Steven H Overbury

List of Publications by Year
in descending order

196 papers	13,809 citations	16451 64 h-index	24258 110 g-index
203 all docs	203 docs citations	203 times ranked	12358 citing authors

#	Article	IF	Citations
1	Probing Defect Sites on CeO₂ Nanocrystals with Well-Defined Surface Planes by Raman Spectroscopy and O₂ Adsorption. Langmuir, 2010, 26, 16595-16606.	3.5	889
2	Electron spectroscopy of single crystal and polycrystalline cerium oxide surfaces. Surface Science, 1998, 409, 307-319.	1.9	863
3	On the structure dependence of CO oxidation over CeO2 nanocrystals with well-defined surface planes. Journal of Catalysis, 2012, 285, 61-73.	6.2	553
4	Surface composition of binary systems. Prediction of surface phase diagrams of solid solutions. Chemical Reviews, 1975, 75, 547-560.	47.7	548
5	Infrared Study of CO₂ Sorption over â€œMolecular Basketâ€•Sorbent Consisting of Polyethylenimine-Modified Mesoporous Molecular Sieve. Journal of Physical Chemistry C, 2009, 113, 7260-7268.	3.1	330
6	Ordered cerium oxide thin films grown on Ru(0001) and Ni(111). Surface Science, 1999, 429, 186-198.	1.9	248
7	Thiolate Ligands as a Double-Edged Sword for CO Oxidation on CeO₂ Supported Au₂₅(SCH₂CH₂Ph)₁₈ Nanoclusters. Journal of the American Chemical Society, 2014, 136, 6111-6122.	13.7	245
8	Evaluation of the Au size effect: CO oxidation catalyzed by Au/TiO2. Journal of Catalysis, 2006, 241, 56-65.	6.2	237
9	Rational Design of Bi Nanoparticles for Efficient Electrochemical CO₂ Reduction: The Elucidation of Size and Surface Condition Effects. ACS Catalysis, 2016, 6, 6255-6264.	11.2	212
10	Ultrastable Au Nanocatalyst Supported on Surface-Modified TiO2Nanocrystals. Journal of the American Chemical Society, 2005, 127, 10480-10481.	13.7	202
11	Preparation of Highly Active Silica-Supported Au Catalysts for CO Oxidation by a Solution-Based Technique. Journal of Physical Chemistry B, 2006, 110, 10842-10848.	2.6	194
12	Water Dissociation on CeO₂(100) and CeO₂(111) Thin Films. Journal of Physical Chemistry C, 2012, 116, 19419-19428.	3.1	178
13	Probing the Surface Sites of CeO₂ Nanocrystals with Well-Defined Surface Planes via Methanol Adsorption and Desorption. ACS Catalysis, 2012, 2, 2224-2234.	11.2	165
14	Spectroscopic Investigation of Surface-Dependent Acidâ€“Base Property of Ceria Nanoshapes. Journal of Physical Chemistry C, 2015, 119, 7340-7350.	3.1	156
15	XAS Study of Au Supported on TiO2:Â Influence of Oxidation State and Particle Size on Catalytic Activity. Journal of Physical Chemistry B, 2004, 108, 15782-15790.	2.6	147
16	Adsorption and reaction of H2O and CO on oxidized and reduced Rh/CeOx(111) surfaces. Surface Science, 2000, 457, 51-62.	1.9	146
17	Preparation and Comparison of Supported Gold Nanocatalysts on Anatase, Brookite, Rutile, and P25 Polymorphs of TiO2for Catalytic Oxidation of CO. Journal of Physical Chemistry B, 2005, 109, 10676-10685.	2.6	146
18	Low-temperature CO oxidation on Au/fumed SiO2-based catalysts prepared from Au(en)2Cl3 precursor. Applied Catalysis A: General, 2007, 326, 89-99.	4.3	145

#	Article	IF	Citations
19	Surface Solâˆ’Gel Modification of Mesoporous Silica Materials with TiO2for the Assembly of Ultrasmall Gold Nanoparticles. Journal of Physical Chemistry B, 2004, 108, 2793-2796.	2.6	142
20	Pseudocapacitance and performance stability of quinone-coated carbon onions. Nano Energy, 2013, 2, 702-712.	16.0	135
21	Comparison of Au Catalysts Supported on Mesoporous Titania and Silica: Investigation of Au Particle Size Effects and Metal-Support Interactions. Catalysis Letters, 2004, 95, 99-106.	2.6	134
22	Evidence for above-surface and subsurface neutralization during interactions of highly charged ions with a metal target. Physical Review Letters, 1991, 67, 723-726.	7.8	129
23	Adsorption and Reaction of Acetaldehyde on Shape-Controlled CeO₂ Nanocrystals: Elucidation of Structureâ€“Function Relationships. ACS Catalysis, 2014, 4, 2437-2448.	11.2	128
24	Gold Nanoparticles Supported on Carbon Nitride: Influence of Surface Hydroxyls on Low Temperature Carbon Monoxide Oxidation. ACS Catalysis, 2012, 2, 1138-1146.	11.2	127
25	Surface structure determination of Sn deposited on Pt(111) by low energy alkali ion scattering. Surface Science, 1991, 254, 45-57.	1.9	126
26	Structure of Au₁₅(SR)₁₃ and Its Implication for the Origin of the Nucleus in Thiolated Gold Nanoclusters. Journal of the American Chemical Society, 2013, 135, 8786-8789.	13.7	126
27	Role of the nanoscale in catalytic CO oxidation by supported Au and Pt nanostructures. Physical Review B, 2007, 76, .	3.2	122
28	Surface Modification of Au/TiO₂ Catalysts by SiO₂ via Atomic Layer Deposition. Journal of Physical Chemistry C, 2008, 112, 9448-9457.	3.1	121
29	Selective Hydrogenation of Phenol Catalyzed by Palladium on High-Surface-Area Ceria at Room Temperature and Ambient Pressure. ACS Catalysis, 2015, 5, 2051-2061.	11.2	120
30	The structure and composition of the NiAl(110) and NiAl(100) surfaces. Surface Science, 1988, 199, 141-153.	1.9	116
31	Colloidal deposition synthesis of supported gold nanocatalysts based on Auâ€“Fe3O4 dumbbell nanoparticles. Chemical Communications, 2008, , 4357.	4.1	113
32	The surface composition of the gold-palladium binary alloy system. Surface Science, 1977, 65, 578-592.	1.9	112
33	Chemisorption and Reaction of NO and N2O on Oxidized and Reduced Ceria Surfaces Studied by Soft X-Ray Photoemission Spectroscopy and Desorption Spectroscopy. Journal of Catalysis, 1999, 186, 296-309.	6.2	112
34	A solid molecular basket sorbent for CO₂capture from gas streams with low CO₂concentration under ambient conditions. Physical Chemistry Chemical Physics, 2012, 14, 1485-1492.	2.8	107
35	Silica-Supported Auâ€“CuO_{<i>x</i>} Hybrid Nanocrystals as Active and Selective Catalysts for the Formation of Acetaldehyde from the Oxidation of Ethanol. ACS Catalysis, 2012, 2, 2537-2546.	11.2	105
36	Formation of stable, two-dimensional alloy-surface phases: Sn on Cu(111), Ni(111), and Pt(111). Physical Review B, 1992, 46, 7868-7872.	3.2	103

#	Article	IF	Citations
37	Ultrastable Gold Nanocatalyst Supported by Nanosized Non-Oxide Substrate. Angewandte Chemie - International Edition, 2006, 45, 3614-3618.	13.8	103
38	Au/MxOy/TiO2 catalysts for CO oxidation: Promotional effect of main-group, transition, and rare-earth metal oxide additives. Journal of Molecular Catalysis A, 2007, 273, 186-197.	4.8	102
39	Investigation of the structure of Au(110) using angle resolved low energy K+ ion backscattering. Surface Science, 1981, 109, 239-262.	1.9	98
40	Oxygen Vacancy-Assisted Coupling and Enolization of Acetaldehyde on CeO₂(111). Journal of the American Chemical Society, 2012, 134, 18034-18045.	13.7	97
41	Surface structure dependence of selective oxidation of ethanol on faceted CeO2 nanocrystals. Journal of Catalysis, 2013, 306, 164-176.	6.2	95
42	Coassembly Synthesis of Ordered Mesoporous Silica Materials Containing Au Nanoparticles. Langmuir, 2003, 19, 3974-3980.	3.5	94
43	Novel MEMS-Based Gas-Cell/Heating Specimen Holder Provides Advanced Imaging Capabilities for<i>In Situ</i>Reaction Studies. Microscopy and Microanalysis, 2012, 18, 656-666.	0.4	93
44	Complexity of Intercalation in MXenes: Destabilization of Urea by Two-Dimensional Titanium Carbide. Journal of the American Chemical Society, 2018, 140, 10305-10314.	13.7	93
45	Synthesis of silica supported AuCu nanoparticle catalysts and the effects of pretreatment conditions for the CO oxidation reaction. Physical Chemistry Chemical Physics, 2011, 13, 2571.	2.8	92
46	In Situ Phase Separation of NiAu Alloy Nanoparticles for Preparing Highly Active Au/NiO CO Oxidation Catalysts. ChemPhysChem, 2008, 9, 2475-2479.	2.1	91
47	Structure of Vanadium Oxide Supported on Ceria by Multiwavelength Raman Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 25368-25378.	3.1	91
48	Role Of CO₂ As a Soft Oxidant For Dehydrogenation of Ethylbenzene to Styrene over a High-Surface-Area Ceria Catalyst. ACS Catalysis, 2015, 5, 6426-6435.	11.2	90
49	Diphosphine-Protected Au₂₂ Nanoclusters on Oxide Supports Are Active for Gas-Phase Catalysis without Ligand Removal. Nano Letters, 2016, 16, 6560-6567.	9.1	88
50	The surface composition of the silverâ€"Gold system by Auger electron spectroscopy. Surface Science, 1976, 55, 209-226.	1.9	84
51	XANES studies of the reduction behavior of (Ce1-yZry)O2 and Rh/(Ce1-yZry)O2. Catalysis Letters, 1998, 51, 133-138.	2.6	81
52	Open-Cage Fullerene-like Graphitic Carbons as Catalysts for Oxidative Dehydrogenation of Isobutane. Journal of the American Chemical Society, 2009, 131, 7735-7741.	13.7	81
53	Acidâ€"Base Reactivity of Perovskite Catalysts Probed via Conversion of 2-Propanol over Titanates and Zirconates. ACS Catalysis, 2017, 7, 4423-4434.	11.2	81
54	Multiwavelength Raman Spectroscopic Study of Silica-Supported Vanadium Oxide Catalysts. Journal of Physical Chemistry C, 2010, 114, 412-422.	3.1	80

#	Article	IF	Citations
55	DRIFTS-QMS Study of Room Temperature CO Oxidation on Au/SiO₂ Catalyst: Nature and Role of Different Au Species. Journal of Physical Chemistry C, 2009, 113, 3726-3734.	3.1	79
56	Electron emission during interactions of multicharged N and Ar ions with Au(110) and Cu(001) surfaces. Physical Review A, 1991, 44, 7214-7228.	2.5	77
57	Powder XRD analysis and catalysis characterization of ultra-small gold nanoparticles deposited on titania-modified SBA-15. Catalysis Communications, 2005, 6, 404-408.	3.3	73
58	Growth and Characterization of Rh and Pd Nanoparticles on Oxidized and Reduced CeOx(111) Thin Films by Scanning Tunneling Microscopy. Journal of Physical Chemistry C, 2008, 112, 9336-9345.	3.1	73
59	Support Shape Effect in Metal Oxide Catalysis: Ceria-Nanoshape-Supported Vanadia Catalysts for Oxidative Dehydrogenation of Isobutane. Journal of Physical Chemistry Letters, 2012, 3, 1517-1522.	4.6	72
60	CO DISSOCIATION ON RH DEPOSITED ON REDUCED CERIUM OXIDE THIN FILMS. Journal of Catalysis, 1999, 188, 340-345.	6.2	70
61	Brookite-supported highly stable gold catalytic system for CO oxidation. Chemical Communications, 2004, , 1918-1919.	4.1	70
62	Evolution of gold structure during thermal treatment of Au/FeOx catalysts revealed by aberration-corrected electron microscopy. Journal of Electron Microscopy, 2009, 58, 199-212.	0.9	70
63	Effect of Supporting Surface Layers on Catalytic Activities of Gold Nanoparticles in CO Oxidation. Journal of Physical Chemistry B, 2005, 109, 15489-15496.	2.6	67
64	Chemisorption and Reaction of Sulfur Dioxide with Oxidized and Reduced Ceria Surfaces. Journal of Physical Chemistry B, 1999, 103, 11308-11317.	2.6	65
65	Rational design of gold catalysts with enhanced thermal stability: post modification of Au/TiO2 by amorphous SiO2 decoration. Catalysis Letters, 2007, 116, 128-135.	2.6	65
66	Metal Phosphates as a New Class of Supports for Gold Nanocatalysts. Catalysis Letters, 2008, 126, 20-30.	2.6	64
67	Adsorption and dissociation of methanol on the fully oxidized and partially reduced (111) cerium oxide surface: Dependence on the configuration of the cerium 4f electrons. Surface Science, 2008, 602, 162-175.	1.9	61
68	Temperature evolution of structure and bonding of formic acid and formate on fully oxidized and highly reduced CeO2(111). Physical Chemistry Chemical Physics, 2009, 11, 11171.	2.8	61
69	Oxygenâ€Functionalized Fewâ€Layer Graphene Sheets as Active Catalysts for Oxidative Dehydrogenation Reactions. ChemSusChem, 2013, 6, 840-846.	6.8	61
70	Determination of the scattering potential for low energy alkali-metal ions from a Mo(001) surface. Physical Review B, 1985, 32, 6278-6285.	3.2	56
71	CO oxidation on Au/FePO4 catalyst: Reaction pathways and nature of Au sites. Journal of Catalysis, 2009, 266, 98-105.	6.2	56
72	Oxidative dehydrogenation of isobutane on phosphorous-modified graphitic mesoporous carbon. Carbon, 2011, 49, 659-668.	10.3	56

#	Article	IF	Citations
73	Identifying Active Functionalities on Fewâ€Layered Graphene Catalysts for Oxidative Dehydrogenation of Isobutane. ChemSusChem, 2014, 7, 483-491.	6.8	56
74	Interaction of S with W(001). Surface Science, 1992, 277, 64-76.	1.9	54
75	Nonhydrolytic Layer-by-Layer Surface Solâˆ'Gel Modification of Powdered Mesoporous Silica Materials with TiO2. Chemistry of Materials, 2005, 17, 1923-1925.	6.7	54
76	Hierarchically Superstructured Prussian Blue Analogues: Spontaneous Assembly Synthesis and Applications as Pseudocapacitive Materials. ChemSusChem, 2015, 8, 177-183.	6.8	54
77	Surface studies of model supported catalysts: NO adsorption on Rh/CeO2(001). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 1647-1652.	2.1	53
78	Transient studies of the mechanisms of CO oxidation over Au/TiO2 using time-resolved FTIR spectroscopy and product analysis. Journal of Catalysis, 2005, 236, 392-400.	6.2	50
79	Low-Temperature Solution-Phase Synthesis of NiAu Alloy Nanoparticles via Butyllithium Reduction: Influences of Synthesis Details and Application As the Precursor to Active Au-NiO/SiO₂ Catalysts through Proper Pretreatment. Journal of Physical Chemistry C, 2009, 113, 5758-5765.	3.1	50
80	Effect of Li Promoter on titania-supported Rh catalyst for ethanol formation from CO hydrogenation. Catalysis Today, 2010, 149, 91-97.	4.4	50
81	EXAFS and FT-IR Characterization of Mn and Li Promoted Titania-Supported Rh Catalysts for CO Hydrogenation. ACS Catalysis, 2011, 1, 1298-1306.	11.2	50
82	Ionic liquid derived carbons as highly efficient oxygen reduction catalysts: first elucidation of pore size distribution dependent kinetics. Chemical Communications, 2014, 50, 1469-1471.	4.1	49
83	Au/PO43âˆ'/TiO2 and PO43âˆ'/Au/TiO2 catalysts for CO oxidation: Effect of synthesis details on catalytic performance. Applied Catalysis A: General, 2007, 327, 226-237.	4.3	48
84	Electron emission from the interaction of multiply charged ions with a Au(110) surface. Surface Science, 1986, 178, 359-366.	1.9	47
85	Adsorption and Reaction of Acetone over CeOx(111) Thin Films. Journal of Physical Chemistry C, 2009, 113, 6208-6214.	3.1	46
86	Pathways for Ethanol Dehydrogenation and Dehydration Catalyzed by Ceria (111) and (100) Surfaces. Journal of Physical Chemistry C, 2015, 119, 2447-2455.	3.1	46
87	The nature of the sulfur induced surface reconstruction on Ni(111). Surface Science, 1995, 323, L287-L292.	1.9	45
88	Direct Visualization and Control of Atomic Mobility at {100} Surfaces of Ceria in the Environmental Transmission Electron Microscope. Nano Letters, 2017, 17, 7652-7658.	9.1	45
89	The surface composition of Auâ€"Sn alloys determined by Auger electron spectroscopy. Journal of Chemical Physics, 1977, 66, 3181-3188.	3.0	43
90	Reactivity and reaction intermediates for acetic acid adsorbed on CeO2(1 1 1). Catalysis Today, 2015, 253, 65-76.	4.4	43

#	ARTICLE	IF	CITATIONS
91	Energy loss, angular distributions and charge fractions of low energy hydrogen transmitted through thin carbon foils. Radiation Effects, 1979, 41, 219-227.	0.4	42
92	Synthesis of Ordered Mixed Titania and Silica Mesostructured Monoliths for Gold Catalysts. Journal of Physical Chemistry B, 2004, 108, 20038-20044.	2.6	42
93	Operando studies of desorption, reaction and carbonate formation during CO oxidation by Au/TiO2 catalysts. Catalysis Today, 2007, 126, 135-142.	4.4	42
94	Investigation of the selective sites on graphitic carbons for oxidative dehydrogenation of isobutane. Journal of Catalysis, 2009, 267, 158-166.	6.2	42
95	CO oxidation on phosphate-supported Au catalysts: Effect of support reducibility on surface reactions. Journal of Catalysis, 2011, 278, 133-142.	6.2	42
96	A comparison of scattering of low energy K+ and Ar+ from the Au(110) surface. Surface Science, 1981, 112, 23-37.	1.9	41
97	The structure of atomic oxygen and carbon overlayers on the Mo(001) surface studied by low energy ion scattering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1983, 1, 1055-1058.	2.1	41
98	The kinetics of CO desorption from Ni(110). Journal of Chemical Physics, 1990, 93, 787-794.	3.0	41
99	Desulfurization of Gaseous Fuels Using Activated Carbons as Catalysts for the Selective Oxidation of Hydrogen Sulfide. Energy & Fuels, 2005, 19, 1774-1782.	5.1	41
100	Gold nanoparticles on electroless-deposition-derived MnOx/C: Synthesis, characterization, and catalytic CO oxidation. Journal of Catalysis, 2007, 252, 119-126.	6.2	41
101	Surface structure analysis of Sn on Ni(111) by low energy alkali ion scattering. Surface Science, 1992, 273, 341-352.	1.9	40
102	Nanoengineering catalyst supports via layer-by-layer surface functionalization. Topics in Catalysis, 2006, 39, 199-212.	2.8	40
103	A Raman Spectroscopic Study of the Speciation of Vanadia Supported on Ceria Nanocrystals with Defined Surface Planes. ChemCatChem, 2012, 4, 1653-1661.	3.7	40
104	Observation of the neutralization of highly charged ions interacting with a metal surface. Physical Review A, 1987, 35, 3176-3179.	2.5	39
105	Separation of kinetic and potential electron emission arising from slow multicharged ion-surface interactions. Physical Review Letters, 1993, 71, 291-294.	7.8	39
106	Low-temperature exfoliation of multilayer-graphene material from FeCl3 and CH3NO2 co-intercalated graphite compound. Chemical Communications, 2011, 47, 5265.	4.1	39
107	Interaction of Gold Clusters with a Hydroxylated Surface. Journal of Physical Chemistry Letters, 2011, 2, 1211-1215.	4.6	39
108	Structures and Energetics of Pt Clusters on TiO₂: Interplay between Metalâ€“Metal Bonds and Metalâ€“Oxygen Bonds. Journal of Physical Chemistry C, 2012, 116, 21880-21885.	3.1	39

#	Article	IF	Citations
109	Low energy ion scattering from the Au(110) surface - structural results. Nuclear Instruments & Methods in Physics Research B, 1987, 23, 374-378.	1.4	37
110	Charge exchange processes between highly charged ions and metal surfaces. Nuclear Instruments & Methods in Physics Research B, 1987, 23, 234-238.	1.4	37
111	Preparation of bicontinuous mesoporous silica and organosilica materials containing gold nanoparticles by co-synthesis method. Microporous and Mesoporous Materials, 2004, 70, 71-80.	4.4	37
112	Origins and implications of the ordering of oxygen vacancies and localized electrons on partially reduced<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CeO</mml:mi><mml:mn>2</mml:mn></mml:msub><mm Physical Review B, 2015, 92, .	3.2	37
113	Uniform formation of uranium oxide nanocrystals inside ordered mesoporous hosts and their potential applications as oxidative catalysts. Chemical Communications, 2002, , 2406-2407.	4.1	36
114	Graphitic mesoporous carbon as a support of promoted Rh catalysts for hydrogenation of carbon monoxide to ethanol. Carbon, 2012, 50, 1574-1582.	10.3	36
115	The use of low energy alkali ion scattering as a probe of surface structure. Nuclear Instruments & Methods in Physics Research B, 1987, 27, 65-77.	1.4	35
116	Ion scattering study of the Zn and oxygen-terminated basal plane surfaces of ZnO. Surface Science, 1998, 410, 106-122.	1.9	35
117	Auger electron spectroscopy of alloy surfaces. Faraday Discussions of the Chemical Society, 1975, 60, 279.	2.2	34
118	Structure analysis of S adsorbed on Ni(111) by low energy Li+ ion scattering. Surface Science, 1992, 276, 262-272.	1.9	34
119	Surface segregation inMo0.75Re0.25(001) studied by low-energy alkali-ion scattering. Physical Review B, 1993, 48, 1718-1725.	3.2	33
120	The structure of oxygen on W(001) by low energy ion scattering. Surface Science, 1989, 210, 481-500.	1.9	32
121	Structural Investigation of Au Catalysts on TiO₂â^’SiO₂ Supports: Nature of the Local Structure of Ti and Au Atoms by EXAFS and XANES. Journal of Physical Chemistry C, 2007, 111, 17322-17332.	3.1	32
122	Surface structure of stepped NiAl(111) by low energy Li+ ion scattering. Surface Science, 1990, 236, 122-134.	1.9	31
123	The Interaction between NO and CO on Rh-Loaded CeOx(111). Journal of Catalysis, 2000, 195, 169-179.	6.2	31
124	The structure of the carburized W(001) surface. Surface Science, 1988, 193, 455-474.	1.9	29
125	Quantum Antidot Formation and Correlation to Optical Shift of Gold Nanoparticles Embedded in MgO. Physical Review Letters, 2002, 88, 175502.	7.8	29
126	Oxygen-assisted reduction of Au species on Au/SiO2 catalyst in room temperature CO oxidation. Chemical Communications, 2008, , 3308.	4.1	29

#	Article	IF	Citations
127	Facile one-pot synthesis of gold nanoparticles stabilized with bifunctional amino/siloxy ligands. Journal of Colloid and Interface Science, 2005, 287, 360-365.	9.4	28
128	Promotion of Au(en)2Cl3-Derived Au/Fumed SiO2 by Treatment with KMnO4. Journal of Physical Chemistry C, 2008, 112, 8349-8358.	3.1	28
129	Coverage dependent dissociation of NO on Rh supported on cerium oxide thin films. Surface Science, 2002, 511, L293-L297.	1.9	27
130	Surface layer relaxation on Mo(111) measured by low energy alkali ion scattering. Surface Science, 1986, 175, 123-140.	1.9	26
131	Charge exchange at molecular-orbital pseudocrossings as an important mechanism for nonkinetic-electron emission in slow-multicharged-ion (v<v0) metal-surface scattering. Physical Review A, 1988, 38, 2294-2304.	2.5	26
132	Catalytic activity and thermal stability of Auâ€“CuO/SiO2 catalysts for the low temperature oxidation of CO in the presence of propylene and NO. Catalysis Today, 2014, 231, 15-21.	4.4	26
133	Fast MAS ¹H NMR Study of Water Adsorption and Dissociation on the (100) Surface of Ceria Nanocubes: A Fully Hydroxylated, Hydrophobic Ceria Surface. Journal of Physical Chemistry C, 2017, 121, 7450-7465.	3.1	26
134	Work-function dependence of above-surface neutralization of multicharged ions. Physical Review A, 1993, 48, 4479-4484.	2.5	25
135	Enhancement of dissociation by metal-support interaction: reaction of NO on Rh supported by ceria films of controlled oxidation state. Surface Science, 2001, 470, 243-254.	1.9	25
136	XANES Study of Hydrothermal Moâ^'V-Based Mixed Oxide M1-Phase Catalysts for the (Amm)oxidation of Propane. Chemistry of Materials, 2008, 20, 6611-6616.	6.7	25
137	Graphitic mesoporous carbon-supported molybdenum carbides for catalytic hydrogenation of carbon monoxide to mixed alcohols. Microporous and Mesoporous Materials, 2013, 170, 141-149.	4.4	24
138	Modification of Au/TiO₂ Nanosystems by SiO₂ Monolayers: Toward the Control of the Catalyst Activity and Stability. Journal of Physical Chemistry C, 2010, 114, 2996-3002.	3.1	23
139	Coupling of Acetaldehyde to Crotonaldehyde on CeO_{2â€“<i>x</i>}(111): Bifunctional Mechanism and Role of Oxygen Vacancies. Journal of Physical Chemistry C, 2019, 123, 8273-8286.	3.1	23
140	Energy and angular distribution of low energy H+ and D+ backscattered from polycrystalline carbon. Journal of Nuclear Materials, 1980, 93-94, 529-535.	2.7	22
141	The adsorption of ethylene on Mo(111): Evidence for a subsurface carbon. Surface Science, 1987, 184, 319-334.	1.9	22
142	Activated carbons for selective catalytic oxidation of hydrogen sulfide to sulfur. Carbon, 2005, 43, 1087-1090.	10.3	22
143	Focused scattering of low energy Li+ from Mo(001): Experimental and computer simulation results. Surface Science, 1983, 125, 377-395.	1.9	21
144	Surface characterization of amorphous and crystallized Fe80B20. Applied Surface Science, 1986, 27, 180-198.	6.1	21

#	Article	IF	Citations
145	Adsorption, desorption, and dissociation of benzene onTiO2(110)andPdâˆ•TiO2(110): Experimental characterization and first-principles calculations. Physical Review B, 2006, 74, .	3.2	20
146	Behavior of Au Species in Au/Fe₂O₃ Catalysts Characterized by Novel <i>In Situ</i> Heating Techniques and Aberration-Corrected STEM Imaging. Microscopy and Microanalysis, 2010, 16, 375-385.	0.4	20
147	H2 reduction of CeO2(111) surfaces via boundary Rhî—¸O mediation. Journal of Catalysis, 2004, 222, 167-173.	6.2	19
148	Structure Activity Relationships of Silica Supported AuCu and AuCuPd Alloy Catalysts for the Oxidation of CO. Catalysis Letters, 2013, 143, 926-935.	2.6	19
149	Understanding Defectâ€Stabilized Noncovalent Functionalization of Graphene. Advanced Materials Interfaces, 2015, 2, 1500277.	3.7	19
150	Neutralization in surface scattering of low energy H+ by polycrystalline graphite. Nuclear Instruments & Methods, 1980, 170, 543-548.	1.2	18
151	Formation of subsurface carbon induced by oxygen adsorption on carbon-covered W(001). Surface Science, 1989, 210, 501-519.	1.9	18
152	INNER-SHELL PROCESSES AS PROBES OF MULTICHARGED ION NEUTRALIZATION AT SURFACES. Journal De Physique Colloque, 1989, 50, C1-263-C1-275.	0.2	18
153	Low energy alkali ion scattering from a clean and adsorbate covered Mo(001) surface. Nuclear Instruments & Methods in Physics Research B, 1984, 2, 448-452.	1.4	17
154	CO desorption and oxidation on CeO2-supported Rh: Evidence for two types of Rh sites. Journal of Catalysis, 2006, 243, 158-164.	6.2	17
155	Novel Au/TiO2/Al2O3ÂÂ·ÂxH2O catalysts for CO oxidation. Catalysis Letters, 2008, 121, 209-218.	2.6	17
156	Oxidative dehydrogenation of isobutane over vanadia catalysts supported by titania nanoshapes. Catalysis Today, 2016, 263, 84-90.	4.4	17
157	Adsorbate induced neutralization effects in low energy alkali and inert gas ion scattering. Nuclear Instruments & Methods in Physics Research B, 1984, 2, 384-390.	1.4	15
158	Structure of Pt Overlayers on ZnO(0001) and ZnO(0001Ì„) Surfacesâ€. Journal of Physical Chemistry B, 2000, 104, 3028-3034.	2.6	14
159	Inelastic neutron scattering, Raman and DFT investigations of the adsorption of phenanthrenequinone on onion-like carbon. Carbon, 2013, 52, 150-157.	10.3	14
160	Coadsorbed Species Explain the Mechanism of Methanol Temperature-Programmed Desorption on CeO₂(111). Journal of Physical Chemistry C, 2016, 120, 7241-7247.	3.1	14
161	Resonant coherent excitation of fast heavy ions in crystals. Nuclear Instruments & Methods in Physics Research, 1982, 194, 327-336.	0.9	12
162	Summary Abstract: The structure of atomic sulfur overlayers on the Mo(001) surface using low energy alkali ion scattering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1985, 3, 1640-1641.	2.1	12

#	Article	IF	Citations
163	Sulfidation of W(001) studied by low-energy ion scattering. Surface Science, 1994, 317, 341-352.	1.9	12
164	Toward Environmentally Benign Oxidations: Bulk Mixed Moâ€Vâ€(Teâ€Nb)â€O M1â€…Phase Catalysts for the Selective Ammoxidation of Propane. ChemSusChem, 2008, 1, 519-523.	6.8	11
165	Dynamics of Phenanthrenequinone on Carbon Nano-Onion Surfaces Probed by Quasielastic Neutron Scattering. Journal of Physical Chemistry B, 2012, 116, 7291-7295.	2.6	11
166	Interaction of Cu overlayers with W(001) studied by lowâ€energy alkali ion scattering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1989, 7, 1942-1948.	2.1	10
167	Novel Pulse Electrodeposited Coâ€“Cuâ€“ZnO Nanowire/tube Catalysts for C₁â€“C₄ Alcohols and C₂â€“C₆ (Except C₅) Hydrocarbons from CO and H₂. Journal of Physical Chemistry C, 2012, 116, 10924-10933.	3.1	10
168	Effects of preadsorbed oxygen on the bonding and desorption kinetics of CO on Ni(110). Journal of Chemical Physics, 1991, 94, 6264-6273.	3.0	9
169	Core-level photoemission and alkali ion scattering structure analysis of Ni adsorption and surface alloying on W(001). Surface Science, 1995, 339, 68-82.	1.9	9
170	Local atomic structure in disordered and nanocrystalline catalytic materials. Zeitschrift Fur Kristallographie - Crystalline Materials, 2007, 222, .	0.8	9
171	Cu-Enhanced Surface Defects and Lattice Mobility of Pr-CeO₂ Mixed Oxides. Journal of Physical Chemistry C, 2016, 120, 27996-28008.	3.1	9
172	Hydrogen and methoxy coadsorption in the computation of the catalytic conversion of methanol on the ceria (111) surface. Surface Science, 2016, 648, 242-249.	1.9	9
173	Dehydrogenation of methanol to formaldehyde catalyzed by pristine and defective ceria surfaces. Physical Chemistry Chemical Physics, 2016, 18, 9990-9998.	2.8	9
174	A high precision gas flow cell for performingin situneutron studies of local atomic structure in catalytic materials. Review of Scientific Instruments, 2017, 88, 034101.	1.3	9
175	Low-EnergyK+-Ion Scattering as a Probe of Adsorbate Ordering. Physical Review Letters, 1984, 53, 481-484.	7.8	8
176	Structure of the p(2 Ã— 1)-oxygen/Mo0.75Re0.25(001) surface studied by low energy Li+ ion scattering. Surface Science, 1994, 301, 313-325.	1.9	8
177	Summary Abstract: Structure and composition of the NiAl(110) and NiAl(100) surfaces by lowâ€energy alkali ion scattering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1988, 6, 811-812.	2.1	7
178	13C NMR Characterization of the Organic Constituents in Ligand-Modified Hexagonal Mesoporous Silicas:Â Media for the Synthesis of Small, Uniform-Size Gold Nanoparticles. Langmuir, 2004, 20, 9577-9584.	3.5	7
179	Atomic Structure of Au Nanoparticles on a Silica Support by an X-ray PDF Study. Journal of Physical Chemistry C, 2010, 114, 6983-6988.	3.1	7
180	Carbon-Mediated Catalysis: Oxidative Dehydrogenation on Graphitic Carbon. ACS Symposium Series, 2013, , 247-258.	0.5	7

#	ARTICLE	IF	CITATIONS
181	Laser desorption from and reconstruction on Si(100) surfaces studied by scanning tunneling microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 918.	1.6	6
182	Structure and Reactivity of Alkyl Ethers Adsorbed on CeO2(111) Model Catalysts. Topics in Catalysis, 2011, 54, 56-69.	2.8	6
183	Understanding catalyst behavior during in situ heating through simultaneous secondary and transmitted electron imaging. Nanoscale Research Letters, 2014, 9, 614.	5.7	5
184	The Characterization and Structure-Dependent Catalysis of Ceria with Well-Defined Facets. , 2015, , 71-97.		5
185	Computer simulations of relaxation processes in scattering of multi-charged ions from metal surfaces. Nuclear Instruments & Methods in Physics Research B, 1992, 67, 126-131.	1.4	4
186	Comparison of experimental and simulated low energy alkali ion scattering. Nuclear Instruments & Methods in Physics Research B, 1994, 90, 286-290.	1.4	4
187	Gold supported on microporous aluminophosphate AlPO4-H1 for selective oxidation of CO in a H2-rich stream. Studies in Surface Science and Catalysis, 2007, , 1065-1071.	1.5	4
188	Behavior of Au Species in Au/FeOx Catalysts as a Result of In-Situ Thermal Treatments, Characterized via Aberration-Corrected STEM Imaging. Microscopy and Microanalysis, 2009, 15, 1482-1483.	0.4	4
189	Mesoporous xEr₂O₃Â·CoTiO₃ composite oxide catalysts for low temperature dehydrogenation of ethylbenzene to styrene using CO₂ as a soft oxidant. RSC Advances, 2016, 6, 32989-32993.	3.6	4
190	Methyl Formate Formation during Methanol Conversion over the (111) Ceria Surface. Journal of Physical Chemistry C, 2017, 121, 9920-9928.	3.1	4
191	Summary Abstract: Evidence for subsurface carbon on Mo(111) by low energy alkali ion scattering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 694-695.	2.1	3
192	Geometric and electronic structure of sulfided Ni films on W(001) studied by low-energy alkali ion scattering and soft X-ray photoemission. Surface Science, 1996, 369, 231-247.	1.9	2
193	Reply to Comment on â€œMultiwavelength Raman Spectroscopic Study of Silica-Supported Vanadium Oxide Catalystsâ€. Journal of Physical Chemistry C, 2011, 115, 10925-10928.	3.1	2
194	Gold Catalysts Supported on Nanostructured Materials: Support Effects. , 2007, , 55-71.		2
195	Reply to â€œcomment of L. Guczi and G. Kisfaludi on â€˜surface characterization of amorphous and crystallized Fe80B20â€™ by D.R. Huntley, S.H. Overbury, D.M. Zehner, J.D. Budai and W.E. Brower, Jr.â€. Applied Surface Science, 1987, 29, 393-394.	6.1	1
196	Rhodium Nanoparticles Confined in Ordered Mesoporous Carbon: Microscopic Characterization and Catalytic Application for Synthesis Gas Conversion to Ethanol. ACS Symposium Series, 2013, , 231-243.	0.5	0