

Hsien-Ming Kao

List of Publications by Year in descending order

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81
papers

2,455
citations

172457

29
h-index

233421

45
g-index

82
all docs

82
docs citations

82
times ranked

3557
citing authors

#	ARTICLE	IF	CITATIONS
1	The effect of carbon coating thickness on the capacity of LiFePO ₄ /C composite cathodes. <i>Journal of Power Sources</i> , 2009, 189, 256-262.	7.8	225
2	Functionalization of cubic mesoporous silica SBA-16 with carboxylic acid via one-pot synthesis route for effective removal of cationic dyes. <i>Journal of Hazardous Materials</i> , 2016, 309, 236-248.	12.4	114
3	Highly conductive and electrochemically stable plasticized blend polymer electrolytes based on PVdF-HFP and triblock copolymer PPG-PEG-PPG diamine for Li-ion batteries. <i>Journal of Power Sources</i> , 2011, 196, 2826-2834.	7.8	98
4	Size-Tunable Ni Nanoparticles Supported on Surface-Modified, Cage-Type Mesoporous Silica as Highly Active Catalysts for CO ₂ Hydrogenation. <i>ACS Catalysis</i> , 2017, 7, 8367-8381.	11.2	97
5	A comparative study of ordered mesoporous carbons with different pore structures as anode materials for lithium-ion batteries. <i>RSC Advances</i> , 2015, 5, 42922-42930.	3.6	73
6	Size-adjustable annular ring-functionalized mesoporous silica as effective and selective adsorbents for heavy metal ions. <i>RSC Advances</i> , 2013, 3, 25686.	3.6	62
7	A simple one-pot route to mesoporous silicas SBA-15 functionalized with exceptionally high loadings of pendant carboxylic acid groups. <i>Chemical Communications</i> , 2009, , 5018.	4.1	60
8	Highly enhanced electrochemical performance of ultrafine CuO nanoparticles confined in ordered mesoporous carbons as anode materials for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14222-14233.	10.3	58
9	Exceptional catalytic performance of ultrafine Cu ₂ O nanoparticles confined in cubic mesoporous carbon for 4-nitrophenol reduction. <i>Applied Surface Science</i> , 2018, 427, 1217-1226.	6.1	57
10	Bimetallic Co/Zn zeolitic imidazolate framework ZIF-67 supported Cu nanoparticles: An excellent catalyst for reduction of synthetic dyes and nitroarenes. <i>Journal of Hazardous Materials</i> , 2021, 407, 124392.	12.4	56
11	²⁷ Al and ¹⁹ F Solid-State NMR Studies of Zeolite H ⁺ -Dealuminated with Ammonium Hexafluorosilicate. <i>Journal of Physical Chemistry B</i> , 2003, 107, 3367-3375.	2.6	55
12	Multinuclear Solid-State NMR, Self-Diffusion Coefficients, Differential Scanning Calorimetry, and Ionic Conductivity of Solid Organic-Inorganic Hybrid Electrolytes Based on PPG-PEG-PPG Diamine, Siloxane, and Lithium Perchlorate. <i>Macromolecules</i> , 2006, 39, 1029-1040.	4.8	51
13	Multinuclear Solid-State NMR Characterization, Ion Dissociation, and Dynamic Properties of Lithium-Doped Organic-Inorganic Hybrid Electrolytes Based on Ureasils. <i>Macromolecules</i> , 2007, 40, 8673-8683.	4.8	46
14	Physical and electrochemical properties of La-doped LiFePO ₄ /C composites as cathode materials for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2008, 12, 815-823.	2.5	46
15	[Ga ₄ (C ₁₀ H ₉ N ₂) ₂ (PO ₄)(H _{0.5} PO ₄) ₂ (HPO ₄) ₂ (H ₂ PO ₄) ₂ (H ₂ O) ₂] \cdot H ₂ O: a novel one-dimensional chain structure containing four different types of monophosphate. <i>Chemical Communications</i> , 2000, , 1061-1062.	4.1	40
16	An Organic-Inorganic Hybrid Electrolyte Derived from Self-Assembly of a Poly(Ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td International Edition, 2004, 43, 980-984.	13.8	38
17	A new highly conductive organic-inorganic solid polymer electrolyte based on a di-ureasil matrix doped with lithium perchlorate. <i>Journal of Materials Chemistry</i> , 2011, 21, 10542.	6.7	38
18	Synthesis and characterization of a highly conductive organic-inorganic hybrid polymer electrolyte based on amine terminated triblock polyethers and its application in electrochromic devices. <i>Journal of Materials Chemistry C</i> , 2014, 2, 331-343.	5.5	37

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19	Comparative Study on the Morphology-Dependent Performance of Various CuO Nanostructures as Anode Materials for Sodium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 10876-10885.	6.7	37
20	Synthesis and characterization of large pore cubic mesoporous silicas functionalized with high contents of carboxylic acid groups and their use as adsorbents. Applied Catalysis B: Environmental, 2013, 142-143, 817-827.	20.2	35
21	Ni Nanoparticles Supported on Cage-Type Mesoporous Silica for CO ₂ Hydrogenation with High CH ₄ Selectivity. ChemSusChem, 2016, 9, 2326-2331.	6.8	35
22	A Water-Soluble NaCMC/NaPAA Binder for Exceptional Improvement of Sodium-Ion Batteries with an SnO ₂ -Ordered Mesoporous Carbon Anode. ChemSusChem, 2018, 11, 3923-3931.	6.8	34
23	Size dependence of silver nanoparticles in carboxylic acid functionalized mesoporous silica SBA-15 for catalytic reduction of 4-nitrophenol. RSC Advances, 2016, 6, 35167-35176.	3.6	33
24	Three-dimensional interpenetrating mesoporous carbon confining SnO ₂ particles for superior sodiation/desodiation properties. Nanoscale, 2017, 9, 8674-8683.	5.6	33
25	Catalytic evaluation of tunable Ni nanoparticles embedded in organic functionalized 2D and 3D ordered mesoporous silicas from the hydrogenation of nitroarenes. Journal of Catalysis, 2019, 370, 274-288.	6.2	33
26	The First Observation of Heteronuclear Two-Bond J-Coupling in the Solid State: A Crystal Structure and Solid-State NMR Spectroscopy of Rb ₄ (NbO) ₂ (Si ₈ O ₂₁). Inorganic Chemistry, 2002, 41, 5644-5646.	4.0	32
27	Phase control of cubic SBA-1 mesostructures via alcohol-assisted synthesis. Journal of Materials Chemistry, 2005, 15, 2989.	6.7	32
28	Encapsulation of LiFePO ₄ Nanoparticles into 3D Interpenetrating Ordered Mesoporous Carbon as a High-Performance Cathode for Lithium-Ion Batteries Exceeding Theoretical Capacity. ACS Applied Energy Materials, 2019, 2, 1121-1133.	5.1	31
29	Direct ⁷ Li NMR Spectral Evidence for Different Li ⁺ Local Environments in a Polyether Poly(urethane) Tj ETQq1 1 0.784314 rgBT / Overlook	4.8	30
30	Ultrafine bimetallic Ag-doped Ni nanoparticles embedded in cage-type mesoporous silica SBA-16 as superior catalysts for conversion of toxic nitroaromatic compounds. Journal of Hazardous Materials, 2020, 384, 121270.	12.4	30
31	New highly conductive organic-inorganic hybrid electrolytes based on star-branched silica based architectures. Polymer, 2012, 53, 6008-6020.	3.8	29
32	pH responsive selective protein adsorption by carboxylic acid functionalized large pore mesoporous silica nanoparticles SBA-1. Materials Science and Engineering C, 2019, 94, 344-356.	7.3	29
33	Synthesis and Characterization of Fluorinated Metal Arsenates with a Layer Structure: A (C ₄ H ₁₂ N ₂) _{1.5} [M ₃ F ₅ (HAsO ₄) ₂ (AsO ₄)] (M = Fe, Ga). Inorganic Chemistry, 2001, 40, 5381-5384.	4.0	28
34	Facile synthesis of stable cubic mesoporous silica SBA-1 over a broad temperature range with the aid of d-fructose. Chemical Communications, 2005, , 1058.	4.1	28
35	Synthesis of highly phosphonic acid functionalized benzene-bridged periodic mesoporous organosilicas for use as efficient dye adsorbents. Journal of Hazardous Materials, 2014, 278, 539-550.	12.4	27
36	Silver particles deposited onto magnetic carbon nanofibers as highly active catalysts for 4-nitrophenol reduction. Applied Catalysis B: Environmental, 2022, 315, 121596.	20.2	27

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37	Hydrothermal Synthesis, Crystal Structure, Solid-State NMR Spectroscopy, and Ionic Conductivity of Na ₅ InSi ₄ O ₁₂ , a Silicate Containing a Single 12-Membered Ring. <i>Chemistry of Materials</i> , 2004, 16, 1660-1666.	6.7	26
38	The ultrafast sonochemical synthesis of mesoporous silica MCM-41. <i>New Journal of Chemistry</i> , 2010, 34, 2109.	2.8	26
39	Probing the Nature and Local Structure of Phosphonic Acid Groups Functionalized in Mesoporous Silica SBA-15. <i>Journal of Physical Chemistry C</i> , 2012, 116, 1658-1669.	3.1	25
40	Ordered cubic mesoporous silica KIT-5 functionalized with carboxylic acid groups for dye removal. <i>RSC Advances</i> , 2014, 4, 49061-49069.	3.6	25
41	Insight into the Superior Lithium Storage Properties of Ultrafine CoO Nanoparticles Confined in a 3D Bimodal Ordered Mesoporous Carbon CMK-9 Anode. <i>ChemSusChem</i> , 2020, 13, 2952-2965.	6.8	25
42	Space confined synthesis of highly dispersed bimetallic CoCu nanoparticles as effective catalysts for ammonia borane dehydrogenation and 4-nitrophenol reduction. <i>Applied Surface Science</i> , 2021, 538, 148091.	6.1	25
43	Towards an understanding of the role of hyper-branched oligomers coated on cathodes, in the safety mechanism of lithium-ion batteries. <i>RSC Advances</i> , 2014, 4, 56147-56155.	3.6	24
44	Direct Solid-State NMR Observation of Tetrahedral Aluminum Fluorides in Zeolite HY Fluorinated by Ammonium Fluoride. <i>Journal of Physical Chemistry C</i> , 2007, 111, 4495-4498.	3.1	23
45	Highly Carboxylic Acid-Functionalized Ethane-Bridged Periodic Mesoporous Organosilicas: Synthesis, Characterization, and Adsorption Properties. <i>Chemistry - an Asian Journal</i> , 2012, 7, 2111-2117.	3.3	23
46	Ru Nanoparticles Embedded in Cubic Mesoporous Silica SBA-1 as Highly Efficient Catalysts for Hydrogen Generation from Ammonia Borane. <i>Catalysts</i> , 2020, 10, 267.	3.5	22
47	Ethane-Bridged Periodic Mesoporous Organosilicas Functionalized with High Loadings of Carboxylic Acid Groups: Synthesis, Bifunctionalization, and Fabrication of Metal Nanoparticles. <i>Chemistry - A European Journal</i> , 2014, 20, 894-903.	3.3	21
48	Facile fabrication of titania-ordered cubic mesoporous carbon composite: Effect of Ni doping on photocatalytic hydrogen generation. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 19255-19266.	7.1	21
49	Probing the formation process of aluminium hydroxide nanoparticles prepared by laser ablation with ²⁷ Al NMR spectroscopy. <i>Journal of Materials Chemistry</i> , 2000, 10, 2802-2804.	6.7	20
50	3D interpenetrating cubic mesoporous carbon supported nanosized SnO ₂ as an efficient anode for high performance lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019, 791, 892-904.	5.5	20
51	Design, synthesis and characterization of polysiloxane and polyetherdiamine based comb-shaped hybrid solid polymer electrolytes for applications in electrochemical devices. <i>Materials Research Bulletin</i> , 2019, 109, 72-81.	5.2	20
52	¹³ C CP/MAS NMR Spectroscopy as a Versatile and Quantitative Tool for Determination of Mercury Adsorption Capacity in Thiol-Functionalized Mesoporous Silica SBA-1. <i>Analytical Chemistry</i> , 2008, 80, 3016-3019.	6.5	19
53	High ion-conducting solid polymer electrolytes based on blending hybrids derived from monoamine and diamine polyethers for lithium solid-state batteries. <i>RSC Advances</i> , 2017, 7, 20373-20383.	3.6	18
54	Solid Polymer Electrolytes, 9. <i>Macromolecular Chemistry and Physics</i> , 2004, 205, 600-610.	2.2	17

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55	Palladium nanoparticles encapsulated in carboxylic acid functionalized periodic mesoporous organosilicas as efficient and reusable heterogeneous catalysts for hydrogen generation from ammonia borane. <i>Materials Research Bulletin</i> , 2020, 125, 110786.	5.2	17
56	Synthesis and characterization of cubic periodic mesoporous organosilicas with a high loading of disulfide groups. <i>New Journal of Chemistry</i> , 2011, 35, 489.	2.8	16
57	Synthesis of highly dispersed ultra-small cobalt nanoparticles within the cage-type mesopores of 3D cubic mesoporous silica via double agent reduction method for catalytic hydrogen generation. <i>Applied Surface Science</i> , 2019, 470, 764-772.	6.1	16
58	Cage like ordered carboxylic acid functionalized mesoporous silica with enlarged pores for enzyme adsorption. <i>Journal of Materials Science</i> , 2017, 52, 6322-6340.	3.7	14
59	Carboxylic acid Functionalized Cage-Type Mesoporous Silica FDU-12 as Support for Controlled Synthesis of Platinum Nanoparticles and Their Catalytic Applications. <i>Chemistry - A European Journal</i> , 2018, 24, 13540-13548.	3.3	14
60	Confinement of Cu nanoparticles in the nanocages of large pore SBA-16 functionalized with carboxylic acid: enhanced activity and improved durability for 4-nitrophenol reduction. <i>Dalton Transactions</i> , 2019, 48, 8227-8237.	3.3	14
61	Solid Polymer Electrolyte Based on Pluronic P123 Triblock Copolymer-Siloxane Organic-Inorganic Hybrid. <i>Journal of the Chinese Chemical Society</i> , 2005, 52, 693-699.	1.4	13
62	Synthesis, Multinuclear NMR Characterization and Dynamic Property of Organic-Inorganic Hybrid Electrolyte Membrane Based on Alkoxysilane and Poly(oxyalkylene) Diamine. <i>Membranes</i> , 2012, 2, 253-274.	3.0	13
63	Particle size effects of carbon sources on electrochemical properties of LiFePO ₄ /C composites. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 1857-1862.	2.5	13
64	A new organic-inorganic hybrid electrolyte based on polyacrylonitrile, polyether diamine and alkoxysilanes for lithium ion batteries: synthesis, structural properties, and electrochemical characterization. <i>RSC Advances</i> , 2014, 4, 13293-13303.	3.6	13
65	Oxidative transformation of thiol groups to disulfide bonds in mesoporous silicas: a diagnostic reaction for probing distribution of organic functional groups. <i>New Journal of Chemistry</i> , 2009, 33, 2199.	2.8	11
66	Ordered mesoporous carbon with tubular framework supported SnO ₂ nanoparticles intertwined in MoS ₂ nanosheets as an anode for advanced lithium-ion batteries with outstanding performances. <i>Electrochimica Acta</i> , 2021, 380, 138195.	5.2	10
67	A comparative study on the effects of salt and filler on transport and structural properties of organic-inorganic hybrid electrolytes. <i>Ionics</i> , 2014, 20, 1561-1571.	2.4	9
68	Bifunctional Cage-Type Cubic Mesoporous Silica SBA-1 Nanoparticles for Selective Adsorption of Dyes. <i>Chemistry - an Asian Journal</i> , 2017, 12, 1314-1325.	3.3	9
69	Effect of Al ₂ O ₃ nanowires on the electrochemical properties of di-ureasil-based organic-inorganic hybrid electrolytes. <i>Ionics</i> , 2015, 21, 2523-2534.	2.4	8
70	Magnetic impurity effects on self-discharge capacity, cycle performance, and rate capability of LiFePO ₄ /C composites. <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 1767-1775.	2.5	8
71	Confinement of Pt nanoparticles in cage-type mesoporous silica SBA-16 as efficient catalysts for toluene oxidation: the effect of carboxylic groups on the mesopore surface. <i>Catalysis Science and Technology</i> , 2019, 9, 6852-6862.	4.1	8
72	N-functionalized mesoporous carbon supported Pd nanoparticles as highly active nanocatalyst for Suzuki-Miyaura reaction, reduction of 4-nitrophenol and hydrodechlorination of chlorobenzene. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 104, 529-543.	5.8	8

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73	Highly conducting blend hybrid electrolytes based on amine ended block copolymers and organosilane with in-situ formed silica particles for lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 390, 1-12.	7.8	7
74	Effect of carboxylic acid of periodic mesoporous organosilicas on the fructose-to-5-hydroxymethylfurfural conversion in dimethylsulfoxide systems. <i>APL Materials</i> , 2014, 2, .	5.1	6
75	Platinum deposited on 2D and 3D mesoporous silica materials for the catalytic oxidation of volatile organic compounds: The oxidation of m-xylene and methanol. <i>Journal of Catalysis</i> , 2021, 402, 275-288.	6.2	5
76	Solid-State NMR Characterization on the Molecular-Level Homogeneity in Lower Critical Solution Temperature Mixtures of Poly(\pm -methyl styrene) and Poly(2,6-dimethyl-p-phenylene oxide). <i>Polymer Journal</i> , 2003, 35, 372-378.	2.7	3
77	Analysis of polycyclic aromatic hydrocarbons using porous material MCM-41 as a sorbent. <i>Analytical Methods</i> , 2013, 5, 6874.	2.7	3
78	Solid-State NMR Study on Relationships between Miscibility and Chain Mobility in Poly(4-Methylstyrene)/Poly(Cyclohexyl Methacrylate) Blend. <i>Journal of the Chinese Chemical Society</i> , 2001, 48, 709-716.	1.4	2
79	A Facile and Rapid Sonochemical Route to Synthesize Highly Ordered Mesoporous Silicas MCM-48 and Al-MCM-48 with Ia3d Cubic Structure Using Gemini Surfactant. <i>Journal of the Chinese Chemical Society</i> , 2013, 60, 831-838.	1.4	1
80	THE TRANSITION FROM MESOSTRUCTURE TO MICROSTRUCTURE IN A DOUBLE-TEMPLATED ALUMINOSILICATE SYSTEM. , 2003, , .		0
81	MESOPOROUS SILICA WITH LOCAL MFI STRUCTURE. , 2003, , .		0