## Shuping Bi

List of Publications by Year in descending order

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		304743	377865
105	1,716	22	34
papers	citations	h-index	g-index
106	106	106	1.665
106	106	106	1665
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Third-generation superoxide anion sensor based on superoxide dismutase directly immobilized by sol–gel thin film on gold electrode. Biosensors and Bioelectronics, 2004, 19, 1479-1486.	10.1	87
2	Indirect determination of sulfide ions in water samples at trace level by anodic stripping voltammetry using mercury film electrode. Analytical Methods, 2010, 2, 154-158.	2.7	51
3	Direct voltammetry of catalase immobilized on silica sol–gel and cysteine modified gold electrode and its application. Biosensors and Bioelectronics, 2006, 22, 247-252.	10.1	50
4	Non-chromatographic speciation analysis of mercury by flow injection on-line preconcentration in combination with chemical vapor generation atomic fluorescence spectrometry. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 831-840.	2.9	50
5	Variation of Wheat Root Exudates under Aluminum Stress. Journal of Agricultural and Food Chemistry, 2006, 54, 10040-10046.	5.2	49
6	Solid phase extraction–spectrophotometric determination of dissolved aluminum in soil extracts and ground waters. Journal of Inorganic Biochemistry, 2003, 97, 173-178.	3 <b>.</b> 5	45
7	Density functional theory study of the aluminium(iii) hydrolysis in aqueous solution. Physical Chemistry Chemical Physics, 2009, 11, 2396.	2.8	45
8	The promotion effect of titania nanoparticles on the direct electrochemistry of lactate dehydrogenase sol–gel modified gold electrode. Talanta, 2008, 76, 1065-1069.	5 <b>.</b> 5	44
9	Resonance Rayleigh scattering determination of trace amounts of Al in natural waters and biological samples based on the formation of an Al(III)–morin–surfactant complex. Analytica Chimica Acta, 2004, 501, 89-97.	5.4	43
10	Electrochemical Studies of Guanosine in DMF and Detection of Its Radical Cation in a Scanning Electrochemical Microscopy Nanogap Experiment. Journal of the American Chemical Society, 2005, 127, 3690-3691.	13.7	42
11	Direct electrochemistry of lactate dehydrogenase immobilized on silica sol–gel modified gold electrode and its application. Biosensors and Bioelectronics, 2007, 23, 682-687.	10.1	38
12	A novel method for study of the aggregation of protein induced by metal ion aluminum(III) using resonance Rayleigh scattering technique. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 69, 71-77.	3.9	38
13	Study of the solvent effect on the quality of dodecanethiol self-assembled monolayers on polycrystalline gold. Journal of Electroanalytical Chemistry, 2008, 624, 315-322.	3.8	38
14	Theoretical Investigation of Water Exchange on the Nanometer-Sized Polyoxocation AlO <sub>4</sub> Al <sub>12</sub> (OH) <sub>24</sub> (H <sub>2</sub> O) <sub>12</sub> <5+ (Keggin-Al <sub>13</sub> ) in Aqueous Solution. Journal of the American Chemical Society, 2008, 130, 14402-14403.	13.7	36
15	Aluminum Tolerance of Two Wheat Cultivars (BrevorandAtlas66) in Relation to Their Rhizosphere pH and Organic Acids Exuded from Roots. Journal of Agricultural and Food Chemistry, 2006, 54, 10033-10039.	5.2	35
16	Determination of the speciation of aluminum(III) in natural waters by adsorption stripping voltammetry and complexation with Al III –solochrome violet RS. Analytica Chimica Acta, 2001, 449, 35-44.	5.4	34
17	Speciation analysis of aluminium(iii) in natural waters and biological fluids by complexing with various catechols followed by differential pulse voltammetry detection. Analyst, The, 2002, 127, 1657-1665.	3.5	32
18	Supermolecule density functional calculations on the water exchange of aquated Al(iii) species in aqueous solution. Chemical Communications, 2008, , 3930.	4.1	32

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19	Investigations on cyclic reciprocal derivative chronopotentiometry. Part 1. Theory for a reversible reaction. Journal of Electroanalytical Chemistry, 1996, 405, 51-58.	3.8	29
20	Neurotransmitter dopamine applied in electrochemical determination of aluminum in drinking waters and biological samples. Journal of Inorganic Biochemistry, 2001, 87, 105-113.	3 <b>.</b> 5	28
21	A study on the interaction of proteins with some heteropoly compounds and their analytical application by resonance Rayleigh scattering method. Talanta, 2004, 63, 279-286.	5.5	26
22	Studies on the effect of electrode pretreatment on the coverage of self-assembled monolayers of dodecanethiol on gold by electrochemical reductive desorption determination. Analyst, The, 2011, 136, 5058.	3 <b>.</b> 5	24
23	Resonance Rayleigh scattering study of the reaction of nucleic acids with thionine and its analytical application. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2004, 60, 455-462.	3.9	23
24	Differential pulse voltammetric indirect determination of aluminium in drinking waters, blood, urine, hair, and medicament samples using l-dopa under alkaline conditions. Analyst, The, 2000, 125, 1299-1302.	<b>3.</b> 5	22
25	Room-temperature ionic liquid as a new solvent to prepare high-quality dodecanethiol self-assembled monolayers on polycrystalline gold. Electrochemistry Communications, 2008, 10, 587-591.	4.7	21
26	Assessment of the Accuracy of Theoretical Methods for Calculating 27Al Nuclear Magnetic Resonance Shielding Tensors of Aquated Aluminum Species. Journal of Physical Chemistry A, 2009, 113, 5138-5143.	2.5	21
27	Linear scan voltammetric indirect determination of AlIII by the catalytic cathodic response of norepinephrine at the hanging mercury drop electrode. Journal of Inorganic Biochemistry, 2005, 99, 1756-1761.	3.5	19
28	Some thoughts on the existence of ion and water channels in highly dense and well-ordered CH3-terminated alkanethiol self-assembled monolayers on gold. Biosensors and Bioelectronics, 2009, 24, 1074-1082.	10.1	19
29	Theoretical investigation on the dimerization of the deprotonated aquo ion of Al( <scp>iii</scp> ) in water. Dalton Transactions, 2009, , 521-529.	3.3	19
30	Exploration of the specific structural characteristics of thiol-modified single-stranded DNA self-assembled monolayers on gold by a simple model. Biosensors and Bioelectronics, 2011, 26, 4564-4570.	10.1	19
31	Investigation of the factors influencing aluminium speciation in natural water equilibria with the mineral phase gibbsite. Analyst, The, 1995, 120, 2033.	3 <b>.</b> 5	18
32	Density functional theory study and kinetic analysis of the formation mechanism of Al3008(OH)56(H2O)2618+ (Al30) in aqueous solution. Geochimica Et Cosmochimica Acta, 2010, 74, 1220-1229.	3.9	18
33	Theoretical investigation of dehydration of aquated Al(OH)2+ species in aqueous solution. Dalton Transactions, 2009, , 1554.	3.3	17
34	Theoretical exploration of the water exchange mechanism of the polyoxocation GaO4Al12(OH)24(H2O)127+ in aqueous solution. Geochimica Et Cosmochimica Acta, 2009, 73, 1588-1596.	3.9	17
35	Potential control characteristics of short-chain thiols of thioctic acid and mercaptohexanol self-assembled on gold. Electrochimica Acta, 2010, 55, 6907-6916.	5.2	17
36	Aluminum ions accelerated the oxidative stress of copper-mediated melanin formation. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 3075-3083.	3.9	16

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37	Study on the interaction of copper–zinc superoxide dismutase with aluminum ions by electrochemical and fluorescent method. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 65, 896-900.	3.9	16
38	Density Functional Investigation of the Water Exchange Reaction on the Gibbsite Surface. Environmental Science & Environmental	10.0	16
39	DFT Studies on the Water-Assisted Synergistic Proton Dissociation Mechanism for the Spontaneous Hydrolysis Reaction of Al <sup>3+</sup> in Aqueous Solution. ACS Earth and Space Chemistry, 2018, 2, 269-277.	2.7	16
40	Rapid formation of high-quality self-assembled monolayers of dodecanethiol on polycrystalline gold under ultrasonic irradiation. Electrochimica Acta, 2008, 53, 3479-3483.	5.2	15
41	Density Functional Theory Study on Aqueous Aluminumâ^'Fluoride Complexes: Exploration of the Intrinsic Relationship between Water-Exchange Rate Constants and Structural Parameters for Monomer Aluminum Complexes. Environmental Science & December 2011, 45, 288-293.	10.0	15
42	Effect of monovalent cations (Li+, Na+, K+, Cs+) on self-assembly of thiol-modified double-stranded and single-stranded DNA on gold electrode. Analyst, The, 2012, 137, 1680.	3.5	15
43	Application of L-Dopa as an Electroactive Ligand for Indirect Determination of Aluminum in Biological Samples by Differential Pulse Voltammetry. Electroanalysis, 2001, 13, 1054-1058.	2.9	14
44	Density functional theory study on the bridge structure in dimeric aluminum (III) water complexes. Journal of Chemical Physics, 2004, 121, 4650-4656.	3.0	14
45	Studies on the effects of Al(III) on the lactate dehydrogenase activity by differential pulse voltammetry. Talanta, 2007, 73, 529-533.	5.5	14
46	<sup>27</sup> Al NMR Chemical Shifts and Relative Stabilities of Aqueous Monomeric Al <sup>3+</sup> Hydrolytic Species with Different Coordination Structures. ACS Earth and Space Chemistry, 2019, 3, 1353-1361.	2.7	14
47	Speciation of aluminium(iii) in natural waters using differential pulse voltammetry with a Pyrocatechol Violet-modified electrode. Analyst, The, 2001, 126, 1404-1408.	3.5	13
48	ELECTROCHEMICAL AND SPECTROMETRIC STUDIES ON THE PRINCIPLE OF INDIRECT DETER-MINATION OF ALUMINUM USINGI-DOPA AS AN ELECTROACTIVE COMPLEXING LIGAND. Analytical Letters, 2002, 35, 135-152.	1.8	13
49	Multi-NMR and fluorescence spectra study the effects of aluminum(III) on coenzyme NADH in aqueous solutions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 2561-2569.	3.9	13
50	Indirect Voltammetric Determination of Aluminum in Environmental and Biological Samples in the Presence of the Aluminum Chelating Drugs. Electroanalysis, 2004, 16, 644-649.	2.9	13
51	LC Determination of Trace Short-Chain Organic Acids in Wheat Root Exudates Under Aluminum Stress. Chromatographia, 2007, 66, 867-872.	1.3	13
52	Application of Dopamine as an Electroactive Ligand for the Determination of Aluminum in Biological Fluids. Analytical Sciences, 2002, 18, 293-299.	1.6	12
53	DFT study on the interaction between monomeric aluminium and chloride ion in aqueous solution. Dalton Transactions, 2011, 40, 5052.	3.3	12
54	Density Functional Theory Studies on the Structures and Water-Exchange Reactions of Aqueous Al(III) $\hat{a}\in$ "Oxalate Complexes. Environmental Science & Environmental Science	10.0	12

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55	Computer simulation of the distribution of aluminum speciation in soil solutions in equilibrium with the mineral phase imogolite. Journal of Inorganic Biochemistry, 2001, 87, 97-104.	3.5	11
56	Potentiometric and multinuclear NMR studies on the interaction of aluminum with ascorbic acid in acidic aqueous solution. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 2655-2665.	3.9	11
57	Electrochemical Studies of the Inhibition and Activation Effects of Al (III) on the Activity of Bovine Liver Glutamate Dehydrogenase. Sensors, 2005, 5, 235-244.	3.8	11
58	Rapid formation of well-ordered self-assembled monolayers of dodecanethiol on polycrystalline gold by microwave irradiation. Electrochemistry Communications, 2008, 10, 582-586.	4.7	11
59	Density functional study of the water exchange reaction of the polyoxocation GeO4Al12(OH)24(H2O)128+ (K-GeAl12) in aqueous solution. Dalton Transactions, 2009, , 8013.	3.3	11
60	A sensitive electrochemical approach for monitoring the effects of nano-Al <sub>2</sub> O <sub>3</sub> on LDH activity by differential pulse voltammetry. Analyst, The, 2010, 135, 116-120.	3.5	11
61	DFT study on the mechanism for the substitution of F <sup>â^'</sup> into Al(iii) complexes in aqueous solution. Dalton Transactions, 2011, 40, 567-572.	3.3	11
62	Derivative adsorption chronopotentiometric determination of aluminum in natural and drinking waters using the AlIII-1,2-dihydroxyanthraquinone-3-sulfonic acid system. Electroanalysis, 1997, 9, 1369-1371.	2.9	10
63	Direct Determination of Labile Monomeric Aluminum in Natural Waters By A.C. Oscillopolarography in the Presence of Rubeanic Acid. Analytical Letters, 1999, 32, 1435-1446.	1.8	10
64	Speciation of aluminum in the stream waters from the Susquehanna River watershed, Chesapeake Bay. Environmental Geology, 2001, 40, 300-304.	1.2	10
65	Effect of aluminum (III) on the conversion of dopachrome in the melanin synthesis pathway. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2003, 59, 1689-1696.	3.9	10
66	Fractionation of aluminum in natural waters by fluorometry based on the competitive complexation. Analytica Chimica Acta, 2004, 511, 25-31.	5.4	10
67	Electrochemical Studies on the Effects of Nanometer-Sized Tridecameric Aluminum Polycation on Lactate Dehydrogenase Activity at the Molecular Level. Journal of Physical Chemistry C, 2008, 112, 18034-18038.	3.1	10
68	Theoretical investigation of the thermodynamic structures and kinetic water-exchange reactions of aqueous Al(III) $\hat{a}$ e"salicylate complexes. Geochimica Et Cosmochimica Acta, 2013, 121, 41-53.	3.9	10
69	Fourier spectrum of ac cyclic oscillochronopotentiometry responses. Journal of Electroanalytical Chemistry, 1995, 390, 1-9.	3.8	8
70	Indirect Differential Pulse Voltammetric Determination of Aluminum Biological Samples in the Presence of 3, 4-Dihydroxyphenylalanine. Analytical Letters, 2000, 33, 209-219.	1.8	8
71	Aluminum Facilitation of the Iron-Mediated Oxidation of DOPA to Melanin. Analytical Sciences, 2004, 20, 629-634.	1.6	8
72	A novel and sensitive method for recognition and indirect determination of AlIII in biological fluid based on the quenching of resonance Rayleigh scattering intensities of "AlIII-EV-DNA―complexing system. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 69, 142-147.	3.9	8

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73	Electrochemical studies on the permeable characteristics of thiol-modified double-stranded DNA self-assembled monolayers on gold. Analyst, The, 2011, 136, 2090.	3.5	8
74	Studies on the effect of solvents on self-assembly of thioctic acid and Mercaptohexanol on gold. Thin Solid Films, 2011, 519, 4225-4233.	1.8	8
75	A.C. Oscillopolarographic Determination of Aluminum in Natural and Drinking Waters Using the Adsorption of the Al(III)-1,2-Dihydroxyanthraquinone-3-sulfonic Acid Complex. Collection of Czechoslovak Chemical Communications, 1996, 61, 1745-1753.	1.0	8
76	Study of reversible electrode processes with unsymmetrical cyclic reciprocal derivative chronopotentiometry. Electrochimica Acta, 2006, 51, 5548-5555.	<b>5.</b> 2	7
77	Insight into the structural characteristics of core-links and flat-aluminum tridecamers: A density functional theory study. Dalton Transactions, 2012, 41, 1027-1032.	3.3	7
78	Estimation of Aluminum Speciation in Surface Waters of Low Ionic Strength by a Simple Computer Model. International Journal of Environmental Analytical Chemistry, 1997, 68, 479-495.	3.3	6
79	Influence of an external magnetic field on the formation of self-assembled monolayers of dodecanethiol on polycrystalline gold electrode. Thin Solid Films, 2009, 517, 3661-3666.	1.8	6
80	Density functional theory studies on the solvent effects in Al(H <sub>2</sub> 0) <sub>6</sub> <sup>3+</sup> water-exchange reactions: the number and arrangement of outer-sphere water molecules. Physical Chemistry Chemical Physics, 2018, 20, 7342-7350.	2.8	6
81	Determination of Aluminum in Drinking Waters by A.C. Oscillopolarography in a Lithium Chloride System. Analytical Letters, 1998, 31, 669-677.	1.8	5
82	Investigation on Cyclic Reciprocal Derivative Chronopotentiometry. Part II. Theoretical Equation for an Irreversible Reaction. Collection of Czechoslovak Chemical Communications, 2000, 65, 971-978.	1.0	5
83	Indirect A.C. Oscillopolarographic Determination of Total Monomeric and Acid-Reactive Aluminum in Natural Waters by Using Pyrocatechol Violet. Analytical Letters, 2000, 33, 677-689.	1.8	5
84	Theoretical investigation on cyclic reciprocal derivative chronopotentiometry. Electrochimica Acta, 2007, 52, 8020-8030.	5 <b>.</b> 2	5
85	Theoretical Studies of the Formation Mechanisms, Thermodynamic Stabilities, and Water-Exchange Reactivities of Aluminum-Salicylate Complexes in Aqueous Solution. ACS Earth and Space Chemistry, 2018, 2, 422-431.	2.7	5
86	Chronopotentiometric Determination of Aluminum by Solochrome Violet RS. Analytical Letters, 1998, 31, 1937-1946.	1.8	4
87	INVESTIGATION ON CYCLIC RECIPROCAL DERIVATIVE CHRONOPOTENTIOMETRY. II. A SIMPLE ELECTRONIC SIMULATOR. Instrumentation Science and Technology, 2000, 28, 303-310.	1.8	4
88	Electrochemical behavior of lactate dehydrogenase immobilized on "silica sol–gel/nanometre-sized tridecameric aluminium polycation―modified gold electrode and its application. Analyst, The, 2009, 134, 1392.	3.5	4
89	Multi-walled carbon nanotubes decrease lactate dehydrogenase activity in enzymatic reaction. Bioelectrochemistry, 2011, 82, 74-78.	4.6	4
90	Density functional theory studies on the external OH <sup>â^'</sup> â€induced barrierless proton dissociation mechanism for the forced hydrolysis reaction of Al <sup>3+</sup> (aq). International Journal of Quantum Chemistry, 2018, 118, e25682.	2.0	4

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91	Speciation of aluminum equilibria with kaolinite in acidic natural water. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2000, 35, 1849-1857.	1.7	3
92	The Electrochemical Behavior ofl±-Ketoglutarate at the Hanging Mercury Drop Electrode in Acidic Aqueous Solution and Its Practical Application in Environmental and Biological Samples. Electroanalysis, 2004, 16, 1051-1058.	2.9	3
93	Theoretical study of irreversible electrode reactions with Henry adsorption using symmetrical cyclic reciprocal derivative chronopotentiometry. Electrochimica Acta, 2009, 54, 5326-5335.	5.2	3
94	Cyclic reciprocal derivative chronopotentiometric behavior of electrode process in the presence of adsorptive reactants: A theoretical study of the electrolysis sequence of adsorptive and diffusing electroactive reactants. Electrochimica Acta, 2010, 55, 9051-9059.	5.2	3
95	INVESTIGATION ON CYCLIC RECIPROCAL DERIVATIVE CHRONOPOTENTIOMETRY. IV. CYCLIC CONTROLLED LOGIC CIRCUIT AND ANOTHER SIMPLE RECIPROCAL SIMULATOR. Instrumentation Science and Technology, 2001, 29, 17-24.	1.8	2
96	FRACTIONATION OF ALUMINUM IN NATURAL WATERS BY CATION-EXCHANGE RESIN COUPLED WITH CHLOROFORM EXTRACTION/8-HYDROXYLQUINOLINE FLUORIMETRIC DETERMINATION. Instrumentation Science and Technology, 2001, 29, 153-160.	1.8	2
97	Numerical simulation study on cyclic reciprocal derivative chronopotentiometry of reversible electrode reaction coupled with Langmuir adsorption. Electrochimica Acta, 2013, 93, 222-229.	5.2	2
98	Density Functional Theory Studies on the Real and Apparent Water-Exchange Reaction Kinetics of Al <sup>3+</sup> in Aqueous Solution. ACS Earth and Space Chemistry, 2019, 3, 2315-2322.	2.7	2
99	Insight into the structures and reactivities of aqueous Al(III)-carboxylate complexes from cluster-based ab initio computational studies – Implications for the ligand-promoted mineral dissolution mechanism. Geochimica Et Cosmochimica Acta, 2019, 244, 451-466.	3.9	2
100	Fast Evaluation of Differential Capacity and Surface Charge in Electrical Double Layers with A.C. Oscillopolarography. Collection of Czechoslovak Chemical Communications, 2000, 65, 371-379.	1.0	1
101	The solvation effect on the rattling behaviour of the hydrated excess proton in water. Physical Chemistry Chemical Physics, 2019, 21, 22385-22389.	2.8	1
102	ADVANCES IN A. C. OSCILLOPOLAROGRAPHY. Instrumentation Science and Technology, 2001, 29, 295-307.	1.8	0
103	Extraction with Toluene and HPLC Determination of Aluminum in the Form of an 8â€Hydroxyquinoline Derivative. Journal of Liquid Chromatography and Related Technologies, 2003, 26, 273-283.	1.0	0
104	Selective Penetration of Metal Atoms â€" New Evidence and Application for the Simple Ideal Penetration Model of the Long-Chain Close-Packed Alkanethiol Self-Assembled Monolayers on Au(111). Physics Procedia, 2012, 32, 198-205.	1.2	0
105	Deriving TC50 Values of Nanoparticles from Electrochemical Monitoring of Lactate Dehydrogenase Activity Indirectly. Methods in Molecular Biology, 2012, 926, 113-130.	0.9	0