

Masashi Okubo, å¸ä¹ä¸å¸

List of Publications by Year in descending order

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114
papers

7,590
citations

76294

40
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51562

86
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120
all docs

120
docs citations

120
times ranked

8472
citing authors

#	ARTICLE	IF	CITATIONS
1	Pseudocapacitance of MXene nanosheets for high-power sodium-ion hybrid capacitors. <i>Nature Communications</i> , 2015, 6, 6544.	5.8	873
2	Nanosize Effect on High-Rate Li-Ion Intercalation in LiCoO ₂ Electrode. <i>Journal of the American Chemical Society</i> , 2007, 129, 7444-7452.	6.6	690
3	Sodium-Ion Intercalation Mechanism in MXene Nanosheets. <i>ACS Nano</i> , 2016, 10, 3334-3341.	7.3	448
4	Sodium iron pyrophosphate: A novel 3.0 V iron-based cathode for sodium-ion batteries. <i>Electrochemistry Communications</i> , 2012, 24, 116-119.	2.3	313
5	MXene as a Charge Storage Host. <i>Accounts of Chemical Research</i> , 2018, 51, 591-599.	7.6	309
6	Intermediate honeycomb ordering to trigger oxygen redox chemistry in layered battery electrode. <i>Nature Communications</i> , 2016, 7, 11397.	5.8	232
7	Enhanced Li-Ion Accessibility in MXene Titanium Carbide by Steric Chloride Termination. <i>Advanced Energy Materials</i> , 2017, 7, 1601873.	10.2	212
8	Bimetallic Cyanide-Bridged Coordination Polymers as Lithium Ion Cathode Materials: Core@Shell Nanoparticles with Enhanced Cyclability. <i>Journal of the American Chemical Society</i> , 2013, 135, 2793-2799.	6.6	205
9	Fast Li-Ion Insertion into Nanosized LiMn ₂ O ₄ without Domain Boundaries. <i>ACS Nano</i> , 2010, 4, 741-752.	7.3	194
10	Switching Redox-Active Sites by Valence Tautomerism in Prussian Blue Analogues A _x Mn _y [Fe(CN) ₆]·nH ₂ O (A: K, Rb): Robust Frameworks for Reversible Li Storage. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2063-2071.	2.1	179
11	Electrode Properties of P ₂ Na _{2/3} Mn _y Co ₁ O ₂ as Cathode Materials for Sodium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2013, 117, 15545-15551.	1.5	174
12	Highly Reversible Oxygen-Redox Chemistry at 4.1 V in Na _{4/7} Mn _{1/7} O ₂ (Mn) Tj EIQqO O 0 ngBT /Overl		
13	High power Na-ion rechargeable battery with single-crystalline Na _{0.44} MnO ₂ nanowire electrode. <i>Journal of Power Sources</i> , 2012, 217, 43-46.	4.0	158
14	Electrochemical Mg ²⁺ intercalation into a bimetallic CuFe Prussian blue analog in aqueous electrolytes. <i>Journal of Materials Chemistry A</i> , 2013, 1, 13055.	5.2	151
15	Suppressed Activation Energy for Interfacial Charge Transfer of a Prussian Blue Analog Thin Film Electrode with Hydrated Ions (Li ⁺ , Na ⁺ , and Mg ²⁺). <i>Journal of Physical Chemistry C</i> , 2013, 117, 10877-10882.	1.5	150
16	Molecular Orbital Principles of Oxygen-Redox Battery Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 36463-36472.	4.0	146
17	Role of Ligand-to-Metal Charge Transfer in O ₃ -Type NaFeO ₂ ·NaNiO ₂ Solid Solution for Enhanced Electrochemical Properties. <i>Journal of Physical Chemistry C</i> , 2014, 118, 2970-2976.	1.5	137
18	Synthesis of Triaxial LiFePO ₄ Nanowire with a VGCF Core Column and a Carbon Shell through the Electrospinning Method. <i>ACS Applied Materials & Interfaces</i> , 2010, 2, 212-218.	4.0	121

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19	Fabrication of a Cyanide-Bridged Coordination Polymer Electrode for Enhanced Electrochemical Ion Storage Ability. <i>Journal of Physical Chemistry C</i> , 2012, 116, 8364-8369.	1.5	120
20	Negative dielectric constant of water confined in nanosheets. <i>Nature Communications</i> , 2019, 10, 850.	5.8	116
21	Off-stoichiometry in Alluaudite-type Sodium Iron Sulfate $\text{Na}_{2+x}\text{Fe}_{2-x}(\text{SO}_4)_3$ as an Advanced Sodium Battery Cathode Material. <i>ChemElectroChem</i> , 2015, 2, 1019-1023.	1.7	102
22	High rate sodium ion insertion into core-shell nanoparticles of Prussian blue analogues. <i>Chemical Communications</i> , 2014, 50, 1353-1355.	2.2	94
23	Redox Potential Paradox in NaMO_2 for Sodium-Ion Battery Cathodes. <i>Chemistry of Materials</i> , 2016, 28, 1058-1065.	3.2	93
24	Layered Na_2RuO_3 as a cathode material for Na-ion batteries. <i>Electrochemistry Communications</i> , 2013, 33, 23-26.	2.3	92
25	Determination of Activation Energy for Li Ion Diffusion in Electrodes. <i>Journal of Physical Chemistry B</i> , 2009, 113, 2840-2847.	1.2	84
26	Ion-Induced Transformation of Magnetism in a Bimetallic CuFe Prussian Blue Analogue. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 6269-6273.	7.2	84
27	Capacitive versus Pseudocapacitive Storage in MXene. <i>Advanced Functional Materials</i> , 2020, 30, 2000820.	7.8	74
28	Assembly of $\text{Na}_3\text{V}_2(\text{PO}_4)_3$ Nanoparticles Confined in a One-Dimensional Carbon Sheath for Enhanced Sodium-Ion Cathode Properties. <i>Chemistry - A European Journal</i> , 2014, 20, 12636-12640.	1.7	72
29	Control of Charge Transfer Phase Transition and Ferromagnetism by Photoisomerization of Spiropyran for an Organic-Inorganic Hybrid System, (SP)[Fe^{II} / Fe^{III} (dto) $_3$] (SP = spiropyran, dto =) Tj ETQq1 1 0.784314 rgBT /Overclock 10 7650 33 71 212-220.	1.7	71
30	Impedance spectroscopic study on interfacial ion transfers in cyanide-bridged coordination polymer electrode with organic electrolyte. <i>Electrochimica Acta</i> , 2012, 63, 139-145.	2.6	64
31	Coulombic self-ordering upon charging a large-capacity layered cathode material for rechargeable batteries. <i>Nature Communications</i> , 2019, 10, 2185.	5.8	62
32	Nonpolarizing oxygen-redox capacity without O-O dimerization in $\text{Na}_2\text{Mn}_3\text{O}_7$. <i>Nature Communications</i> , 2021, 12, 631.	5.8	62
33	Multiorbital bond formation for stable oxygen-redox reaction in battery electrodes. <i>Energy and Environmental Science</i> , 2020, 13, 1492-1500.	15.6	60
34	Ternary metal Prussian blue analogue nanoparticles as cathode materials for Li-ion batteries. <i>Dalton Transactions</i> , 2013, 42, 15881.	1.6	59
35	Magnetocaloric effect in hexacyanochromate Prussian blue analogs. <i>Physical Review B</i> , 2006, 73, .	1.1	53
36	An alluaudite $\text{Na}_{2+2x}\text{Fe}_{2-x}(\text{SO}_4)_3$ ($x=0.2$) derivative phase as insertion host for lithium battery. <i>Electrochemistry Communications</i> , 2015, 51, 19-22.	2.3	52

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37	Size effect on electrochemical property of nanocrystalline LiCoO ₂ synthesized from rapid thermal annealing method. <i>Solid State Ionics</i> , 2009, 180, 612-615.	1.3	51
38	Electrospinning Synthesis of Wire-Structured LiCoO ₂ for Electrode Materials of High-Power Li-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2012, 116, 10774-10780.	1.5	51
39	Precise Electrochemical Control of Ferromagnetism in a Cyanide-Bridged Bimetallic Coordination Polymer. <i>Inorganic Chemistry</i> , 2012, 51, 10311-10316.	1.9	48
40	Anisotropic Surface Effect on Electronic Structures and Electrochemical Properties of LiCoO ₂ . <i>Journal of Physical Chemistry C</i> , 2009, 113, 15337-15342.	1.5	45
41	Synthesis of LiNi _{0.5} Mn _{1.5} O ₄ and 0.5Li ₂ MnO ₃ â€“0.5LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ hollow nanowires by electrospinning. <i>CrystEngComm</i> , 2013, 15, 2592.	1.3	39
42	Dense Charge Accumulation in MXene with a Hydrate-Melt Electrolyte. <i>Chemistry of Materials</i> , 2019, 31, 5190-5196.	3.2	39
43	Electron delocalization in cyanide-bridged coordination polymer electrodes for Li-ion batteries studied by soft x-ray absorption spectroscopy. <i>Physical Review B</i> , 2011, 84, .	1.1	38
44	Li-ion and Na-ion insertion into size-controlled nickel hexacyanoferrate nanoparticles. <i>RSC Advances</i> , 2014, 4, 24955.	1.7	36
45	Enhancement of the Curie Temperature by Isomerization of Diarylethene (DAE) for an Organicâ€“Inorganic Hybrid System:â€“Co ₄ (OH) ₇ (DAE) _{0.5} Â·3H ₂ O. <i>Inorganic Chemistry</i> , 2006, 45, 10240-10247.	1.9	35
46	Topochemical synthesis of phase-pure Mo ₂ AlB ₂ through staging mechanism. <i>Chemical Communications</i> , 2019, 55, 9295-9298.	2.2	34
47	Designing positive electrodes with high energy density for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7407-7421.	5.2	34
48	Reversible Solid State Redox of an Octacyanometallate-Bridged Coordination Polymer by Electrochemical Ion Insertion/Extraction. <i>Inorganic Chemistry</i> , 2013, 52, 3772-3779.	1.9	32
49	Cobalt-Free O ₂ -Type Lithium-Rich Layered Oxides. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3630-A3633.	1.3	32
50	Control of magnetism by isomerization of intercalated molecules in organicâ€“inorganic hybrid systems. <i>Coordination Chemistry Reviews</i> , 2007, 251, 2665-2673.	9.5	31
51	Operando soft x-ray emission spectroscopy of LiMn ₂ O ₄ thin film involving Li ⁺ ion extraction/insertion reaction. <i>Electrochemistry Communications</i> , 2015, 50, 93-96.	2.3	29
52	Relationship between Electric Double-Layer Structure of MXene Electrode and Its Surface Functional Groups. <i>Chemistry of Materials</i> , 2022, 34, 2069-2075.	3.2	28
53	Vacancy-driven magnetocaloric effect in Prussian blue analogues. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 316, e569-e571.	1.0	27
54	Electrochemical properties of LiM _x Fe _{1-x} PO ₄ (x=0, 0.2, 0.4, 0.6, 0.8 and 1.0)/vapor grown carbon fiber coreâ€“sheath composite nanowire synthesized by electrospinning method. <i>Journal of Power Sources</i> , 2014, 248, 615-620.	4.0	27

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55	Reversible photomagnetism in a cobalt layered compound coupled with photochromic diarylethene. Solid State Communications, 2005, 134, 777-782.	0.9	26
56	Configuration-Interaction Full-Multiplet Calculation to Analyze the Electronic Structure of a Cyano-Bridged Coordination Polymer Electrode. Journal of Physical Chemistry C, 2012, 116, 24896-24901.	1.5	26
57	Temperature dependent local structure of LiCoO ₂ nanoparticles determined by Co K-edge X-ray absorption fine structure. Journal of Power Sources, 2013, 229, 272-276.	4.0	26
58	Stepwise Reduction of Electrochemically Lithiated Core-Shell Heterostructures Based on the Prussian Blue Analogue Coordination Polymers K _{0.1} Cu[Fe(CN) ₆] _{0.7} ·3.5H ₂ O and K _{0.1} Ni[Fe(CN) ₆] _{0.7} ·4.4H ₂ O. Chemistry of Materials, 2015, 27, 1524-1530.	3.2	26
59	Temperature Dependent Local Structure of Na _x CoO ₂ Cathode Material for Rechargeable Sodium-Ion Batteries. Journal of Physical Chemistry C, 2016, 120, 4227-4232.	1.5	26
60	Particle Size Effects on the Entropy Behavior of a Li _x FePO ₄ Electrode. ChemPhysChem, 2014, 15, 2156-2161.	1.0	25
61	Phase Separation of a Hexacyanoferrate-Bridged Coordination Framework under Electrochemical Na-ion Insertion. Inorganic Chemistry, 2014, 53, 3141-3147.	1.9	25
62	Oxygen redox in hexagonal layered Na _x TMO ₃ (TM = 4d elements) for high capacity Na ion batteries. Journal of Materials Chemistry A, 2018, 6, 3747-3753.	5.2	24
63	Distinguishing between High- and Low-Spin States for Divalent Mn in Mn-Based Prussian Blue Analogue by High-Resolution Soft X-ray Emission Spectroscopy. Journal of Physical Chemistry Letters, 2014, 5, 4008-4013.	2.1	22
64	Iron-Oxalato Framework with One-Dimensional Open Channels for Electrochemical Sodium-Ion Intercalation. Chemistry - A European Journal, 2015, 21, 1096-1101.	1.7	22
65	Anisotropic charge-transfer effects in the asymmetric Fe(CN) ₅ NO octahedron of sodium nitroprusside: a soft X-ray absorption spectroscopy study. Physical Chemistry Chemical Physics, 2014, 16, 7031-7036.	1.3	21
66	Kinetic square scheme in oxygen-redox battery electrodes. Energy and Environmental Science, 2022, 15, 2591-2600.	15.6	21
67	Interfacial Dissociation of Contact-Ion-Pair on MXene Electrodes in Concentrated Aqueous Electrolytes. Journal of the Electrochemical Society, 2019, 166, A3739-A3744.	1.3	20
68	Crystal structure and ferromagnetism of (n-C ₃ H ₇) ₄ N[CoIIFeIII(dto) ₃] (dto=C ₂ O ₂ S ₂). Solid State Communications, 2003, 126, 291-296.	0.9	19
69	Study on photomagnetism of 2-D magnetic compounds coupled with photochromic diarylethene cations. Synthetic Metals, 2005, 152, 461-464.	2.1	19
70	Electrochemical Li-Ion Intercalation in Octacyanotungstate-Bridged Coordination Polymer with Evidence of Three Magnetic Regimes. Inorganic Chemistry, 2016, 55, 7637-7646.	1.9	19
71	Redox-Driven Spin Transition in a Layered Battery Cathode Material. Chemistry of Materials, 2019, 31, 2358-2365.	3.2	19
72	Ferromagnetism and its photo-induced effect in 2D iron mixed-valence complex coupled with photochromic spiropyran. Synthetic Metals, 2005, 153, 473-476.	2.1	18

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73	Charge Storage Mechanism of RuO ₂ /Water Interfaces. Journal of Physical Chemistry C, 2017, 121, 18975-18981.	1.5	15
74	In Vivo Redox-Responsive Sol-Gel/Sol Transition of Star Block Copolymer Solution Based on Ionic Cross-Linking. Macromolecules, 2017, 50, 5539-5548.	2.2	15
75	A [Fe ^{III} (Tp)(CN) ₃] ⁻ scorpionate-based complex as a building block for designing ion storage hosts (Tp: hydrotrispyrazolylborate). Chemical Communications, 2018, 54, 5189-5192.	2.2	14
76	Visualization of Structural Heterogeneities in Particles of Lithium Nickel Manganese Oxide Cathode Materials by Ptychographic X-ray Absorption Fine Structure. Journal of Physical Chemistry Letters, 2021, 12, 5781-5788.	2.1	14
77	Combined Theoretical and Experimental Studies of Sodium Battery Materials. Chemical Record, 2019, 19, 792-798.	2.9	13
78	Phonon confinement effect on nanocrystalline LiCoO ₂ studied with Raman spectroscopy. Journal of Physics and Chemistry of Solids, 2008, 69, 2911-2915.	1.9	12
79	Mn 2p resonant X-ray emission clarifies the redox reaction and charge-transfer effects in LiMn ₂ O ₄ . Physical Chemistry Chemical Physics, 2019, 21, 18363-18369.	1.3	11
80	VGCF-core@LiMn _{0.4} Fe _{0.6} PO ₄ -sheath heterostructure nanowire for high rate Li-ion batteries. CrystEngComm, 2013, 15, 6638.	1.3	10
81	Electrochemical Properties of Heterosite FePO ₄ in Aqueous Mg ²⁺ Electrolytes. Electrochemistry, 2014, 82, 855-858.	0.6	10
82	Origin of charge transfer phase transition and ferromagnetism in (CnH _{2n+1}) ₄ N[FeII(FeIII(dto) ₃](dto=C ₂ O ₂ S ₂). Synthetic Metals, 2003, 137, 1231-1232.	2.1	9
83	Distinct local structure of nanoparticles and nanowires of V ₂ O ₅ probed by x-ray absorption spectroscopy. Applied Physics Letters, 2013, 103, .	1.5	9
84	Single Crystallization of Olivine Lithium Phosphate Nanowires using Oriented Attachments. Journal of Physical Chemistry C, 2014, 118, 7678-7682.	1.5	9
85	Effects of nanostructuring on the bond strength and disorder in V ₂ O ₅ cathode material for rechargeable ion-batteries. Physical Chemistry Chemical Physics, 2018, 20, 15288-15292.	1.3	9
86	Operando soft X-ray emission spectroscopy of the Fe ₂ O ₃ anode to observe the conversion reaction. Physical Chemistry Chemical Physics, 2019, 21, 26351-26357.	1.3	9
87	Oxygen Redox Promoted by Na Excess and Covalency in Hexagonal and Monoclinic Na _{2-x} RuO ₃ Polymorphs. Journal of the Electrochemical Society, 2019, 166, A5343-A5348.	1.3	8
88	A tricky water molecule coordinated to a verdazyl radical-iron(ii) complex: a multitechnique approach. Physical Chemistry Chemical Physics, 2014, 16, 9086.	1.3	7
89	Potentiometric Study to Reveal Reaction Entropy Behavior of Biphasic Na _{1+2x} V ₂ (PO ₄) ₃ Electrodes. Electrochemistry, 2016, 84, 234-237.	0.6	7
90	Correlation between the O 2p Orbital and Redox Reaction in LiMn _{0.6} Fe _{0.4} PO ₄ Nanowires Studied by Soft X-ray Absorption. ChemPhysChem, 2016, 17, 4110-4115.	1.0	7

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91	Square-Scheme Electrochemistry in Battery Electrodes. <i>Accounts of Materials Research</i> , 2022, 3, 33-41.	5.9	6
92	Solid-state electrochemistry of metal cyanides. <i>Comptes Rendus Chimie</i> , 2019, 22, 483-489.	0.2	5
93	Does Spinel Serve as a Rigid Framework for Oxygen Redox?. <i>Chemistry of Materials</i> , 2020, 32, 7181-7187.	3.2	5
94	Optimal water concentration for aqueous Li ⁺ intercalation in vanadyl phosphate. <i>Chemical Science</i> , 2021, 12, 4450-4454.	3.7	5
95	Oxygen Redox Versus Oxygen Evolution in Aqueous Electrolytes: Critical Influence of Transition Metals. <i>Advanced Science</i> , 2022, 9, e2104907.	5.6	5
96	Hybrid Organic-Inorganic Conductor Coupled with BEDT-TTF and Photochromic Nitrosyl Ruthenium Complex. <i>Bulletin of the Chemical Society of Japan</i> , 2005, 78, 1054-1060.	2.0	3
97	Soft X-ray Emission Studies on Hydrate-Melt Electrolytes. <i>Journal of Physical Chemistry B</i> , 2021, 125, 11534-11539.	1.2	3
98	HPO ₃ ²⁻ as a building unit for sodium-ion battery cathodes: 3.1 V operation of Na ₂ xFe(HPO ₃) ₂ (0 < i>x</i> < i>< 1). <i>Chemical Communications</i> , 2019, 55, 14155-14157.	2.2	2
99	Pseudocapacitors: Capacitive versus Pseudocapacitive Storage in MXene (<i>Adv. Funct. Mater.</i> 47/2020). <i>Advanced Functional Materials</i> , 2020, 30, 2070312.	7.8	2
100	Possible high-potential ilmenite type $N_{1-x}M_xO_3$ ($0 < x < 1$). <i>Chemical Communications</i> , 2019, 55, 14155-14157.	0.9	2
101	Lithium-Rich O ₂ -Type Li _{0.66} [Li _{0.22} Ru _{0.78}]O ₂ Positive Electrode Material. <i>Journal of the Electrochemical Society</i> , 2022, 169, 040536.	1.3	2
102	<i>Operando</i> resonant soft X-ray emission spectroscopy of the LiMn ₂ O ₄ cathode using an aqueous electrolyte solution. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 19177-19183.	1.3	2
103	Synthesis, crystal structure and possible proton conduction of Fe(H ₂ PO ₄) ₂ F. <i>Solid State Ionics</i> , 2019, 338, 134-137.	1.3	1
104	LiCoO ₂ Electrochemistry, 2008, 76, 349-353.	0.6	0
105	Development of Positive Electrode Materials for the High Rate Lithium Ion Battery by Nanostructure Control. <i>Key Engineering Materials</i> , 2010, 445, 109-112.	0.4	0
106	Pseudocapacitors: Enhanced Li-Ion Accessibility in MXene Titanium Carbide by Steric Chloride Termination (<i>Adv. Energy Mater.</i> 9/2017). <i>Advanced Energy Materials</i> , 2017, 7, .	10.2	0
107	Solid State Electrochemistry and Battery Application of Coordination Compounds. <i>Bulletin of Japan Society of Coordination Chemistry</i> , 2017, 69, 45-49.	0.1	0
108	Waste Heat Harvesting: Descriptor of Thermogalvanic Cell. <i>JPSJ News and Comments</i> , 2021, 18, 07.	0.2	0

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109	Computational Study on Possible High Potential Ilmenite Type Na1TMO3 (TM=3d, 4d Transition Metals) Cathodes Based on Oxygen Redox Reaction. ECS Meeting Abstracts, 2019, , .	0.0	0
110	MXenes for Batteries. , 2019, , 367-379.		0
111	Does Spinel Serve As a Rigid Framework for Oxygen Redox?. ECS Meeting Abstracts, 2020, MA2020-02, 322-322.	0.0	0
112	(Invited) Probing Redox Centers in Oxygen-Redox Electrodes Using Soft X-Ray Spectroscopy. ECS Meeting Abstracts, 2020, MA2020-02, 165-165.	0.0	0
113	(Invited) Coulombic Self-Ordering upon Charging a Large-Capacity Layered Cathode Material. ECS Meeting Abstracts, 2020, MA2020-02, 20-20.	0.0	0
114	(Invited) Capacitive and Pseudocapacitive Intercalation of Aqueous Ions in Layered Materials (MXenes). ECS Meeting Abstracts, 2020, MA2020-02, 600-600.	0.0	0