

# Xianming Shi

## List of Publications by Year in descending order

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207  
papers

8,486  
citations

53660

45  
h-index

54797

84  
g-index

232  
all docs

232  
docs citations

232  
times ranked

6207  
citing authors

#	ARTICLE	IF	CITATIONS
1	Durability of steel reinforced concrete in chloride environments: An overview. <i>Construction and Building Materials</i> , 2012, 30, 125-138.	3.2	651
2	Effect of nanoparticles on the anticorrosion and mechanical properties of epoxy coating. <i>Surface and Coatings Technology</i> , 2009, 204, 237-245.	2.2	595
3	Characteristics and applications of fly ash as a sustainable construction material: A state-of-the-art review. <i>Resources, Conservation and Recycling</i> , 2018, 136, 95-109.	5.3	322
4	Rheological Properties and Chemical Bonding of Asphalt Modified with Nanosilica. <i>Journal of Materials in Civil Engineering</i> , 2013, 25, 1619-1630.	1.3	278
5	A self-healing cementitious composite using oil core/silica gel shell microcapsules. <i>Cement and Concrete Composites</i> , 2011, 33, 506-512.	4.6	260
6	Environmental Impacts of Chemicals for Snow and Ice Control: State of the Knowledge. <i>Water, Air, and Soil Pollution</i> , 2012, 223, 2751-2770.	1.1	259
7	Rheological properties and chemical analysis of nanoclay and carbon microfiber modified asphalt with Fourier transform infrared spectroscopy. <i>Construction and Building Materials</i> , 2013, 38, 327-337.	3.2	212
8	Effect of deicing solutions on the tensile strength of micro- or nano-modified asphalt mixture. <i>Construction and Building Materials</i> , 2011, 25, 195-200.	3.2	161
9	Effect of styrene-butadiene rubber latex on the chloride permeability and microstructure of Portland cement mortar. <i>Construction and Building Materials</i> , 2009, 23, 2283-2290.	3.2	157
10	Chloride Permeability and Microstructure of Portland Cement Mortars Incorporating Nanomaterials. <i>Transportation Research Record</i> , 2008, 2070, 13-21.	1.0	152
11	Freeze-thaw damage and chemical change of a portland cement concrete in the presence of diluted deicers. <i>Materials and Structures/Materiaux Et Constructions</i> , 2010, 43, 933-946.	1.3	146
12	Permeable concrete pavements: A review of environmental benefits and durability. <i>Journal of Cleaner Production</i> , 2019, 210, 1605-1621.	4.6	146
13	Performance of asphalt binder blended with non-modified and polymer-modified nanoclay. <i>Construction and Building Materials</i> , 2012, 35, 159-170.	3.2	143
14	Deicer Impacts on Pavement Materials: Introduction and Recent Developments. <i>Open Civil Engineering Journal</i> , 2009, 3, 16-27.	0.4	126
15	Portland Cement Paste Modified by TiO <sub>2</sub> Nanoparticles: A Microstructure Perspective. <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 11575-11582.	1.8	121
16	Transport Properties of Carbon-Nanotube/Cement Composites. <i>Journal of Materials Engineering and Performance</i> , 2013, 22, 184-189.	1.2	120
17	Thin Nacre-Biomimetic Coating with Super-Anticorrosion Performance. <i>ACS Nano</i> , 2018, 12, 10189-10200.	7.3	114
18	Corrosion of Deicers to Metals in Transportation Infrastructure: Introduction and Recent Developments. <i>Corrosion Reviews</i> , 2009, 27, 23-52.	1.0	108

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19	Cyber-physical systems for water sustainability: challenges and opportunities. , 2015, 53, 216-222.		108
20	Safety Effects of Winter Weather: The State of Knowledge and Remaining Challenges. Transport Reviews, 2010, 30, 677-699.	4.7	96
21	The role of admixed graphene oxide in a cement hydration system. Carbon, 2019, 148, 141-150.	5.4	95
22	Anti-icing Performance of a Superhydrophobic PDMS/Modified Nano-silica Hybrid Coating for Insulators. Journal of Adhesion Science and Technology, 2012, 26, 665-679.	1.4	90
23	Effect of Nanoparticles on the Thermal and Mechanical Properties of Epoxy Coatings. Journal of Nanoscience and Nanotechnology, 2016, 16, 9874-9881.	0.9	89
24	Performance evaluation and modification mechanism analysis of asphalt binders modified by graphene oxide. Construction and Building Materials, 2018, 163, 880-889.	3.2	86
25	Evaluation of mechanical performance and modification mechanism of asphalt modified with graphene oxide and warm mix additives. Journal of Cleaner Production, 2018, 193, 87-96.	4.6	86
26	Nanocomposite organic coatings for corrosion protection of metals: A review of recent advances. Progress in Organic Coatings, 2022, 162, 106573.	1.9	85
27	Use of chloride-based ice control products for sustainable winter maintenance: A balanced perspective. Cold Regions Science and Technology, 2013, 86, 104-112.	1.6	83
28	Hydrogen peroxide sensing using ultrathin platinum-coated gold nanoparticles with core@shell structure. Biosensors and Bioelectronics, 2013, 41, 576-581.	5.3	80
29	Nanotechnology in Cement-Based Materials: A Review of Durability, Modeling, and Advanced Characterization. Nanomaterials, 2019, 9, 1213.	1.9	80
30	Accelerated laboratory evaluation of surface treatments for protecting concrete bridge decks from salt scaling. Construction and Building Materials, 2014, 55, 128-135.	3.2	75
31	A FESEM/EDX investigation into how continuous deicer exposure affects the chemistry of Portland cement concrete. Construction and Building Materials, 2011, 25, 957-966.	3.2	72
32	Performance of hot and warm mix asphalt mixtures enhanced by nano-sized graphene oxide. Construction and Building Materials, 2019, 217, 273-282.	3.2	72
33	Strength and corrosion properties of Portland cement mortar and concrete with mineral admixtures. Construction and Building Materials, 2011, 25, 3245-3256.	3.2	71
34	Correlating lab and field tests for evaluation of deicing and anti-icing chemicals: A review of potential approaches. Cold Regions Science and Technology, 2014, 97, 21-32.	1.6	66
35	Thermosetting resin system based on novolak and bismaleimide for resin-transfer molding. Journal of Applied Polymer Science, 2002, 83, 1651-1657.	1.3	63
36	Functionalized layered double hydroxide applied to heavy metal ions absorption: A review. Nanotechnology Reviews, 2020, 9, 800-819.	2.6	63

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37	Self-repairing coating for corrosion protection of aluminum alloys. <i>Progress in Organic Coatings</i> , 2009, 65, 37-43.	1.9	60
38	Influence of graphene oxide in a chemically activated fly ash. <i>Fuel</i> , 2018, 226, 644-657.	3.4	60
39	Reactivity of coal fly ash used in cementitious binder systems: A state-of-the-art overview. <i>Fuel</i> , 2021, 301, 121031.	3.4	60
40	Laboratory Investigation of Performance and Impacts of Snow and Ice Control Chemicals for Winter Road Service. <i>Journal of Cold Regions Engineering - ASCE</i> , 2011, 25, 89-114.	0.5	59
41	Adhesion characteristics of graphene oxide modified asphalt unveiled by surface free energy and AFM-scanned micro-morphology. <i>Construction and Building Materials</i> , 2020, 244, 118404.	3.2	58
42	Understanding the role of unzipped carbon nanotubes in cement pastes. <i>Cement and Concrete Composites</i> , 2022, 126, 104366.	4.6	58
43	Performance evaluation of bitumen with a homogeneous dispersion of carbon nanotubes. <i>Carbon</i> , 2020, 158, 465-471.	5.4	57
44	Comparative study in chemistry of microbially and electrochemically induced pitting of 316L stainless steel. <i>Corrosion Science</i> , 2003, 45, 2577-2595.	3.0	55
45	Laboratory investigation of reinforcement corrosion initiation and chloride threshold content for self-compacting concrete. <i>Cement and Concrete Research</i> , 2010, 40, 1507-1516.	4.6	55
46	Electrochemical Chloride Extraction and Electrochemical Injection of Corrosion Inhibitor in Concrete: State of the Knowledge. <i>Corrosion Reviews</i> , 2009, 27, 53-82.	1.0	52
47	Laboratory Assessment of a Self-Healing Cementitious Composite. <i>Transportation Research Record</i> , 2010, 2142, 9-17.	1.0	50
48	Nano-engineered, Fly Ash-Based Geopolymer Composites: An Overview. <i>Resources, Conservation and Recycling</i> , 2021, 168, 105334.	5.3	45
49	Sequestration of phosphorus from wastewater by cement-based or alternative cementitious materials. <i>Water Research</i> , 2014, 62, 88-96.	5.3	44
50	Laboratory Investigation and Neural Networks Modeling of Deicer Ingress into Portland Cement Concrete and its Corrosion Implications. <i>Corrosion Reviews</i> , 2010, 28, 105-154.	1.0	43
51	Exploring the Interactions of Chloride Deicer Solutions with Nanomodified and Micromodified Asphalt Mixtures Using Artificial Neural Networks. <i>Journal of Materials in Civil Engineering</i> , 2012, 24, 805-815.	1.3	43
52	Surface abrasion resistance of high-volume fly ash concrete modified by graphene oxide: Macro- and micro-perspectives. <i>Construction and Building Materials</i> , 2020, 237, 117686.	3.2	42
53	Percolation backbone structure analysis in electrically conductive carbon fiber reinforced cement composites. <i>Composites Part B: Engineering</i> , 2012, 43, 3270-3275.	5.9	41
54	Electrochemical and mechanical properties of superhydrophobic aluminum substrates modified with nano-silica and fluorosilane. <i>Surface and Coatings Technology</i> , 2012, 206, 3700-3713.	2.2	41

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55	New insights into how MgCl <sub>2</sub> deteriorates Portland cement concrete. <i>Cement and Concrete Research</i> , 2019, 120, 244-255.	4.6	39
56	Applying artificial neural networks and virtual experimental design to quality improvement of two industrial processes. <i>International Journal of Production Research</i> , 2004, 42, 101-118.	4.9	37
57	Assessment of Electrical Injection of Corrosion Inhibitor for Corrosion Protection of Reinforced Concrete. <i>Transportation Research Record</i> , 2008, 2044, 51-60.	1.0	35
58	Effect of chemically modified recycled carbon fiber composite on the mechanical properties of cementitious mortar. <i>Composites Part B: Engineering</i> , 2019, 173, 106853.	5.9	35
59	Bamboo fiber has engineering properties and performance suitable as reinforcement for asphalt mixture. <i>Construction and Building Materials</i> , 2021, 290, 123240.	3.2	35
60	Exploring the performance and corrosivity of chloride deicer solutions: Laboratory investigation and quantitative modeling. <i>Cold Regions Science and Technology</i> , 2013, 86, 36-44.	1.6	33
61	Developing an abiotic capsule-based self-healing system for cementitious materials: The state of knowledge. <i>Construction and Building Materials</i> , 2017, 156, 1096-1113.	3.2	33
62	Carbon and Steel Surfaces Modified by <i>Leptothrix discophora</i> SP-6: Characterization and Implications. <i>Environmental Science &amp; Technology</i> , 2007, 41, 7987-7996.	4.6	32
63	Corrosion by Chloride Deicers on Highway Maintenance Equipment. <i>Transportation Research Record</i> , 2013, 2361, 106-113.	1.0	32
64	Mechanism of corrosion protection in chloride solution by an apple-based green inhibitor: experimental and theoretical studies. <i>Journal of Infrastructure Preservation and Resilience</i> , 2020, 1, .	1.5	32
65	Interfacial nano-engineering by graphene oxide to enable better utilization of silica fume in cementitious composite. <i>Journal of Cleaner Production</i> , 2022, 354, 131381.	4.6	32
66	Electrochemistry of passive metals modified by manganese oxides deposited by : two-step model verified by ToF-SIMS. <i>Corrosion Science</i> , 2002, 44, 1027-1045.	3.0	31
67	Influence of releasing graphene oxide into a clayey sand: physical and mechanical properties. <i>RSC Advances</i> , 2017, 7, 18060-18067.	1.7	31
68	A phenomenological model for the chloride threshold of pitting corrosion of steel in simulated concrete pore solutions. <i>Anti-Corrosion Methods and Materials</i> , 2011, 58, 179-189.	0.6	30
69	Evaluating Snow and Ice Control Chemicals for Environmentally Sustainable Highway Maintenance Operations. <i>Journal of Transportation Engineering</i> , 2014, 140, .	0.9	30
70	Road surface friction prediction using long short-term memory neural network based on historical data. <i>Journal of Intelligent Transportation Systems: Technology, Planning, and Operations</i> , 2022, 26, 34-45.	2.6	30
71	Techniques of corrosion monitoring of steel rebar in reinforced concrete structures: A review. <i>Structural Health Monitoring</i> , 2022, 21, 1879-1905.	4.3	30
72	Evaluation of Effects of Weather Information on Winter Maintenance Costs. <i>Transportation Research Record</i> , 2009, 2107, 104-110.	1.0	29

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73	Application of Nano-SiO <sub>2</sub> and Nano-Fe <sub>2</sub> O <sub>3</sub> for Protection of Steel Rebar in Chloride Contaminated Concrete: Epoxy Nanocomposite Coatings and Nano-Modified Mortars. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 427-436.	0.9	29
74	Impacts of Potassium Acetate and Sodium-Chloride Deicers on Concrete. <i>Journal of Materials in Civil Engineering</i> , 2017, 29, .	1.3	29
75	Effects of alkali-treated recycled carbon fiber on the strength and free drying shrinkage of cementitious mortar. <i>Journal of Cleaner Production</i> , 2019, 228, 1187-1195.	4.6	29
76	Graphene oxide modified, clinker-free cementitious paste with principally alkali-activated fly ash. <i>Fuel</i> , 2020, 269, 117418.	3.4	29
77	An electrochemical and microstructural characterization of steel-mortar admixed with corrosion inhibitors. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 52-66.	0.9	28
78	Investigation into the Synergistic Effect of Nano-sized Materials on the Anti-corrosion Properties of a Waterborne Epoxy Coating. <i>International Journal of Electrochemical Science</i> , 2016, 11, 6023-6042.	0.5	28
79	Evaluation of Asphalt Blended With Low Percentage of Carbon Micro-Fiber and Nanoclay. <i>Journal of Testing and Evaluation</i> , 2013, 41, 278-288.	0.4	28
80	Microbially Deposited Manganese and Iron Oxides on Passive Metals—Their Chemistry and Consequences for Material Performance. <i>Corrosion</i> , 2002, 58, 728-738.	0.5	27
81	Effects of mixing sequence on mechanical properties of graphene oxide and warm mix additive composite modified asphalt binder. <i>Construction and Building Materials</i> , 2019, 217, 301-309.	3.2	27
82	Enhancing degradation and corrosion resistance of AZ31 magnesium alloy through hydrophobic coating. <i>Materials Chemistry and Physics</i> , 2019, 225, 426-432.	2.0	27
83	An amidoxime-functionalized polypropylene fiber: Competitive removal of Cu(II), Pb(II) and Zn(II) from wastewater and subsequent sequestration in cement mortar. <i>Journal of Cleaner Production</i> , 2020, 274, 123049.	4.6	27
84	Stochastic Modeling of Service Life of Concrete Structures in Chloride-Laden Environments. <i>Journal of Materials in Civil Engineering</i> , 2012, 24, 381-390.	1.3	26
85	Graphene coated sand for smart cement composites. <i>Construction and Building Materials</i> , 2022, 346, 128313.	3.2	26
86	Fabrication of Super-Hydrophobic Surfaces with Long-Term Stability. <i>Journal of Dispersion Science and Technology</i> , 2011, 32, 969-974.	1.3	25
87	Impact of nanoclay and carbon microfiber in combating the deterioration of asphalt concrete by non-chloride deicers. <i>Construction and Building Materials</i> , 2018, 160, 514-525.	3.2	25
88	Benefit-Cost Analysis of Weather Information for Winter Maintenance. <i>Transportation Research Record</i> , 2008, 2055, 119-127.	1.0	23
89	Corrosion inhibitors for metals in maintenance equipment: introduction and recent developments. <i>Corrosion Reviews</i> , 2014, 32, 163-181.	1.0	23
90	A targeted approach of employing nano-materials in high-volume fly ash concrete. <i>Cement and Concrete Composites</i> , 2019, 104, 103390.	4.6	23

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91	Development of Standard Laboratory Testing Procedures to Evaluate the Performance of Deicers. Journal of Testing and Evaluation, 2012, 40, 1015-1026.	0.4	22
92	Evaluation of Winter Maintenance Chemicals and Crashes with an Artificial Neural Network. Transportation Research Record, 2014, 2440, 43-50.	1.0	20
93	Effects of microwave, thermomechanical and chemical treatments of sewage sludge ash on its early-age behavior as supplementary cementitious material. Journal of Cleaner Production, 2020, 258, 120647.	4.6	20
94	Mechanical activation improves reactivity and reduces leaching of municipal solid waste incineration (MSWI) bottom ash in cement hydration system. Journal of Cleaner Production, 2022, 363, 132533.	4.6	20
95	On the Use of Nanotechnology to Manage Steel Corrosion. Recent Patents on Engineering, 2010, 4, 44-50.	0.3	19
96	Surface-sulfonated polystyrene microspheres improve crack resistance of carbon microfiber-reinforced Portland cement mortar. Journal of Materials Science, 2010, 45, 3497-3505.	1.7	19
97	Vehicle-based sensor technologies for winter highway operations. IET Intelligent Transport Systems, 2012, 6, 336.	1.7	18
98	Estimating Statewide Benefits of Winter Maintenance Operations. Transportation Research Record, 2013, 2329, 17-23.	1.0	18
99	Nano-montmorillonite modified foamed paste with a high volume fly ash binder. RSC Advances, 2017, 7, 9803-9812.	1.7	18
100	Developing Renewable Agro-Based Anti-Icers for Sustainable Winter Road Maintenance Operations. Journal of Materials in Civil Engineering, 2019, 31, .	1.3	18
101	A peony-leaves-derived liquid corrosion inhibitor: protecting carbon steel from NaCl. Green Chemistry Letters and Reviews, 2017, 10, 359-379.	2.1	17
102	An Accurate, Reproducible and Robust Model to Predict the Rutting of Asphalt Pavement: Neural Networks Coupled With Particle Swarm Optimization. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 22063-22072.	4.7	17
103	Mechanism, characterization and factors of reaction between basalt and alkali: Exploratory investigation for potential application in geopolymer concrete. Cement and Concrete Composites, 2022, 130, 104526.	4.6	17
104	Benefit-Cost Analysis of Maintenance Decision Support System. Transportation Research Record, 2009, 2107, 95-103.	1.0	15
105	Costs and Benefits of Tools to Maintain Winter Roads. Transportation Research Record, 2010, 2169, 174-186.	1.0	15
106	Accelerated Laboratory Test Suggests the Importance of Film Integrity of Sealers on the Protection of Concrete from Deicer Scaling. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	15
107	Laboratory Investigation of Washing Practices and Bio-Based Additive for Mitigating Metallic Corrosion by Magnesium Chloride Deicer. Journal of Materials in Civil Engineering, 2017, 29, 04016187.	1.3	14
108	Laboratory investigation of graphene oxide suspension as a surface sealer for cementitious mortars. Construction and Building Materials, 2018, 162, 65-79.	3.2	14

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109	Effect of admixing graphene oxide on abrasion resistance of ordinary portland cement concrete. <i>AIP Advances</i> , 2019, 9, .	0.6	14
110	Upcycling waste mask PP microfibers in portland cement paste: Surface treatment by graphene oxide. <i>Materials Letters</i> , 2022, 318, 132238.	1.3	14
111	Holistic Approach to Decision Making in the Formulation and Selection of Anti-Icing Products. <i>Journal of Cold Regions Engineering - ASCE</i> , 2012, 26, 101-117.	0.5	13
112	Anti-icing for key highway locations: fixed automated spray technology. <i>Canadian Journal of Civil Engineering</i> , 2013, 40, 11-18.	0.7	13
113	Managing airport stormwater containing deicers: challenges and opportunities. <i>Frontiers of Structural and Civil Engineering</i> , 2017, 11, 35-46.	1.2	13
114	Electron Probe Microanalysis Investigation into High-Volume Fly Ash Mortars. <i>Journal of Materials in Civil Engineering</i> , 2017, 29, .	1.3	13
115	Laboratory evaluation of a sustainable additive for anti-icing asphalt. <i>Cold Regions Science and Technology</i> , 2021, 189, 103338.	1.6	13
116	Development and Use of Salt-Storage Additives in Asphalt Pavement for Anti-Icing: Literature Review. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2021, 147, .	0.8	13
117	Ultralow platinum-loading bimetallic nanoflowers: Fabrication and high-performance electrocatalytic activity towards the oxidation of formic acid. <i>Electrochemistry Communications</i> , 2012, 25, 19-22.	2.3	12
118	Exploratory Investigation into a Chemically Activated Fly Ash Binder for Mortars. <i>Journal of Materials in Civil Engineering</i> , 2017, 29, 06017018.	1.3	12
119	Synergistic Effects of Nano-Montmorillonite and Polyethylene Microfiber in Foamed Paste with High Volume Fly Ash Binder. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 4465-4473.	0.9	12
120	Longevity of corrosion inhibitors and performance of liquid deicer products under field storage. <i>Canadian Journal of Civil Engineering</i> , 2012, 39, 117-127.	0.7	11
121	Effect of Electrical Injection of Corrosion Inhibitor on the Corrosion of Steel Rebar in Chloride-Contaminated Repair Mortar. <i>International Journal of Corrosion</i> , 2015, 2015, 1-10.	0.6	11
122	Effectiveness of Liquid Agricultural By-Products and Solid Complex Chlorides for Snow and Ice Control. <i>Journal of Cold Regions Engineering - ASCE</i> , 2017, 31, 04016006.	0.5	11
123	Strategies to Mitigate the Impacts of Chloride Roadway Deicers on the Natural Environment. , 2013, , .		11
124	Development of predictive models of asphalt pavement distresses in Idaho through gene expression programming. <i>Neural Computing and Applications</i> , 2022, 34, 14913-14927.	3.2	11
125	Microwave-Assisted Solvent-Free Synthesis of Zeolitic Imidazolate Framework-67. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-9.	1.5	10
126	Preserving the value of highway maintenance equipment against roadway deicers: a case study and preliminary cost benefit analysis. <i>Anti-Corrosion Methods and Materials</i> , 2016, 63, 1-8.	0.6	10



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127	Upcycling of Waste Materials: Green Binder Prepared with Pure Coal Fly Ash. <i>Journal of Materials in Civil Engineering</i> , 2016, 28, 04015138.	1.3	10
128	Statistical Characteristics of Microhardness of Hardened Cement Paste. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2018, 33, 924-931.	0.4	10
129	Durability of CFRP-wrapped concrete in cold regions: A laboratory evaluation of montmorillonite nanoclay-modified siloxane epoxy adhesive. <i>Construction and Building Materials</i> , 2021, 290, 123253.	3.2	10
130	Cathodic Protection Technologies for Reinforced Concrete: Introduction and Recent Developments. <i>Reviews in Chemical Engineering</i> , 2009, 25, .	2.3	9
131	Ionic transport in cementitious materials under an externally applied electric field: Finite element modeling. <i>Construction and Building Materials</i> , 2011, 27, 450-450.	3.2	9
132	Modeling cathodic prevention for unconventional concrete in salt-laden environment. <i>Anti-Corrosion Methods and Materials</i> , 2012, 59, 121-131.	0.6	9
133	Improved User Experience and Scientific Understanding of Anti-Icing and Pre-Wetting for Winter Roadway Maintenance in North America. , 2015, , .		9
134	Water Quality Implications and the Toxicological Effects of Chloride-Based Deicers. , 2015, , .		9
135	Influence of Surface Sealers on the Properties of Internally Cured Cement Mortars Containing Saturated Fine Lightweight Aggregate. <i>Journal of Materials in Civil Engineering</i> , 2015, 27, 04015037.	1.3	9
136	Effect of electrochemical chloride extraction treatment on the corrosion of steel rebar in chloride contaminated mortar. <i>Anti-Corrosion Methods and Materials</i> , 2016, 63, 377-385.	0.6	9
137	Effect of nanomaterials and electrode configuration on soil consolidation by electroosmosis: experimental and modeling studies. <i>RSC Advances</i> , 2017, 7, 12103-12112.	1.7	9
138	Effects of Processed Agro-Residues on the Performance of Sodium Chloride Brine Anti-Icer. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13655-13667.	3.2	9
139	Effect of rice husk ash surface modification by silane coupling agents on damping capacity of cement-based pastes. <i>Construction and Building Materials</i> , 2021, 296, 123730.	3.2	9
140	A hybrid yellow nanopigment as an environmentally sound alternative to lead chromate pigment for pavement markings. <i>Journal of Cleaner Production</i> , 2021, 319, 128733.	4.6	9
141	Model development and prediction of anti-icing longevity of asphalt pavement with salt-storage additive. <i>Journal of Infrastructure Preservation and Resilience</i> , 2022, 3, .	1.5	9
142	A mechanistic study of corrosion inhibiting admixtures. <i>Anti-Corrosion Methods and Materials</i> , 2009, 56, 3-12.	0.6	8
143	Mechanism for Soil Reinforcement by Electroosmosis in the Presence of Calcium Chloride. <i>Chemical Engineering Communications</i> , 2017, 204, 424-433.	1.5	8
144	Laboratory Investigation into the Modification of Transport Properties of High-Volume Fly Ash Mortar by Chemical Admixtures. <i>Journal of Materials in Civil Engineering</i> , 2017, 29, 04017184.	1.3	8

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145	Use of Biological Additives in Concrete Pavements: A Review of Opportunities and Challenges. Journal of Transportation Engineering Part B: Pavements, 2020, 146, 04020036.	0.8	8
146	Self-Heating Graphene Nanocomposite Bricks: A Case Study in China. Materials, 2020, 13, 714.	1.3	8
147	More than smart pavements: connected infrastructure paves the way for enhanced winter safety and mobility on highways. Journal of Infrastructure Preservation and Resilience, 2020, 1, .	1.5	8
148	Precipitation Variation and the Identification of High-Risk Wet Accident Locations in California. Transportation Research Record, 2009, 2107, 123-133.	1.0	7
149	Recent Progress in the Research on Microbially Influenced Corrosion: A Bird's Eye View through the Engineering Lens. Recent Patents on Corrosion Science, 2011, 1, 118-131.	0.1	7
150	Laboratory study on the properties of plastering mortar modified by feather fibers. Science and Engineering of Composite Materials, 2013, 20, 293-299.	0.6	7
151	Laboratory Investigation of Naturally Sourced Liquid Deicers and Subsequent Decision Support. Journal of Cold Regions Engineering - ASCE, 2017, 31, .	0.5	7
152	Harvest Energy from the Water. Transactions on Embedded Computing Systems, 2018, 17, 1-24.	2.1	7
153	Toxicological impacts of roadway deicers on aquatic resources and human health: A review. Water Environment Research, 2021, 93, 1855-1881.	1.3	7
154	Foreword from the editor-in-chief: the inaugural issue of journal of infrastructure preservation and resilience. Journal of Infrastructure Preservation and Resilience, 2020, 1, .	1.5	7
155	Reinforcement of cement paste by reduced graphene oxide: effect of dispersion state. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1.	1.3	7
156	Biofouling and corrosion of stainless steels in natural waters. Water Science and Technology: Water Supply, 2002, 2, 65-72.	1.0	6
157	Molecular Dynamics Study of Interaction between Corrosion Inhibitors, Nanoparticles, and Other Minerals in Hydrated Cement. Transportation Research Record, 2010, 2142, 58-66.	1.0	6
158	Safety Effects of Fixed Automated Spray Technology Systems. Transportation Research Record, 2015, 2482, 102-109.	1.0	6
159	Experimental and modeling studies on installation of arc sprayed Zn anodes for protection of reinforced concrete structures. Frontiers of Structural and Civil Engineering, 2016, 10, 1-11.	1.2	6
160	Friction and Snowâ€Pavement Bond after Salting and Plowing Permeable Friction Surfaces. Transportation Research Record, 2020, 2674, 794-805.	1.0	6
161	Accelerated Laboratory Assessment of Discrete Sacrificial Anodes for Rehabilitation of Salt-Contaminated Reinforced Concrete. Journal of Materials in Civil Engineering, 2020, 32, 04020344.	1.3	6
162	Seismic Performance of Bridge Piers Constructed with PP-ECC at Potential Plastic Hinge Regions. Materials, 2020, 13, 1865.	1.3	6

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163	Graphene Oxide-Modified Pervious Concrete with Fly Ash as the Sole Binder. ACI Materials Journal, 2018, 115, .	0.3	6
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