

Jun-ichi Ozaki

List of Publications by Year in descending order

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103
papers

4,777
citations

159585

30
h-index

95266

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107
all docs

107
docs citations

107
times ranked

5602
citing authors

#	ARTICLE	IF	CITATIONS
1	Carbon Alloy Catalysts: Active Sites for Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2008, 112, 14706-14709.	3.1	474
2	A review of the stability and durability of non-precious metal catalysts for the oxygen reduction reaction in proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2015, 285, 334-348.	7.8	457
3	X-ray absorption analysis of nitrogen contribution to oxygen reduction reaction in carbon alloy cathode catalysts for polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2009, 187, 93-97.	7.8	448
4	Carbon Nitride as a Nonprecious Catalyst for Electrochemical Oxygen Reduction. <i>Journal of Physical Chemistry C</i> , 2009, 113, 20148-20151.	3.1	341
5	Preparation and oxygen reduction activity of BN-doped carbons. <i>Carbon</i> , 2007, 45, 1847-1853.	10.3	310
6	Critical advancements in achieving high power and stable nonprecious metal catalyst-based MEAs for real-world proton exchange membrane fuel cell applications. <i>Science Advances</i> , 2018, 4, eaar7180.	10.3	189
7	First-principles calculation of the electronic properties of graphene clusters doped with nitrogen and boron: Analysis of catalytic activity for the oxygen reduction reaction. <i>Physical Review B</i> , 2009, 80, .	3.2	177
8	Enhancement of oxygen reduction activity of nanoshell carbons by introducing nitrogen atoms from metal phthalocyanines. <i>Electrochimica Acta</i> , 2010, 55, 1864-1871.	5.2	164
9	Simultaneous doping of boron and nitrogen into a carbon to enhance its oxygen reduction activity in proton exchange membrane fuel cells. <i>Carbon</i> , 2006, 44, 3358-3361.	10.3	153
10	Hard Carbon Anodes for Na-ion Batteries: Toward a Practical Use. <i>ChemElectroChem</i> , 2015, 2, 1917-1920.	3.4	112
11	Enhancement of oxygen reduction activity by carbonization of furan resin in the presence of phthalocyanines. <i>Carbon</i> , 2006, 44, 1324-1326.	10.3	109
12	X-ray photoemission spectroscopy analysis of N-containing carbon-based cathode catalysts for polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2011, 196, 1006-1011.	7.8	98
13	Nitrogen-Doped Carbon Materials Prepared by Ammoxidation as Solid Base Catalysts for Knoevenagel Condensation and Transesterification Reactions. <i>Advanced Synthesis and Catalysis</i> , 2010, 352, 1476-1484.	4.3	92
14	Structures, physicochemical properties and oxygen reduction activities of carbons derived from ferrocene-poly(furfuryl alcohol) mixtures. <i>Journal of Applied Electrochemistry</i> , 2006, 36, 239-247.	2.9	85
15	A quantitative analysis of carbon edge sites and an estimation of graphene sheet size in high-temperature treated, non-porous carbons. <i>Carbon</i> , 2014, 80, 135-145.	10.3	85
16	Chemical Recycling of Phenol Resin by Supercritical Methanol. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 245-249.	3.7	72
17	Enhanced Catalytic Activity of Carbon Alloy Catalysts Codoped with Boron and Nitrogen for Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8933-8937.	3.1	70
18	Preparation of carbon alloy catalysts for polymer electrolyte fuel cells from nitrogen-containing rigid-rod polymers. <i>Journal of Power Sources</i> , 2010, 195, 5947-5951.	7.8	67

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19	Studies on electrochemical sodium storage into hard carbons with binder-free monolithic electrodes. <i>Journal of Power Sources</i> , 2016, 318, 41-48.	7.8	67
20	Hydrogen production by steam reforming of acetic acid: Comparison of conventional supported metal catalysts and metal-incorporated mesoporous smectite-like catalysts. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 110-117.	7.1	66
21	Indirect contribution of transition metal towards oxygen reduction reaction activity in iron phthalocyanine-based carbon catalysts for polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2012, 74, 254-259.	5.2	59
22	Effects of metal ions on the thermal decomposition of brown coal. <i>Fuel Processing Technology</i> , 1996, 46, 183-194.	7.2	52
23	Analyses of trace amounts of edge sites in natural graphite, synthetic graphite and high-temperature treated coke for the understanding of their carbon molecular structures. <i>Carbon</i> , 2017, 125, 146-155.	10.3	47
24	New insights into non-precious metal catalyst layer designs for proton exchange membrane fuel cells: Improving performance and stability. <i>Journal of Power Sources</i> , 2017, 344, 39-45.	7.8	43
25	Effects of surface treatment on cation exchange properties of Australian brown coals. <i>Fuel Processing Technology</i> , 1995, 43, 95-110.	7.2	41
26	Role of residual transition-metal atoms in oxygen reduction reaction in cobalt phthalocyanine-based carbon cathode catalysts for polymer electrolyte fuel cell. <i>Journal of Power Sources</i> , 2011, 196, 8346-8351.	7.8	38
27	Formation of uniformly and finely dispersed nanoshells by carbonization of cobalt-coordinated oxine-formaldehyde resin and their electrochemical oxygen reduction activity. <i>Carbon</i> , 2012, 50, 2941-2952.	10.3	37
28	Enhanced catalytic activity of nanoshell carbon co-doped with boron and nitrogen in the oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 15489-15496.	7.1	32
29	Effects of Ferrocene on Production of High Performance Carbon Electrodes from Poly(furfuryl) Tj ETQq1 1 0.784314 rgBT /Overlock 107	6.7	30
30	Single-Step Synthesis of W ₂ C Nanoparticle-Dispersed Carbon Electrocatalysts for Hydrogen Evolution Reactions Utilizing Phosphate Groups on Carbon Edge Sites. <i>ACS Omega</i> , 2016, 1, 689-695.	3.5	29
31	Understanding the chemical structure of carbon edge sites by using deuterium-labeled temperature-programmed desorption technique. <i>Carbon</i> , 2020, 161, 343-349.	10.3	29
32	A TG-MS study of poly(vinyl butyral)/phenol-formaldehyde resin blend fiber. <i>Carbon</i> , 2000, 38, 1515-1519.	10.3	27
33	Electric Double-Layer Capacitors from Activated Carbon Derived from Black Liquor. <i>Energy & Fuels</i> , 2010, 24, 1889-1893.	5.1	27
34	Electrochemical oxygen reduction activity of intermediate onion-like carbon produced by the thermal transformation of nanodiamond. <i>Carbon</i> , 2015, 87, 415-417.	10.3	26
35	The Role of Fe in the Preparation of Carbon Alloy Cathode Catalysts. <i>ECS Transactions</i> , 2009, 25, 463-467.	0.5	23
36	Influence of heat-treatment of Ketjen Black on the oxygen reduction reaction of Pt/C catalysts. <i>Journal of Power Sources</i> , 2012, 220, 173-179.	7.8	22

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37	The changes in the structure and some physical properties of mesocarbon microbeads by heat treatment. <i>Carbon</i> , 1987, 25, 697-701.	10.3	21
38	Novel N-Doped Carbon Cathode Catalyst for Polymer Electrolyte Membrane Fuel Cells Formed on Carbon Black. <i>Chemistry Letters</i> , 2009, 38, 396-397.	1.3	21
39	Preparation of Chemically Structure-Controlled BN-Doped Carbons for the Molecular Understanding of Their Surface Active Sites for Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2022, 12, 1288-1297.	11.2	21
40	Electrochemical behavior of carbon nanorod arrays having different graphene orientations and crystallinity. <i>Journal of Materials Chemistry</i> , 2009, 19, 4615.	6.7	19
41	In-Depth Analysis of Key Factors Affecting the Catalysis of Oxidized Carbon Blacks for Cellulose Hydrolysis. <i>ACS Catalysis</i> , 2022, 12, 892-905.	11.2	19
42	Role of carboxyl groups in the disintegration of brown coal briquettes by water sorption. <i>Fuel Processing Technology</i> , 1997, 50, 57-68.	7.2	18
43	Probing carbon edge exposure of iron phthalocyanine-based oxygen reduction catalysts by soft X-ray absorption spectroscopy. <i>Journal of Power Sources</i> , 2013, 223, 30-35.	7.8	18
44	Controlling Factor of Electrocatalytic Activity of Iron-containing Carbon Materials. <i>Chemistry Letters</i> , 1998, 27, 573-574.	1.3	14
45	Preparation of BN-doped carbon blacks by mechanochemical alloying of carbon and h-BN and its use as a catalyst for the oxygen reduction. <i>Tanso</i> , 2007, 2007, 153-157.	0.1	14
46	Carbon deposition on a Ni/Al ₂ O ₃ catalyst in low-temperature gasification using C ₆ -hydrocarbons as surrogate biomass tar. <i>Fuel Processing Technology</i> , 2012, 102, 30-34.	7.2	14
47	Synergistically enhanced oxygen reduction activity of iron-based nanoshell carbons by copper incorporation. <i>Carbon</i> , 2017, 116, 591-598.	10.3	14
48	Formation of non-planar carbon layers in naphthalene-pitch-derived carbon by addition of fullerene mixture and its influence on electrochemical oxygen reduction reaction. <i>Tanso</i> , 2011, 2011, 102-104.	0.1	14
49	Dispersion and Optical Absorption of Au and Ag Particles Supported on an Amorphous SiO ₂ Substrate. <i>Journal of Colloid and Interface Science</i> , 1994, 168, 473-477.	9.4	13
50	H ₂ S decomposition activity of TS carbon derived from furan resin. <i>Carbon</i> , 2001, 39, 1611-1612.	10.3	12
51	A quantitative analysis of a trace amount of hydrogen in high temperature heat-treated carbons. <i>Carbon</i> , 2012, 50, 3310-3314.	10.3	12
52	Synthesis of P- and N-doped carbon catalysts for the oxygen reduction reaction via controlled phosphoric acid treatment of folic acid. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 1497-1510.	2.8	11
53	Adsorption of cytochrome c on nanoshell carbon. <i>Carbon</i> , 2011, 49, 4505-4510.	10.3	9
54	An Ion-Sensitive Field Effect Transistor Using Metal-Coordinated Zeolite-Templated Carbons as a Three-Dimensional Graphene Nanoribbon Network. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	9

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55	Electrochemical Behavior of Iron-Carbon Composites Prepared from Ferrocene-Poly (furfuryl) Tj ETQq1 1 0.784314 ggBT /Overlock 10	0.784314	10
56	Carbonization of iron-treated Loy Yang coal. Fuel, 1999, 78, 489-499.	6.4	8
57	A study on pyrolysis and cross-link formation of poly(p-phenylene butadiyne) by thermoanalysis and spectroscopy. Journal of Analytical and Applied Pyrolysis, 2006, 77, 56-62.	5.5	8
58	Warped graphitic layers generated by oxidation of fullerene extraction residue and its oxygen reduction catalytic activity. Beilstein Journal of Nanotechnology, 2019, 10, 1391-1400.	2.8	8
59	Carbon Alloy Catalysts for Polymer Electrolyte Fuel Cells: Exploration of Materials and Understanding of Mechanisms. Electrochemistry, 2015, 83, 319-325.	1.4	7
60	Benzene hydrogenation activities of Ni catalyst supported on N- and B-doped carbons. Diamond and Related Materials, 2021, 119, 108550.	3.9	7
61	Estimation of the spatial distribution of carbon edge sites in a carbon structure using H ₂ desorption kinetics in temperature programmed desorption. Carbon, 2022, 196, 1054-1062.	10.3	7
62	Preparation of ZSM-5 nanoparticles supported on carbon substrate. Carbon, 2006, 44, 1243-1249.	10.3	6
63	Investigation on Deactivation and Regeneration of a Commercial Ni/Al ₂ O ₃ Catalyst in Coal Volatile Decomposition. Journal of Chemical Engineering of Japan, 2008, 41, 915-922.	0.6	6
64	Dispersibility in organic solvents of nanosized silica particles used in semiconductor package substrates. Chemical Engineering Journal, 2009, 155, 493-498.	12.7	6
65	Preparation of Carbon Alloy Catalysts from a Polyhydroxyamide with Iron Phthalocyanine via a Poly-biphenylenebisoxazole Composite. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2010, 23, 459-464.	0.3	6
66	Direct conversion of lignin to high-quality graphene-based materials via catalytic carbonization. RSC Advances, 2021, 11, 18702-18707.	3.6	6
67	Nanoshell-Containing Carbon Cathode Catalyst for Proton Exchange Membrane Fuel Cell from Herbaceous Plants Lignin. Smart Grid and Renewable Energy, 2013, 04, 10-15.	1.1	6
68	Influence of Fe ₂ O ₃ and CaCO ₃ Addition on the Coking of Gooneylla Coal. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2010, 96, 249-257.	0.4	5
69	Electrochemical Oxygen Reduction on Carbon Nitride. ECS Transactions, 2010, 28, 11-26.	0.5	5
70	Sculpture preparation of crystalline mesoporous carbons from nanoshell-containing carbon. Carbon, 2013, 61, 537-542.	10.3	5
71	Bulge forming of braided thermoplastic composite tubes under axial compression and internal pressure. Polymer Composites, 1996, 17, 115-123.	4.6	4
72	Differences in the Coking and Non-coking Coals from the Standpoint of Carbon Structure. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2006, 92, 157-163.	0.4	4

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73	Effect of oxidative treatment of carbon black on electrochemical activity of cytochrome c. Analytical Methods, 2012, 4, 1623.	2.7	4
74	Electrochemical Properties of an Atomically Dispersed Platinum Catalyst Formed on a Heat-treated Carbon Support. ChemistrySelect, 2016, 1, 3189-3196.	1.5	4
75	FEM Deformation Analysis of Textile Composite Tubes in Thermoforming Process.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2000, 66, 2858-2863.	0.2	2
76	Mechanochemical Treatment of Precursors of Carbon-Nanoshell-Containing Catalysts for the Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2016, 163, H223-H227.	2.9	2
77	Influence of Low-temperature Oxidation on Structure of Coke Making Coal. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2018, 104, 401-408.	0.4	2
78	Carbonization and Graphitization Behaviors of Fe-loaded Brown Coal and Electrocatalytic Activity of Derived Carbons. Tanso, 2001, 2001, 161-165.	0.1	2
79	Bulge Forming of FRTP Braided Tubes Using Fiber Orientation Rearrangement by Axial Compression.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1993, 59, 2863-2868.	0.2	1
80	Spherical Shape Thermoforming of Textile Thermoplastic Composite Tube.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1999, 65, 3425-3430.	0.2	1
81	Deformation Mechanism and Bending Limit of Textile Composite Tubes in Roll Bending Process.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1999, 65, 4854-4859.	0.2	1
82	Development of Roll Bending Process for Textile Composite Tubes.. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 1999, 65, 4535-4540.	0.2	1
83	Enhanced photoresponse of carbonaceous film/silicon junctions by doping with bromanil. Journal of Applied Physics, 2002, 91, 881-883.	2.5	1
84	Thermoforming of Textile Composite Pipe Fittings. JSME International Journal Series A-Solid Mechanics and Material Engineering, 2003, 46, 426-431.	0.4	1
85	Electronic Structures of Non-Pt Carbon Alloy Catalysts for Polymer Electrolyte Membrane Fuel Cells Revealed by Synchrotron Radiation Analyses. Materials Research Society Symposia Proceedings, 2011, 1318, 1.	0.1	1
86	Catalytic Carbons “ Cathode Catalytic Carbons. , 2013, , 103-111.		1
87	Effects of graphite oxide additions on the oxygen reduction reaction activity of a carbon alloy catalyst for a polymer electrolyte fuel cell cathode. Tanso, 2014, 2014, 159-164.	0.1	1
88	Preparation of carbon alloy catalysts from humic acid and their activities for the oxygen reduction reaction. Tanso, 2015, 2015, 94-100.	0.1	1
89	Influence of Low-temperature Oxidation on Structure of Coke Making Coal. ISIJ International, 2019, 59, 1465-1472.	1.4	1
90	Development of carbon alloy catalysts for a polymer electrolyte fuel cell. Tanso, 2014, 2014, 204-212.	0.1	1

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91	Modulation of the electronic state of carbon thin films by inorganic substrates. Carbon, 2022, 196, 313-319.	10.3	1
92	Multistep Pyrolysis of Fe Phthalocyanine and Phenolic Resin for Nonprecious Metal Cathode Catalysts. ECS Transactions, 2010, 33, 587-593.	0.5	0
93	The contribution of surface metal complexes to the catalytic activity of carbon nanoshell particles in an amorphous carbon matrix for the oxygen reduction reaction. Tanso, 2015, 2015, 195-200.	0.1	0
94	Supercritical Methanol Extraction of Loy Yang Coal.. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2001, 80, 274-277.	0.2	0
95	Preparation of Porous Carbon from Lithium Acetylide. Tanso, 2002, 2002, 266-269.	0.1	0
96	Carbon nanotubes prepared by meltspinning of core-shell polymer particles. Tanso, 2006, 2006, 333-335.	0.1	0
97	Electron microscopic studies on disintegration of core/shell polymer structure during heat treatment process in carbon nanotube preparation by polymer blend technique. Tanso, 2009, 2009, 57-60.	0.1	0
98	Study on Low CTE Materials for FC-BGA Substrate. Journal of Japan Institute of Electronics Packaging, 2010, 13, 543-551.	0.1	0
99	5r1/4Žã,«ãf1/4ãfœãf³ã,çãfã,ã,«ã,1/2ãf1/4ãf%è\$ äª²ã®ã´ã,CEã³/4ã\$ãªã´ã,CEã•ã,%ã. Electrochemistry, 2014, 82, 191-195.		0
100	An analysis of the molecular structure of graphite by estimating the small number of edge sites. Tanso, 2018, 2018, 222-226.	0.1	0
101	Chemical composition and structure of carbon surfaces and their influence on the activities of carbon catalysts for the oxygen reduction reaction. Tanso, 2019, 2019, 195-203.	0.1	0
102	Can electrical conductivity be a characterization tool for low-temperature carbon?. Tanso, 2021, 2021, 136-144.	0.1	0
103	Electrochemistry and Carbon Materials Chemistry: Preparation of Carbon-based Materials Using Controlled Carbonization for Advanced Electrochemical Applications. Electrochemistry, 2020, 88, 343-343.	1.4	0