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Stable iridium dinuclear heterogeneous catalysts supported on metal-oxide substrate for solar water oxidation

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196	Quantitative Attachment of Bimetal Combinations of Transition-Metal Ions to the Surface of TiO Nanorods. 2018 , 34, 5422-5434		5
195	Die facettenreiche Reaktivit heterogener Einzelatom-Katalysatoren. 2018 , 130, 15538-15552		29
194	The Multifaceted Reactivity of Single-Atom Heterogeneous Catalysts. 2018 , 57, 15316-15329		179
193	End-On Bound Iridium Dinuclear Heterogeneous Catalysts on WO for Solar Water Oxidation. 2018 , 4, 1166-1172		54
192	Supported cluster catalysts synthesized to be small, simple, selective, and stable. 2018 , 208, 9-33		4
191	Forwarding Molecular Design of Heterogeneous Catalysts. 2018 , 4, 1084-1086		1
190	Atomically Dispersed Pt/Metal Oxide Mesoporous Catalysts from Synchronous PyrolysisDeposition Route for WaterGas Shift Reaction. 2018 , 30, 5534-5538		23
189	Activating Klūi-Type Organometallic Precursors at Metal Oxide Surfaces for Enhanced Solar Water Oxidation. <i>ACS Energy Letters</i> , 2018 , 3, 1613-1619	20.1	24
188	Facet-Dependent Kinetics and Energetics of Hematite for Solar Water Oxidation Reactions. 2019 , 11, 5616-5622		32
187	Transmission Electron Microscopy of Catalytic Nanomaterials at Atomic Resolution. 2019 , 25, 2054-205	55	
186	A Cobalt-Iron Double-Atom Catalyst for the Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , 2019 , 141, 14190-14199	16.4	203
185	Surface states in bulk single crystal of topological semimetal CoSnS toward water oxidation. <i>Science Advances</i> , 2019 , 5, eaaw9867	14.3	63
184	Surpassing the single-atom catalytic activity limit through paired Pt-O-Pt ensemble built from isolated Pt atoms. <i>Nature Communications</i> , 2019 , 10, 3808	17.4	120
183	Stable Multimetallic Nanoparticles for Oxygen Electrocatalysis. 2019 , 19, 5149-5158		59
182	Energy transfer on a two-dimensional antenna enhances the photocatalytic activity of CO reduction by metal-organic layers. 2019 , 55, 9657-9660		14
181	Boosting Photoelectrochemical Water Oxidation of Hematite in Acidic Electrolytes by Surface State Modification. 2019 , 9, 1901836		32
180	Supported Noble-Metal Single Atoms for Heterogeneous Catalysis. <i>Advanced Materials</i> , 2019 , 31, e190	2031	115

179	Water Oxidation Catalysts for Artificial Photosynthesis. Advanced Materials, 2019, 31, e1902069	24	125
178	A Single-Junction Cathodic Approach for Stable Unassisted Solar Water Splitting. 2019 , 3, 2444-2456		20
177	Surface chemistry and photoelectrochemistry-Case study on tantalum nitride. 2019 , 151, 130902		14
176	Transforming Energy with Single-Atom Catalysts. 2019 , 3, 2897-2929		115
175	MgO-Supported Iridium Metal Pair-Site Catalysts Are More Active and Resistant to CO Poisoning than Analogous Single-Site Catalysts for Ethylene Hydrogenation and HydrogenDeuterium Exchange. ACS Catalysis, 2019, 9, 9545-9553	13.1	10
174	Thin film photoelectrodes for solar water splitting. <i>Chemical Society Reviews</i> , 2019 , 48, 2182-2215	58.5	141
173	Atomic (single, double, and triple atoms) catalysis: frontiers, opportunities, and challenges. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 3492-3515	13	160
172	Immobilization of a molecular cobalt cubane catalyst on porous BiVOvia electrochemical polymerization for efficient and stable photoelectrochemical water oxidation. 2019 , 55, 1414-1417		12
171	Evidence for tetranuclear bis-Ebxo cubane species in molecular iridium-based water oxidation catalysts from XAS analysis. 2019 , 55, 7832-7835		5
170	Engineering surface states of hematite based photoanodes for boosting photoelectrochemical water splitting. 2019 , 4, 1256-1276		53
169	Boosting the Performance of WO3/n-Si Heterostructures for Photoelectrochemical Water Splitting: from the Role of Si to Interface Engineering. 2019 , 9, 1900940		28
168	Graphite-protected CsPbBr perovskite photoanodes functionalised with water oxidation catalyst for oxygen evolution in water. <i>Nature Communications</i> , 2019 , 10, 2097	17.4	81
167	Low-Coordinated Pd Catalysts Supported on Zn1Zr1Ox Composite Oxides for Selective Methanol Steam Reforming. 2019 , 580, 81-92		17
166	Boosting Electrochemical Nitrogen Reduction Performance over Binuclear Mo Atoms on N-Doped Nanoporous Graphene: A Theoretical Investigation. 2019 , 24,		11
165	Search for Catalysts by Inverse Design: Artificial Intelligence, Mountain Climbers, and Alchemists. 2019 , 119, 6595-6612		90
164	Atom-by-Atom Resolution of Structure E unction Relations over Low-Nuclearity Metal Catalysts. 2019 , 131, 8816-8821		11
163	The development of molecular water oxidation catalysts. 2019 , 3, 331-341		129
162	Atom-by-Atom Resolution of Structure-Function Relations over Low-Nuclearity Metal Catalysts. 2019 , 58, 8724-8729		64

161	Synergetic interaction between neighboring platinum and ruthenium monomers boosts CO oxidation. 2019 , 10, 5898-5905		71
160	Artificial photosynthesis: opportunities and challenges of molecular catalysts. <i>Chemical Society Reviews</i> , 2019 , 48, 2216-2264	58.5	363
159	Bulky Calixarene Ligands Stabilize Supported Iridium Pair-Site Catalysts. <i>Journal of the American Chemical Society</i> , 2019 , 141, 4010-4015	16.4	26
158	Recent Advances in the Development of Molecular Catalyst-Based Anodes for Water Oxidation toward Artificial Photosynthesis. <i>ChemSusChem</i> , 2019 , 12, 1775-1793	8.3	37
157	Atomic palladium on graphitic carbon nitride as a hydrogen evolution catalyst under visible light irradiation. 2019 , 2,		35
156	Understanding electro-catalysis by using density functional theory. 2019 , 21, 23782-23802		30
155	Fuels and energy carriers from single-site catalysts prepared via surface organometallic chemistry. 2019 , 4, 1018-1024		21
154	Light-Driven Water Oxidation with the Catalyst and the Ru(bpy)/SO Cycle: Photogeneration of Active Dimers, Electron-Transfer Kinetics, and Light Synchronization for Oxygen Evolution with High Quantum Efficiency. <i>Inorganic Chemistry</i> , 2019 , 58, 16537-16545	5.1	7
153	Single-atom gold oxo-clusters prepared in alkaline solutions catalyse the heterogeneous methanol self-coupling reactions. 2019 , 11, 1098-1105		44
152	Selectivity of HO and O by water oxidation on metal oxide surfaces. 2019 , 150, 041712		8
151	Palladium Dimer Supported on Mo2CO2(MXene) for Direct Methane to Methanol Conversion. 2019 , 2, 1800158		16
150	Hybrid Photoelectrochemical Water Splitting Systems: From Interface Design to System Assembly. 2020 , 10, 1900399		78
149	Utilization of core-shell nanoparticles to evaluate subsurface contribution to water oxidation catalysis of [CoII(H2O)2]1.5[CoIII(CN)6] nanoparticles. <i>Applied Catalysis B: Environmental</i> , 2020 , 262, 1181	2 118	6
148	Atomically Defined Undercoordinated Active Sites for Highly Efficient CO2 Electroreduction. Advanced Functional Materials, 2020 , 30, 1907658	15.6	115
147	Titania supported synergistic palladium single atoms and nanoparticles for room temperature ketone and aldehydes hydrogenation. <i>Nature Communications</i> , 2020 , 11, 48	17.4	101
146	Structural Regulation with Atomic-Level Precision: From Single-Atomic Site to Diatomic and Atomic Interface Catalysis. 2020 , 2, 78-110		107
145	Analysis of Electrocatalytic Metal-Organic Frameworks. <i>Coordination Chemistry Reviews</i> , 2020 , 406,	23.2	41
144	Photoinduced Deposition of Platinum from (BuN)[Pt(NO)] for a Low Pt-Loading Pt/TiO Hydrogen Photogeneration Catalyst. 2020 , 12, 48631-48641		14

143	Single-Atom Catalysts across the Periodic Table. 2020 , 120, 11703-11809		237
142	Poison or Promoter? Investigating the Dual-Role of Carbon Monoxide in Pincer-Iridium-Based Alkane Dehydrogenation Systems via Operando Diffuse Reflectance Infrared Fourier Transform 1 Spectroscopy. <i>ACS Catalysis</i> , 2020 , 10, 12425-12436	3.1	3
141	Recent progress in use and observation of surface hydrogen migration over metal oxides. 2020 , 22, 2285	2-228	3 6 3
140	Supported Metal Pair-Site Catalysts. ACS Catalysis, 2020, 10, 9065-9085	3.1	37
139	Structural Regulation and Support Coupling Effect of Single-Atom Catalysts for Heterogeneous Catalysis. 2020 , 10, 2001482		71
138	Nanocluster and single-atom catalysts for thermocatalytic conversion of CO and CO2. <i>Catalysis Science and Technology</i> , 2020 , 10, 5772-5791	.5	12
137	MOF-based atomically dispersed metal catalysts: Recent progress towards novel atomic configurations and electrocatalytic applications. <i>Coordination Chemistry Reviews</i> , 2020 , 422, 213483	3.2	55
136	Highly Efficient Deoxydehydration and Hydrodeoxygenation on MoS2-Supported Transition-Metal Atoms through a Cℍ Activation Mechanism. <i>ACS Catalysis</i> , 2020 , 10, 11346-11355	3.1	3
135	Surface Coordination Chemistry of Atomically Dispersed Metal Catalysts. 2020 , 120, 11810-11899		134
134	Advanced Electrocatalysts with Single-Metal-Atom Active Sites. 2020 , 120, 12217-12314		235
133	Heterogeneous Atomic Catalysts Overcoming the Limitations of Single-Atom Catalysts. <i>ACS Nano</i> , 2020 , 14, 14355-14374	6.7	32
132	Single-Atom Catalysts Based on the Metal-Oxide Interaction. 2020 , 120, 11986-12043		154
131	Stepwise construction of silica-supported tantalum/iridium heteropolymetallic catalysts using surface organometallic chemistry. <i>Journal of Catalysis</i> , 2020 , 392, 287-301	.3	4
130	Enabling Highly Stable LiD2 Batteries with Full Dischargetharge Capability: The Porous Binderand Carbon-Free IrNi Nanosheet Cathode. 2020 , 8, 16115-16123		2
129	Supported Metal Clusters: Fabrication and Application in Heterogeneous Catalysis. <i>ACS Catalysis</i> , 2020 , 10, 11011-11045	3.1	85
128	Bimetallics in a Nutshell: Complexes Supported by Chelating Naphthyridine-Based Ligands. 2020 , 53, 1944-1956		18
127	Recent advances and strategies in the stabilization of single-atom catalysts for electrochemical applications. 2020 , 2, 488-520		16
126	Surface-Attached Molecular Catalysts on Visible-Light-Absorbing Semiconductors: Opportunities and Challenges for a Stable Hybrid Water-Splitting Photoanode. <i>ACS Energy Letters</i> , 2020 , 5, 3195-3202 ²	0.1	12

125	Facet-Dependent Cobalt Ion Distribution on the CoO Nanocatalyst Surface. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 9913-9919	6.4	9
124	Metal Clusters and Their Reactivity. 2020 ,		6
123	Exceeding the volcano relationship in oxygen reduction/evolution reactions using single-atom-based catalysts with dual-active-sites. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 10193-1019	9 § 3	15
122	Dynamic active-site generation of atomic iridium stabilized on nanoporous metal phosphides for water oxidation. <i>Nature Communications</i> , 2020 , 11, 2701	17.4	105
121	A Universal Principle to Accurately Synthesize Atomically Dispersed Metal-N Sites for CO Electroreduction. 2020 , 12, 108		30
120	Molecular and heterogenized dinuclear Ir-Cp* water oxidation catalysts bearing EDTA or EDTMP as bridging and anchoring ligands. 2020 , 65, 1614-1625		11
119	Assembly of a Highly Active Iridium-Based Oxide Oxygen Evolution Reaction Catalyst by Using Metal-Organic Framework Self-Dissolution. 2020 , 12, 29414-29423		3
118	Atomically Dispersed Iridium on Indium Tin Oxide Efficiently Catalyzes Water Oxidation. 2020 , 6, 1189-	1198	25
117	A triple atom catalyst with ultrahigh loading potential for nitrogen electrochemical reduction. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 15086-15093	13	19
116	Iridium-Doped Nanosized Zn-Al Layered Double Hydroxides as Efficient Water Oxidation Catalysts. 2020 , 12, 32736-32745		13
115	Characterizing electronic and atomic structures for amorphous and molecular metal oxide catalysts at functional interfaces by combining soft X-ray spectroscopy and high-energy X-ray scattering. 2020 , 12, 13276-13296		9
114	Single atom catalysts: a surface heterocompound perspective. 2020 , 5, 757-764		23
113	Activation of Low-Valent, Multiply MM Bonded Group VI Dimers toward Catalytic Olefin Metathesis via Surface Organometallic Chemistry. 2020 , 39, 1035-1045		7
112	MoS2-Supported Fe2 Clusters Catalyzing Nitrogen Reduction Reaction to Produce Ammonia. 2020 , 124, 6260-6266		40
111	Cooperation of cerium oxide nanoparticles and soluble molecular catalysts for alcohol oxidation. <i>Inorganic Chemistry Frontiers</i> , 2020 , 7, 1386-1393	6.8	5
110	From Geometry to Activity: A Quantitative Analysis of WO3/Si Micropillar Arrays for Photoelectrochemical Water Splitting. <i>Advanced Functional Materials</i> , 2020 , 30, 1909157	15.6	12
109	A facile route to fabricate double atom catalysts with controllable atomic spacing for the r-WGS reaction. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 2364-2368	13	20
108	Single-atom catalysis for a sustainable and greener future. 2020 , 22, 54-64		16

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107	Strategies for Semiconductor/Electrocatalyst Coupling toward Solar-Driven Water Splitting. 2020 , 7, 1902102		61	
106	Molecular Reaction Imaging of Single-Entity Photoelectrodes. ACS Energy Letters, 2020 , 5, 1474-1486	20.1	5	
105	Revealing Sintering Kinetics of MoS-Supported Metal Nanocatalysts in Atmospheric Gas Environments Transmission Electron Microscopy. <i>ACS Nano</i> , 2020 , 14, 4074-4086	16.7	9	
104	Inter-chain double-site synergistic photocatalytic hydrogen evolution in robust cuprous coordination polymers. 2020 , 56, 6261-6264		7	
103	Coinage metal clusters: From superatom chemistry to genetic materials. <i>Coordination Chemistry Reviews</i> , 2021 , 429, 213643	23.2	24	
102	More is Different: Laynergistic Effect and Structural Engineering in Double-Atom Catalysts. <i>Advanced Functional Materials</i> , 2021 , 31, 2007423	15.6	74	
101	Optimizing noble metals exploitation in water oxidation catalysis by their incorporation in layered double hydroxides. 2021 , 516, 120161		4	
100	From double-atom catalysts to single-cluster catalysts: A new frontier in heterogeneous catalysis. 2021 , 2, 251-270		16	
99	Fully Exposed Cluster Catalyst (FECC): Toward Rich Surface Sites and Full Atom Utilization Efficiency. 2021 , 7, 262-273		54	
98	Synthesis of High Metal Loading Single Atom Catalysts and Exploration of the Active Center Structure. 2021 , 13, 28-58		8	
97	Molecular and heterogeneous water oxidation catalysts: recent progress and joint perspectives. <i>Chemical Society Reviews</i> , 2021 , 50, 2444-2485	58.5	33	
96	Synergistic Effects for Enhanced Catalysis in a Dual Single-Atom Catalyst. <i>ACS Catalysis</i> , 2021 , 11, 1952	-1 9 61	48	
95	Recent advances in understanding oxygen evolution reaction mechanisms over iridium oxide. <i>Inorganic Chemistry Frontiers</i> , 2021 , 8, 2900-2917	6.8	24	
94	Heterogeneous Water Oxidation Catalysts for Molecular Anodes and Photoanodes. <i>Solar Rrl</i> , 2021 , 5, 2000565	7.1	3	
93	Rational design of an Fe cluster catalyst for robust nitrogen activation. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 21219-21227	13	3	
92	Surface Reduction State Determines Stabilization and Incorporation of Rh on Fe2O3(11D2). <i>Advanced Materials Interfaces</i> , 2021 , 8, 2001908	4.6	5	
91	Directly Probing the Local Coordination, Charge State, and Stability of Single Atom Catalysts by Advanced Electron Microscopy: A Review. <i>Small</i> , 2021 , 17, e2006482	11	15	
90	Structural tuning of heterogeneous molecular catalysts for electrochemical energy conversion. Science Advances, 2021, 7,	14.3	11	

89	Switching of metaloxygen hybridization for selective CO2 electrohydrogenation under mild temperature and pressure. <i>Nature Catalysis</i> , 2021 , 4, 274-283	36.5	19
88	Dual-atom Pt heterogeneous catalyst with excellent catalytic performances for the selective hydrogenation and epoxidation. <i>Nature Communications</i> , 2021 , 12, 3181	17.4	40
87	Dispersion and support dictated properties and activities of Pt/metal oxide catalysts in heterogeneous CO oxidation. <i>Nano Research</i> , 2021 , 14, 4841	10	9
86	A semiconductor/molecular catalyst hybrid photoanode with FeOOH as an electron transfer relay. <i>Chemistry - an Asian Journal</i> , 2021 , 16, 1745-1749	4.5	
85	Progress of Nonprecious-Metal-Based Electrocatalysts for Oxygen Evolution in Acidic Media. <i>Advanced Materials</i> , 2021 , 33, e2003786	24	33
84	Single-Atom Electrocatalysts for Multi-Electron Reduction of CO. <i>Small</i> , 2021 , 17, e2101443	11	16
83	Atomically Precise Dinuclear Site Active toward Electrocatalytic CO Reduction. <i>Journal of the American Chemical Society</i> , 2021 , 143, 11317-11324	16.4	36
82	18.1% single palladium atom catalysts on mesoporous covalent organic framework for gas phase hydrogenation of ethylene. <i>Cell Reports Physical Science</i> , 2021 , 2, 100495	6.1	5
81	Self-adaptive dual-metal-site pairs in metal-organic frameworks for selective CO2 photoreduction to CH4. <i>Nature Catalysis</i> , 2021 , 4, 719-729	36.5	80
80	Observation of a potential-dependent switch of water-oxidation mechanism on Co-oxide-based catalysts. <i>CheM</i> , 2021 , 7, 2101-2117	16.2	11
79	Dual-atom catalysts: controllable synthesis and electrocatalytic applications. <i>Science China Chemistry</i> , 1	7.9	10
78	Origin of enhanced water oxidation activity in an iridium single atom anchored on NiFe oxyhydroxide catalyst. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	21
77	The kinetics of metal oxide photoanodes from charge generation to catalysis. <i>Nature Reviews Materials</i> ,	73.3	36
76	Atomically precise control in the design of low-nuclearity supported metal catalysts. <i>Nature Reviews Materials</i> ,	73.3	17
75	Single-step selective oxidation of methane to methanol in the aqueous phase on iridium-based catalysts. <i>Applied Catalysis B: Environmental</i> , 2021 , 292, 120124	21.8	14
74	Molecular and Heterogenized Cp*Ir Water Oxidation Catalysts Bearing Glyphosate and Glyphosine as Ancillary and Anchoring Ligands. <i>European Journal of Inorganic Chemistry</i> , 2021 , 2021, 299-307	2.3	3
73	Boosting Photoelectrochemical Water Oxidation of Hematite by Surface States Modification. <i>SSRN Electronic Journal</i> ,	1	1
72	Charge Transfer and the Harpoon Mechanism. 2020 , 193-213		

71	Facet-engineering palladium nanocrystals for remarkable photocatalytic dechlorination of polychlorinated biphenyls. <i>Catalysis Science and Technology</i> ,	5.5	0
70	In Situ Determination of Polaron-Mediated Ultrafast Electron Trapping in Rutile TiO Nanorod Photoanodes. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 10815-10822	6.4	6
69	Atom probe specimen preparation methods for nanoparticles. <i>Ultramicroscopy</i> , 2021 , 233, 113420	3.1	
68	Engineering Single-Atomic Ni-N-O Sites on Semiconductor Photoanodes for High-Performance Photoelectrochemical Water Splitting. <i>Journal of the American Chemical Society</i> , 2021 ,	16.4	19
67	Heterogeneous Single Atom Environmental Catalysis: Fundamentals, Applications, and Opportunities. <i>Advanced Functional Materials</i> , 2108381	15.6	8
66	Antibacterial Films of Alginate-CoNi-Coated Cellulose Paper Stabilized Co NPs for Dyes and Nitrophenol Degradation. <i>Polymers</i> , 2021 , 13,	4.5	3
65	Exploration of Metal-Molecule interaction of subnanometric heterogeneous catalysts via simulated Raman spectrum. <i>Applied Surface Science</i> , 2022 , 579, 152194	6.7	0
64	Novel cellulose supported 1,2-bis(4-aminophenylthio)ethane Ni(ii) complex (Ni(BAPTE)(NO)-Cell) as an efficient nanocatalyst for the synthesis of spirooxindole derivatives <i>RSC Advances</i> , 2022 , 12, 3584-3	15 ³ 972	2
63	Homogeneous Water Oxidation Catalyzed by First-Row Transition Metal Complexes: Unveiling the Relationship between Turnover Frequency and Reaction Overpotential. <i>ChemSusChem</i> , 2021 ,	8.3	1
62	Electron Energy Loss Spectroscopy for Single Atom Catalysis. <i>Topics in Catalysis</i> , 1	2.3	1
61	Advances in understanding the role of surface hole formation in heterogeneous water oxidation. Current Opinion in Electrochemistry, 2022 , 33, 100932	7.2	О
60	Electrochemistry in Organometallic Chemistry. 2022,		
59	An efficient screening strategy towards multifunctional catalysts for the simultaneous electroreduction of NO3IINO2Iand NO to NH3. <i>Journal of Materials Chemistry A</i> ,	13	8
58	Characterization of Supported Metal Single-Atom Catalysts. 2022 , 169-198		2
57	Supported Metal Single-Atom Photocatalysis. 2022 , 583-611		
56	Oxo dicopper anchored on carbon nitride for selective oxidation of methane <i>Nature Communications</i> , 2022 , 13, 1375	17.4	10
55	Single-atom heterogeneous catalysts for sustainable organic synthesis. <i>Trends in Chemistry</i> , 2022 , 4, 26	4=124786	1
54	Coordination structure at work: Atomically dispersed heterogeneous catalysts. <i>Coordination Chemistry Reviews</i> , 2022 , 460, 214469	23.2	3

53	Quantitative Characterization of the Thermally Driven Alloying State in Ternary Ir-Pd-Ru Nanoparticles <i>ACS Nano</i> , 2021 ,	16.7	0
52	Determining the Three-Dimensional Structures of Silica-Supported Metal Complexes from the Ground Up <i>Inorganic Chemistry</i> , 2021 ,	5.1	2
51	Single Rh Adatoms Stabilized on FeO(11 02) by Coadsorbed Water ACS Energy Letters, 2022 , 7, 375-38	30 0.1	3
50	Recent advances and perspectives for solar-driven water splitting using particulate photocatalysts <i>Chemical Society Reviews</i> , 2022 ,	58.5	22
49	Engineering single-atom catalysts toward biomedical applications Chemical Society Reviews, 2022,	58.5	6
48	Enhanced ferromagnetic ordering of Mn trimer symmetrically and fully exposed on iridium-doped graphene. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> ,	1.3	
47	Possible catalytic activity of N,N-coordinated mono-cationic copper bound Pyrazol-1-yl(1H-pyrrol-2-yl)methanone complex: a computational study. <i>Proceedings of the Indian National Science Academy</i> , 1	1	
46	Iridium pair sites anchored to Zr6O8 nodes of the metal@rganic framework UiO-66 catalyze ethylene hydrogenation. <i>Journal of Catalysis</i> , 2022 ,	7.3	
45	Metal-metal interactions in correlated single-atom catalysts Science Advances, 2022, 8, eabo0762	14.3	18
44	Selectively anchoring single atoms on specific sites of supports for improved oxygen evolution <i>Nature Communications</i> , 2022 , 13, 2473	17.4	12
43	Cellulose Supported Propylamine/Molybdate Complex: A Novel and Recyclable Nanocatalyst for the Synthesis of Pyranopyrimidine Derivatives. <i>Current Organocatalysis</i> , 2022 , 09,	1.2	
42	Single Atom Catalysts for Selective Methane Oxidation to Oxygenates. ACS Nano,	16.7	7
41	Atomically dispersed dual-metal-site PGM-free electrocatalysts for oxygen reduction reaction: Opportunities and challenges. <i>SusMat</i> ,		4
40	Emerging low-nuclearity supported metal catalysts with atomic level precision for efficient heterogeneous catalysis. <i>Nano Research</i> ,	10	22
39	Solid-Solid Interfaces in Photoelectrochemistry: Co-catalysts, Surface Passivation, and Corrosion Protection. <i>Springer Handbooks</i> , 2022 , 879-921	1.3	
38	Synergetic Dual-Atom Catalysts: the Next Boom of Atomic Catalysts. <i>ChemSusChem</i> ,	8.3	2
37	Elucidation of Metal Local Environments in Single-Atom Catalysts Based on Carbon Nitrides. <i>Small</i> , 220	2080	2
36	Interfacial Cladding Engineering Suppresses Atomic Thermal Migration to Fabricate Well-Defined Dual-Atom Electrocatalysts. <i>Advanced Functional Materials</i> , 2205637	15.6	2

35	IridiumIron Diatomic Active Sites for Efficient Bifunctional Oxygen Electrocatalysis. ACS Catalysis, 9397-94909	5
34	Dehydrogenation of Ammonia Borane by PlatinumNickel Dimers: Regulation of the Heteroatom Interspace Boosts Bifunctional Synergetic Catalysis.	2
33	Dehydrogenation of Ammonia Borane by PlatinumNickel Dimers: Regulation of the Heteroatom Interspace Boosts Bifunctional Synergetic Catalysis.	
32	Recent advances on semiconductor/MXene hybrids for harvesting light and photoelectrochemical water oxidation: A mini review. 2022 , 450, 138381	
31	Cobalt dual-atom clusters with strong chemiluminescent response for analyzing pathogenic bacteria by using cell wall bind domain as recognizer. 2022 , 371, 132566	0
30	Multi-atom cluster catalysts for efficient electrocatalysis.	4
29	The remarkable performance of a single iridium atom supported on hematite for methane activation: a density functional theory study. 2022 , 12, 23736-23746	0
28	Transition metal DualAtom Ni2/TiO2 catalysts for photoelectrocatalytic hydrogen Evolution: A density functional theory study. 2023 , 608, 155132	1
27	Modulating hydrogen bonding in single-atom catalysts to break scaling relation for oxygen evolution. 2022 ,	1
26	Rational Design of Precious-Metal Single-Atom Catalysts for Methane Combustion. 2022 , 14, 43141-43150	О
25	Two-dimensional materials for photoelectrochemical water splitting.	1
24	Mixture screening strategy of efficient transition metal heteronuclear dual-atom electrocatalysts toward nitrogen fixation.	О
23	A Tale of Two Sites: Neighboring Atomically Dispersed Pt Sites Cooperatively Remove Trace H 2 in CO-Rich Stream. 2204611	0
22	Controlled synthesis of a Ni2 dual-atom catalyst for synergistic CO2 electroreduction. 2023 , 322, 122073	Ο
21	Stabilization of Dinuclear Rhodium and Iridium Clusters on Layered Titanate and Niobate Supports.	0
20	Progress of Heterogeneous Iridium-Based Water Oxidation Catalysts.	2
19	Fundamental, application and opportunities of single atom catalysts for Li-S batteries. 2023 , 55, 322-355	0
18	Electrolyte engineering stabilizes photoanodes decorated with molecular catalysts.	O

17	Dissolution of WO 3 modified with IrO x overlayers during photoelectrochemical water splitting.	O
16	Selective Methane Oxidation by Heterogenized Iridium Catalysts. 2023, 145, 769-773	1
15	Single-Atom Iridium on Hematite Photoanodes for Solar Water Splitting: Catalyst or Spectator?.	O
14	Facile fabrication of atomically dispersed Ru-P-Ru ensembles for efficient hydrogenations beyond isolated single atoms. 2023 , 45, 107-119	O
13	Oxygen Evolution Electrocatalysis in Acids: Atomic Tuning of the Stability Number for Submonolayer IrOx on Conductive Oxides from Molecular Precursors. 2023 , 13, 902-915	0
12	Advanced Electrocatalytic System for Enhanced Atom/electron Utilizations.	O
11	Dinuclear Reactivity of One Metal Exalted by the Second One. 2023,	O
10	Modified magnetic cellulose supported o-phenylenediamine nickel(II) complex as a new heterogeneous catalyst for the synthesis of sulfonamide-substituted 4-hydroxycoumarins. 2023 , 154, 249-258	O
9	Single-Atom Iridium-Based Catalysts: Synthesis Strategies and Electro(Photo)-Catalytic Applications for Renewable Energy Conversion and Storage. 2023 , 486, 215143	O
8	Elucidation of single atom catalysts for energy and sustainable chemical production: Synthesis, characterization and frontier science. 2023 , 96, 101074	O
7	Lifetime over 10000 hours for organic solar cells with Ir/IrOx electron-transporting layer. 2023, 14,	0
6	Elucidation of the Active Site for the Oxygen Evolution Reaction on a Single Pt Atom Supported on Indium Tin Oxide. 2023 , 14, 2635-2643	O
5	Bimetallic Sites for Catalysis: From Binuclear Metal Sites to Bimetallic Nanoclusters and Nanoparticles.	О
4	Pushing the limit of atomically dispersed Au catalysts for electrochemical H2O2 production by precise electronic perturbation of the active site. 2023 , 3, 100583	O
3	Atomic design of carbon-based dual-metal site catalysts for energy applications.	1
2	Atom-Precise Low-Nuclearity Cluster Catalysis: Opportunities and Challenges. 2023 , 13, 5609-5634	O
1	Superior performance of formaldehyde complete oxidation at ambient temperature over Co single-atom catalysts. 2023 , 122774	O