Chia-Chen Li

List of Publications by Year
in descending order

78 papers	2,026 citations	257450 24 h-index	265206 42 g-index
81 all docs	81 docs citations	81 times ranked	2178 citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	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
5	Colloidal stability of CuO nanoparticles in alkanes via oleate modifications. Materials Letters, 2004, 58, 3903-3907.	2.6	82
6	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
7	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
8	Dispersion of Nano-Sized gamma-Alumina Powder in Non-Polar Solvents. Journal of the American Ceramic Society, 2006, 89, 882-887.	3.8	66
9	Efficient hydroxylation of BaTiO3 nanoparticles by using hydrogen peroxide. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 361, 143-149.	4.7	58
10	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
11	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
12	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
13	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
14	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
15	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
16	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
17	Dispersion, agglomeration, and gelation of LiFePO4 in water-based slurry. Journal of Power Sources, 2016, 310, 47-53.	7.8	36
18	Dispersion of Poly(urea-formaldehyde)-Based Microcapsules for Self-Healing and Anticorrosion Applications. Langmuir, 2019, 35, 7871-7878.	3.5	33

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19	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
20	Encapsulation of flame retardants for application in lithium-ion batteries. Journal of Power Sources, 2017, 338, 82-90.	7.8	30
21	Carbon-encapsulated gigaporous microsphere as potential Si anode-active material for lithium-ion batteries. Carbon, 2020, 160, 255-264.	10.3	30
22	Efficient Dispersants for TiO₂ Nanopowder in Organic Suspensions. Journal of the American Ceramic Society, 2016, 99, 445-451.	3.8	26
23	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
24	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
25	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
26	Dispersion of microcapsules for the improved thermochromic performance of smart coatings. RSC Advances, 2019, 9, 24175-24183.	3.6	25
27	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
28	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
29	Gelation or dispersion of LiFePO4 in water-based slurry?. Journal of Power Sources, 2013, 241, 400-403.	7.8	23
30	Surface Chemistry and Dispersion Property of TiO₂ Nanoparticles. Journal of the American Ceramic Society, 2010, 93, 4008-4010.	3.8	22
31	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
32	Boehmite-based Microcapsules as Flame-retardants for Lithium-ion Batteries. Electrochimica Acta, 2017, 228, 597-603.	5.2	21
33	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
34	Newly Designed Copolymers for Fabricating Particles with Highly Porous Architectures. Chemistry of Materials, 2016, 28, 6089-6095.	6.7	20
35	Effect of surface hydroxyl groups on the dispersion of ceramic powders. Materials Chemistry and Physics, 2016, 172, 1-5.	4.0	20
36	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

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37	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
38	Newly designed diblock dispersant for powder stabilization in water-based suspensions. Journal of Colloid and Interface Science, 2017, 506, 180-187.	9.4	19
39	Microencapsulating inorganic and organic flame retardants for the safety improvement of lithium-ion batteries. Solid State Ionics, 2018, 323, 56-63.	2.7	19
40	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
41	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
42	Distinct dispersion stability of various TiO2 nanopowders using ammonium polyacrylate as dispersant. Ceramics International, 2018, 44, 5131-5138.	4.8	17
43	Dissolution and Dispersion Behavior of Barium Carbonate in Aqueous Suspensions. Journal of the American Ceramic Society, 2002, 85, 2977-2983.	3.8	16
44	Synthesis of conductive microcapsules for fabricating restorable circuits. Journal of Materials Chemistry A, 2017, 5, 25583-25593.	10.3	16
45	Synthesis and application of self-healing microcapsules containing curable glue. Materials Chemistry and Physics, 2020, 240, 122161.	4.0	16
46	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
47	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
48	Well-Dispersed Garnet Crystallites for Applications in Solid-State Liâ€“S Batteries. ACS Applied Materials & Interfaces, 2021, 13, 11995-12005.	8.0	14
49	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
50	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
51	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
52	Development and experimental validation of a hybrid selective laser melting and CNC milling system. Additive Manufacturing, 2020, 36, 101550.	3.0	12
53	New Approach for the Synthesis of Nanozirconia Fortified Microcapsules. Langmuir, 2017, 33, 5843-5851.	3.5	10
54	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

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55	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
56	Dispersion of aluminumâ€doped zinc oxide nanopowder in nonâ€aqueous suspensions. Journal of the American Ceramic Society, 2017, 100, 5020-5029.	3.8	9
57	Selectivity of Hydrophilic and Hydrophobic TiO₂ for Organicâ€Based Dispersants. Journal of the American Ceramic Society, 2017, 100, 56-64.	3.8	9
58	TiO2-based microsphere with large pores to improve the electrochemical performance of Li-ion anodes. Ceramics International, 2021, 47, 12038-12046.	4.8	8
59	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
60	Gelation mechanism of organic additives with LiFePO4 in the water-based cathode slurries. Ceramics International, 2017, 43, S765-S770.	4.8	7
61	Dispersion of aluminum-doped zinc oxide nanopowder with high solid content in ethylene glycol. Powder Technology, 2018, 327, 1-8.	4.2	7
62	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
63	Flexible thermoelectric generators prepared by dispenser printing technology. Materials Chemistry and Physics, 2022, 287, 126269.	4.0	6
64	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
65	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
66	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
67	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
68	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
69	Poly(methacrylate)â€derived diblock dispersant for TiO₂ in aqueous suspensions. Journal of the American Ceramic Society, 2017, 100, 4961-4964.	3.8	4
70	Poly(4â€styrene sulfonic acid) to Disperse Graphene for Applications in Lithiumâ€Sulfur Batteries. ChemElectroChem, 2018, 5, 3835-3840.	3.4	4
71	A smart hemicapsule with multiple dynamic functions. Materials Horizons, 2018, 5, 1092-1099.	12.2	4
72	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

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73	New Brush Copolymers as an Effective Dispersant for Stabilizing Concentrated Suspensions of Silver Nanoparticles. Langmuir, 2020, 36, 3377-3385.	3.5	3
74	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
75	Facile Synthesis of Hierarchical Sulfur Composites for Lithiumâ€“Sulfur Batteries. ChemElectroChem, 2019, 6, 2438-2447.	3.4	2
76	Microencapsulated Liquid Metals for the Autonomous Restoration of In-Mold Electronic Circuits. ACS Applied Electronic Materials, 2022, 4, 936-945.	4.3	2
77	Poly(4â€styrene sulfonic acid) to Disperse Graphene for Applications in Lithiumâ€“Sulfur Batteries. ChemElectroChem, 2018, 5, 3821-3821.	3.4	0
78	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