

Hai-Feng Wang

List of Publications by Year in descending order

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135
papers

8,283
citations

44069

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140
all docs

140
docs citations

140
times ranked

10170
citing authors

#	ARTICLE	IF	CITATIONS
1	2D Monolayer MoS ₂ "Carbon Interoverlapped Superstructure: Engineering Ideal Atomic Interface for Lithium Ion Storage. <i>Advanced Materials</i> , 2015, 27, 3687-3695.	21.0	504
2	Heterogeneous Single-Atom Catalysts for Electrochemical CO ₂ Reduction Reaction. <i>Advanced Materials</i> , 2020, 32, e2001848.	21.0	366
3	Rational screening low-cost counter electrodes for dye-sensitized solar cells. <i>Nature Communications</i> , 2013, 4, 1583.	12.8	365
4	Direct hydrodeoxygenation of raw woody biomass into liquid alkanes. <i>Nature Communications</i> , 2016, 7, 11162.	12.8	359
5	Local atomic structure modulations activate metal oxide as electrocatalyst for hydrogen evolution in acidic water. <i>Nature Communications</i> , 2015, 6, 8064.	12.8	270
6	Multiple configurations of the two excess electrons on defective CeO ₂ on defective CeO ₂ Origin and impl. <i>Physical Review B</i> , 2009, 79, .	3.2	233
7	Selective Deposition of Ag ₃ PO ₄ on Monoclinic BiVO ₄ (040) for Highly Efficient Photocatalysis. <i>Small</i> , 2013, 9, 3951-3956.	10.0	215
8	Identifying the key obstacle in photocatalytic oxygen evolution on rutile TiO ₂ . <i>Nature Catalysis</i> , 2018, 1, 291-299.	34.4	212
9	Unidirectional suppression of hydrogen oxidation on oxidized platinum clusters. <i>Nature Communications</i> , 2013, 4, 2500.	12.8	197
10	Direct catalytic conversion of furfural to 1,5-pentanediol by hydrogenolysis of the furan ring under mild conditions over Pt/Co ₂ AlO ₄ catalyst. <i>Chemical Communications</i> , 2011, 47, 3924.	4.1	187
11	Crystal Structural Effect of AuCu Alloy Nanoparticles on Catalytic CO Oxidation. <i>Journal of the American Chemical Society</i> , 2017, 139, 8846-8854.	13.7	181
12	Origin of extraordinarily high catalytic activity of Co ₃ O ₄ and its morphological chemistry for CO oxidation at low temperature. <i>Journal of Catalysis</i> , 2012, 296, 110-119.	6.2	179
13	Hydrogen Spillover-Bridged Volmer/Tafel Processes Enabling Ampere-Level Current Density Alkaline Hydrogen Evolution Reaction under Low Overpotential. <i>Journal of the American Chemical Society</i> , 2022, 144, 6028-6039.	13.7	179
14	Stable Isolated Metal Atoms as Active Sites for Photocatalytic Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2014, 20, 2138-2144.	3.3	173
15	Towards the Circular Economy: Converting Aromatic Plastic Waste Back to Arenes over a Ru/Nb ₂ O ₅ Catalyst. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 5527-5535.	13.8	169
16	Tuning Metal Catalyst with Metal-C ₃ N ₄ Interaction for Efficient CO ₂ Electroreduction. <i>ACS Catalysis</i> , 2018, 8, 11035-11041.	11.2	161
17	Facet-Dependent Catalytic Activity of Platinum Nanocrystals for Triiodide Reduction in Dye-Sensitized Solar Cells. <i>Scientific Reports</i> , 2013, 3, 1836.	3.3	146
18	Tracking motion trajectories of individual nanoparticles using time-resolved current traces. <i>Chemical Science</i> , 2017, 8, 1854-1861.	7.4	127

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19	Structural Origin: Water Deactivates Metal Oxides to CO Oxidation and Promotes Low-Temperature CO Oxidation with Metals. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6657-6661.	13.8	119
20	A Model to Understand the Oxygen Vacancy Formation in Zr-Doped CeO ₂ : Electrostatic Interaction and Structural Relaxation. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10229-10232.	3.1	113
21	Surface hydrogen bonding can enhance photocatalytic H ₂ evolution efficiency. <i>Journal of Materials Chemistry A</i> , 2013, 1, 14089.	10.3	113
22	Evidence To Challenge the Universality of the Horiuti-Polanyi Mechanism for Hydrogenation in Heterogeneous Catalysis: Origin and Trend of the Preference of a Non-Horiuti-Polanyi Mechanism. <i>Journal of the American Chemical Society</i> , 2013, 135, 15244-15250.	13.7	101
23	Partial Sulfidation Strategy to NiFe-LDH@FeNi ₂ S ₄ Heterostructure Enable High-Performance Water/Seawater Oxidation. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	100
24	Understanding Catalytic Reactions over Zeolites: A Density Functional Theory Study of Selective Catalytic Reduction of NO _x by NH ₃ over Cu-SAPO-34. <i>ACS Catalysis</i> , 2016, 6, 7882-7891.	11.2	99
25	Active sites on hydrogen evolution photocatalyst. <i>Journal of Materials Chemistry A</i> , 2013, 1, 15258.	10.3	96
26	Au on (111) and (110) surfaces of CeO ₂ : A density-functional theory study. <i>Surface Science</i> , 2008, 602, 1736-1741.	1.9	95
27	Maximizing the Localized Relaxation: The Origin of the Outstanding Oxygen Storage Capacity of γ -Ce ₂ Zr ₂ O ₈ . <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8289-8292.	13.8	85
28	New insight into mechanisms in water-gas-shift reaction on Au/CeO ₂ (111): A density functional theory and kinetic study. <i>Faraday Discussions</i> , 2011, 152, 121.	3.2	85
29	Highly Ethylene-Selective Electrocatalytic CO ₂ Reduction Enabled by Isolated Cu ⁺ S Motifs in Metal-Organic Framework Based Precatalysts. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	81
30	Oxygen vacancy formation in CeO ₂ and Ce _{1-x} Zr _x O ₂ solid solutions: electron localization, electrostatic potential and structural relaxation. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16521.	2.8	80
31	Examining the redox and formate mechanisms for water-gas shift reaction on Au/CeO ₂ using density functional theory. <i>Surface Science</i> , 2008, 602, 2828-2834.	1.9	76
32	Identifying the Role of Photogenerated Holes in Photocatalytic Methanol Dissociation on Rutile TiO ₂ (110). <i>ACS Catalysis</i> , 2017, 7, 2374-2380.	11.2	76
33	Perspective: Photocatalytic reduction of CO ₂ to solar fuels over semiconductors. <i>Journal of Chemical Physics</i> , 2017, 147, 030901.	3.0	76
34	Insight into the NH ₃ -Assisted Selective Catalytic Reduction of NO on β -MnO ₂ (110): Reaction Mechanism, Activity Descriptor, and Evolution from a Pristine State to a Steady State. <i>ACS Catalysis</i> , 2018, 8, 9269-9279.	11.2	76
35	Pd single-atom monolithic catalyst: Functional 3D structure and unique chemical selectivity in hydrogenation reaction. <i>Science China Materials</i> , 2021, 64, 1919-1929.	6.3	75
36	The effects of the Pd chemical state on the activity of Pd/Al ₂ O ₃ catalysts in CO oxidation. <i>Catalysis Science and Technology</i> , 2014, 4, 3973-3980.	4.1	73

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37	Highly Electrocatalytic Activity of RuO ₂ Nanocrystals for Triiodide Reduction in Dye-Sensitized Solar Cells. <i>Small</i> , 2014, 10, 484-492.	10.0	68
38	Exploring dynamic interactions of single nanoparticles at interfaces for surface-confined electrochemical behavior and size measurement. <i>Nature Communications</i> , 2020, 11, 2307.	12.8	67
39	Reversibility Iteration Method for Understanding Reaction Networks and for Solving Microkinetics in Heterogeneous Catalysis. <i>ACS Catalysis</i> , 2016, 6, 7078-7087.	11.2	64
40	Catalyst screening: Refinement of the origin of the volcano curve and its implication in heterogeneous catalysis. <i>Chinese Journal of Catalysis</i> , 2015, 36, 1596-1605.	14.0	61
41	Identifying the distinct features of geometric structures for hole trapping to generate radicals on rutile TiO ₂ (110) in photooxidation using density functional theory calculations with hybrid functional. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 1549-1555.	2.8	61
42	A {0001} faceted single crystal NiS nanosheet electrocatalyst for dye-sensitized solar cells: sulfur-vacancy induced electrocatalytic activity. <i>Chemical Communications</i> , 2014, 50, 5569.	4.1	60
43	Critical roles of co-catalysts for molecular hydrogen formation in photocatalysis. <i>Journal of Catalysis</i> , 2015, 330, 120-128.	6.2	59
44	Exchange between sub-surface and surface oxygen vacancies on CeO ₂ (111): a new surface diffusion mechanism. <i>Chemical Communications</i> , 2011, 47, 6105.	4.1	58
45	NO Oxidation on Platinum Group Metals Oxides: First Principles Calculations Combined with Microkinetic Analysis. <i>Journal of Physical Chemistry C</i> , 2009, 113, 18746-18752.	3.1	56
46	When Silicon Materials Meet Natural Sources: Opportunities and Challenges for Low-Cost Lithium Storage. <i>Small</i> , 2021, 17, e1904508.	10.0	56
47	The search for efficient electrocatalysts as counter electrode materials for dye-sensitized solar cells: mechanistic study, material screening and experimental validation. <i>NPG Asia Materials</i> , 2015, 7, e226-e226.	7.9	52
48	Modulating the Electronic Structure of FeCo Nanoparticles in N-Doped Mesoporous Carbon for Efficient Oxygen Reduction Reaction. <i>Advanced Science</i> , 2022, 9, e2200394.	11.2	52
49	Selective methane electrosynthesis enabled by a hydrophobic carbon coated copper core-shell architecture. <i>Energy and Environmental Science</i> , 2022, 15, 234-243.	30.8	51
50	Understanding the Dual Active Sites of the FeO/Pt(111) Interface and Reaction Kinetics: Density Functional Theory Study on Methanol Oxidation to Formaldehyde. <i>ACS Catalysis</i> , 2017, 7, 4281-4290.	11.2	50
51	Porphyrin sensitizers with modified indoline donors for dye-sensitized solar cells. <i>Journal of Materials Chemistry C</i> , 2018, 6, 3927-3936.	5.5	48
52	CATKINAS: A large-scale catalytic microkinetic analysis software for mechanism auto-analysis and catalyst screening. <i>Journal of Computational Chemistry</i> , 2021, 42, 379-391.	3.3	48
53	Constructing Structurally Ordered High-Entropy Alloy Nanoparticles on Nitrogen-Rich Mesoporous Carbon Nanosheets for High-Performance Oxygen Reduction. <i>Advanced Materials</i> , 2022, 34, e2110128.	21.0	44
54	Improved Performance of Nickel Boride by Phosphorus Doping as an Efficient Electrocatalyst for the Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 17348-17356.	3.7	42

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55	Revealing the Volcano-Shaped Activity Trend of Triiodide Reduction Reaction: A DFT Study Coupled with Microkinetic Analysis. <i>ACS Catalysis</i> , 2016, 6, 733-741.	11.2	41
56	Possibility of designing catalysts beyond the traditional volcano curve: a theoretical framework for multi-phase surfaces. <i>Chemical Science</i> , 2015, 6, 5703-5711.	7.4	40
57	An efficient Ni ₃ Zr ₂ O ₇ catalyst for hydrogenation of bio-derived methyl levulinate to γ -valerolactone in water under low hydrogen pressure. <i>Applied Catalysis B: Environmental</i> , 2018, 227, 488-498.	20.2	40
58	Amorphous Catalysis: Machine Learning Driven High-Throughput Screening of Superior Active Site for Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2020, 124, 10483-10494.	3.1	38
59	Alkali-assisted mild aqueous exfoliation for single-layered and structure-preserved graphitic carbon nitride nanosheets. <i>Journal of Colloid and Interface Science</i> , 2017, 495, 19-26.	9.4	37
60	Identifying Catalytically Active Mononuclear Peroxonioate Anion of Ionic Liquids in the Epoxidation of Olefins. <i>ACS Catalysis</i> , 2018, 8, 4645-4659.	11.2	36
61	Highly Efficient Epoxidation of Allylic Alcohols with Hydrogen Peroxide Catalyzed by Peroxonioate-Based Ionic Liquids. <i>ACS Catalysis</i> , 2016, 6, 3354-3364.	11.2	35
62	Theoretical Study of Heteroatom Doping in Tuning the Catalytic Activity of Graphene for Triiodide Reduction. <i>ACS Catalysis</i> , 2016, 6, 6804-6813.	11.2	35
63	Theory and applications of surface microkinetics in the rational design of catalysts using density functional theory calculations. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2017, 7, e1321.	14.6	35
64	A Universal Single-Atom Coating Strategy Based on Tannic Acid Chemistry for Multifunctional Heterogeneous Catalysis. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	34
65	Achieving Theory-Experiment Parity for Activity and Selectivity in Heterogeneous Catalysis Using Microkinetic Modeling. <i>Accounts of Chemical Research</i> , 2022, 55, 1237-1248.	15.6	33
66	Structure and Catalytic Activity of Gold in Low-Temperature CO Oxidation. <i>Journal of Physical Chemistry C</i> , 2009, 113, 6124-6131.	3.1	32
67	Insight into Room-Temperature Catalytic Oxidation of Nitric oxide by Cr ₂ O ₃ : A DFT Study. <i>ACS Catalysis</i> , 2018, 8, 5415-5424.	11.2	32
68	Significant enhancement of the selectivity of propylene epoxidation for propylene oxide: a molecular oxygen mechanism. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 25129-25139.	2.8	31
69	First-Principles Determination of CO Adsorption and Desorption on Pt(111) in the Free Energy Landscape. <i>Journal of Physical Chemistry C</i> , 2018, 122, 21478-21483.	3.1	29
70	A Robust Hierarchical MXene/Ni/Aluminosilicate Glass Composite for High-Performance Microwave Absorption. <i>Advanced Science</i> , 2022, 9, e2104163.	11.2	29
71	Turning Indium Oxide into a Superior Electrocatalyst: Deterministic Heteroatoms. <i>Scientific Reports</i> , 2013, 3, 3109.	3.3	28
72	First-Principles Insight into the Degradation Mechanism of CH ₃ NH ₃ Pb ₃ Perovskite: Light-Induced Defect Formation and Water Dissociation. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27340-27349.	3.1	28

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73	Oxygen vacancies and alkaline metal boost CeO ₂ catalyst for enhanced soot combustion activity: A first-principles evidence. Applied Catalysis B: Environmental, 2021, 281, 119468.	20.2	28
74	Unexpected C-C Bond Cleavage Mechanism in Ethylene Combustion at Low Temperature: Origin and Implications. ACS Catalysis, 2016, 6, 5393-5398.	11.2	27
75	Theoretical investigation of NH ₃ -SCR processes over zeolites: A review. International Journal of Quantum Chemistry, 2015, 115, 618-630.	2.0	26
76	Activity Trend for Low-Concentration NO Oxidation at Room Temperature on Rutile-Type Metal Oxides. ACS Catalysis, 2018, 8, 10864-10870.	11.2	26
77	Insights into the selective catalytic reduction of NO by NH ₃ over Mn ₃ O ₄ (110): a DFT study coupled with microkinetic analysis. Science China Chemistry, 2018, 61, 457-467.	8.2	26
78	Mechanisms of Aromatic-C bonds cleavage in lignin over NbO _x -supported Ru catalyst. Journal of Catalysis, 2021, 394, 94-103.	6.2	25
79	In Operando Identification of In Situ Formed Metalloid Zinc ⁺ Active Sites for Highly Efficient Electrocatalyzed Carbon Dioxide Reduction. Angewandte Chemie - International Edition, 2022, 61, .	13.8	25
80	A Simple Method To Locate the Optimal Adsorption Energy for the Best Catalysts Directly. ACS Catalysis, 2019, 9, 2633-2638.	11.2	24
81	Understanding the Dynamic Potential Distribution at the Electrode Interface by Stochastic Collision Electrochemistry. Journal of the American Chemical Society, 2021, 143, 12428-12432.	13.7	24
82	Resolving the Intricate Mechanism and Selectivity of Syngas Conversion on Reduced ZnCr ₂ O _x : A Quantitative Study from DFT and Microkinetic Simulations. ACS Catalysis, 2021, 11, 12977-12988.	11.2	24
83	Insight into the Superior Catalytic Activity of MnO ₂ for Low-Content NO Oxidation at Room Temperature. Journal of Physical Chemistry C, 2018, 122, 25365-25373.	3.1	22
84	Flexible and Reusable Non-woven Fabric Photodetector Based on Polypyrrole/Crystal Violet Lactone for NIR Light Detection and Writing. Advanced Fiber Materials, 2020, 2, 150-160.	16.1	22
85	An understanding and implications of the coverage of surface free sites in heterogeneous catalysis. Journal of Chemical Physics, 2009, 130, 224701.	3.0	21
86	Thermal behavior of cellulose diacetate melt using ionic liquids as plasticizers. RSC Advances, 2015, 5, 901-907.	3.6	21
87	Theoretical insights into how the first C-C bond forms in the methanol-to-olefin process catalysed by HSAPO-34. Physical Chemistry Chemical Physics, 2016, 18, 14495-14502.	2.8	21
88	Theoretical insight into methanol steam reforming on indium oxide with different coordination environments. Science China Chemistry, 2018, 61, 336-343.	8.2	20
89	Insight into room-temperature catalytic oxidation of NO by CrO ₂ (110): A DFT study. Chinese Chemical Letters, 2019, 30, 618-623.	9.0	20
90	Optimally Selecting Photo- and Electrocatalysis to Facilitate CH ₄ Activation on TiO ₂ (110) Surface: Localized Photoexcitation versus Global Electric-Field Polarization. JACS Au, 2022, 2, 188-196.	7.9	20

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91	Unique Trapped Dimer State of the Photogenerated Hole in Hybrid Orthorhombic CH ₃ NH ₃ PbI ₃ Perovskite: Identification, Origin, and Implications. Nano Letters, 2017, 17, 7724-7730.	9.1	19
92	Boosting Photocatalytic Water Oxidation Over Bifunctional Rh ⁰ â€”Rh ³⁺ Sites. Angewandte Chemie - International Edition, 2021, 60, 22761-22768.	13.8	19
93	Ceria Foam with Atomically Thin Singleâ€”Crystal Walls. Angewandte Chemie - International Edition, 2012, 51, 3611-3615.	13.8	18
94	Orange Zinc Germanate with Metallic Ge-Ge Bonds as a Chromophoreâ€”Like Center for Visibleâ€”Lightâ€”Driven Water Splitting. Angewandte Chemie - International Edition, 2015, 54, 11467-11471.	13.8	18
95	A novel heterogeneous Co(II)-Fenton-like catalyst for efficient photodegradation by visible light over extended pH. Science China Chemistry, 2020, 63, 1825-1836.	8.2	17
96	SSIA: A sensitivity-supervised interlock algorithm for high-performance microkinetic solving. Journal of Chemical Physics, 2021, 154, 024108.	3.0	17
97	The critical role of electrochemically activated adsorbates in neutral OER. Science China Materials, 2020, 63, 2509-2516.	6.3	16
98	Nanoscale hematoporphrin-based frameworks for photo-sono synergistic cancer therapy via utilizing Al(III) as metal nodes rather than heavy metals. Journal of Colloid and Interface Science, 2022, 616, 23-33.	9.4	16
99	Direct Transformation of Glycerol to Propanal using Zirconium Phosphateâ€”Supported Bimetallic Catalysts. ChemSusChem, 2020, 13, 4954-4966.	6.8	15
100	First principles study of Fenton reaction catalyzed by FeOCl: reaction mechanism and location of active site. Rare Metals, 2019, 38, 783-792.	7.1	14
101	Identifying the composition and atomic distribution of Pt-Au bimetallic nanoparticle with machine learning and genetic algorithm. Chinese Chemical Letters, 2020, 31, 890-896.	9.0	13
102	Structural rule of N-coordinated single-atom catalysts for electrochemical CO ₂ reduction. Journal of Materials Chemistry A, 2022, 10, 3585-3594.	10.3	13
103	An effective structural descriptor to quantify the reactivity of lattice oxygen in CeO ₂ subnano-clusters. Physical Chemistry Chemical Physics, 2020, 22, 1721-1726.	2.8	12
104	In situ NMR Investigation of the Photoresponse of Perovskite Crystal. Matter, 2020, 3, 2042-2054.	10.0	12
105	Cooperative Motion in Waterâ€”Methanol Clusters Controls the Reaction Rates of Heterogeneous Photocatalytic Reactions. Journal of the American Chemical Society, 2021, 143, 10940-10947.	13.7	12
106	A Highly Efficient Nickel Phosphate Electrocatalyst for the Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid. ACS Sustainable Chemistry and Engineering, 2022, 10, 5538-5547.	6.7	12
107	Cosensitized Porphyrin System for High-Performance Solar Cells with TOF-SIMS Analysis. ACS Applied Materials & Interfaces, 2017, 9, 16081-16090.	8.0	11
108	Solvent Water Controls Photocatalytic Methanol Reforming. Journal of Physical Chemistry Letters, 2020, 11, 3738-3744.	4.6	11

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109	The effects of the presence of metal Fe in the CO oxidation over Ir/FeOx catalyst. <i>Catalysis Communications</i> , 2015, 61, 83-87.	3.3	10
110	Gold Segregation Improves Electrocatalytic Activity of Icosahedron Au@Pt Nanocluster: Insights from Machine Learning. <i>Chinese Journal of Chemistry</i> , 0, , .	4.9	10
111	A general doping rule: rational design of Ir-doped catalysts for the oxygen evolution reaction. <i>Chemical Communications</i> , 2020, 56, 15201-15204.	4.1	9
112	Towards the object-oriented design of active hydrogen evolution catalysts on single-atom alloys. <i>Chemical Science</i> , 2021, 12, 10634-10642.	7.4	9
113	Insight into the photoexcitation effect on the catalytic activation of H ₂ and C-H bonds on TiO ₂ (110) surface. <i>Chinese Chemical Letters</i> , 2022, 33, 4705-4709.	9.0	9
114	A Universal Single-Atom Coating Strategy Based on Tannic Acid Chemistry for Multifunctional Heterogeneous Catalysis. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	9
115	Origin of Water-Induced Deactivation of MnO ₂ -Based Catalyst for Room-Temperature NO Oxidation: A First-Principles Microkinetic Study. <i>ACS Catalysis</i> , 2021, 11, 6835-6845.	11.2	8
116	A Cationic Ru(II) Complex Intercalated into Zirconium Phosphate Layers Catalyzes Selective Hydrogenation via Heterolytic Hydrogen Activation. <i>ChemCatChem</i> , 2021, 13, 3801-3814.	3.7	7
117	Batteries: 2D Monolayer MoS ₂ -Carbon Interoverlapped Superstructure: Engineering Ideal Atomic Interface for Lithium Ion Storage (<i>Adv. Mater.</i> 24/2015). <i>Advanced Materials</i> , 2015, 27, 3582-3582.	21.0	6
118	Molecular Adsorption Kinetics: Nonlinear Entropy-Enthalpy Loss Quantified by Constrained AIMD and Insights into the Adsorption-Site Determination on Metal Oxides. <i>Journal of Physical Chemistry C</i> , 2021, 125, 10974-10982.	3.1	6
119	Universal Skeleton Feature of the Three-Dimensional Volcano Surface and the Thermodynamic Rule in Locating the Catalyst in Heterogeneous Catalysis. <i>ACS Catalysis</i> , 2022, 12, 247-258.	11.2	6
120	Synthesis and Characterization of the CaTiO ₃ :Eu ³⁺ Red Phosphor by an Optimized Microwave-Assisted Sintering Process. <i>Materials</i> , 2020, 13, 874.	2.9	5
121	Highly Ethylene-Selective Electrocatalytic CO ₂ Reduction Enabled by Isolated Cu ⁺ S Motifs in Metal-Organic Framework Based Precatalysts. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	5
122	Oriented design of triple atom catalysts for electrocatalytic nitrogen reduction with the genetic-algorithm-based global optimization method driven by first principles calculations. <i>Journal of Materials Chemistry A</i> , 0, , .	10.3	5
123	Ce _{0.3} Zr _{0.7} O _{1.88} N _{0.12} solid solution as a stable photocatalyst for visible light driven water splitting. <i>Applied Catalysis B: Environmental</i> , 2018, 224, 733-739.	20.2	4
124	Insight into the Surface-Tuned Activity and Cl ₂ /HCl Selectivity in the Catalytic Oxidation of Vinyl Chloride over Co ₃ O ₄ (110) versus (001): A DFT Study. <i>Journal of Physical Chemistry C</i> , 2021, 125, 16975-16983.	3.1	4
125	Preparation and Characterization of High-Strength Glass-Ceramics via Ion-Exchange Method. <i>Materials</i> , 2021, 14, 5477.	2.9	4
126	Resolving the Two-Track Scaling Trend for Adsorbates on Rutile-Type Metal Oxides: New Descriptors for Adsorption Energies. <i>Journal of Physical Chemistry C</i> , 2021, 125, 23162-23168.	3.1	4

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127	Breaking through the Peak Height Limit of the Volcano-Shaped Activity Curve for Metal Catalysts: Role of Distinct Surface Structures on Transition Metal Oxides. <i>Journal of Physical Chemistry C</i> , 2022, 126, 183-191.	3.1	4
128	Stable Isolated Metal Atoms as Active Sites for Photocatalytic Hydrogen Evolution. <i>Chemistry - A European Journal</i> , 2014, 20, 2088-2088.	3.3	3
129	Solar Cells: Highly Electrocatalytic Activity of RuO ₂ Nanocrystals for Triiodide Reduction in Dye-Sensitized Solar Cells (Small 3/2014). <i>Small</i> , 2014, 10, 483-483.	10.0	3
130	Revealing the boosting role of NO for soot combustion over CeO ₂ (111): A first-principles microkinetic modeling. <i>Molecular Catalysis</i> , 2021, 509, 111582.	2.0	3
131	Boosting Photocatalytic Water Oxidation Over Bifunctional Rh ⁰ & Rh ³⁺ Sites. <i>Angewandte Chemie</i> , 2021, 133, 22943.	2.0	2
132	Computational Simulation of Trapped Charge Carriers in TiO ₂ and Their Impacts on Photocatalytic Water Splitting. <i>ACS Symposium Series</i> , 2019, , 67-100.	0.5	1
133	Synthesis of Cu ₂ (OH)PO ₄ superstructures with NIR-laser enhanced photocatalytic activity. <i>Functional Materials Letters</i> , 2020, 13, 2050015.	1.2	1
134	Innenröcktitelbild: Boosting Photocatalytic Water Oxidation Over Bifunctional Rh ⁰ & Rh ³⁺ Sites (Angew. Chem. 42/2021). <i>Angewandte Chemie</i> , 2021, 133, 23211-23211.	2.0	0
135	Operando Metalloid Zn ⁺ Active Sites for Highly Efficient Carbon Dioxide Reduction Electrocatalysis. <i>Angewandte Chemie</i> , 0, , .	2.0	0