Linhua Jiang

List of Publications by Year
in descending order

120 papers	3,401 citations	147566 31 h-index	174990 52 g-index
120 all docs	120 docs citations	120 times ranked	2111 citing authors

#	Article	IF	Citations
1	A model for predicting carbonation of high-volume fly ash concrete. Cement and Concrete Research, 2000, 30, 699-702.	4.6	156
2	Enhancement of mechanical and electrical properties of graphene/cement composite due to improved dispersion of graphene by addition of silica fume. Construction and Building Materials, 2018, 164, 433-441.	3.2	156
3	Effect of ginger extract as green inhibitor on chloride-induced corrosion of carbon steel in simulated concrete pore solutions. Journal of Cleaner Production, 2019, 214, 298-307.	4.6	152
4	Effect of chloride salt type on chloride binding behavior of concrete. Construction and Building Materials, 2012, 37, 512-517.	3.2	124
5	Influence of carbonation on chloride-induced reinforcement corrosion in simulated concrete pore solutions. Construction and Building Materials, 2014, 56, 16-20.	3.2	113
6	A novel green reinforcement corrosion inhibitor extracted from waste Platanus acerifolia leaves. Construction and Building Materials, 2020, 260, 119695.	3.2	111
7	Predicting the calcium leaching behavior of cement pastes in aggressive environments. Construction and Building Materials, 2012, 29, 88-96.	3.2	92
8	Utilization of flue gas desulfurization gypsum as an activation agent for high-volume slag concrete. Journal of Cleaner Production, 2018, 205, 589-598.	4.6	90
9	Evolution of pH and chemical composition of pore solution in carbonated concrete. Construction and Building Materials, 2012, 28, 519-524.	3.2	83
10	Deoxyribonucleic acid as an inhibitor for chloride-induced corrosion of reinforcing steel in simulated concrete pore solutions. Construction and Building Materials, 2017, 150, 238-247.	3.2	76
11	Preparation of phytic acid conversion coating and corrosion protection performances for steel in chlorinated simulated concrete pore solution. Corrosion Science, 2018, 139, 275-288.	3.0	76
12	Pore structure and permeability of concrete with high volume of limestone powder addition. Powder Technology, 2018, 338, 416-424.	2.1	74
13	Influence of detection methods on chloride threshold value for the corrosion of steel reinforcement. Construction and Building Materials, 2009, 23, 1902-1908.	3.2	73
14	Monitoring chloride ion penetration in concrete structure based on the conductivity of graphene/cement composite. Construction and Building Materials, 2017, 136, 394-404.	3.2	62
15	Influence of chloride salt type on threshold level of reinforcement corrosion in simulated concrete pore solutions. Construction and Building Materials, 2012, 30, 516-521.	3.2	56
16	Effect of limestone powder addition on threshold chloride concentration for steel corrosion in reinforced concrete. Cement and Concrete Research, 2020, 131, 106018.	4.6	56
17	Influence of CaCl2 and NaCl from different sources on chloride threshold value for the corrosion of steel reinforcement in concrete. Construction and Building Materials, 2011, 25, 663-669.	3.2	55
18	Releases of bound chlorides from chloride-admixed plain and blended cement pastes subjected to sulfate attacks. Construction and Building Materials, 2013, 45, 53-59.	3.2	54

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19	Chloride absorption by nitrate, nitrite and aminobenzoate intercalated layered double hydroxides. Journal of Materials Science, 2017, 52, 5908-5916.	1.7	52
20	Evaluation of sulfate resistance of slag contained concrete under steam curing. Construction and Building Materials, 2019, 195, 231-237.	3.2	47
21	Influence of temperature history on chloride diffusion in high volume fly ash concrete. Construction and Building Materials, 2017, 144, 677-685.	3.2	46
22	A time-dependent chloride diffusion model for predicting initial corrosion time of reinforced concrete with slag addition. Cement and Concrete Research, 2021, 145, 106455.	4.6	46
23	Utilization of limestone powder as an activator for early-age strength improvement of slag concrete. Construction and Building Materials, 2020, 253, 119257.	3.2	44
24	Deterioration of pastes exposed to leaching, external sulfate attack and the dual actions. Construction and Building Materials, 2016, 116, 52-62.	3.2	43
25	Degradation of concrete with addition of mineral admixture due to free chloride ion penetration under the effect of carbonation. Corrosion Science, 2018, 138, 42-53.	3.0	42
26	Research on electrical conductivity of graphene/cement composites. Advances in Cement Research, 2020, 32, 45-52.	0.7	41
27	Repair of concrete crack by pulse electro-deposition technique. Construction and Building Materials, 2017, 148, 241-248.	3.2	40
28	Impact of calcium leaching on mechanical and physical behaviors of high belite cement pastes. Construction and Building Materials, 2021, 286, 122983.	3.2	35
29	Inhibition effect and mechanism of polyacrylamide for steel corrosion in simulated concrete pore solution. Construction and Building Materials, 2020, 259, 120425.	3.2	34
30	Influence of cation type on diffusion behavior of chloride ions in concrete. Construction and Building Materials, 2015, 99, 150-158.	3.2	33
31	Influences of exposure condition and sulfate salt type on deterioration of paste with and without fly ash. Construction and Building Materials, 2016, 113, 951-963.	3.2	33
32	Effects of Deoxyribonucleic acid on cement paste properties and chloride-induced corrosion of reinforcing steel in cement mortars. Cement and Concrete Composites, 2018, 91, 87-96.	4.6	33
33	Modeling of chloride diffusion in concrete immersed in CaCl2 and NaCl solutions with account of multi-phase reactions and ionic interactions. Construction and Building Materials, 2014, 66, 1-9.	3.2	32
34	Monitoring chloride ion penetration in concrete with different mineral admixtures based on embedded chloride ion selective electrodes. Construction and Building Materials, 2017, 143, 1-15.	3.2	32
35	Influence of sulfate salt type on passive film of steel in simulated concrete pore solution. Construction and Building Materials, 2019, 223, 352-359.	3.2	32
36	Preparation and characterization of capric-stearic acid/montmorillonite/graphene composite phase change material for thermal energy storage in buildings. Construction and Building Materials, 2021, 301, 124102.	3.2	32

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37	Modeling the chloride concentration profile in migration test based on general Poisson Nernst Planck equations and pore structure hypothesis. Construction and Building Materials, 2013, 40, 596-603.	3.2	31
38	Electrochemical Characterization of a Solid Embeddable Ag/AgCl Reference Electrode for Corrosion Monitoring in Reinforced Concrete. Electrochemistry, 2014, 82, 1040-1046.	0.6	31
39	Prediction of compressive strength and elastic modulus of expanded polystyrene lightweight concrete. Magazine of Concrete Research, 2015, 67, 954-962.	0.9	30
40	The effect of carbonate and sulfate ions on chloride threshold level of reinforcement corrosion in mortar with/without fly ash. Construction and Building Materials, 2016, 113, 90-95.	3.2	30
41	Effect of polyacrylamide on the carbonation behavior of cement paste. Cement and Concrete Research, 2022, 156, 106756.	4.6	30
42	The mechanical properties and electrochemical behavior of cement paste containing nano-MgO at different curing temperature. Construction and Building Materials, 2018, 164, 663-671.	3.2	29
43	Effects of stray current and silicate ions on electrochemical behavior of a high-strength prestressing steel in simulated concrete pore solutions. Corrosion Science, 2022, 197, 110083.	3.0	29
44	Use of grounded iron ore tailings (GIOTs) and BaCO3 to improve sulfate resistance of pastes. Construction and Building Materials, 2017, 150, 66-76.	3.2	27
45	Effect of stray current on stability of bound chlorides in chloride and sulfate coexistence environment. Construction and Building Materials, 2019, 194, 247-256.	3.2	27
46	Characterization of Ag/AgCl electrode manufactured by immersion in sodium hypochloride acid for monitoring chloride content in concrete. Construction and Building Materials, 2016, 122, 310-319.	3.2	26
47	The effect of tensile fatigue on chloride ion diffusion in concrete. Construction and Building Materials, 2017, 151, 119-126.	3.2	26
48	Employing ultrasonic wave as a novel trigger of microcapsule self-healing cementitious materials. Cement and Concrete Composites, 2021, 118, 103951.	4.6	26
49	Impact of compressive fatigue on chloride diffusion coefficient in OPC concrete: An analysis using EIS method. Construction and Building Materials, 2016, 113, 712-720.	3.2	25
50	Impact of cation type and fly ash on deterioration process of high belite cement pastes exposed to sulfate attack. Construction and Building Materials, 2021, 286, 122961.	3.2	25
51	Determination of calcium leaching behavior of cement pastes exposed to ammonium chloride aqueous solution via an electrochemical impedance spectroscopic approach. Construction and Building Materials, 2019, 196, 267-276.	3.2	24
52	Investigation on the performance characteristics of chloride selective electrode in concrete. Ionics, 2015, 21, 2981-2992.	1.2	23
53	Synthesis of nanoSiO2@graphene-oxide core-shell nanoparticles and its influence on mechanical properties of cementitious materials. Construction and Building Materials, 2020, 236, 117619.	3.2	23
54	Influence of surfactants on chloride binding in cement paste. Construction and Building Materials, 2016, 125, 369-374.	3.2	22

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55	Effect of sulfate ions on corrosion of reinforced steel treated by DNA corrosion inhibitor in simulated concrete pore solution. Construction and Building Materials, 2019, 228, 116752.	3.2	22
56	Effect of electrochemical chloride removal and ground granulated blast furnace slag on the chloride binding of cement paste subjected to NaCl and Na2SO4 attack. Construction and Building Materials, 2019, 220, 538-546.	3.2	22
57	Impact of phosphate corrosion inhibitors on chloride binding and release in cement pastes. Construction and Building Materials, 2020, 236, 117469.	3.2	21
58	Influence of cation type on deterioration process of cement paste in sulfate environment. Construction and Building Materials, 2014, 71, 158-166.	3.2	20
59	Characterization of sulfate diffusion into cement paste by low frequency impedance spectroscopy. Materials Letters, 2016, 174, 234-237.	1.3	20
60	Impact of calcium leaching on chloride diffusion behavior of cement pastes exposed to ammonium chloride aqueous solution. Construction and Building Materials, 2017, 153, 211-215.	3.2	20
61	Effect of flue gas desulfurization gypsum addition on critical chloride content for rebar corrosion in fly ash concrete. Construction and Building Materials, 2021, 286, 122963.	3.2	19
62	Chloride threshold value for reinforcement corrosion in concrete with additions of silica fume or fly ash. Magazine of Concrete Research, 2011, 63, 905-913.	0.9	17
63	Influence of elevated temperature on release of bound chlorides from chloride-admixed plain and blended cement pastes. Construction and Building Materials, 2016, 104, 9-15.	3.2	17
64	Use of XPS for quantitative evaluation of tensile-stress-induced degradation of passive film on carbon steel in simulated concrete pore solution. Construction and Building Materials, 2021, 274, 121779.	3.2	17
65	Electrochemical Characterization of Solid Ag/AgCl Reference Electrode with Different Electrolytes for Corrosion Monitoring of Steel in Concrete. Electrochemistry, 2016, 84, 383-389.	0.6	15
66	Fabrication and characterization of pseudo reference electrode based on graphene-cement composites for corrosion monitoring in reinforced concrete structure. Construction and Building Materials, 2019, 204, 144-157.	3.2	15
67	Effect of silica fume and fly ash on the stability of bound chlorides in cement mortar during electrochemical chloride extraction. Construction and Building Materials, 2020, 256, 119481.	3.2	14
68	Experimental study and modeling on effective thermal conductivity of EPS lightweight concrete. Journal of Thermal Science and Technology, 2016, 11, JTST0023-JTST0023.	0.6	13
69	Flexural Strength of Cement Paste Beam under Chemical Degradation: Experiments and Simplified Modeling. Journal of Materials in Civil Engineering, 2013, 25, 555-562.	1.3	12
70	Deterioration process of high belite cement paste exposed to sulfate attack, calcium leaching and the dual actions. Journal of Materials Research and Technology, 2021, 15, 2982-2992.	2.6	12
71	Anti-microbial corrosion performance of concrete treated by Cu2O electrodeposition: Influence of different treatment parameters. Cement and Concrete Composites, 2021, 123, 104195.	4.6	12
72	Using EDTA-2Na to inhibit sulfate attack in slag cement mortar under steam curing. Construction and Building Materials, 2020, 265, 120324.	3.2	11

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73	Influence of flexural fatigue on chloride threshold value for the corrosion of steels in Ca(OH)2 solutions. Materials Chemistry and Physics, 2015, 164, 23-28.	2.0	10
74	Surface coating treatment and densification of mortar by electrodeposition method. Magazine of Concrete Research, 2016, 68, 69-79.	0.9	10
75	Improvement on the Repair Effect of Electrochemical Chloride Extraction Using a Modified Electrode Configuration. Materials, 2018, 11, 225.	1.3	10
76	Influence of steam curing on compressive fatigue performance of high-volume slag concrete. Magazine of Concrete Research, 2019, 71, 773-780.	0.9	10
77	Influence of anion types on the electrodeposition healing effect of concrete cracks. Journal Wuhan University of Technology, Materials Science Edition, 2012, 27, 1154-1159.	0.4	9
78	Electrochemical and Semiconducting Properties of Passive Films on Steel Surfaces in Alkali-Activated Slag Extraction Solution. Journal of Materials in Civil Engineering, 2018, 30, .	1.3	9
79	Corrosion Resistance of Steel in Cracked Reinforced Concrete after Electro-depositon Treatment. Journal Wuhan University of Technology, Materials Science Edition, 2019, 34, 1127-1135.	0.4	9
80	Vickers hardness distribution and prediction model of cement pastes corroded by sulfate under the coexistence of electric field and chloride. Construction and Building Materials, 2021, 309, 125119.	3.2	9
81	Chloride erosion resistance of calcium formate incorporated cement mortar under chloride attack. Construction and Building Materials, 2022, 314, 125611.	3.2	9
82	Influence of chloride salt type on critical chloride content of reinforcement corrosion in concrete. Magazine of Concrete Research, 2013, 65, 319-331.	0.9	8
83	A Method of Preparation of Ag/AgCl Chloride Selective Electrode. Journal Wuhan University of Technology, Materials Science Edition, 2018, 33, 767-771.	0.4	8
84	Role of swelling agent and set-controlling admixtures on chloride binding and diffusion in cement matrix. Construction and Building Materials, 2020, 230, 117009.	3.2	8
85	Developing a Multi-Element Sensor to Non-Destructively Monitor Several Fundamental Parameters Related to Concrete Durability. Sensors, 2020, 20, 5607.	2.1	8
86	Effect of retarder on hydration properties of light-burned magnesia. Construction and Building Materials, 2020, 263, 119762.	3.2	8
87	Influence of Calcium Leaching on Mechanical and Physical Properties of Limestone Powderâ€“Cement Pastes Cured under Different Temperatures. Journal of Materials in Civil Engineering, 2022, 34, .	1.3	8
88	Influence of carbonation on fatigue of concrete with high volume of ground granulated blast-furnace slag. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 361-368.	0.4	7
89	Influence of compressive fatigue on the sulfate resistance of slag contained concrete under steam curing. Structural Concrete, 2019, 20, 1572-1582.	1.5	7
90	Influence of Hydrostatic Pressure and Cationic Type on the Diffusion Behavior of Chloride in Concrete. Materials, 2021, 14, 2851.	1.3	7

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91	Understanding the role of calcium formate towards hydration and deformation property of light-burned magnesia cement. Construction and Building Materials, 2021, 289, 122995.	3.2	7
92	Application of Electrodeposition Method in Upgrading Mortar Durability. Journal of Advanced Concrete Technology, 2015, 13, 367-372.	0.8	6
93	Impact of elevated curing temperature on mechanical properties and microstructure of MgOâ€based expansive additive cement mortars. Structural Concrete, 2020, 21, 1082-1092.	1.5	6
94	Influence of curing temperature on the mechanical properties and microstructure of limestone powder mass concrete. Structural Concrete, 2021, 22, E745.	1.5	6
95	Using ultrasonic wave to trigger microcapsule inhibitor against chloride-induced corrosion of carbon steel in simulated concrete pore solution. Construction and Building Materials, 2021, 311, 125331.	3.2	6
96	The effect of graphene on the conductivity of magnesium sulfate cement. Construction and Building Materials, 2021, 312, 125342.	3.2	6
97	Reduction of SO42â˜' and Clâ˜' migration rates and degradation of silica nanoparticles incorporated cement pastes exposed to co-existence of sulfate, chloride and electric fields. Construction and Building Materials, 2022, 344, 128234.	3.2	6
98	Carbonation Resistance of Surface Protective Materials Modified with Hybrid NanoSiO2. Coatings, 2021, 11, 269.	1.2	5
99	The role of chloride binding mechanism in the interpretation of chloride profiles in concrete containing limestone powder. Journal of Sustainable Cement-Based Materials, 2023, 12, 24-35.	1.7	5
100	Influence of Carbonation on the Electrical Conductivity of Graphene/Cement Composite. Journal Wuhan University of Technology, Materials Science Edition, 2021, 36, 804-810.	0.4	5
101	Effect of Pulse Parameters on Deposition in Concrete Crack using Pulse Current Electro-deposition. Journal Wuhan University of Technology, Materials Science Edition, 2018, 33, 908-914.	0.4	4
102	Effect of Ultrasonic Parameters on Electrochemical Chloride Removal and Rebar Repassivation of Reinforced Concrete. Materials, 2019, 12, 2774.	1.3	4
103	Evaluation and Prediction on the Hydraulic Abrasion Performance of High Belite Cement-Based Concrete. KSCE Journal of Civil Engineering, 2021, 25, 2175-2185.	0.9	4
104	Effect of ultraâ€high molecular weight polyethylene fiber on the early mechanical strength and shrinkage crack resistance of concrete. Structural Concrete, 2022, 23, 412-422.	1.5	4
105	Effect of combined cations on chloride diffusion behavior in concrete. Construction and Building Materials, 2022, 339, 127669.	3.2	4
106	Effect of electroless plating time and temperature on the formation and antibacterial ability of Cu-plated cement-based material. Cement and Concrete Composites, 2022, 131, 104566.	4.6	4
107	Galloping Reduction of Transmission Lines by Using Phononic Crystal. Crystals, 2017, 7, 346.	1.0	3
108	Influence of retarders on hydration and microstructure development of cement containing high-volume limestone powder. Journal of Thermal Analysis and Calorimetry, 2020, 141, 685-696.	2.0	3

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109	Influence of high-volume limestone powder on hydration and microstructural development of cement. Advances in Cement Research, 2021, 33, 197-209.	0.7	3
110	Evaluation of frost damage on high-belite cement concrete based on Vickers hardness and ultrasonic theory. Magazine of Concrete Research, 0, , 1-15.	0.9	3
111	Effect of Compressive Fatigue on Sulfate Ion Diffusion in Standard-Cured and Steam-Cured Concrete Containing Slag. Journal of Materials in Civil Engineering, 2022, 34, .	1.3	3
112	Electrochemical behavior of steel bar in electrolytes: Influence of pH value and cations. Journal Wuhan University of Technology, Materials Science Edition, 2011, 26, 1133-1136.	0.4	2
113	Influence of mineral admixtures on the electro-deposition healing effect of concrete cracks. Journal Wuhan University of Technology, Materials Science Edition, 2014, 29, 1219-1224.	0.4	2
114	Using non-destructive testing tools to assess the pore structure of slag-blended cement paste under steam curing. Magazine of Concrete Research, 2021, 73, 98-107.	0.9	2
115	Cement with high-volume limestone powder: effect of powder fineness on packing density, strength and hydration behaviour. Advances in Cement Research, 2022, 34, 311-323.	0.7	2
116	Improvement of mortar durability by electrochemical technique. Advances in Cement Research, 2017, 29, 429-437.	0.7	1
117	Novel Preparation of Bi/BiVO4 Catalyst Supported by Alkali-Modified Diatomite and its Visible Light-Driven Degradation Performance. Nano, 2021, 16, 2150034.	0.5	1
118	Modeling of damage in cement paste subject to external sulfate attack. Computers and Concrete, 2015, 16, 847-864.	0.7	1
119	Phase evolutions of cementitious materials with very low water/binder ratios. Magazine of Concrete Research, 2021, 73, 919-928.	0.9	0
120	Influence of curing temperature on freeze-thaw resistance of limestone powder hydraulic concrete. Case Studies in Construction Materials, 2022, , e01322.	0.8	0