Chia-Chen Li

List of Publications by Year
in descending order

78	2,026	24	42
papers	citations	h-index	g-index
		257450	265206

81	81	81	2178
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Using conductive carbon fabric to fabricate binderâ€free Niâ€rich cathodes for Liâ€ion batteries. International Journal of Energy Research, 2022, 46, 4671-4679.	4.5	4
2	Advantages of using carbon fabric over Cu foil as conductive matrix for anodes of micro- and nano-sized Si. Materials Research Bulletin, 2022, 148, 111690.	5.2	8
3	Microencapsulated Liquid Metals for the Autonomous Restoration of In-Mold Electronic Circuits. ACS Applied Electronic Materials, 2022, 4, 936-945.	4.3	2
4	Flexible thermoelectric generators prepared by dispenser printing technology. Materials Chemistry and Physics, 2022, 287, 126269.	4.0	6
5	Construction of an Additional Hierarchical Porous Framework in Carbon Fabric for Applications in Energy Storage. Chemistry of Materials, 2022, 34, 8127-8137.	6.7	6
6	Well-Dispersed Garnet Crystallites for Applications in Solid-State Liâ€“S Batteries. ACS Applied Materials & Interfaces, 2021, 13, 11995-12005.	8.0	14
7	TiO2-based microsphere with large pores to improve the electrochemical performance of Li-ion anodes. Ceramics International, 2021, 47, 12038-12046.	4.8	8
8	Good Structural Stability of Si Anodes Achieved through Dispersant Addition and Use of Carbon Fabric as Conductive Framework. Journal of the Electrochemical Society, 2021, 168, 060517.	2.9	3
9	Aqueous Processed Ni-Rich Li(Ni_{0.8}Co_{0.1}Mn_{0.1})O₂ Cathodes Along with Water-Based Binders and a Carbon Fabric as 3-D Conductive Host. Journal of the Electrochemical Society, 2021, 168, 120538.	2.9	5
10	Synthesis and application of self-healing microcapsules containing curable glue. Materials Chemistry and Physics, 2020, 240, 122161.	4.0	16
11	Carbon-encapsulated gigaporous microsphere as potential Si anode-active material for lithium-ion batteries. Carbon, 2020, 160, 255-264.	10.3	30
12	Nano-carbon-fiber-penetrated sulfur crystals as potential cathode active material for high-performance lithiumâ€“sulfur batteries. Carbon, 2020, 159, 401-411.	10.3	14
13	Development and experimental validation of a hybrid selective laser melting and CNC milling system. Additive Manufacturing, 2020, 36, 101550.	3.0	12
14	Effects of surface modification and organic binder type on cell performance of water-processed Ni-rich Li(Ni0.8Co0.1Mn0.1)O2 cathodes. Journal of Power Sources, 2020, 472, 228552.	7.8	26
15	Encapsulating Well-Dispersed Carbon Nanoparticles for Applications in the Autonomous Restoration of Electronic Circuits. ACS Applied Materials & Interfaces, 2020, 12, 38690-38699.	8.0	6
16	Water-Based Process to the Preparation of Nickel-Rich Li(Ni_{0.8}Co_{0.1}Mn_{0.1})O₂ Cathode. Journal of the Electrochemical Society, 2020, 167, 100504.	2.9	18
17	New Brush Copolymers as an Effective Dispersant for Stabilizing Concentrated Suspensions of Silver Nanoparticles. Langmuir, 2020, 36, 3377-3385.	3.5	3
18	Using a Brush Copolymer as Efficient Dispersant for the Preparation of Highly Stabilized Ag Nanoparticles in Aqueous Suspensions. Journal of Surfactants and Detergents, 2020, 23, 841-851.	2.1	0

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19	Highly symmetric gigaporous carbon microsphere as conductive host for sulfur to achieve high areal capacity for lithiumâ€"sulfur batteries. Journal of Power Sources, 2020, 451, 227818.	7.8	14
20	Distribution Uniformity of Water-Based Binders in Si Anodes and the Distribution Effects on Cell Performance. ACS Sustainable Chemistry and Engineering, 2020, 8, 6868-6876.	6.7	24
21	In situ cross-linked poly(ether urethane) elastomer as a binder for high-performance Si anodes of lithium-ion batteries. Electrochimica Acta, 2019, 327, 135011.	5.2	25
22	Dispersion of microcapsules for the improved thermochromic performance of smart coatings. RSC Advances, 2019, 9, 24175-24183.	3.6	25
23	Dispersion of Poly(urea-formaldehyde)-Based Microcapsules for Self-Healing and Anticorrosion Applications. Langmuir, 2019, 35, 7871-7878.	3.5	33
24	Facile Synthesis of Hierarchical Sulfur Composites for Lithiumâ€"Sulfur Batteries. ChemElectroChem, 2019, 6, 2438-2447.	3.4	2
25	Effects of interactions between binders and different-sized silicons on dispersion homogeneity of anodes and electrochemistry of lithium-silicon batteries. Journal of Power Sources, 2019, 409, 38-47.	7.8	22
26	A new porous structure with dispersed nano-TiO2 in a three-dimensional carbon skeleton for achieving high photocatalytic activity. Microporous and Mesoporous Materials, 2019, 276, 62-67.	4.4	20
27	Distinct dispersion stability of various TiO2 nanopowders using ammonium polyacrylate as dispersant. Ceramics International, 2018, 44, 5131-5138.	4.8	17
28	Preparation of highly dispersed and concentrated aqueous suspensions of nanodiamonds using novel diblock dispersants. Journal of Colloid and Interface Science, 2018, 520, 119-126.	9.4	20
29	Dispersion of aluminum-doped zinc oxide nanopowder with high solid content in ethylene glycol. Powder Technology, 2018, 327, 1-8.	4.2	7
30	Poly(4â€styrene sulfonic acid) to Disperse Graphene for Applications in Lithiumâ€"Sulfur Batteries. ChemElectroChem, 2018, 5, 3821-3821.	3.4	0
31	Poly(4â€styrene sulfonic acid) to Disperse Graphene for Applications in Lithiumâ€Sulfur Batteries. ChemElectroChem, 2018, 5, 3835-3840.	3.4	4
32	Microencapsulating inorganic and organic flame retardants for the safety improvement of lithium-ion batteries. Solid State Ionics, 2018, 323, 56-63.	2.7	19
33	Communicationâ€"Gelatinization of Guar Gum and Its Effects on the Dispersion and Electrochemistry of Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2018, 165, A2058-A2060.	2.9	13
34	Dispersion Homogeneity and Electrochemical Performance of Si Anodes with the Addition of Various Water-Based Binders. Journal of the Electrochemical Society, 2018, 165, A2239-A2246.	2.9	21
35	A smart hemicapsule with multiple dynamic functions. Materials Horizons, 2018, 5, 1092-1099.	12.2	4
36	Low-cost and sustainable corn starch as a high-performance aqueous binder in silicon anodes via in situ cross-linking. Journal of Power Sources, 2018, 396, 459-466.	7.8	49

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37	Boehmite-based Microcapsules as Flame-retardants for Lithium-ion Batteries. Electrochimica Acta, 2017, 228, 597-603.	5.2	21
38	New Approach for the Synthesis of Nanozirconia Fortified Microcapsules. Langmuir, 2017, 33, 5843-5851.	3.5	10
39	Gelation mechanism of organic additives with LiFePO4 in the water-based cathode slurries. Ceramics International, 2017, 43, S765-S770.	4.8	7
40	Dispersion of aluminumâ€doped zinc oxide nanopowder in nonâ€aqueous suspensions. Journal of the American Ceramic Society, 2017, 100, 5020-5029.	3.8	9
41	Efficient dispersants for the dispersion of gallium zinc oxide nanopowder in aqueous suspensions. Journal of the American Ceramic Society, 2017, 100, 920-928.	3.8	13
42	Newly designed diblock dispersant for powder stabilization in water-based suspensions. Journal of Colloid and Interface Science, 2017, 506, 180-187.	9.4	19
43	Effects of sp2- and sp3-carbon coatings on dissolution and electrochemistry of water-based LiFePO4 cathodes. Journal of Applied Electrochemistry, 2017, 47, 1065-1072.	2.9	4
44	Synthesis of conductive microcapsules for fabricating restorable circuits. Journal of Materials Chemistry A, 2017, 5, 25583-25593.	10.3	16
45	Poly(methacrylate)â€derived diblock dispersant for TiO₂ in aqueous suspensions. Journal of the American Ceramic Society, 2017, 100, 4961-4964.	3.8	4
46	Selectivity of Hydrophilic and Hydrophobic TiO₂ for Organicâ€Based Dispersants. Journal of the American Ceramic Society, 2017, 100, 56-64.	3.8	9
47	Water-soluble polyethylenimine as an efficient dispersant for gallium zinc oxide nanopowder in organic-based suspensions. Powder Technology, 2017, 305, 226-231.	4.2	13
48	Encapsulation of flame retardants for application in lithium-ion batteries. Journal of Power Sources, 2017, 338, 82-90.	7.8	30
49	Efficient Dispersants for TiO₂ Nanopowder in Organic Suspensions. Journal of the American Ceramic Society, 2016, 99, 445-451.	3.8	26
50	Newly Designed Copolymers for Fabricating Particles with Highly Porous Architectures. Chemistry of Materials, 2016, 28, 6089-6095.	6.7	20
51	Effect of surface hydroxyl groups on the dispersion of ceramic powders. Materials Chemistry and Physics, 2016, 172, 1-5.	4.0	20
52	Dispersion, agglomeration, and gelation of LiFePO4 in water-based slurry. Journal of Power Sources, 2016, 310, 47-53.	7.8	36
53	Effects of capping agents on the dispersion of silver nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 419, 209-215.	4.7	50
54	Gelation and Degelation of <scp>PVA</scp> in Aqueous <scp><scp>BaTiO</scp></scp>₃ Slurries. Journal of the American Ceramic Society, 2013, 96, 436-441.	3.8	4

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55	Gelation or dispersion of LiFePO4 in water-based slurry?. Journal of Power Sources, 2013, 241, 400-403.	7.8	23
56	Importance of binder compositions to the dispersion and electrochemical properties of water-based LiCoO2 cathodes. Journal of Power Sources, 2013, 227, 204-210.	7.8	71
57	Interactions between organic additives and active powders in water-based lithium iron phosphate electrode slurries. Journal of Power Sources, 2012, 220, 413-421.	7.8	67
58	Binder Distributions in Water-Based and Organic-Based LiCoO2 Electrode Sheets and Their Effects on Cell Performance. Journal of the Electrochemical Society, 2011, 158, A1361.	2.9	101
59	Effects of compositional impurity on surface chemistry of TiO2 nanopowder and its chemical interactions with dispersants. Materials Chemistry and Physics, 2011, 131, 400-405.	4.0	5
60	Effects of Surface-coated Carbon on the Chemical Selectivity for Water-Soluble Dispersants of LiFePO₄. Journal of the Electrochemical Society, 2011, 158, A828-A834.	2.9	31
61	Preparation of clear colloidal solutions of detonation nanodiamond in organic solvents. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 353, 52-56.	4.7	104
62	Efficient hydroxylation of BaTiO3 nanoparticles by using hydrogen peroxide. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 361, 143-149.	4.7	58
63	Effects of Interactions Among BaTiO₃, PVA, and B₂O₃ on the Rheology of Aqueous BaTiO₃ Suspensions. Journal of the American Ceramic Society, 2010, 93, 3049-3051.	3.8	9
64	Surface Chemistry and Dispersion Property of TiO₂ Nanoparticles. Journal of the American Ceramic Society, 2010, 93, 4008-4010.	3.8	22
65	Using Poly(4-Styrene Sulfonic Acid) to Improve the Dispersion Homogeneity of Aqueous-Processed LiFePO[sub 4] Cathodes. Journal of the Electrochemical Society, 2010, 157, A517.	2.9	56
66	An efficient approach to derive hydroxyl groups on the surface of barium titanate nanoparticles to improve its chemical modification ability. Journal of Colloid and Interface Science, 2009, 329, 300-305.	9.4	140
67	A new and acid-exclusive method for dispersing carbon multi-walled nanotubes in aqueous suspensions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 297, 275-281.	4.7	39
68	Effects of pH on the dispersion and cell performance of LiCoO2 cathodes based on the aqueous process. Journal of Materials Science, 2007, 42, 5773-5777.	3.7	46
69	Aqueous processing of lithium-ion battery cathodes using hydrogen peroxide-treated vapor-grown carbon fibers for improvement of electrochemical properties. Journal of Materials Science, 2007, 42, 10118-10123.	3.7	25
70	A novel and efficient water-based composite binder for LiCoO2 cathodes in lithium-ion batteries. Journal of Power Sources, 2007, 173, 985-989.	7.8	47
71	Improvements of Dispersion Homogeneity and Cell Performance of Aqueous-Processed LiCoO[sub 2] Cathodes by Using Dispersant of PAAâ€“NH[sub 4]. Journal of the Electrochemical Society, 2006, 153, A809.	2.9	104
72	Dispersion of Nano-Sized gamma-Alumina Powder in Non-Polar Solvents. Journal of the American Ceramic Society, 2006, 89, 882-887.	3.8	66

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73	Effects of ethylene glycol, thickness, and B2O3 on PVA distribution in dried BaTiO3 green tape. Materials Chemistry and Physics, 2005, 94, 78-86.	4.0	9
74	Effects of PAA-NH[sub 4] Addition on the Dispersion Property of Aqueous LiCoO[sub 2] Slurries and the Cell Performance of As-Prepared LiCoO[sub 2] Cathodes. Electrochemical and Solid-State Letters, 2005, 8, A509.	2.2	52
75	Colloidal stability of CuO nanoparticles in alkanes via oleate modifications. Materials Letters, 2004, 58, 3903-3907.	2.6	82
76	Interactions of Organic Additives with Boric Oxide in Aqueous Barium Titanate Suspensions. Journal of the American Ceramic Society, 2002, 85, 1441-1448.	3.8	24
77	Interaction between Dissolved Ba²⁺ and PAAâ€NH₄ Dispersant in Aqueous Barium Titanate Suspensions. Journal of the American Ceramic Society, 2002, 85, 1449-1455.	3.8	18
78	Dissolution and Dispersion Behavior of Barium Carbonate in Aqueous Suspensions. Journal of the American Ceramic Society, 2002, 85, 2977-2983.	3.8	16