Kei Kubota

List of Publications by Year
in descending order

107 papers	14,856 citations	71102 41 h-index	42399 92 g-index
110 all docs	110 docs citations	110 times ranked	10387 citing authors

#	Article	IF	Citations
1	Research Development on Sodium-Ion Batteries. Chemical Reviews, 2014, 114, 11636-11682.	47.7	4,970
2	Potassium intercalation into graphite to realize high-voltage/high-power potassium-ion batteries and potassium-ion capacitors. Electrochemistry Communications, 2015, 60, 172-175.	4.7	882
3	Research Development on K-Ion Batteries. Chemical Reviews, 2020, 120, 6358-6466.	47.7	804
4	Towards Kâ€Ion and Naâ€Ion Batteries as â€œBeyond Liâ€Ionâ€. Chemical Record, 2018, 18, 459-479.	5.8	665
5	Reviewâ€"Practical Issues and Future Perspective for Na-Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A2538-A2550.	2.9	579
6	Negative electrodes for Na-ion batteries. Physical Chemistry Chemical Physics, 2014, 16, 15007.	2.8	555
7	A novel K-ion battery: hexacyanoferrate(<scp>ii</scp>)/graphite cell. Journal of Materials Chemistry A, 2017, 5, 4325-4330.	10.3	396
8	P2-type Na_{2/3}Ni_{1/3}Mn_{2/3â^’x}Ti_xO₂ as a new positive electrode for higher energy Na-ion batteries. Chemical Communications, 2014, 50, 3677-3680.	4.1	334
9	New O2/P2â€type Liâ€Excess Layered Manganese Oxides as Promising Multiâ€Functional Electrode Materials for Rechargeable Li/Na Batteries. Advanced Energy Materials, 2014, 4, 1301453.	19.5	307
10	A new electrode material for rechargeable sodium batteries: P2-type Na_{2/3}[Mg_{0.28}Mn_{0.72}]O₂ with anomalously high reversible capacity. Journal of Materials Chemistry A, 2014, 2, 16851-16855.	10.3	284
11	KVPO₄F and KVOPO₄toward 4 volt-class potassium-ion batteries. Chemical Communications, 2017, 53, 5208-5211.	4.1	262
12	Electrochemistry and Solidâ€State Chemistry of NaMeO₂ (Me = 3d Transition Metals). Advanced Energy Materials, 2018, 8, 1703415.	19.5	255
13	Black Phosphorus as a High-Capacity, High-Capability Negative Electrode for Sodium-Ion Batteries: Investigation of the Electrode/Electrolyte Interface. Chemistry of Materials, 2016, 28, 1625-1635.	6.7	238
14	Synthesis of hard carbon from argan shells for Na-ion batteries. Journal of Materials Chemistry A, 2017, 5, 9917-9928.	10.3	224
15	Sodium and Manganese Stoichiometry of P2â€Type Na_{2/3}MnO₂. Angewandte Chemie - International Edition, 2016, 55, 12760-12763.	13.8	217
16	P2- and P3-K_xCoO₂ as an electrochemical potassium intercalation host. Chemical Communications, 2017, 53, 3693-3696.	4.1	214
17	Layered oxides as positive electrode materials for Na-ion batteries. MRS Bulletin, 2014, 39, 416-422.	3.5	208
18	Sodium carboxymethyl cellulose as a potential binder for hard-carbon negative electrodes in sodium-ion batteries. Electrochemistry Communications, 2014, 44, 66-69.	4.7	182

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19	MgOâ€Template Synthesis of Extremely High Capacity Hard Carbon for Naâ€Ion Battery. Angewandte Chemie - International Edition, 2021, 60, 5114-5120.	13.8	169
20	Highly concentrated electrolyte solutions for 4 V class potassium-ion batteries. Chemical Communications, 2018, 54, 8387-8390.	4.1	159
21	New Insight into Structural Evolution in Layered NaCrO₂ during Electrochemical Sodium Extraction. Journal of Physical Chemistry C, 2015, 119, 166-175.	3.1	152
22	Structural Analysis of Sucrose-Derived Hard Carbon and Correlation with the Electrochemical Properties for Lithium, Sodium, and Potassium Insertion. Chemistry of Materials, 2020, 32, 2961-2977.	6.7	150
23	Effect of Hexafluorophosphate and Fluoroethylene Carbonate on Electrochemical Performance and the Surface Layer of Hard Carbon for Sodiumâ€Ion Batteries. ChemElectroChem, 2016, 3, 1856-1867.	3.4	147
24	Understanding the Structural Evolution and Redox Mechanism of a NaFeO₂â€“NaCoO₂ Solid Solution for Sodiumâ€Ion Batteries. Advanced Functional Materials, 2016, 26, 6047-6059.	14.9	132
25	Synthesizing higher-capacity hard-carbons from cellulose for Na- and K-ion batteries. Journal of Materials Chemistry A, 2018, 6, 16844-16848.	10.3	131
26	Pâ€²2-Na_{2/3}Mn_{0.9}Me_{0.1}O₂ (Me = Mg, Ti, Co, Ni, Cu, and) Tj ETQq0 0 0 rgBT /Over Materials, 2017, 29, 8958-8962.	6.7	124
27	Synthesis and electrochemical properties of Na-rich Prussian blue analogues containing Mn, Fe, Co, and Fe for Na-ion batteries. Journal of Power Sources, 2018, 378, 322-330.	7.8	120
28	Direct synthesis of oxygen-deficient Li2MnO3â^'x for high capacity lithium battery electrodes. Journal of Power Sources, 2012, 216, 249-255.	7.8	113
29	High-Capacity Hard Carbon Synthesized from Macroporous Phenolic Resin for Sodium-Ion and Potassium-Ion Battery. ACS Applied Energy Materials, 2020, 3, 135-140.	5.1	113
30	Polyanionic Compounds for Potassiumâ€Ion Batteries. Chemical Record, 2019, 19, 735-745.	5.8	102
31	Potassium Metal as Reliable Reference Electrodes of Nonaqueous Potassium Cells. Journal of Physical Chemistry Letters, 2019, 10, 3296-3300.	4.6	93
32	Combination of solid state NMR and DFT calculation to elucidate the state of sodium in hard carbon electrodes. Journal of Materials Chemistry A, 2016, 4, 13183-13193.	10.3	83
33	Understanding Particle-Size-Dependent Electrochemical Properties of Li₂MnO₃-Based Positive Electrode Materials for Rechargeable Lithium Batteries. Journal of Physical Chemistry C, 2016, 120, 875-885.	3.1	77
34	Stable and Unstable Diglyme-Based Electrolytes for Batteries with Sodium or Graphite as Electrode. ACS Applied Materials & Interfaces, 2019, 11, 32844-32855.	8.0	77
35	Concentration Effect of Fluoroethylene Carbonate on the Formation of Solid Electrolyte Interphase Layer in Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 28525-28532.	8.0	66
36	Origin of Enhanced Capacity Retention of P2-Type Na_{2/3}Ni_{1/3-}<i>_x</i>Mn_{2/3}Cu<i>_x</i>O₂ for Na-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A2368-A2373.	3.9	62

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37	Development of KPF₆/KFSA Binary-Salt Solutions for Long-Life and High-Voltage K-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 34873-34881.	8.0	62
38	Poly-Î³-glutamate Binder To Enhance Electrode Performances of P2-Na_{2/3}Ni_{1/3}Mn_{2/3}O₂ for Na-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 10986-10997.	8.0	53
39	Application of Ionic Liquid as K-Ion Electrolyte of Graphite//K₂Mn[Fe(CN)₆] Cell. ACS Energy Letters, 2020, 5, 2849-2857.	17.4	51
40	Structure and electrode reactions of layered rocksalt LiFeO2 nanoparticles for lithium battery cathode. Journal of Power Sources, 2011, 196, 6809-6814.	7.8	50
41	Na2CoPO4F as a High-voltage Electrode Material for Na-ion Batteries. Electrochemistry, 2014, 82, 909-911.	1.4	49
42	Role of diffusion-weighted imaging in evaluating therapeutic efficacy after transcatheter arterial chemoembolization for hepatocellular carcinoma. Oncology Reports, 2010, 24, 727-32.	2.6	41
43	Sodium and Manganese Stoichiometry of P2â€Type Na_{2/3}MnO₂. Angewandte Chemie, 2016, 128, 12952-12955.	2.0	41
44	Active material and interphase structures governing performance in sodium and potassium ion batteries. Chemical Science, 2022, 13, 6121-6158.	7.4	41
45	Nanometer-size Na cluster formation in micropore of hard carbon as origin of higher-capacity Na-ion battery. Npj Computational Materials, 2021, 7, .	8.7	39
46	A Layered Inorganicâ€"Organic Open Framework Material as a 4 V Positive Electrode with Highâ€Rate Performance for Kâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1902528.	19.5	37
47	Thermal Stability of Na_{<i>x</i>}CrO₂ for Rechargeable Sodium Batteries; Studies by High-Temperature Synchrotron X-ray Diffraction. ACS Applied Materials & Interfaces, 2016, 8, 32292-32299.	8.0	36
48	Early prediction of response to neoadjuvant chemotherapy in patients with breast cancer using diffusion-weighted imaging and gray-scale ultrasonography. Oncology Reports, 2014, 31, 1555-1560.	2.6	35
49	Phase I study of a new radiosensitizer containing hydrogen peroxide and sodium hyaluronate for topical tumor injection: A new enzyme-targeting radiosensitization treatment, Kochi Oxydol-Radiation Therapy for Unresectable Carcinomas, Type II (KORTUC II). International Journal of Oncology, 2009, 34, 609-18.	3.3	33
50	Correlation of carbonization condition with metallic property of sodium clusters formed in hard carbon studied using 23Na nuclear magnetic resonance. Carbon, 2019, 145, 712-715.	10.3	33
51	Impact of Mg and Ti doping in O3 type NaNi_{1/2}Mn_{1/2}O₂ on reversibility and phase transition during electrochemical Na intercalation. Journal of Materials Chemistry A, 2021, 9, 12830-12844.	10.3	32
52	Effect of Particle Size and Anion Vacancy on Electrochemical Potassium Ion Insertion into Potassium Manganese Hexacyanoferrates. ChemSusChem, 2021, 14, 1166-1175.	6.8	31
53	Correlation of liver parenchymal gadolinium-ethoxybenzyl diethylenetriaminepentaacetic acid enhancement and liver function in humans with hepatocellular carcinoma. Oncology Letters, 2012, 3, 990-994.	1.8	29
54	Application of modified styrene-butadiene-rubber-based latex binder to high-voltage operating LiCoO2 composite electrodes for lithium-ion batteries. Journal of Power Sources, 2020, 468, 228332.	7.8	27

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55	Phase evolution of electrochemically potassium intercalated graphite. Journal of Materials Chemistry A, 2021, 9, 11187-11200.	10.3	27
56	KFSA/glyme electrolytes for 4 V-class K-ion batteries. Journal of Materials Chemistry A, 2020, 8, 23766-23771.	10.3	26
57	Unraveling the Role of Doping in Selective Stabilization of NaMnO₂ Polymorphs: Combined Theoretical and Experimental Study. Chemistry of Materials, 2018, 30, 1257-1264.	6.7	24
58	Elucidating Influence of Mgâ€•and Cuâ€Doping on Electrochemical Properties of O3â€Na<i>_x</i>[Fe,Mn]O₂ for Naâ€Ion Batteries. Small, 2020, 16, e2006483.	10.0	24
59	Comparison of Ionic Transport Properties of Non-Aqueous Lithium and Sodium Hexafluorophosphate Electrolytes. Journal of the Electrochemical Society, 2021, 168, 040538.	2.9	24
60	Application of Acrylicâ€Rubberâ€Based Latex Binder to Highâ€Voltage Spinel Electrodes of Lithiumâ€Ion Batteries. ChemElectroChem, 2019, 6, 5070-5079.	3.4	23
61	1,3,2-Dioxathiolane 2,2-Dioxide as an Electrolyte Additive for K-Metal Cells. ACS Energy Letters, 2021, 6, 3643-3649.	17.4	23
62	Safety and effectiveness of a new enzyme-targeting radiosensitization treatment (KORTUC II) for intratumoral injection for low-LET radioresistant tumors. International Journal of Oncology, 2011, 39, 553-60.	3.3	22
63	Impact of Newly Developed Styreneâ€"Butadieneâ€"Rubber Binder on the Electrode Performance of High-Voltage LiNi_{0.5}Mn_{1.5}O₄ Electrode. ACS Applied Energy Materials, 2020, 3, 7978-7987.	5.1	22
64	Synthesis and electrochemical properties of nanosized LiFeO2 particles with a layered rocksalt structure for lithium batteries. Materials Research Bulletin, 2012, 47, 79-84.	5.2	21
65	All-Solid-State Potassium Polymer Batteries Enabled by the Effective Pretreatment of Potassium Metal. ACS Energy Letters, 2022, 7, 2244-2246.	17.4	20
66	Preparation and electrochemical properties of Li₂MoO₃/C composites for rechargeable Li-ion batteries. Physical Chemistry Chemical Physics, 2016, 18, 28556-28563.	2.8	19
67	Non-Surgical Breast-Conserving Treatment (KORTUC-BCT) Using a New Radiosensitization Method (KORTUC II) for Patients with Stage I or II Breast Cancer. Cancers, 2015, 7, 2277-2289.	3.7	17
68	Development of advanced electrolytes in Na-ion batteries: application of the Red Moon method for molecular structure design of the SEI layer. RSC Advances, 2021, 12, 971-984.	3.6	14
69	Structural change during chargeâ€"discharge for iron substituted lithium manganese oxide. Journal of Power Sources, 2016, 318, 18-25.	7.8	13
70	Synthesis and Electrochemical Performance of C-Base-Centered Lepidocrocite-like Titanates for Na-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 3630-3635.	5.1	12
71	Electrochemistry and Solid-State Chemistry of Layered Oxides for Li-, Na-, and K-Ion Batteries. Electrochemistry, 2020, 88, 507-514.	1.4	12
72	States of thermochemically or electrochemically synthesized NaxPy compounds analyzed by solid state 23Na and 31P nuclear magnetic resonance with theoretical calculation. Journal of Power Sources, 2019, 413, 418-424.	7.8	11

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73	MgOâ€Template Synthesis of Extremely High Capacity Hard Carbon for Naâ€Ion Battery. Angewandte Chemie, 2021, 133, 5174-5180.	2.0	11
74	A vanadium-based oxide-phosphate-pyrophosphate framework as a 4 V electrode material for K-ion batteries. Chemical Science, 2021, 12, 12383-12390.	7.4	10
75	Na3V2O2(PO4)2F3-2 as a stable positive electrode for potassium-ion batteries. Journal of Power Sources, 2021, 493, 229676.	7.8	10
76	Structural change induced by electrochemical sodium extraction from layered Oâ€²3-NaMnO₂. Journal of Materials Chemistry A, 2021, 9, 26810-26819.	10.3	10
77	Lithium Magnesium Tungstate Solid as an Additive into Li(Ni_{1/3}Mn_{1/3}Co_{1/3})O₂ Electrodes for Li-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A5430-A5436.	2.9	9
78	Structural Investigation of Quaternary Layered Oxides upon Na-Ion Deinsertion. Inorganic Chemistry, 2020, 59, 7408-7414.	4.0	9
79	Evaluation of Changes in Tumor Shadows and Microcalcifications on Mammography Following KORTUC II, a New Radiosensitization Treatment without any Surgical Procedure for Elderly Patients with Stage I and II Breast Cancer. Cancers, 2011, 3, 3496-3505.	3.7	7
80	Effect of diphenylethane as an electrolyte additive to enhance high-temperature durability of LiCoO2/graphite cells. Electrochimica Acta, 2018, 270, 120-128.	5.2	7
81	A phosphite-based layered framework as a novel positive electrode material for Na-ion batteries. Journal of Materials Chemistry A, 2021, 9, 5045-5052.	10.3	7
82	Superconcentrated NaFSAâ€“KFSA Aqueous Electrolytes for 2 V-Class Dual-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 23507-23517.	8.0	7
83	Computed Tomography Demonstration of the Production and Distribution of Oxygen Gas Following Intratumoral Injection of a New Radiosensitizer (KORTUC) for Patients with Breast Cancerâ€”Is Intratumoral Injection Not an Ideal Approach to Solve the Major Problem of Tumor Hypoxia in Radiotherapy?. Cancers, 2016, 8, 43.	3.7	6
84	Effect of Substituted Styreneâ€Butadiene Rubber Binders on the Stability of 4.5 Vâ€Charged LiCoO₂ Electrode. ChemElectroChem, 2021, 8, 4345-4352.	3.4	5
85	Enhanced Electrochemical Properties of KTiOPO₄â€“rGO Negative Electrode for Sodium and Potassium Ion Batteries. Journal of Physical Chemistry C, 2021, 125, 24823-24830.	3.1	5
86	Synthesis and electrode characteristics of solid solution LiMn1âˆ’xFexPO4(OH) (0â‰xâ‰0.3) with tavorite structure for lithium batteries. Journal of Power Sources, 2012, 205, 394-401.	7.8	4
87	High-pressure synthesis and electrochemical properties of lithium transition metal oxides with layered rock-salt structure. Journal of Power Sources, 2014, 252, 1-7.	7.8	4
88	Optimizing Micrometer-Sized Sn Powder Composite Electrodes for Sodium-Ion Batteries. Electrochemistry, 2019, 87, 70-77.	1.4	4
89	Power Doppler and gray-scale sonography standardized by BI-RADS for the differentiation of benign postoperative lesion and local recurrence after breast-conserving therapy. Oncology Reports, 2011, 26, 1357-62.	2.6	3
90	La₂Ni_{0.5}Li_{0.5}O₄ Modified Single Polycrystalline Particles of NMC622 for Improved Capacity Retention in High-Voltage Lithium-Ion Batteries. Journal of the Electrochemical Society, 2021, 168, 110505.	2.9	3

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91	Electrode materials for K-ion batteries. , 2023, , 83-127.		3
92	Diagnostic accuracy of mammography, ultrasonography and magnetic resonance imaging in the detection of intraductal spread of breast cancer following neoadjuvant chemotherapy. Oncology Reports, 2007, 17, 915-8.	2.6	3
93	Facile Material Design Concept for Co-Free Lithium Excess Nickel-Manganese Oxide as High-Capacity Positive Electrode Material. Journal of the Electrochemical Society, 0, , .	2.9	2
94	Study of electrochemical alkali insertion into carbonaceous materials. , 2014, , .		1
95	From Lithium to Sodium and Potassium Batteries. , 2019, , 181-219.		1
96	P2-type Na<inf>x</inf> [Fe,Ni,Mn]O<inf>2</inf> for high capacity Na-ion batteries. , 2014, , .		0
97	Rechargeable Na-ion batteries for large format applications. , 2014, , .		0
98	KPF6-KFSA Binary Salt Electrolytes for 4 V-Class Potassium Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
99	(Invited) On the NaMeO2 (Me = 3d metal) for Na-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
100	2 V-Class Aqueous Multi-Ion Batteries Realized By Superconcentrated Na/K Electrolytes. ECS Meeting Abstracts, 2019, , .	0.0	0
101	(Keynote) Polyanionic Compounds for K-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
102	K2[(VO)2(HPO4)2(C2O4)] and K x VOPO4 as 4 V-Class Positive Electrode Materials for K-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
103	(Invited) Functional Binders for Li-, Na-, and K-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
104	(Invited) Research Development on K-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 25-25.	0.0	0
105	Effect of Particle Size and Anion Vacancies on Electrochemical Performances of Potassium Manganese Hexacyanoferrate for Potassium-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 170-170.	0.0	0
106	(Invited) Sodium Insertion Carbon Materials As â€œBeyond Li-GICâ€. ECS Meeting Abstracts, 2020, MA2020-02, 559-559.	0.0	0
107	Structural change and charge compensation mechanism for Li1+(Fe0.1Ni0.1Mn0.8)1-O2 (0 < x <1/3) positive electrode material during electrochemical activation. Materials Research Bulletin, 2022, 149, 111743.	5.2	0