Guang Feng

List of Publications by Year in Descending Order

112 papers	4,874 citations	37 h-index	67 g-index
120 ext. papers	5,829 ext. citations	8.8 avg, IF	5.93 L-index

#	Paper	IF	Citations
112	Ionophobicity of carbon sub-nanometer pores enables efficient desalination at high salinity. *Cell Reports Physical Science*, **2022**, 3, 100689	6.1	2
111	Molecular insight into oil displacement by CO2 flooding on rough silica surface. *Journal of Supercritical Fluids*, **2022**, 181, 105507	4.2	1
110	Conductive Metal-Organic Frameworks for Supercapacitors.. *Advanced Materials*, **2022**, e2200999	24	7
109	Molecular insight into replacement dynamics of CO2 enhanced oil recovery in nanopores. *Chemical Engineering Journal*, **2022**, 440, 135796	14.7	2
108	Progress on predicting the electrochemical stability window of electrolytes. *Current Opinion in Electrochemistry*, **2022**, 101030	7.2	3
107	Regulating interfacial structure enables high-voltage dilute ether electrolytes. *Cell Reports Physical Science*, **2022**, 100919	6.1	0
106	Inhibiting Dendrite Growth via Regulating the Electrified Interface for Fast-Charging Lithium Metal Anode.. *ACS Central Science*, **2021**, 7, 2029-2038	16.8	5
105	Modeling galvanostatic charge–discharge of nanoporous supercapacitors. *Nature Computational Science*, **2021**, 1, 725-731		7
104	Aqueous interphase formed by CO brings electrolytes back to salt-in-water regime. *Nature Chemistry*, **2021**, 13, 1061-1069	17.6	14
103	Charge Transfer Kinetics at Ag(111) Single Crystal Electrode/Ionic Liquid Interfaces: Dependence on the Cation Alkyl Side Chain Length. *ChemElectroChem*, **2021**, 8, 983-990	4.3	2
102	Liquid-state thermocells: Opportunities and challenges for low-grade heat harvesting. *Joule*, **2021**, 5, 768-779	27.8	23
101	Symmetrizing cathode-anode response to speed up charging of nanoporous supercapacitors. *Green Energy and Environment*, **2021**,	5.7	4
100	Molecular Understanding of Charge Storage in MoS2 Supercapacitors with Ionic Liquids. *Energy and Environmental Materials*, **2021**,	13	7
99	Regulation of SEI Formation by Anion Receptors to Achieve Ultra-Stable Lithium-Metal Batteries. *Angewandte Chemie - International Edition*, **2021**, 60, 19232-19240	16.4	26
98	Regulation of SEI Formation by Anion Receptors to Achieve Ultra-Stable Lithium-Metal Batteries. *Angewandte Chemie*, **2021**, 133, 19381-19389	3.6	3
97	Hydration shell energy barrier differences of sub-nanometer carbon pores enable ion sieving and selective ion removal. *Chemical Engineering Journal*, **2021**, 419, 129438	14.7	8
96	A Stirred Self-Stratified Battery for Large-Scale Energy Storage. *Joule*, **2020**, 4, 953-966	27.8	17

95	Molecular Insight into Microbehaviors of n-Decane and CO2 in Mineral Nanopores. *Energy & Fuels*, **2020**, 34, 2925-2935	4.1	4
94	Electrical Double Layer of Linear Tricationic Ionic Liquids at Graphite Electrode. *Journal of Physical Chemistry C*, **2020**, 124, 15723-15729	3.8	4
93	Transient analysis and process optimization of the spatial atomic layer deposition using the dynamic mesh method. *Chemical Engineering Science*, **2020**, 217, 115513	4.4	6
92	Ion Structure Transition Enhances Charging Dynamics in Subnanometer Pores. *ACS Nano*, **2020**, 14, 2395-2403	15.7	29
91	Molecular understanding of charge storage and charging dynamics in supercapacitors with MOF electrodes and ionic liquid electrolytes. *Nature Materials*, **2020**, 19, 552-558	27	208
90	Water-in-salt electrolytes: An interfacial perspective. *Current Opinion in Colloid and Interface Science* , **2020**, 47, 99-110	7.6	27
89	Permselective ion electrosorption of subnanometer pores at high molar strength enables capacitive deionization of saline water. *Sustainable Energy and Fuels*, **2020**, 4, 1285-1295	5.8	23
88	Enforced Freedom: Electric-Field-Induced Declustering of Ionic-Liquid Ions in the Electrical Double Layer. *Energy and Environmental Materials*, **2020**, 3, 414-420	13	8
87	Adding salt to expand voltage window of humid ionic liquids. *Nature Communications*, **2020**, 11, 5809	17.4	23
86	Computational Insights into Charge Storage Mechanisms of Supercapacitors. *Energy and Environmental Materials*, **2020**, 3, 235-246	13	19
85	Free and Bound States of Ions in Ionic Liquids, Conductivity, and Underscreening Paradox. *Physical Review X*, **2019**, 9,	9.1	35
84	Densely Populated Isolated Single Co?N Site for Efficient Oxygen Electrocatalysis. *Advanced Energy Materials*, **2019**, 9, 1900149	21.8	179
83	Low-Temperature Charging Dynamics of the Ionic Liquid and Its Gating Effect on FeSeTe Superconducting Films. *ACS Applied Materials & Interfaces*, **2019**, 11, 17979-17986	9.5	4
82	Adding Solvent into Ionic Liquid-Gated Transistor: The Anatomy of Enhanced Gating Performance. *ACS Applied Materials & Interfaces*, **2019**, 11, 13822-13830	9.5	3
81	Hysteretic order-disorder transitions of ionic liquid double layer structure on graphite. *Nano Energy* , **2019**, 60, 886-893	17.1	15
80	Stabilization of layered manganese oxide by substitutional cation doping. *Journal of Materials Chemistry A*, **2019**, 7, 7118-7127	13	6
79	DFT Study on the Hydrogen Evolution Reaction for Different Facets of Co2P. *ChemElectroChem*, **2019**, 6, 260-267	4.3	30
78	Molecular insight into structures of monocationic and dicationic ionic liquids in mica slits. *Molecular Physics*, **2019**, 117, 3957-3967	1.7	1

77	Effect of Pore Size on the Ion Electrosorption and Hydrogen/Deuterium Electrosorption Using Sodium Chloride in H2O and D2O. *Journal of the Electrochemical Society*, **2019**, 166, A4158-A4167	3.9	6
76	Spatially controlled synthesis of superlattice-like SnS/nitrogen-doped graphene hybrid nanobelts as high-rate and durable anode materials for sodium-ion batteries. *Journal of Materials Chemistry A*, **2019**, 7, 27475-27483	13	21
75	Mechanistic Study of Forming Either Cyclic or Linear Sulfur-Clusters from Thermal Decomposition of Thiourea Under Two Distinct Conditions. *European Journal of Organic Chemistry*, **2019**, 2019, 598-604	3.2	1
74	Electricity generation from water droplets via capillary infiltrating. *Nano Energy*, **2018**, 48, 211-216	17.1	53
73	Systematic comparison of force fields for molecular dynamic simulation of Au(111)/Ionic liquid interfaces. *Fluid Phase Equilibria*, **2018**, 463, 106-113	2.5	19
72	Synthesis of single crystalline two-dimensional transition-metal phosphides via a salt-templating method. *Nanoscale*, **2018**, 10, 6844-6849	7.7	43
71	Molecular dynamics study of interfacial properties in CO2 enhanced oil recovery. *Fluid Phase Equilibria*, **2018**, 467, 25-32	2.5	29
70	Molecular dynamics study of room temperature ionic liquids with water at mica surface. *Green Energy and Environment*, **2018**, 3, 120-128	5.7	19
69	On the temperature dependence of the double layer capacitance of ionic liquids. *Journal of Electroanalytical Chemistry*, **2018**, 819, 347-358	4.1	49
68	Chainmail catalyst of ultrathin P-doped carbon shell-encapsulated nickel phosphides on graphene towards robust and efficient hydrogen generation. *Journal of Materials Chemistry A*, **2018**, 6, 24107-24113	13	31
67	Understanding Electric Double-Layer Gating Based on Ionic Liquids: from Nanoscale to Macroscale. *ACS Applied Materials & Interfaces*, **2018**, 10, 43211-43218	9.5	16
66	Molecular dynamics simulation to estimate minimum miscibility pressure for oil with pure and impure CO2. *Journal of Physics Communications*, **2018**, 2, 115028	1.2	8
65	Aqueous thermogalvanic cells with a high Seebeck coefficient for low-grade heat harvest. *Nature Communications*, **2018**, 9, 5146	17.4	123
64	Minimizing the electrosorption of water from humid ionic liquids on electrodes. *Nature Communications*, **2018**, 9, 5222	17.4	54
63	Atmospheric-Pressure Synthesis of 2D Nitrogen-Rich Tungsten Nitride. *Advanced Materials*, **2018**, 30, e1805655	24	69
62	In Situ Tracking of Partial Sodium Desolvation of Materials with Capacitive, Pseudocapacitive, and Battery-like Charge/Discharge Behavior in Aqueous Electrolytes. *Langmuir*, **2018**, 34, 13132-13143	4	15
61	Mechanistic modeling study of atomic layer deposition process optimization in a fluidized bed reactor. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2017**, 35, 01B102	2.9	9
60	Topotactic reduction of layered double hydroxides for atomically thick two-dimensional non-noble-metal alloy. *Nano Research*, **2017**, 10, 2988-2997	10	29

59	Rapid mass production of two-dimensional metal oxides and hydroxides via the molten salts method. *Nature Communications*, **2017**, 8, 15630	17.4	190
58	Capacitive performance of amino acid ionic liquid electrolyte-based supercapacitors by molecular dynamics simulation. *RSC Advances*, **2017**, 7, 28945-28950	3.7	17
57	Mean-Field Theory of Electrical Double Layer In Ionic Liquids with Account of Short-Range Correlations. *Electrochimica Acta*, **2017**, 225, 190-197	6.7	93
56	Role of Electrical Double Layer Structure in Ionic Liquid Gated Devices. *ACS Applied Materials & Interfaces*, **2017**, 9, 40949-40958	9.5	20
55	Interface between an Au(111) Surface and an Ionic Liquid: The Influence of Water on the Double-Layer Capacitance. *ChemElectroChem*, **2017**, 4, 216-220	4.3	30
54	The Influence of Anion Shape on the Electrical Double Layer Microstructure and Capacitance of Ionic Liquids-Based Supercapacitors by Molecular Simulations. *Molecules*, **2017**, 22,	4.8	10
53	Wearable Thermocells Based on Gel Electrolytes for the Utilization of Body Heat. *Angewandte Chemie*, **2016**, 128, 12229-12232	3.6	30
52	Wearable Thermocells Based on Gel Electrolytes for the Utilization of Body Heat. *Angewandte Chemie - International Edition*, **2016**, 55, 12050-3	16.4	132
51	N-doped interconnected carbon sheets for energy storage application. *Materials Research Bulletin*, **2016**, 84, 350-354	5.1	3
50	Asymmetric Behavior of Positive and Negative Electrodes in Carbon/Carbon Supercapacitors and Its Underlying Mechanism. *Journal of Physical Chemistry C*, **2016**, 120, 24675-24681	3.8	25
49	Fundamental aspects of electric double layer force-distance measurements at liquid-solid interfaces using atomic force microscopy. *Scientific Reports*, **2016**, 6, 32389	4.9	40
48	Induced Potential in Porous Carbon Films through Water Vapor Absorption. *Angewandte Chemie - International Edition*, **2016**, 55, 8003-7	16.4	104
47	Induced Potential in Porous Carbon Films through Water Vapor Absorption. *Angewandte Chemie*, **2016**, 128, 8135-8139	3.6	7
46	Capacitive deionization in organic solutions: case study using propylene carbonate. *RSC Advances*, **2016**, 6, 5865-5870	3.7	24
45	Coordination of the electrical and optical signals revealing nanochannels with an onion-like gating mechanism and its sensing application. *NPG Asia Materials*, **2016**, 8, e234-e234	10.3	26
44	Single-Crystalline Ultrathin Nickel Nanosheets Array from In Situ Topotactic Reduction for Active and Stable Electrocatalysis. *Angewandte Chemie - International Edition*, **2016**, 55, 693-7	16.4	182
43	The effects of dication symmetry on ionic liquid electrolytes in supercapacitors. *Journal of Physics Condensed Matter*, **2016**, 28, 464005	1.8	14
42	Molecular simulation study of dynamical properties of room temperature ionic liquids with carbon pieces. *Science China Chemistry*, **2016**, 59, 594-600	7.9	2

41	Single-Crystalline Ultrathin Nickel Nanosheets Array from In Situ Topotactic Reduction for Active and Stable Electrocatalysis. *Angewandte Chemie*, **2016**, 128, 703-707	3.6	31
40	Topological defects in electric double layers of ionic liquids at carbon interfaces. *Nano Energy*, **2015**, 15, 737-745	17.1	31
39	Single-crystalline dendritic bimetallic and multimetallic nanocubes. *Chemical Science*, **2015**, 6, 7122-7129	9.4	51
38	Three-dimensional porous superaerophobic nickel nanoflower electrodes for high-performance hydrazine oxidation. *Nano Research*, **2015**, 8, 3365-3371	10	55
37	Microstructure of room temperature ionic liquids at stepped graphite electrodes. *AICHE Journal*, **2015**, 61, 3022-3028	3.6	21
36	A computational study of dicationic ionic liquids/CO₂ interfaces. *Langmuir*, **2015**, 31, 2447-54	4	19
35	Interfacial ionic 'liquids': connecting static and dynamic structures. *Journal of Physics Condensed Matter*, **2015**, 27, 032101	1.8	57
34	Modeling of Supercapacitors **2015**, 2282-2289		
33	Graphitization as a Universal Tool to Tailor the Potential-Dependent Capacitance of Carbon Supercapacitors. *Advanced Energy Materials*, **2014**, 4, 1400316	21.8	168
32	Structural Origins of Potential Dependent Hysteresis at the Electrified Graphene/Ionic Liquid Interface. *Journal of Physical Chemistry C*, **2014**, 118, 569-574	3.8	96
31	Densification of Ionic Liquid Molecules within a Hierarchical Nanoporous Carbon Structure Revealed by Small-Angle Scattering and Molecular Dynamics Simulation. *Chemistry of Materials*, **2014**, 26, 1144-1153	9.6	47
30	Toward understanding the structural heterogeneity and ion pair stability in dicationic ionic liquids. *Soft Matter*, **2014**, 10, 9193-200	3.6	27
29	Water in ionic liquids at electrified interfaces: the anatomy of electrosorption. *ACS Nano*, **2014**, 8, 11685-94	13.7	119
28	Enhanced performance of dicationic ionic liquid electrolytes by organic solvents. *Journal of Physics Condensed Matter*, **2014**, 26, 284105	1.8	20
27	Interfaces of dicationic ionic liquids and graphene: a molecular dynamics simulation study. *Journal of Physics Condensed Matter*, **2014**, 26, 284106	1.8	24
26	Integrated Experimental and Computational Studies of Energy-relevant Interfaces. *Physics Procedia*, **2014**, 53, 32-38		
25	The influence of a hierarchical porous carbon network on the coherent dynamics of a nanoconfined room temperature ionic liquid: A neutron spin echo and atomistic simulation investigation. *Carbon*, **2014**, 78, 415-427	10.4	21
24	The Electrical Double Layer of Dicationic Ionic Liquids at Onion-like Carbon Surface. *Journal of Physical Chemistry C*, **2014**, 118, 3901-3909	3.8	39

23	Effect of cation on diffusion coefficient of ionic liquids at onion-like carbon electrodes. *Journal of Physics Condensed Matter*, **2014**, 26, 284104	1.8	32
22	Strain-Based In Situ Study of Anion and Cation Insertion into Porous Carbon Electrodes with Different Pore Sizes. *Advanced Energy Materials*, **2014**, 4, 1300683	21.8	31
21	Dynamic and structural properties of room-temperature ionic liquids near silica and carbon surfaces. *Langmuir*, **2013**, 29, 9744-9	4	55
20	Molecular Insights into Carbon Supercapacitors Based on Room-Temperature Ionic Liquids. *Journal of Physical Chemistry Letters*, **2013**, 4, 3367-3376	6.4	112
19	Bias-dependent molecular-level structure of electrical double layer in ionic liquid on graphite. *Nano Letters*, **2013**, 13, 5954-60	11.5	117
18	Modern Theories of Carbon-Based Electrochemical Capacitors **2013**, 167-206		6
17	Molecular Insights into Carbon Nanotube Supercapacitors: Capacitance Independent of Voltage and Temperature. *Journal of Physical Chemistry C*, **2013**, 117, 9178-9186	3.8	60
16	Distinctive Nanoscale Organization of Dicationic versus Monocationic Ionic Liquids. *Journal of Physical Chemistry C*, **2013**, 117, 18251-18257	3.8	55
15	In Situ Electrochemical Dilatometry of Onion-Like Carbon and Carbon Black. *Journal of the Electrochemical Society*, **2012**, 159, A1897-A1903	3.9	46
14	Nanoscale perturbations of room temperature ionic liquid structure at charged and uncharged interfaces. *ACS Nano*, **2012**, 6, 9818-27	16.7	137
13	Molecular Dynamics Simulation Study of the Capacitive Performance of a Binary Mixture of Ionic Liquids near an Onion-like Carbon Electrode. *Journal of Physical Chemistry Letters*, **2012**, 3, 2465-9	6.4	35
12	Curvature Effect on the Capacitance of Electric Double Layers at Ionic Liquid/Onion-Like Carbon Interfaces. *Journal of Chemical Theory and Computation*, **2012**, 8, 1058-63	6.4	104
11	Supercapacitor Capacitance Exhibits Oscillatory Behavior as a Function of Nanopore Size. *Journal of Physical Chemistry Letters*, **2011**, 2, 2859-2864	6.4	263
10	A "counter-charge layer in generalized solvents" framework for electrical double layers in neat and hybrid ionic liquid electrolytes. *Physical Chemistry Chemical Physics*, **2011**, 13, 14723-34	3.6	75
9	The importance of ion size and electrode curvature on electrical double layers in ionic liquids. *Physical Chemistry Chemical Physics*, **2011**, 13, 1152-61	3.6	151
8	Computational modeling of carbon nanostructures for energy storage applications **2010**,		1
7	Modern Theories of Carbon-Based Electrochemical Capacitors: A Short Review **2010**,		2
6	Ion distribution in electrified micropores and its role in the anomalous enhancement of capacitance. *ACS Nano*, **2010**, 4, 2382-90	16.7	150

5	Atomistic Insight on the Charging Energetics in Subnanometer Pore Supercapacitors. *Journal of Physical Chemistry C*, **2010**, 114, 18012-18016	3.8	48
4	Structure and dynamics of electrical double layers in organic electrolytes. *Physical Chemistry Chemical Physics*, **2010**, 12, 5468-79	3.6	84
3	Structure and charging kinetics of electrical double layers at large electrode voltages. *Microfluidics and Nanofluidics*, **2010**, 8, 703-708	2.8	17
2	Microstructure and Capacitance of the Electrical Double Layers at the Interface of Ionic Liquids and Planar Electrodes. *Journal of Physical Chemistry C*, **2009**, 113, 4549-4559	3.8	167
1	Time-Dependent Cation Selectivity of Titanium Carbide MXene in Aqueous Solution. *Advanced Sustainable Systems*,2100383	5.9	0