Oxide on 2-Butoxide-Covered Palladium(111). Journal of the American Chemical Society, 2002, 124, 8984-8989.	6.6	105
23	The conversion of CO <sub>2</sub> to methanol on orthorhombic $\beta$ -Mo <sub>2</sub> C and Cu/ $\beta$ -Mo <sub>2</sub> C catalysts: mechanism for admetal induced change in the selectivity and activity. Catalysis Science and Technology, 2016, 6, 6766-6777.	2.1	101
24	Cloud point extraction, preconcentration and spectrophotometric determination of erbium(III)-2-(3,5-dichloro-2-pyridylazo)-5-dimethylaminophenol. Analytica Chimica Acta, 1997, 342, 229-238.	2.6	97
25	Interaction of CO with OH on Au(111): HCOO, CO <sub>3</sub> , and HOCO as Key Intermediates in the Water-Gas Shift Reaction. Journal of Physical Chemistry C, 2009, 113, 19536-19544.	1.5	93
26	An Investigation of the Reaction Pathway for Ethylene Hydrogenation on Pd(111). Journal of Physical Chemistry B, 2001, 105, 11233-11239.	1.2	89
27	The Activation of Gold and the Water-Gas Shift Reaction: Insights from Studies with Model Catalysts. Accounts of Chemical Research, 2014, 47, 773-782.	7.6	87
28	Ambient pressure XPS and IRRAS investigation of ethanol steam reforming on Ni-CeO <sub>2</sub> (111) catalysts: an in situ study of C-C and O-H bond scission. Physical Chemistry Chemical Physics, 2016, 18, 16621-16628.	1.3	83
29	An Ideal Electrode Material, 3D Surface-Microporous Graphene for Supercapacitors with Ultrahigh Areal Capacitance. ACS Applied Materials & Interfaces, 2017, 9, 24655-24661.	4.0	83
30	Identification of 5-7 Defects in a Copper Oxide Surface. Journal of the American Chemical Society, 2011, 133, 11474-11477.	6.6	80
31	In situ/operando studies for the production of hydrogen through the water-gas shift on metal oxide catalysts. Physical Chemistry Chemical Physics, 2013, 15, 12004.	1.3	80
32	Fundamental Studies of Well-Defined Surfaces of Mixed-Metal Oxides: Special Properties of MO <sub>x</sub> /TiO <sub>2</sub> (110) {M = V, Ru, Ce, or W}. Chemical Reviews, 2013, 113, 4373-4390.	23.0	77
33	Ethylene adsorption on Pd(111) studied using infrared reflection-absorption spectroscopy. Surface Science, 2002, 511, 215-228.	0.8	75
34	Synthesis of $\beta$ -MoCl <sub>1-x</sub> and $\beta$ -MoC <sub>y</sub> Catalysts for CO <sub>2</sub> Hydrogenation by Thermal Carburization of Mo-oxide in Hydrocarbon and Hydrogen Mixtures. Catalysis Letters, 2014, 144, 1418-1424.	1.4	75
35	<i>In Situ</i> Imaging of Cu <sub>2</sub> O under Reducing Conditions: Formation of Metallic Fronts by Mass Transfer. Journal of the American Chemical Society, 2013, 135, 16781-16784.	6.6	74
36	On the Reaction Pathway for the Hydrogenation of Acetylene and Vinylidene on Pd(111). Journal of Physical Chemistry B, 2000, 104, 3107-3115.	1.2	73

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37	Adsorbate-Driven Morphological Changes of a Gold Surface at Low Temperatures. <i>Journal of the American Chemical Society</i> , 2008, 130, 17272-17273.	6.6	72
38	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, 15384-15385.	6.6	71
39	Visible Light-Driven H <sub>2</sub> Production over Highly Dispersed Ruthenium on Rutile TiO <sub>2</sub> Nanorods. <i>ACS Catalysis</i> , 2016, 6, 407-417.	5.5	71
40	Relating methanol oxidation to the structure of ceria-supported vanadia monolayer catalysts. <i>Journal of Catalysis</i> , 2010, 272, 82-91.	3.1	69
41	Exploring the Structural and Electronic Properties of Pt/Ceria-Modified TiO <sub>2</sub> and Its Photocatalytic Activity for Water Splitting under Visible Light. <i>Journal of Physical Chemistry C</i> , 2012, 116, 14062-14070.	1.5	69
42	Requirements for the Formation of a Chiral Template. <i>Journal of Physical Chemistry B</i> , 2005, 109, 851-856.	1.2	66
43	Potassium-chemical synthesis of 3D graphene from CO <sub>2</sub> and its excellent performance in HTM-free perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7749-7752.	5.2	66
44	Catalysis and the nature of mixed-metal oxides at the nanometer level: special properties of MO <sub>x</sub> /TiO <sub>2</sub> (110) {M= V, W, Ce} surfaces. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 9557.	1.3	64
45	Redox-Mediated Reconstruction of Copper during Carbon Monoxide Oxidation. <i>Journal of Physical Chemistry C</i> , 2014, 118, 15902-15909.	1.5	64
46	Elucidation of the Reaction Mechanism for the Palladium-Catalyzed Synthesis of Vinyl Acetate. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 4572-4574.	7.2	63
47	Direct Epoxidation of Propylene over Stabilized Cu <sup>+</sup> Surface Sites on Titanium-Modified Cu <sub>2</sub> O. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11946-11951.	7.2	62
48	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, 2202-2207.	6.6	59
49	Electronic Metal-Support 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.	1.3	57
50	Three-dimensional ruthenium-doped TiO <sub>2</sub> sea urchins for enhanced visible-light-responsive H <sub>2</sub> production. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 15972-15979.	1.3	56
51	Water Nucleation on Gold: Existence of a Unique Double Bilayer. <i>Journal of Physical Chemistry C</i> , 2009, 113, 15102-15105.	1.5	55
52	The Carburization of Transition Metal Molybdates (M <sub>x</sub> MoO <sub>4</sub> , M=Cu, Ni or Co) and the Generation of Highly Active Metal/Carbide Catalysts for CO <sub>2</sub> Hydrogenation. <i>Catalysis Letters</i> , 2015, 145, 1365-1373.	1.4	52
53	The adsorption and reaction of 2-iodoethanol on Ag(111). <i>Surface Science</i> , 2000, 463, 81-92.	0.8	51
54	Stabilization of Catalytically Active Cu <sup>+</sup> Surface Sites on Titanium-Copper Mixed-Oxide Films. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5336-5340.	7.2	51

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55	Selenium-sulfur (SeS) fast charging cathode for sodium and lithium metal batteries. <i>Energy Storage Materials</i> , 2019, 20, 71-79.	9.5	50
56	Dilute Alloys Based on Au, Ag, or Cu for Efficient Catalysis: From Synthesis to Active Sites. <i>Chemical Reviews</i> , 2022, 122, 8758-8808.	23.0	50
57	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.	0.8	49
58	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.	0.8	48
59	Determining the Behavior of RuO <sub>2</sub> Nanoparticles in Mixed-Metal Oxides: Structural and Catalytic Properties of RuO <sub>2</sub> /TiO <sub>2</sub> (110) Surfaces. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 10198-10202.	7.2	48
60	Synthesis and Structure of Ultrathin Aluminosilicate Films. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 7636-7639.	7.2	45
61	One-dimensional supramolecular surface structures: 1,4-diisocyanobenzene on Au(111) surfaces. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 11624.	1.3	44
62	CeO <sub>2</sub> + CuO Interactions and the Controlled Assembly of CeO <sub>2</sub> (111) and CeO <sub>2</sub> (100) Nanoparticles on an Oxidized Cu(111) Substrate. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23062-23066.	1.5	44
63	Hydrocarbon conversion on palladium catalysts. <i>Journal of Molecular Catalysis A</i> , 2005, 228, 35-45.	4.8	42
64	The effect of subsurface hydrogen on the adsorption of ethylene on Pd(111). <i>Surface Science</i> , 2003, 540, L600-L604.	0.8	41
65	Formation of an Ordered Ice Layer on a Thin Silica Film. <i>Journal of Physical Chemistry C</i> , 2007, 111, 759-764.	1.5	41
66	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.	0.8	40
67	The kinetics of ethylene hydrogenation catalyzed by metallic palladium. <i>Catalysis Letters</i> , 2005, 101, 145-149.	1.4	40
68	The adsorption and structure of carbon monoxide on ethylidyne-covered Pd(111). <i>Surface Science</i> , 2000, 470, L32-L38.	0.8	39
69	Structure and decomposition pathways of vinyl acetate on Pd(111). <i>Surface Science</i> , 2005, 598, 263-275.	0.8	39
70	On the reaction pathway for the formation of benzene from acetylene catalyzed by palladium. <i>Catalysis Letters</i> , 1999, 60, 11-14.	1.4	38
71	Nanopatterning in CeO <sub>2</sub> /Cu(111): A New Type of Surface Reconstruction and Enhancement of Catalytic Activity. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 839-843.	2.1	38
72	Adsorption of hydrogen on the surface and sub-surface of Cu(111). <i>Journal of Chemical Physics</i> , 2013, 139, 044712.	1.2	38

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73	Potassium-induced Effect on the Structure and Chemical Activity of the Cu <sub>2</sub> O/Cu(100) (100) Surface: A Combined Scanning Tunneling Microscopy and Density Functional Theory Study. ChemCatChem, 2015, 7, 3865-3872.		38
74	Tuning the Properties of Copper-Based Catalysts Based on Molecular in Situ Studies of Model Systems. Accounts of Chemical Research, 2015, 48, 2151-2158.	7.6	38
75	Oxygen adsorption on Mo(112) surface studied by ab initio genetic algorithm and experiment. Journal of Chemical Physics, 2007, 126, 234710.	1.2	37
76	Mechanistic Insights of Ethanol Steam Reforming over Ni-CeO <sub>2</sub> (111): The Importance of Hydroxyl Groups for Suppressing Coke Formation. Journal of Physical Chemistry C, 2015, 119, 18248-18256.	1.5	37
77	Reactivity of a Zirconia-Copper Inverse Catalyst for CO <sub>2</sub> Hydrogenation. Journal of Physical Chemistry C, 2020, 124, 22158-22172.	1.5	37
78	Dry Reforming of Methane on a Highly Active Ni-CeO <sub>2</sub> Catalyst: Effects of Metal-Support Interactions on C-H Bond Breaking. Angewandte Chemie, 2016, 128, 7581-7585.	1.6	35
79	Enantioselective Chemisorption on Model Chirally Modified Surfaces: 2-Butanol on Î±-(1-Naphthyl)ethylamine/Pd(111). Journal of Physical Chemistry C, 2009, 113, 13877-13885.	1.5	34
80	Assisted deprotonation of formic acid on Cu(111) and self-assembly of 1D chains. Physical Chemistry Chemical Physics, 2013, 15, 12291.	1.3	34
81	Ethanol Photoreaction on RuO <sub>2</sub> /Ru-Modified TiO <sub>2</sub> (110). Journal of Physical Chemistry C, 2013, 117, 11149-11158.	1.5	34
82	Structural Changes of Cu(110) and Cu(110)-(2 Å <sup>-1</sup> )-O Surfaces under Carbon Monoxide in the Torr Pressure Range Studied with Scanning Tunneling Microscopy and Infrared Reflection Absorption Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 8227-8231.	1.5	34
83	Reaction of tributyl phosphate with oxidized iron: surface chemistry and tribological significance. Tribology Letters, 2005, 18, 377-384.	1.2	33
84	Surface Reduction Mechanism of Cerium-Gallium Mixed Oxides with Enhanced Redox Properties. Journal of Physical Chemistry C, 2013, 117, 8822-8831.	1.5	33
85	Energy Level Shifts at the Silica/Ru(0001) Heterojunction Driven by Surface and Interface Dipoles. Topics in Catalysis, 2017, 60, 481-491.	1.3	32
86	Determination of the structure of disordered overlayers of ethylene on clean and hydrogen-covered Pd by low-energy electron diffraction. Surface Science, 2004, 564, 71-78.	0.8	31
87	Mechanistic Study of CO Titration on Cu <sub>2</sub> O/Cu(100) (100) Surfaces. ChemCatChem, 2014, 6, 2364-2372.	1.8	31
88	Probing adsorption sites for CO on ceria. Physical Chemistry Chemical Physics, 2013, 15, 15856.	1.3	30
89	Redox Properties of Cu <sub>2</sub> O(100) and (111) Surfaces. Journal of Physical Chemistry C, 2018, 122, 28684-28691.	1.5	30
90	Adsorption of Au and Pd Atoms on Thin SiO <sub>2</sub> Films: the Role of Atomic Structure. Journal of Physical Chemistry C, 2008, 112, 3405-3409.	1.5	29

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91	Immobilization of single argon atoms in nano-cages of two-dimensional zeolite model systems. Nature Communications, 2017, 8, 16118.	5.8	29
92	Oxygen-Promoted Methane Activation on Copper. Journal of Physical Chemistry B, 2018, 122, 855-863.	1.2	29
93	Reversible graphene-metal contact through hydrogenation. Physical Review B, 2012, 86, .	1.1	28
94	The adsorption of ethylene on ethynyl-covered Pd(). Surface Science, 2002, 513, L431-L435.	0.8	27
95	Structure and reactivity of propylene on clean and hydrogen-covered Pd(111). Surface Science, 2003, 542, 129-141.	0.8	27
96	Interplay between theory and experiment in the quest for silica with reduced dimensionality grown on a Mo(112) surface. Chemical Physics Letters, 2006, 424, 115-119.	1.2	27
97	Pulsed-reactant in situ studies of ceria/CuO catalysts using simultaneous XRD, PDF and DRIFTS measurements. Catalysis Today, 2014, 229, 64-71.	2.2	27
98	Direct conversion of CO <sub>2</sub> to meso/macro-porous frameworks of surface-microporous graphene for efficient asymmetrical supercapacitors. Journal of Materials Chemistry A, 2017, 5, 23252-23258.	5.2	27
99	Palladium-catalyzed cyclotrimerization and hydrogenation: from ultrahigh vacuum to high-pressure catalysis. Catalysis Today, 2001, 65, 3-11.	2.2	26
100	Theoretical analysis of the coverage dependence of enantioselective chemisorption on a chirally templated surface. Journal of Chemical Physics, 2003, 118, 6030-6037.	1.2	26
101	Facilitating hydrogen atom migration via a dense phase on palladium islands to a surrounding silver surface. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22657-22664.	3.3	26
102	Ice-Assisted Preparation of Silica-Supported Vanadium Oxide Particles. Journal of Physical Chemistry C, 2007, 111, 5337-5344.	1.5	25
103	Special Chemical Properties of RuO <sub>x</sub> Nanowires in RuO <sub>x</sub> /TiO <sub>2</sub> (110): Dissociation of Water and Hydrogen Production. Journal of Physical Chemistry C, 2012, 116, 4767-4773.	1.5	25
104	Probing enantioselective chemisorption in ultrahigh vacuum. Journal of Molecular Catalysis A, 2004, 216, 215-221.	4.8	24
105	Interfacial Cu <sup>+</sup> promoted surface reactivity: Carbon monoxide oxidation reaction over polycrystalline copper-titania catalysts. Surface Science, 2016, 652, 206-212.	0.8	24
106	KINETIC AND REACTIVE PROPERTIES OF ETHYLENE ON CLEAN AND HYDROGEN-COVERED Pd(111). Surface Review and Letters, 2003, 10, 909-916.	0.5	23
107	Lattice-gas modeling of enantioselective adsorption by template chiral substrates. Physica A: Statistical Mechanics and Its Applications, 2004, 338, 493-510.	1.2	23
108	Formation of one-dimensional molybdenum oxide on Mo(112). Surface Science, 2008, 602, 3338-3342.	0.8	23



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109	Structure of Copper-Cobalt Surface Alloys in Equilibrium with Carbon Monoxide Gas. <i>Journal of the American Chemical Society</i> , 2018, 140, 6575-6581.	6.6	23
110	The Kinetics of Ethylidyne Formation from Ethylene on Pd(111). <i>Journal of Physical Chemistry C</i> , 2009, 113, 8000-8001.	1.5	22
111	Selective molecular adsorption in sub-nanometer cages of a Cu <sub>2</sub> O surface oxide. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 10726.	1.3	22
112	In situ time-resolved X-ray diffraction study of the synthesis of Mo <sub>2</sub> C with different carburization agents. <i>Canadian Journal of Chemistry</i> , 2013, 91, 573-582.	0.6	22
113	The Unique Properties of the Oxide-Metal Interface: Reaction of Ethanol on an Inverse Model CeO <sub>x</sub> -Au(111) Catalyst. <i>Journal of Physical Chemistry C</i> , 2014, 118, 25057-25064.	1.5	22
114	High Activity of Au/K/TiO <sub>2</sub> (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.	1.5	22
115	Ionization-Facilitated Formation of 2D (Alumino)Silicate Noble Gas Clathrate Compounds. <i>Advanced Functional Materials</i> , 2019, 29, 1806583.	7.8	20
116	Potassium-Promoted Reduction of Cu <sub>2</sub> O/Cu(111) by CO. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8057-8066.	1.5	20
117	Multi-modal surface analysis of porous films under <i>operando</i> conditions. <i>AIP Advances</i> , 2020, 10, .	0.6	19
118	Application of ultrathin TiO <sub>2</sub> layers in solar energy conversion devices. <i>Energy Science and Engineering</i> , 2022, 10, 1614-1629.	1.9	19
119	An Investigation of the Chemistry of Molybdenum Hexacarbonyl on Thin Dehydroxylated Alumina Films in Ultrahigh Vacuum. <i>Catalysis Letters</i> , 2003, 91, 83-88.	1.4	18
120	Design and Synthesis of 3D Potassium-Ion Pre-Intercalated Graphene for Supercapacitors. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 3610-3616.	1.8	18
121	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.	6.6	17
122	On the effect of hydrogen on the palladium-catalyzed formation of benzene from acetylene. <i>Catalysis Letters</i> , 2001, 71, 1-4.	1.4	16
123	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.	1.2	15
124	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.	1.3	15
125	Elucidation of Active Sites for the Reaction of Ethanol on TiO <sub>2</sub> /Au(111). <i>Journal of Physical Chemistry C</i> , 2017, 121, 7794-7802.	1.5	15
126	Near band edge photoluminescence of ZnO nanowires: Optimization via surface engineering. <i>Applied Physics Letters</i> , 2017, 111, 231901.	1.5	15



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127	Kinetic Parameters for the Elementary Steps in the Palladium-Catalyzed Synthesis of Vinyl Acetate. <i>Catalysis Letters</i> , 2010, 138, 135-142.	1.4	14
128	Potassium and Water Coadsorption on TiO <sub>2</sub> (110): OH-Induced Anchoring of Potassium and the Generation of Single-Site Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3866-3872.	2.1	14
129	Ultrathin Amorphous Titania on Nanowires: Optimization of Conformal Growth and Elucidation of Atomic-Scale Motifs. <i>Nano Letters</i> , 2019, 19, 3457-3463.	4.5	14
130	Reactivity and Morphology of Oxygen-Modified Au Surfaces. <i>Journal of Physical Chemistry C</i> , 2012, 116, 18292-18299.	1.5	13
131	Water-gas shift reaction over gold nanoparticles dispersed on nanostructured CeO <sub>x</sub> -TiO <sub>2</sub> (110) surfaces: Effects of high ceria coverage. <i>Surface Science</i> , 2016, 650, 34-39.	0.8	13
132	In Situ Probing of Ion Ordering at an Electrified Ionic Liquid/Au Interface. <i>Advanced Materials</i> , 2017, 29, 1606357.	11.1	13
133	Stabilization of Oxidized Copper Nanoclusters in Confined Spaces. <i>Topics in Catalysis</i> , 2018, 61, 419-427.	1.3	13
134	Porous MoxCy/SiO <sub>2</sub> Material for CO <sub>2</sub> Hydrogenation. <i>Topics in Catalysis</i> , 2019, 62, 1026-1034.	1.3	13
135	Resolving the Evolution of Atomic Layer-Deposited Thin-Film Growth by Continuous <i>In Situ</i> X-Ray Absorption Spectroscopy. <i>Chemistry of Materials</i> , 2021, 33, 1740-1751.	3.2	13
136	Title is missing!. <i>Tribology Letters</i> , 2003, 14, 99-104.	1.2	12
137	An infrared spectroscopic and temperature-programmed desorption study of methyl iodide hydrogenation on Pd(). <i>Surface Science</i> , 2003, 524, 173-182.	0.8	12
138	New Role of Pd Hydride as a Sensor of Surface Pd Distributions in Pd <sup>δ</sup> Au Catalysts. <i>ChemCatChem</i> , 2020, 12, 717-721.	1.8	12
139	Morphology and reactivity of size-selected titanium oxide nanoclusters on Au(111). <i>Journal of Chemical Physics</i> , 2020, 152, 054714.	1.2	12
140	Enhanced Catalysis under 2D Silica: A CO Oxidation Study. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10888-10894.	7.2	12
141	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.	1.5	11
142	Isolation and characterization of formates on CeO <sub>2</sub> -Cu <sub>2</sub> O/Cu(1 1 1). <i>Catalysis Today</i> , 2015, 240, 190-200.	2.2	11
143	How to stabilize highly active Cu <sup>+</sup> cations in a mixed-oxide catalyst. <i>Catalysis Today</i> , 2016, 263, 4-10.	2.2	11
144	3D graphene from CO <sub>2</sub> and K as an excellent counter electrode for dye-sensitized solar cells. <i>International Journal of Energy Research</i> , 2017, 41, 2502-2508.	2.2	11

#	ARTICLE	IF	CITATIONS
145	Studying two-dimensional zeolites with the tools of surface science: MFI nanosheets on Au(111). <i>Catalysis Today</i> , 2017, 280, 283-288.	2.2	11
146	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.	2.5	11
147	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.	1.5	11
148	Probing reaction pathways on model catalyst surfaces: Vinyl acetate synthesis and olefin metathesis. <i>Journal of Molecular Catalysis A</i> , 2008, 281, 14-23.	4.8	10
149	Reversible oxidation and reduction of gold-supported iron oxide islands at room temperature. <i>Journal of Chemical Physics</i> , 2020, 152, 074710.	1.2	10
150	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.	0.7	10
151	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.	1.5	9
152	Imaging the ordering of a weakly adsorbed two-dimensional condensate: ambient-pressure microscopy and spectroscopy of CO <sub>2</sub> molecules on rutile TiO <sub>2</sub> (110). <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 13122-13126.	1.3	9
153	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.	1.2	8
154	Adsorbate-driven morphological changes on Cu(111) nano-pits. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 3032-3038.	1.3	8
155	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.	0.6	8
156	Adsorption of a Lennard-Jones gas on random bivariate surfaces. <i>Surface Science</i> , 2000, 449, 43-49.	0.8	7
157	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.	4.8	7
158	Stabilization of Carboxylate Surface Species on Pd(111). <i>Adsorption Science and Technology</i> , 2011, 29, 603-611.	1.5	7
159	EDTA-Ce(III) Modified Pt Vulcan XC-72 Catalyst Synthesis for Methanol Oxidation in Acid Solution. <i>Electrocatalysis</i> , 2014, 5, 50-61.	1.5	7
160	Formation of $\gamma$ -Mo <sub>2</sub> C below 600 °C using MoO <sub>2</sub> nanoparticles as precursor. <i>Journal of Catalysis</i> , 2015, 332, 83-94.	3.1	7
161	Enhancing the reactivity of gold: Nanostructured Au(111) adsorbs CO. <i>Surface Science</i> , 2016, 650, 17-23.	0.8	7
162	Zeolite Nanosheets Stabilize Catalyst Particles to Promote the Growth of Thermodynamically Unfavorable, Small-Diameter Carbon Nanotubes. <i>Small</i> , 2020, 16, e2002120.	5.2	7

#	ARTICLE	IF	CITATIONS
163	Surface structure of mass-selected niobium oxide nanoclusters on Au(111). <i>Nanotechnology</i> , 2021, 32, 475601.	1.3	7
164	Cooperative sequential adsorption processes on heterogeneous substrates. <i>Journal of Chemical Physics</i> , 1998, 108, 1730-1739.	1.2	6
165	Cerium oxide as a promoter for the electro-oxidation reaction of ethanol: in situ XAFS characterization of the Pt nanoparticles supported on CeO <sub>2</sub> nanoparticles and nanorods. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 32251-32256.	1.3	6
166	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.	1.5	5
167	Stabilization of Cu <sub>2</sub> O through Site-Selective Formation of a Co <sub>1</sub> Cu Hybrid Single-Atom Catalyst. <i>Chemistry of Materials</i> , 2022, 34, 2313-2320.	3.2	5
168	Reactivity and Mass Transfer of Low-Dimensional Catalysts. <i>Chemical Record</i> , 2014, 14, 857-868.	2.9	4
169	Rotating Disk Slurry Au Electrodeposition at Unsupported Carbon Vulcan XC-72 and Ce <sup>3+</sup> Impregnation for Ethanol Oxidation in Alkaline Media. <i>Electrocatalysis</i> , 2017, 8, 87-94.	1.5	4
170	Confinement Effects on Furfuryl Alcohol Reactions over Porous Bilayer Silica-Modified Pd(111). <i>Journal of Physical Chemistry C</i> , 2020, 124, 25437-25446.	1.5	4
171	Morphology of Palladium Thin Film Deposited on a Two-Dimensional Bilayer Aluminosilicate. <i>Topics in Catalysis</i> , 2019, 62, 1067-1075.	1.3	3
172	Adsorption and thermal decomposition of 2-octylthieno[3,4-b]thiophene on Au(1 1 1). <i>Journal of Colloid and Interface Science</i> , 2012, 384, 143-148.	5.0	2
173	Xenon Trapping in Metal-Supported Silica Nanocages. <i>Small</i> , 2021, 17, 2103661.	5.2	2
174	Water Formation Reaction under Interfacial Confinement: Al <sub>0.25</sub> Si <sub>0.75</sub> O <sub>2</sub> on O-Ru(0001). <i>Nanomaterials</i> , 2022, 12, 183.	1.9	2
175	Frontispiece: Direct Epoxidation of Propylene over Stabilized Cu+Surface Sites on Titanium-Modified Cu <sub>2</sub> O. <i>Angewandte Chemie - International Edition</i> , 2015, 54, n/a-n/a.	7.2	1
176	Environmental TEM Studies Reveal Catalyst/Support Registry on 2D Zeolites. <i>Microscopy and Microanalysis</i> , 2019, 25, 1458-1459.	0.2	1
177	Enhanced Catalysis under 2D Silica: A CO Oxidation Study. <i>Angewandte Chemie</i> , 2021, 133, 10983-10989.	1.6	1
178	Back Cover Image. <i>Energy Science and Engineering</i> , 2022, 10, .	1.9	1
179	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.	1.5	0
180	Frontispiz: Direct Epoxidation of Propylene over Stabilized Cu+Surface Sites on Titanium-Modified Cu <sub>2</sub> O. <i>Angewandte Chemie</i> , 2015, 127, n/a-n/a.	1.6	0

#	ARTICLE	IF	CITATIONS
181	When ruthenia met titania: achieving extraordinary catalytic activity at low temperature by nanostructuring of oxides. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 26813-26818.	1.3	0
182	Catalytic Chemistry on Oxide Nanostructures. <i>Springer Series in Materials Science</i> , 2016, , 251-280.	0.4	0
183	2D (Alumino)Silicate Noble Clathrates: Ionization Facilitated Formation of 2D (Alumino)Silicate Noble Gas Clathrate Compounds ( <i>Adv. Funct. Mater.</i> 20/2019). <i>Advanced Functional Materials</i> , 2019, 29, 1970137.	7.8	0
184	Hypothetical Efficiency of Electrical to Mechanical Energy Transfer during Individual Stochastic Molecular Switching Events. <i>ACS Nano</i> , 2020, 14, 16558-16564.	7.3	0
185	Nanomaterials in Operando Conditions. <i>Microscopy and Microanalysis</i> , 2020, 26, 776-776.	0.2	0
186	Xenon Trapping in Metal Supported Silica Nanocages ( <i>Small</i> 39/2021). <i>Small</i> , 2021, 17, 2170204.	5.2	0