

William Weiss

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8550423/william-weiss-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

114
papers

5,387
citations

44
h-index

69
g-index

116
ext. papers

6,359
ext. citations

5.9
avg, IF

6.09
L-index

#	Paper	IF	Citations
114	Determining the freeze-thaw performance of mortar samples using length change measurements during freezing. <i>Cement and Concrete Composites</i> , 2021 , 116, 103869	8.6	3
113	Use of borosilicate glass powder in cementitious materials: Pozzolanic reactivity and neutron shielding properties. <i>Cement and Concrete Composites</i> , 2020 , 112, 103640	8.6	4
112	Using X-ray computed tomography to investigate mortar subjected to freeze-thaw cycles. <i>Cement and Concrete Composites</i> , 2020 , 108, 103520	8.6	15
111	Rheological impact of using cellulose nanocrystals (CNC) in cement pastes. <i>Construction and Building Materials</i> , 2020 , 235, 117497	6.7	18
110	Quantifying fluid filling of the air voids in air entrained concrete using neutron radiography. <i>Cement and Concrete Composites</i> , 2019 , 104, 103407	8.6	7
109	Influence of high volumes of silica fume on the rheological behavior of oil well cement pastes. <i>Construction and Building Materials</i> , 2019 , 203, 401-407	6.7	12
108	New insights from reactivity testing of supplementary cementitious materials. <i>Cement and Concrete Composites</i> , 2019 , 103, 331-338	8.6	49
107	An accelerated testing protocol for assessing microbially induced concrete deterioration during the bacterial attachment phase. <i>Cement and Concrete Composites</i> , 2019 , 104, 103339	8.6	11
106	Service-life of concrete in freeze-thaw environments: Critical degree of saturation and calcium oxychloride formation. <i>Cement and Concrete Research</i> , 2019 , 122, 93-106	10.3	30
105	A two-step multiscale model to predict early age strength development of cementitious composites considering competing fracture mechanisms. <i>Construction and Building Materials</i> , 2019 , 208, 577-600	6.7	7
104	Toward the prediction of pore volumes and freeze-thaw performance of concrete using thermodynamic modelling. <i>Cement and Concrete Research</i> , 2019 , 124, 105820	10.3	20
103	Chloride binding of cement pastes with fly ash exposed to CaCl ₂ solutions at 5 and 23 °C. <i>Cement and Concrete Composites</i> , 2019 , 97, 43-53	8.6	64
102	Pozzolanicity of finely ground lightweight aggregates. <i>Cement and Concrete Composites</i> , 2018 , 88, 115-118	8.6	23
101	Damage in cement pastes exposed to NaCl solutions. <i>Construction and Building Materials</i> , 2018 , 171, 120-127	6.7	57
100	Freeze-thaw crack determination in cementitious materials using 3D X-ray computed tomography and acoustic emission. <i>Cement and Concrete Composites</i> , 2018 , 89, 120-129	8.6	37
99	Performance and damage evolution of plain and fibre-reinforced segmental concrete pipelines subjected to transverse permanent ground displacement. <i>Structure and Infrastructure Engineering</i> , 2018 , 14, 232-246	2.9	2
98	Examining Curing Efficiency using Neutron Radiography. <i>Transportation Research Record</i> , 2018 , 2672, 13-23	1.7	10

97	Flexural strength reduction of cement pastes exposed to CaCl ₂ solutions. <i>Cement and Concrete Composites</i> , 2018 , 86, 297-305	8.6	29
96	Evaluating the hydration of high volume fly ash mixtures using chemically inert fillers. <i>Construction and Building Materials</i> , 2018 , 161, 221-228	6.7	35
95	Damage in cement pastes exposed to MgCl ₂ solutions. <i>Materials and Structures/Materiaux Et Constructions</i> , 2018 , 51, 1	3.4	20
94	Leaching of Conductive Species: Implications to Measurements of Electrical Resistivity. <i>Cement and Concrete Composites</i> , 2017 , 79, 94-105	8.6	20
93	Evaluating the use of supplementary cementitious materials to mitigate damage in cementitious materials exposed to calcium chloride deicing salt. <i>Cement and Concrete Composites</i> , 2017 , 81, 77-86	8.6	19
92	Numerical Simulation of the Freeze-Thaw Behavior of Mortar Containing Deicing Salt Solution. <i>Materials and Structures/Materiaux Et Constructions</i> , 2017 , 50, 1	3.4	32
91	Incorporating phase change materials in concrete pavement to melt snow and ice. <i>Cement and Concrete Composites</i> , 2017 , 84, 134-145	8.6	42
90	Use of Fly Ash to Minimize Deicing Salt Damage in Concrete Pavements. <i>Transportation Research Record</i> , 2017 , 2629, 24-32	1.7	22
89	Examining the pozzolanicity of supplementary cementitious materials using isothermal calorimetry and thermogravimetric analysis. <i>Cement and Concrete Composites</i> , 2017 , 83, 273-278	8.6	84
88	Using X-ray fluorescence to assess the chemical composition and resistivity of simulated cementitious pore solutions. <i>International Journal of Advances in Engineering Sciences and Applied Mathematics</i> , 2017 , 9, 136-143	0.6	14
87	The Influence of Cellulose Nanocrystals on the Hydration and Flexural Strength of Portland Cement Pastes. <i>Polymers</i> , 2017 , 9,	4.5	37
86	NEUTRON RADIOGRAPHY MEASUREMENT OF SALT SOLUTION ABSORPTION IN MORTAR. <i>ACI Materials Journal</i> , 2017 , 114, 149-159	0.9	6
85	The influence of carbonation on the formation of calcium oxychloride. <i>Cement and Concrete Composites</i> , 2016 , 73, 185-191	8.6	19
84	Reducing Joint Damage in Concrete Pavements: Quantifying Calcium Oxychloride Formation. <i>Transportation Research Record</i> , 2016 , 2577, 17-24	1.7	29
83	Monitoring sulfide-oxidizing biofilm activity on cement surfaces using non-invasive self-referencing microsensors. <i>Water Research</i> , 2016 , 89, 321-9	12.5	5
82	Using neutron radiography to assess water absorption in air entrained mortar. <i>Construction and Building Materials</i> , 2016 , 110, 98-105	6.7	19
81	Binary mixtures of fatty acid methyl esters as phase change materials for low temperature applications. <i>Applied Thermal Engineering</i> , 2016 , 96, 501-507	5.8	36
80	The influence of mechanical activation by vibro-milling on the early-age hydration and strength development of cement. <i>Cement and Concrete Composites</i> , 2016 , 71, 53-62	8.6	25

79	The relationship between cellulose nanocrystal dispersion and strength. <i>Construction and Building Materials</i> , 2016 , 119, 71-79	6.7	90
78	Internal Curing for Concrete Bridge Decks: Integration of a Social Cost Analysis in Evaluation of Long-Term Benefit. <i>Transportation Research Record</i> , 2016 , 2577, 25-34	1.7	4
77	The influence of cellulose nanocrystals on the microstructure of cement paste. <i>Cement and Concrete Composites</i> , 2016 , 74, 164-173	8.6	57
76	Damage development in cementitious materials exposed to magnesium chloride deicing salt. <i>Construction and Building Materials</i> , 2015 , 93, 384-392	6.7	66
75	Plastic shrinkage of mortars with shrinkage reducing admixture and lightweight aggregates studied by neutron tomography. <i>Cement and Concrete Research</i> , 2015 , 73, 238-245	10.3	57
74	Electrical response of mortar with different degrees of saturation and deicing salt solutions during freezing and thawing. <i>Cement and Concrete Composites</i> , 2015 , 59, 49-59	8.6	51
73	Acoustic emission waveform characterization of crack origin and mode in fractured and ASR damaged concrete. <i>Cement and Concrete Composites</i> , 2015 , 60, 135-145	8.6	70
72	The Influence of Calcium Chloride Deicing Salt on Phase Changes and Damage Development in Cementitious Materials. <i>Cement and Concrete Composites</i> , 2015 , 64, 1-15	8.6	88
71	Using accelerated pavement testing to examine traffic opening criteria for concrete pavements. <i>Construction and Building Materials</i> , 2015 , 96, 86-95	6.7	11
70	The influence of cellulose nanocrystal additions on the performance of cement paste. <i>Cement and Concrete Composites</i> , 2015 , 56, 73-83	8.6	147
69	Multi-scale investigation of the performance of limestone in concrete. <i>Construction and Building Materials</i> , 2015 , 75, 1-10	6.7	110
68	Conventional Portland Cement and Carbonated Calcium Silicate Based Cement Systems: Performance During Freezing and Thawing in Presence of Calcium Chloride Deicing Salts. <i>Transportation Research Record</i> , 2015 , 2508, 48-54	1.7	16
67	Assessing Performance of Glow-in-the-Dark Concrete. <i>Transportation Research Record</i> , 2015 , 2508, 31-38	1.7	10
66	The influence of alkali content on the electrical resistivity and transport properties of cementitious materials. <i>Cement and Concrete Composites</i> , 2014 , 51, 49-58	8.6	46
65	Fluid transport in high volume fly ash mixtures with and without internal curing. <i>Cement and Concrete Composites</i> , 2014 , 45, 102-110	8.6	44
64	The influence of accelerated curing on the properties used in the prediction of chloride ingress in concrete using a Nernst-Planck approach. <i>Construction and Building Materials</i> , 2014 , 66, 752-759	6.7	4
63	The influence of deicing salt exposure on the gas transport in cementitious materials. <i>Construction and Building Materials</i> , 2014 , 67, 108-114	6.7	3
62	Early age cracking behavior of internally cured mortar restrained by dual rings with different thickness. <i>Construction and Building Materials</i> , 2014 , 66, 146-153	6.7	18

61	An inter lab comparison of gas transport testing procedures: Oxygen permeability and oxygen diffusivity. <i>Cement and Concrete Composites</i> , 2014 , 53, 357-366	8.6	30
60	Acoustic Emission and Low-Temperature Calorimetry Study of Freeze and Thaw Behavior in Cementitious Materials Exposed to Sodium Chloride Salt. <i>Transportation Research Record</i> , 2014 , 2441, 81-90	1.7	45
59	Performance of Portland Limestone Cements. <i>Transportation Research Record</i> , 2014 , 2441, 112-120	1.7	8
58	Influence of Slag Aggregate Production on Its Potential for Use in Internal Curing. <i>Transportation Research Record</i> , 2014 , 2441, 105-111	1.7	7
57	Wireless Crack Detection in Concrete Elements Using Conductive Surface Sensors and Radio Frequency Identification Technology. <i>Journal of Materials in Civil Engineering</i> , 2014 , 26, 923-929	3	17
56	Effect of internal curing by using superabsorbent polymers (SAP) on autogenous shrinkage and other properties of a high-performance fine-grained concrete: results of a RILEM round-robin test. <i>Materials and Structures/Materiaux Et Constructions</i> , 2014 , 47, 541-562	3.4	128
55	Modeling of the influence of transverse cracking on chloride penetration into concrete. <i>Cement and Concrete Composites</i> , 2013 , 38, 65-74	8.6	77
54	Using a Saturation Function to Interpret the Electrical Properties of Partially Saturated Concrete. <i>Journal of Materials in Civil Engineering</i> , 2013 , 25, 1097-1106	3	72
53	Application of ultrasonic P-wave reflection to measure development of early-age cement-paste properties. <i>Materials and Structures/Materiaux Et Constructions</i> , 2013 , 46, 987-997	3.4	16
52	Jet mill grinding of portland cement, limestone, and fly ash: Impact on particle size, hydration rate, and strength. <i>Cement and Concrete Composites</i> , 2013 , 44, 41-49	8.6	30
51	Influence of bundle coating on the tensile behavior, bonding, cracking and fluid transport of fabric cement-based composites. <i>Cement and Concrete Composites</i> , 2013 , 42, 9-19	8.6	40
50	Atomic force and lateral force microscopy (AFM and LFM) examinations of cement and cement hydration products. <i>Cement and Concrete Composites</i> , 2013 , 36, 48-55	8.6	33
49	Factors that Influence Electrical Resistivity Measurements in Cementitious Systems. <i>Transportation Research Record</i> , 2013 , 2342, 90-98	1.7	69
48	The influence of the initial moisture content of lightweight aggregate on internal curing. <i>Construction and Building Materials</i> , 2012 , 35, 52-62	6.7	69
47	Application of internal curing for mixtures containing high volumes of fly ash. <i>Cement and Concrete Composites</i> , 2012 , 34, 1001-1008	8.6	94
46	Reducing Set Retardation in High-Volume Fly Ash Mixtures with the Use of Limestone: Improving Constructability for Sustainability. <i>Transportation Research Record</i> , 2012 , 2290, 139-146	1.7	42
45	Fine limestone additions to regulate setting in high volume fly ash mixtures. <i>Cement and Concrete Composites</i> , 2012 , 34, 11-17	8.6	138
44	Water Absorption and Electrical Conductivity for Internally Cured Mortars with a W/C between 0.30 and 0.45. <i>Journal of Materials in Civil Engineering</i> , 2012 , 24, 223-231	3	22

43	Characterizing Lightweight Aggregate Desorption at High Relative Humidities Using a Pressure Plate Apparatus. <i>Journal of Materials in Civil Engineering</i> , 2012 , 24, 961-969	3	13
42	Assessment of the Behavior of Buried Concrete Pipelines Subjected to Ground Rupture: Experimental Study. <i>Journal of Pipeline Systems Engineering and Practice</i> , 2012 , 3, 8-16	1.5	19
41	Water Absorption and Critical Degree of Saturation Relating to Freeze-Thaw Damage in Concrete Pavement Joints. <i>Journal of Materials in Civil Engineering</i> , 2012 , 24, 299-307	3	154
40	Toward the Development of a Performance-Related Specification for Concrete Shrinkage. <i>Journal of Materials in Civil Engineering</i> , 2012 , 24, 64-71	3	4
39	Can Soy Methyl Esters Improve Concrete Pavement Joint Durability?. <i>Transportation Research Record</i> , 2012 , 2290, 60-68	1.7	8
38	Role of Lightweight Synthetic Particles on the Restrained Shrinkage Cracking Behavior of Mortar. <i>Journal of Materials in Civil Engineering</i> , 2011 , 23, 597-605	3	18
37	Experimental Methods to Detect and Quantify Damage in Restrained Concrete Ring Specimens. <i>Journal of Advanced Concrete Technology</i> , 2011 , 9, 251-260	2.3	16
36	Saturated Lightweight Aggregate for Internal Curing in Low w/c Mixtures: Monitoring Water Movement Using X-ray Absorption. <i>Strain</i> , 2011 , 47, e432-e441	1.7	26
35	Absorption and desorption properties of fine lightweight aggregate for application to internally cured concrete mixtures. <i>Cement and Concrete Composites</i> , 2011 , 33, 1001-1008	8.6	139
34	The design of an instrumented rebar for assessment of corrosion in cracked reinforced concrete. <i>Materials and Structures/Materiaux Et Constructions</i> , 2011 , 44, 1259-1271	3.4	23
33	Hydrated cement paste constituents observed with Atomic Force and Lateral Force Microscopy. <i>Construction and Building Materials</i> , 2011 , 25, 4299-4302	6.7	14
32	Detecting the time and location of cracks using electrically conductive surfaces. <i>Cement and Concrete Composites</i> , 2011 , 33, 116-123	8.6	28
31	The origin of early age expansions induced in cementitious materials containing shrinkage reducing admixtures. <i>Cement and Concrete Research</i> , 2011 , 41, 218-229	10.3	110
30	Wetting and drying of concrete using aqueous solutions containing deicing salts. <i>Cement and Concrete Composites</i> , 2011 , 33, 535-542	8.6	60
29	Effect of sample conditioning on the water absorption of concrete. <i>Cement and Concrete Composites</i> , 2011 , 33, 805-813	8.6	136
28	Capillary porosity depercolation in cement-based materials: Measurement techniques and factors which influence their interpretation. <i>Cement and Concrete Research</i> , 2011 , 41, 854-864	10.3	69
27	Fluid Transport in Cracked Fabric-Reinforced-Cement-Based Composites. <i>Journal of Materials in Civil Engineering</i> , 2011 , 23, 1227-1238	3	17
26	Restrained Shrinkage Cracking in Concrete Elements: Role of Substrate Bond on Crack Development. <i>Journal of Materials in Civil Engineering</i> , 2011 , 23, 895-902	3	13

25	Influence of Shrinkage-Reducing Admixtures on Moisture Absorption in Cementitious Materials at Early Ages. <i>Journal of Materials in Civil Engineering</i> , 2010 , 22, 277-286	3	39
24	Atomic Force Microscopy Examinations of Mortar Made by Using Water-Filled Lightweight Aggregate. <i>Transportation Research Record</i> , 2010 , 2141, 92-101	1.7	23
23	Experimental and Numerical Quantification of Plastic Settlement in Fresh Cementitious Systems. <i>Journal of Materials in Civil Engineering</i> , 2010 , 22, 951-966	3	23
22	An automated electrical monitoring system (AEMS) to assess property development in concrete. <i>Automation in Construction</i> , 2010 , 19, 485-490	9.6	16
21	Volume change and cracking in internally cured mixtures made with saturated lightweight aggregate under sealed and unsealed conditions. <i>Cement and Concrete Composites</i> , 2009 , 31, 427-437	8.6	183
20	Water absorption in internally cured mortar made with water-filled lightweight aggregate. <i>Cement and Concrete Research</i> , 2009 , 39, 883-892	10.3	117
19	Early-age acoustic emission measurements in hydrating cement paste: Evidence for cavitation during solidification due to self-desiccation. <i>Cement and Concrete Research</i> , 2009 , 39, 861-867	10.3	68
18	Cracking in cement paste induced by autogenous shrinkage. <i>Materials and Structures/Materiaux Et Constructions</i> , 2009 , 42, 1089-1099	3.4	60
17	Can Soy Methyl Esters Reduce Fluid Transport and Improve Durability of Concrete?. <i>Transportation Research Record</i> , 2009 , 2113, 22-30	1.7	9
16	Early-Age Properties of Cement-Based Materials. I: Influence of Cement Fineness. <i>Journal of Materials in Civil Engineering</i> , 2008 , 20, 502-508	3	68
15	Shrinkage Mitigation Strategies in Cementitious Systems: A Closer Look at Differences in Sealed and Unsealed Behavior. <i>Transportation Research Record</i> , 2008 , 2070, 59-67	1.7	67
14	Methodology for Determining the Timing of Saw Cutting in Concrete Pavements. <i>Transportation Research Record</i> , 2008 , 2081, 110-117	1.7	10
13	Interactions between shrinkage reducing admixtures (SRA) and cement paste's pore solution. <i>Cement and Concrete Research</i> , 2008 , 38, 606-615	10.3	162
12	Rheological properties of cement pastes: A discussion of structure formation and mechanical property development. <i>Cement and Concrete Research</i> , 2008 , 38, 1286-1296	10.3	93
11	A preliminary numerical investigation on the influence of material variability in the early-age cracking behavior of restrained concrete. <i>Materials and Structures/Materiaux Et Constructions</i> , 2007 , 40, 375-386	3.4	19
10	Electrical conductivity of drying cement paste. <i>Materials and Structures/Materiaux Et Constructions</i> , 2007 , 40, 1143-1160	3.4	118
9	Estimating residual stress in the restrained ring test under circumferential drying. <i>Cement and Concrete Composites</i> , 2006 , 28, 486-496	8.6	74
8	Assessment of Localized Damage in Concrete under Compression Using Acoustic Emission. <i>Journal of Materials in Civil Engineering</i> , 2006 , 18, 325-333	3	26

7	The role of specimen geometry and boundary conditions on stress development and cracking in the restrained ring test. <i>Cement and Concrete Research</i> , 2006 , 36, 189-199	10.3	72
6	Characterizing Enhanced Porosity Concrete using electrical impedance to predict acoustic and hydraulic performance. <i>Cement and Concrete Research</i> , 2006 , 36, 2074-2085	10.3	170
5	Quantifying shrinkage cracking in fiber reinforced concrete using the ring test. <i>Materials and Structures/Materiaux Et Constructions</i> , 2006 , 39, 887-899	3.4	91
4	Procedure to Interpret Electrical Conductivity Measurements in Cover Concrete during Rewetting. <i>Journal of Materials in Civil Engineering</i> , 2005 , 17, 586-594	3	36
3	Acoustic performance and damping behavior of cellulose/cement composites. <i>Cement and Concrete Composites</i> , 2004 , 26, 359-370	8.6	63
2	Assessing residual stress development and stress relaxation in restrained concrete ring specimens. <i>Cement and Concrete Composites</i> , 2004 , 26, 531-540	8.6	179
1	Evaluating the efficacy of antimicrobial additives against biogenic acidification in simulated wastewater exposure solutions. <i>RILEM Technical Letters</i> , 4 , 49-56		3