Naoto Todoroki

List of Publications by Year
in descending order

57	884	516710 16	501196 28
papers	citations	h-index	g-index

57	57	57	1203
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Oxygen reduction reaction properties of vacuum-deposited Pt on thermally grown epitaxial graphene layers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	2.1	1
2	Nanostructures and Oxygen Evolution Overpotentials of Surface Catalyst Layers Synthesized on Various Austenitic Stainless Steel Electrodes. Electrocatalysis, 2022, 13, 116-125.	3.0	12
3	Abnormal Metal Bond Distances in PtAu Alloy Nanoparticles: In Situ Back-Illumination XAFS Investigations of the Structure of PtAu Nanoparticles on a Flat HOPG Substrate Prepared by Arc Plasma Deposition. Journal of Physical Chemistry C, 2022, 126, 1006-1016.	3.1	3
4	Activity switching of Sn and In species in Heusler alloys for electrochemical CO₂ reduction. Chemical Communications, 2022, 58, 4865-4868.	4.1	6
5	Hydrogen peroxide generation and hydrogen oxidation reactions of vacuum-prepared Ru/Ir(111) bimetallic surfaces. Physical Chemistry Chemical Physics, 2022, 24, 14277-14283.	2.8	5
6	Electrochemical stability of stainless-steel-made anode for alkaline water electrolysis: Surface catalyst nanostructures and oxygen evolution overpotentials under applying potential cycle loading. Electrochemistry Communications, 2021, 122, 106902.	4.7	39
7	Activity for the ORR on Pt-Pd-Co ternary alloy electrodes is markedly affected by surface structure and composition. Electrochemistry Communications, 2021, 125, 107007.	4.7	13
8	Hydrogen Peroxide Generation and Hydrogen Oxidation Reaction Properties of Ir(111)-, (100)-, and (110)-Low-Index Single-Crystal Surfaces. Journal of Physical Chemistry C, 2021, 125, 21481-21487.	3.1	5
9	Atomically resolved interface structures of vacuum-deposited Pt on SnO2(110), (101), and (111). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	2
10	Oxygen Reduction Reaction of Third Element-Modified Pt/Pd(111): Effect of Atomically Controlled Ir Locations on the Activity and Durability. ACS Catalysis, 2021, 11, 1554-1562.	11.2	12
11	Dry synthesis of single-nanometer-scale Pt Si fine particles for electrocatalysis. Journal of Electroanalytical Chemistry, 2020, 876, 114492.	3.8	2
12	Online Electrochemical Mass Spectrometry Combined with the Rotating Disk Electrode Method for Direct Observations of Potential-Dependent Molecular Behaviors in the Electrode Surface Vicinity. Journal of the Electrochemical Society, 2020, 167, 106503.	2.9	8
13	Model building analysis â€“ a novel method for statistical evaluation of Pt L₃-edge EXAFS data to unravel the structure of Pt-alloy nanoparticles for the oxygen reduction reaction on highly oriented pyrolytic graphite. Physical Chemistry Chemical Physics, 2020, 22, 18815-18823.	2.8	9
14	Heterolayered Niâ€“Fe Hydroxide/Oxide Nanostructures Generated on a Stainless-Steel Substrate for Efficient Alkaline Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 44161-44169.	8.0	59
15	Electrochemical CO₂ Reduction on Bimetallic Surface Alloys: Enhanced Selectivity to CO for Co/Au(110) and to H₂ for Sn/Au(110). ChemElectroChem, 2019, 6, 3101-3107.	3.4	11
16	Ligand-Effect-Induced Oxygen Reduction Reaction Activity Enhancement for Pt/Zr/Pt(111) Surfaces with Tensile Strain Relieved by Stacking Faults. ACS Applied Energy Materials, 2019, 2, 4597-4601.	5.1	13
17	Effective surface termination with Au on PtCo@Pt core-shell nanoparticle: Microstructural investigations and oxygen reduction reaction properties. Journal of Electroanalytical Chemistry, 2019, 842, 1-7.	3.8	14
18	Oxygen Reduction Reaction Activity of Nano-Flake Carbon-Deposited Pt75Ni25(111) Surfaces. Electrocatalysis, 2019, 10, 232-242.	3.0	3

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19	Surface Atomic Arrangement Dependence of Electrochemical CO₂ Reduction on Gold: Online Electrochemical Mass Spectrometric Study on Low-Index Au(hkl) Surfaces. ACS Catalysis, 2019, 9, 1383-1388.	11.2	78
20	Development of Energy Conversion Catalytic Materials Based on Surface Scientific Approach. Materia Japan, 2019, 58, 328-332.	0.1	0
21	Alloy-composition-dependent oxygen reduction reaction activity and electrochemical stability of Pt-based bimetallic systems: a model electrocatalyst study of Pt/Pt_xNi_{100â^'x}(111). Physical Chemistry Chemical Physics, 2018, 20, 11994-12004.	2.8	9
22	Oxygen Reduction Reaction Activity for Cobalt-Deposited Pt(111) Model Catalyst Surfaces in Alkaline Solution. Electrochemistry, 2018, 86, 243-245.	1.4	6
23	Oxygen Reduction Reaction Properties for Dry-Process Synthesized Pt/TaCx Nanoparticles. ECS Transactions, 2018, 86, 519-524.	0.5	5
24	Oxygen Reduction Reaction Properties of Dry-Process-Synthesized Pt/Graphene/SiC(0001) Model Catalyst Surfaces. ECS Transactions, 2018, 86, 525-530.	0.5	1
25	Oxygen Reduction and Oxygen Evolution Reaction Activity on Co/Pt(111) Surfaces in Alkaline Solution. ECS Transactions, 2018, 86, 569-574.	0.5	3
26	Rotating Disk Electrode â€“ Online Electrochemical Mass Spectrometry for Oxygen Reduction Reaction on Pt Electrode Surfaces. ECS Transactions, 2018, 86, 447-452.	0.5	1
27	Ultrahigh Vacuum Synthesis of Strain-Controlled Model Pt(111)-Shell Layers: Surface Strain and Oxygen Reduction Reaction Activity. Journal of Physical Chemistry Letters, 2017, 8, 5360-5365.	4.6	19
28	Highly Enhanced Oxygen Reduction Reaction Activity and Electrochemical Stability of Pt/Ir(111) Bimetallic Surfaces. Electrochimica Acta, 2016, 222, 1616-1621.	5.2	33
29	Dealloying of Nitrogen-Introduced Ptâ€“Co Alloy Nanoparticles: Preferential Coreâ€“Shell Formation with Enhanced Activity for Oxygen Reduction Reaction. ACS Omega, 2016, 1, 1247-1252.	3.5	25
30	Oxygen Reduction Reaction Activity and Durability for Model Pt Shell Layers on Ir(111) Prepared by Molecular Beam Epitaxy. ECS Transactions, 2016, 75, 815-820.	0.5	0
31	Oxygen Reduction Reaction Activity and Durability for Pt/TaNx Model Catalysts Fabricated in Ultra-High-Vacuum. ECS Transactions, 2016, 75, 821-826.	0.5	5
32	ORR activity and electrochemical stability for well-defined topmost and interface structures of the Pt/Pd(111) bimetallic system. Electrochimica Acta, 2016, 212, 822-827.	5.2	16
33	Oxygen Reduction Reaction Activity for Strain-Controlled Pt-Based Model Alloy Catalysts: Surface Strains and Direct Electronic Effects Induced by Alloying Elements. ACS Catalysis, 2016, 6, 5285-5289.	11.2	122
34	On-Line Mass Spectrometry for Ethanol Oxidation on Well-Defined Sn/Pt(hkl) Electrode Surfaces. ECS Transactions, 2016, 75, 1029-1033.	0.5	0
35	Surface Structures and Electrochemical Stabilities for Pt/Pd(111) Model Electrocatalysts. ECS Transactions, 2016, 75, 741-746.	0.5	0
36	ORR Properties for Model Pt-Shell Layers Prepared on Nitrogen-Beam Irradiated Pt25Ni75(111) Substrate. ECS Transactions, 2016, 75, 809-814.	0.5	1

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37	Electrochemical Reduction of CO2 on Ni- and Pt-Epitaxially Grown Cu(111) Surfaces. Electrocatalysis, 2016, 7, 97-103.	3.0	27
38	Oxygen Reduction Reaction Activities for Various-Monolayer-Thick Pt Shells on PtxNi100-x(111). ECS Transactions, 2015, 69, 619-624.	0.5	0
39	Effects of Core-Shell Interface Structures on ORR Activities: a Model Catalyst Study of Pt/Pd(111). ECS Transactions, 2015, 69, 315-320.	0.5	0
40	Electrochemical Structural Stability of Au-Modified Pt Nanoparticles Prepared by Arc-Plasma Deposition. ECS Transactions, 2015, 69, 657-661.	0.5	2
41	Ptâ€"Ni Nanoparticle-Stacking Thin Film: Highly Active Electrocatalysts for Oxygen Reduction Reaction. ACS Catalysis, 2015, 5, 2209-2212.	11.2	44
42	Oxygen reduction reaction activity and structural stability of Ptâ€"Au nanoparticles prepared by arc-plasma deposition. Physical Chemistry Chemical Physics, 2015, 17, 18638-18644.	2.8	38
43	Electrochemical Properties of Pt Epitaxial Layers Formed on Pd(111) in Ultra-High Vacuum. Journal of the Electrochemical Society, 2015, 162, F463-F467.	2.9	9
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45	Microscopic surface structures and ORR activities for vacuum-deposited Pt/Ni/Pt(111) and Pt/Ni/Pt(110) sandwich structures. Journal of Electroanalytical Chemistry, 2014, 724, 15-20.	3.8	12
46	Effective shell layer thickness of platinum for oxygen reduction reaction alloy catalysts. Physical Chemistry Chemical Physics, 2013, 15, 17771.	2.8	20
47	Structure and Electrochemical Stability of Pt-Enriched Ni/Pt(111) Topmost Surface Prepared by Molecular Beam Epitaxy. Journal of the Electrochemical Society, 2013, 160, F591-F596.	2.9	27
48	Oxygen Reduction Reaction Activities for Pt/Au(hkl) Bimetallic Surfaces Prepared by Molecular Beam Epitaxy. Journal of the Electrochemical Society, 2013, 160, F898-F904.	2.9	22
49	Electrochemical Stability of Topmost Surface of Pt-Enriched Ni/Pt(111) Prepared by Molecular Beam Epitaxy. ECS Transactions, 2013, 50, 1707-1713.	0.5	1
50	Oxygen Reduction Reaction Activity of Pt/Ni/Pt(111) Well-defined Model Catalyst Surfaces. ECS Transactions, 2013, 58, 565-573.	0.5	0
51	Platinum-Enriched Ni/Pt(111) Surfaces Prepared by Molecular Beam Epitaxy: Oxygen Reduction Reaction Activity and Stability. Materials Transactions, 2013, 54, 1735-1740.	1.2	8
52	Oxygen reduction reaction activities of Pt/Au(111) surfaces prepared by molecular beam epitaxy. Journal of Electroanalytical Chemistry, 2012, 685, 79-85.	3.8	21
53	Outermost Surface Structures and Oxygen Reduction Reaction Activities of Co/Pt(111) Bimetallic Systems Fabricated Using Molecular Beam Epitaxy. Journal of Physical Chemistry C, 2011, 115, 18589-18596.	3.1	35
54	Oxygen reduction reaction activities of Ni/Pt(111) model catalysts fabricated by molecular beam epitaxy. Electrochemistry Communications, 2010, 12, 1112-1115.	4.7	65

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55	Carbon Monoxide Adsorption on Cobalt-Deposited Platinum Single Crystal Surfaces Investigated by IR Reflection-Absorption and Low-Energy Electron Diffraction. E-Journal of Surface Science and Nanotechnology, 2010, 8, 161-166.	0.4	2
56	IRRAS and TPD Investigations of Carbon Monoxide Adsorption on MBE grown Fe on Pt(100). E-Journal of Surface Science and Nanotechnology, 2009, 7, 245-248.	0.4	2
57	Carbon Monoxide Adsorption on Ni/Pt(111) Surfaces Investigated by Infrared Reflection Absorption Spectroscopy. E-Journal of Surface Science and Nanotechnology, 2009, 7, 230-233.	0.4	6