

# Ya Wei

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

1,298  
citations

361296

20  
h-index

414303

32  
g-index

67  
all docs

67  
docs citations

67  
times ranked

731  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tensile Creep Behavior of Concrete Subject to Constant Restraint at Very Early Ages. Journal of Materials in Civil Engineering, 2013, 25, 1277-1284.	1.3	79
2	Microstructure and Fatigue Performance of Polyurethane Grout Materials under Compression. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	68
3	Internal Curing Efficiency of Prewetted LWFAs on Concrete Humidity and Autogenous Shrinkage Development. Journal of Materials in Civil Engineering, 2014, 26, 947-954.	1.3	60
4	Indentation creep of cementitious materials: Experimental investigation from nano to micro length scales. Construction and Building Materials, 2017, 143, 222-233.	3.2	60
5	Effect of calcined bauxite powder or aggregate on the shrinkage properties of UHPC. Cement and Concrete Composites, 2021, 118, 103967.	4.6	52
6	Microprestress-solidification theory-based tensile creep modeling of early-age concrete: Considering temperature and relative humidity effects. Construction and Building Materials, 2016, 127, 618-626.	3.2	50
7	Stress prediction in very early-age concrete subject to restraint under varying temperature histories. Cement and Concrete Composites, 2017, 83, 45-56.	4.6	50
8	Design and construction of super-long span bridges in China: Review and future perspectives. Frontiers of Structural and Civil Engineering, 2020, 14, 803-838.	1.2	42
9	Multiscale modeling elastic properties of cement-based materials considering imperfect interface effect. Construction and Building Materials, 2017, 154, 567-579.	3.2	38
10	Early-age strain-stress relationship and cracking behavior of slag cement mixtures subject to constant uniaxial restraint. Construction and Building Materials, 2013, 49, 635-642.	3.2	36
11	Effect of individual phases on multiscale modeling mechanical properties of hardened cement paste. Construction and Building Materials, 2017, 153, 25-35.	3.2	36
12	Thermal Effect on Rheological Properties of Epoxy Asphalt Mixture and Stress Prediction for Bridge Deck Paving. Journal of Materials in Civil Engineering, 2019, 31, .	1.3	34
13	Methodology of obtaining intrinsic creep property of concrete by flexural deflection test. Cement and Concrete Composites, 2019, 97, 288-299.	4.6	34
14	Prediction of Paving Performance for Epoxy Asphalt Mixture by Its Time- and Temperature-Dependent Properties. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	34
15	Measurement and modeling concrete creep considering relative humidity effect. Mechanics of Time-Dependent Materials, 2020, 24, 161-177.	2.3	28
16	Strain-rate sensitivity of cement paste by microindentation continuous stiffness measurement: Implication to isotache approach for creep modeling. Cement and Concrete Research, 2017, 100, 84-95.	4.6	26
17	Effects of water-to-cement ratio and curing age on microscopic creep and creep recovery of hardened cement pastes by microindentation. Cement and Concrete Composites, 2020, 113, 103619.	4.6	24
18	Comparison of Compressive, Tensile, and Flexural Creep of Early-Age Concretes under Sealed and Drying Conditions. Journal of Materials in Civil Engineering, 2018, 30, .	1.3	23

#	ARTICLE	IF	CITATIONS
19	Research progress on cement-based materials by X-ray computed tomography. <i>International Journal of Pavement Research and Technology</i> , 2020, 13, 366-375.	1.3	23
20	Integrated shrinkage, relative humidity, strength development, and cracking potential of internally cured concrete exposed to different drying conditions. <i>Drying Technology</i> , 2016, 34, 741-752.	1.7	22
21	Computed permeability for cement paste subject to freeze-thaw cycles at early ages. <i>Construction and Building Materials</i> , 2020, 244, 118298.	3.2	21
22	Mixed "ionic-electronic" thermoelectric effect of reduced graphene oxide reinforced cement-based composites. <i>Cement and Concrete Composites</i> , 2022, 128, 104442.	4.6	21
23	Strengthening mechanism of fracture properties by nano materials for cementitious materials subject to early-age frost attack. <i>Cement and Concrete Composites</i> , 2021, 119, 104025.	4.6	20
24	Quantifying Effect of Later Curing on Pores of Paste Subject to Early-Age Freeze-Thaw Cycles by Different Techniques. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, .	1.3	19
25	A model for predicting evaporation from fresh concrete surface during the plastic stage. <i>Drying Technology</i> , 2020, 38, 2231-2241.	1.7	17
26	Development of three-dimensional pavement texture measurement technique using surface structured light projection. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 185, 110003.	2.5	17
27	Characterization of Moisture Transport and Its Effect on Deformations in Jointed Plain Concrete Pavement. <i>Transportation Research Record</i> , 2011, 2240, 9-15.	1.0	16
28	Effect of Internal Curing on Moisture Gradient Distribution and Deformation of a Concrete Pavement Slab Containing Pre-Wetted Lightweight Fine Aggregates. <i>Drying Technology</i> , 2015, 33, 355-364.	1.7	16
29	Multifunctional application of nanoscratch technique to characterize cementitious materials. <i>Cement and Concrete Research</i> , 2021, 140, 106318.	4.6	16
30	Internal Curing by Porous Calcined Bauxite Aggregate in Ultrahigh-Performance Concrete. <i>Journal of Materials in Civil Engineering</i> , 2021, 33, .	1.3	16
31	Internal curing efficiency and key properties of UHPC influenced by dry or prewetted calcined bauxite aggregate with different particle size. <i>Construction and Building Materials</i> , 2021, 312, 125406.	3.2	16
32	Numerical Evaluation of Moisture Warping and Stress in Concrete Pavement Slabs with Different Water-to-Cement Ratio and Thickness. <i>Journal of Engineering Mechanics - ASCE</i> , 2017, 143, .	1.6	15
33	Biaxial creep of high-strength concrete at early ages assessed from restrained ring test. <i>Cement and Concrete Composites</i> , 2019, 104, 103421.	4.6	15
34	Imperfect Interface Effect on Creep Property of Hardened-Cement Pastes: Investigations from Nano to Micro Scales. <i>Journal of Materials in Civil Engineering</i> , 2020, 32, .	1.3	14
35	Development of Piezoelectric Energy Harvester System through Optimizing Multiple Structural Parameters. <i>Sensors</i> , 2021, 21, 2876.	2.1	14
36	Identifying dust as the dominant source of exposure to heavy metals for residents around battery factories in the Battery Industrial Capital of China. <i>Science of the Total Environment</i> , 2021, 765, 144375.	3.9	14

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37	Modelling of creep effect on moisture warping and stress developments in concrete pavement slabs. International Journal of Pavement Engineering, 2018, 19, 429-438.	2.2	13
38	Surface deflection-based reliability analysis of asphalt pavement design. Science China Technological Sciences, 2020, 63, 1824-1836.	2.0	13
39	Real-Time and Efficient Traffic Information Acquisition via Pavement Vibration IoT Monitoring System. Sensors, 2021, 21, 2679.	2.1	13
40	Characteristics of airborne particles retained on conifer needles across China in winter and preliminary evaluation of the capacity of trees in haze mitigation. Science of the Total Environment, 2022, 806, 150704.	3.9	13
41	Application of X-Ray Micro-CT for Quantifying Degree of Hydration of Slag-Blended Cement Paste. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	12
42	Influential Depth by Water Absorption and Surface Drying in Concrete Slabs. Transportation Research Record, 2013, 2342, 76-82.	1.0	11
43	Design and analysis of a hollow triangular piezoelectric cantilever beam harvester for vibration energy collection. International Journal of Pavement Research and Technology, 2019, 12, 259-268.	1.3	11
44	Nonlinear Optimization of Orthotropic Steel Deck System Based on Response Surface Methodology. Research, 2020, 2020, 1303672.	2.8	11
45	Design and verification of a testing system for strength, modulus, and creep of concrete subject to tension under controlled temperature and humidity conditions. Construction and Building Materials, 2014, 53, 448-454.	3.2	10
46	Critical aspects of scanning probe microscopy mapping when applied to cement pastes. Advances in Cement Research, 2018, 30, 293-304.	0.7	10
47	Development of micro and macro fracture properties of cementitious materials exposed to freeze-thaw environment at early ages. Construction and Building Materials, 2021, 271, 121502.	3.2	10
48	Abrasion resistance of ultra-high performance concrete with coarse aggregate. Materials and Structures/Materiaux Et Constructions, 2021, 54, 1.	1.3	10
49	Feasibility Evaluation of a Long-Life Asphalt Pavement for Steel Bridge Deck. Advances in Civil Engineering, 2020, 2020, 1-8.	0.4	9
50	New insights into creep and creep recovery of hardened cement paste at micro scale. Construction and Building Materials, 2020, 248, 118724.	3.2	9
51	Effect of epoxy impregnation on characterizing microstructure and micromechanical properties of concrete by different techniques. Journal of Materials Science, 2020, 55, 2389-2404.	1.7	7
52	The Colorimetry Method in Assessing Fire-Damaged Concrete. Journal of Advanced Concrete Technology, 2019, 17, 282-294.	0.8	6
53	Drop-Weight Impact Resistance of Ultrahigh-Performance Concrete and the Corresponding Statistical Analysis. Journal of Materials in Civil Engineering, 2022, 34, .	1.3	6
54	Strain-based equivalent temperature gradient in concrete pavement and comparison with other quantification methods. Road Materials and Pavement Design, 2017, 18, 1460-1472.	2.0	5

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55	Effect of Filler Type, Fineness, and Shape on the Properties of Nonfibrous UHPC Matrix. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	5
56	Concrete Creep Modeling: Application to Slabs on Ground. Journal of Engineering Mechanics - ASCE, 2019, 145, .	1.6	4
57	A new data preprocessing method for 3D reconstruction of pavement. International Journal of Pavement Engineering, 2021, 22, 675-689.	2.2	4
58	Transverse Cracking of Concrete Base Plate in CRTS III Ballastless Track Structure: Effects of Environmental Boundary Conditions. Applied Sciences (Switzerland), 2021, 11, 10400.	1.3	4
59	Methodology for Quantifying Features of Early-Age Concrete Cracking from Laser Scanned 3D Data. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	3
60	An Efficient Real-Time Vehicle Monitoring Method. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 22073-22083.	4.7	3
61	Programmable analytical feature of ratiometric electrochemical biosensor by alternating the binding site of ferrocene to <sc>DNA</sc> duplex for the detection of aflatoxin <sc>B1</sc>. Chinese Journal of Chemistry, 0, , .	2.6	3
62	Experimental study on interface performance between implantable cement-based sensor and matrix concrete. Construction and Building Materials, 2022, 345, 128316.	3.2	3
63	Pavement 3D Data Denoising Algorithm Based on Cell Meshing Ellipsoid Detection. Sensors, 2021, 21, 2310.	2.1	2
64	Performance Evaluation of Concrete Pavement Slab Considering Creep Effect by Finite Element Analysis. Transportation Research Record, 2018, 2672, 65-77.	1.0	1
65	Design and construction of low-volume concrete road: experiences from China. Road Materials and Pavement Design, 2020, 21, 393-410.	2.0	1
66	Closure to "Tensile Creep Behavior of Concrete Subject to Constant Restraint at Very Early Ages" by Ya Wei and Will Hansen. Journal of Materials in Civil Engineering, 2014, 26, 07014004.	1.3	0
67	Modelling and Characterizing the Adhesion of Parallel-Grooved Interface between Concrete Lining Structure and Geopolymer by Wedge Splitting Method. Mathematical Problems in Engineering, 2020, 1-15.	0.6	0