

# Na Tian

## List of Publications by Year in descending order

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56  
papers

7,806  
citations

117625

34  
h-index

138484

58  
g-index

61  
all docs

61  
docs citations

61  
times ranked

8854  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of Tetrahedral Platinum Nanocrystals with High-Index Facets and High Electro-Oxidation Activity. <i>Science</i> , 2007, 316, 732-735.	12.6	2,838
2	Nanomaterials of high surface energy with exceptional properties in catalysis and energy storage. <i>Chemical Society Reviews</i> , 2011, 40, 4167.	38.1	755
3	Platinum Metal Catalysts of High-Index Surfaces: From Single-Crystal Planes to Electrochemically Shape-Controlled Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2008, 112, 19801-19817.	3.1	536
4	Direct Electrodeposition of Tetrahedral Pd Nanocrystals with High-Index Facets and High Catalytic Activity for Ethanol Electrooxidation. <i>Journal of the American Chemical Society</i> , 2010, 132, 7580-7581.	13.7	447
5	High-Index Faceted Platinum Nanocrystals Supported on Carbon Black as Highly Efficient Catalysts for Ethanol Electrooxidation. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 411-414.	13.8	310
6	In situ FTIR spectroscopic studies of electrooxidation of ethanol on Pd electrode in alkaline media. <i>Electrochimica Acta</i> , 2010, 55, 7995-7999.	5.2	198
7	Nanoparticle catalysts with high energy surfaces and enhanced activity synthesized by electrochemical method. <i>Faraday Discussions</i> , 2008, 140, 81-92.	3.2	170
8	Alloy tetrahedral Pd-Pt catalysts: enhancing significantly the catalytic activity by synergy effect of high-index facets and electronic structure. <i>Chemical Science</i> , 2012, 3, 1157.	7.4	152
9	Electrochemical preparation of Pd nanorods with high-index facets. <i>Chemical Communications</i> , 2009, , 1502.	4.1	151
10	Octahedral PtCu alloy nanocrystals with high performance for oxygen reduction reaction and their enhanced stability by trace Au. <i>Nano Energy</i> , 2017, 33, 65-71.	16.0	139
11	High-Index-Facet- and High-Surface-Energy Nanocrystals of Metals and Metal Oxides as Highly Efficient Catalysts. <i>Joule</i> , 2020, 4, 2562-2598.	24.0	136
12	Structure Design and Performance Tuning of Nanomaterials for Electrochemical Energy Conversion and Storage. <i>Accounts of Chemical Research</i> , 2016, 49, 2569-2577.	15.6	131
13	Electrochemically Shape-Controlled Synthesis in Deep Eutectic Solvents—A New Route to Prepare Pt Nanocrystals Enclosed by High-Index Facets with High Catalytic Activity. <i>Journal of Physical Chemistry C</i> , 2012, 116, 2040-2044.	3.1	119
14	Synthesis of Convex Hexoctahedral Pt Micro/Nanocrystals with High-Index Facets and Electrochemistry-Mediated Shape Evolution. <i>Journal of the American Chemical Society</i> , 2013, 135, 18754-18757.	13.7	117
15	Electrochemically Seed-Mediated Synthesis of Sub-10 nm Tetrahedral Pt Nanocrystals Supported on Graphene with Improved Catalytic Performance. <i>Journal of the American Chemical Society</i> , 2016, 138, 5753-5756.	13.7	99
16	Electrochemical preparation of platinum nanothorn assemblies with high surface enhanced Raman scattering activity. <i>Chemical Communications</i> , 2006, , 4090.	4.1	96
17	Electrochemically shape-controlled synthesis of trapezohedral platinum nanocrystals with high electrocatalytic activity. <i>Chemical Communications</i> , 2012, 48, 9531.	4.1	95
18	Rational Design and Synthesis of Low-Temperature Fuel Cell Electrocatalysts. <i>Electrochemical Energy Reviews</i> , 2018, 1, 54-83.	25.5	87

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19	Aminothiazole-derived N,S,Fe-doped graphene nanosheets as high performance electrocatalysts for oxygen reduction. <i>Chemical Communications</i> , 2015, 51, 17092-17095.	4.1	85
20	Structurally Disordered Phosphorus-Doped Pt as a Highly Active Electrocatalyst for an Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2021, 11, 355-363.	11.2	79
21	Tetrahexahedral Pt Nanocrystal Catalysts Decorated with Ru Adatoms and Their Enhanced Activity in Methanol Electrooxidation. <i>ACS Catalysis</i> , 2012, 2, 708-715.	11.2	76
22	Pd Nanocrystals with Continuously Tunable High-Index Facets as a Model Nanocatalyst. <i>ACS Catalysis</i> , 2019, 9, 3144-3152.	11.2	68
23	Cu overlayers on tetrahedral Pd nanocrystals with high-index facets for CO <sub>2</sub> electroreduction to alcohols. <i>Chemical Communications</i> , 2017, 53, 8085-8088.	4.1	64
24	Promoting Ethylene Selectivity from CO <sub>2</sub> Electroreduction on CuO Supported onto CO <sub>2</sub> Capture Materials. <i>ChemSusChem</i> , 2018, 11, 881-887.	6.8	61
25	Pt-group bimetallic nanocrystals with high-index facets as high performance electrocatalysts. <i>Faraday Discussions</i> , 2013, 162, 77.	3.2	50
26	Pt nanoparticle netlike-assembly as highly durable and highly active electrocatalyst for oxygen reduction reaction. <i>Chemical Communications</i> , 2011, 47, 3407.	4.1	48
27	Excavated cubic platinum-iridium alloy nanocrystals with high-index facets as highly efficient electrocatalysts in N <sub>2</sub> fixation to NH <sub>3</sub> . <i>Chemical Communications</i> , 2019, 55, 9335-9338.	4.1	48
28	Designing Pt-Based Electrocatalysts with High Surface Energy. <i>ACS Energy Letters</i> , 2017, 2, 1892-1900.	17.4	46
29	Shape transformation from Pt nanocubes to tetrahedra with size near 10nm. <i>Electrochemistry Communications</i> , 2012, 22, 61-64.	4.7	44
30	In situ FTIR spectroscopic studies of ethylene glycol electrooxidation on Pd electrode in alkaline solution: The effects of concentration. <i>Journal of Electroanalytical Chemistry</i> , 2013, 688, 165-171.	3.8	43
31	Facets and surface relaxation of tetrahedral platinum nanocrystals. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	41
32	Hydrogen adsorption-mediated synthesis of concave Pt nanocubes and their enhanced electrocatalytic activity. <i>Nanoscale</i> , 2016, 8, 11559-11564.	5.6	39
33	Intermetallic PtBi Nanoplates with High Catalytic Activity towards Electrooxidation of Formic Acid and Glycerol. <i>ChemElectroChem</i> , 2020, 7, 239-245.	3.4	37
34	Fluorescence detection of hydroxyl radical generated from oxygen reduction on Fe/N/C catalyst. <i>Science China Chemistry</i> , 2020, 63, 198-202.	8.2	32
35	Overpotential-dependent shape evolution of gold nanocrystals grown in a deep eutectic solvent. <i>Nano Research</i> , 2016, 9, 3547-3557.	10.4	31
36	Seeds and Potentials Mediated Synthesis of High-Index Faceted Gold Nanocrystals with Enhanced Electrocatalytic Activities. <i>Langmuir</i> , 2017, 33, 6991-6998.	3.5	30

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37	High CO-Tolerant Ru-Based Catalysts by Constructing an Oxide Blocking Layer. <i>Journal of the American Chemical Society</i> , 2022, 144, 9292-9301.	13.7	29
38	Roughening of Pt nanoparticles induced by surface-oxide formation. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 2268.	2.8	21
39	Tetrahexahedral PdRh nanocrystals with tunable composition as a highly efficient electrocatalyst for ethylene glycol oxidation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11049-11055.	10.3	21
40	Surface structure effects of platinum-based catalysts for oxygen reduction reaction. <i>Current Opinion in Electrochemistry</i> , 2017, 4, 76-82.	4.8	19
41	Evolution of Cu single atom catalysts to nanoclusters during CO <sub>2</sub> reduction to CO. <i>Chemical Communications</i> , 2022, 58, 2488-2491.	4.1	19
42	Shape transformation of {hk0}-faceted Pt nanocrystals from a tetrahedron into a truncated ditetragonal prism. <i>Chemical Communications</i> , 2017, 53, 3236-3238.	4.1	17
43	Helical PdPtAu nanowires bounded with high-index facets selectively switch the pathway of ethanol electrooxidation. <i>Journal of Materials Chemistry A</i> , 2022, 10, 10902-10908.	10.3	17
44	Shape Evolution of Platinum Nanocrystals by Electrochemistry. <i>Electrochimica Acta</i> , 2014, 140, 345-351.	5.2	16
45	Influence of transition metal modification of oxide-derived Cu electrodes in electroreduction of CO <sub>2</sub> . <i>Chinese Journal of Catalysis</i> , 2016, 37, 1070-1075.	14.0	13
46	High Catalytic Activity of Pt(100) for CH <sub>4</sub> Electrochemical Conversion. <i>ACS Catalysis</i> , 2019, 9, 10159-10165.	11.2	13
47	N, P Dual-Doped Porous Carbon Nanosheets for High-Efficiency CO <sub>2</sub> Electroreduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 1880-1887.	6.7	12
48	Electrochemical synthesis of Tetrahedral Cu nanocrystals with high-index facets for efficient nitrate electroreduction. <i>Journal of Electroanalytical Chemistry</i> , 2022, 907, 116022.	3.8	12
49	High activity of step sites on Pd nanocatalysts in electrocatalytic dechlorination. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 3896-3904.	2.8	10
50	Improved Stability of Octahedral PtCu by Rh Doping for the Oxygen Reduction Reaction. <i>ChemElectroChem</i> , 2021, 8, 2425-2430.	3.4	7
51	Interaction of citrate with Pt(100) surface investigated by cyclic voltammetry towards understanding the structure-tuning effect in nanomaterials synthesis. <i>Science China Chemistry</i> , 2012, 55, 2353-2358.	8.2	6
52	Collision Incidents of Single Tetrahedral Platinum Nanocrystals Recorded by a Carbon Nanoelectrode. <i>ChemElectroChem</i> , 2018, 5, 3068-3072.	3.4	6
53	Shape transformations of Pt nanocrystals enclosed with high-index facets and low-index facets. <i>CrystEngComm</i> , 2021, 23, 6655-6660.	2.6	5
54	Kinetics of dissociative adsorption of formic acid on electrodes of tetrahedral platinum nanocrystals. <i>Science in China Series B: Chemistry</i> , 2009, 52, 1660-1665.	0.8	2

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55	Fluorescence enhancement mediated by high-index-faceted Pt nanocrystals: roles of crystal structures. <i>Chemical Communications</i> , 2018, 54, 2016-2019.	4.1	2
56	Kinetics of thiocyanate orientation conversion on Pt surface studied by in situ step-scan time-resolved microscope FTIR spectroscopy. <i>Science Bulletin</i> , 2013, 58, 622-626.	1.7	0