

Jeffery R Roesler

List of Publications by Year in descending order

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43
papers

1,589
citations

394421

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43
all docs

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docs citations

43
times ranked

1168
citing authors

#	ARTICLE	IF	CITATIONS
1	A unified potential-based cohesive model of mixed-mode fracture. <i>Journal of the Mechanics and Physics of Solids</i> , 2009, 57, 891-908.	4.8	365
2	Steel furnace slag aggregate expansion and hardened concrete properties. <i>Cement and Concrete Composites</i> , 2015, 60, 1-9.	10.7	172
3	Bonding in cementitious materials with asphalt-coated particles: Part I – The interfacial transition zone. <i>Construction and Building Materials</i> , 2017, 130, 171-181.	7.2	104
4	Determination of the kink point in the bilinear softening model for concrete. <i>Engineering Fracture Mechanics</i> , 2008, 75, 3806-3818.	4.3	80
5	Bonding in cementitious materials with asphalt-coated particles: Part II – Cement-asphalt chemical interactions. <i>Construction and Building Materials</i> , 2017, 130, 182-192.	7.2	80
6	Simplified method for concrete pavement design with discrete structural fibers. <i>Construction and Building Materials</i> , 2008, 22, 384-393.	7.2	63
7	Characterizing Effective Built-In Curling from Concrete Pavement Field Measurements. <i>Journal of Transportation Engineering</i> , 2005, 131, 320-327.	0.9	57
8	Fracture of Plain and Fiber-Reinforced Concrete Slabs under Monotonic Loading. <i>Journal of Materials in Civil Engineering</i> , 2004, 16, 452-460.	2.9	54
9	Fracture Properties of Roller-Compacted Concrete with Virgin and Recycled Aggregates. <i>Transportation Research Record</i> , 2014, 2441, 128-134.	1.9	54
10	Interfacial transition zone of cement composites with steel furnace slag aggregates. <i>Cement and Concrete Composites</i> , 2018, 86, 117-129.	10.7	54
11	Determination of Critical Concrete Pavement Fatigue Damage Locations Using Influence Lines. <i>Journal of Transportation Engineering</i> , 2005, 131, 599-607.	0.9	50
12	Flexural Capacity of Full-Depth and Two-Lift Concrete Slabs with Recycled Aggregates. <i>Transportation Research Record</i> , 2014, 2456, 64-72.	1.9	47
13	Analytical Approach to Predicting Temperature Fields in Multilayered Pavement Systems. <i>Journal of Engineering Mechanics - ASCE</i> , 2009, 135, 334-344.	2.9	40
14	Accelerated performance testing of concrete pavement with short slabs. <i>International Journal of Pavement Engineering</i> , 2012, 13, 494-507.	4.4	37
15	Simplified Nonlinear Temperature Curling Analysis for Jointed Concrete Pavements. <i>Journal of Transportation Engineering</i> , 2010, 136, 654-663.	0.9	34
16	Expansive and Concrete Properties of SFS – FRAP Aggregates. <i>Journal of Materials in Civil Engineering</i> , 2016, 28, .	2.9	32
17	Machine vision based characterization of particle shape and asphalt coating in Reclaimed Asphalt Pavement. <i>Transportation Geotechnics</i> , 2016, 6, 26-37.	4.5	28
18	Three-dimensional cohesive zone model for fracture of cementitious materials based on the thermodynamics of irreversible processes. <i>Engineering Fracture Mechanics</i> , 2013, 97, 261-280.	4.3	24

#	ARTICLE	IF	CITATIONS
19	One-Dimensional Rigid Pavement Temperature Prediction Using Laplace Transformation. Journal of Transportation Engineering, 2012, 138, 1171-1177.	0.9	20
20	Fatigue and Static Testing of Concrete Slabs. Transportation Research Record, 1999, 1684, 71-80.	1.9	15
21	Transverse Joint Analysis for Mechanistic-Empirical Design of Rigid Pavements. Transportation Research Record, 2002, 1809, 42-51.	1.9	15
22	Modeling Longitudinal, Corner and Transverse Cracking in Jointed Concrete Pavements. International Journal of Pavement Engineering, 2003, 4, 51-58.	4.4	15
23	One-dimensional temperature profile prediction in multi-layered rigid pavement systems using a separation of variables method. International Journal of Pavement Engineering, 2014, 15, 373-382.	4.4	14
24	Top-Down Cracking of Rigid Pavements Constructed with Fast-Setting Hydraulic Cement Concrete. Transportation Research Record, 2000, 1712, 3-12.	1.9	13
25	Longitudinal Cracking Distress on Continuously Reinforced Concrete Pavements in Illinois. Journal of Performance of Constructed Facilities, 2005, 19, 331-338.	2.0	13
26	Two-scale approach to predict multi-site cracking potential in 3-D structures using the generalized finite element method. International Journal of Solids and Structures, 2013, 50, 1991-2002.	2.7	13
27	Concrete slab analyses with field-assigned non-uniform support conditions. International Journal of Pavement Engineering, 2016, 17, 578-589.	4.4	12
28	Virtual Internal Pair-Bond Model for Quasi-Brittle Materials. Journal of Engineering Mechanics - ASCE, 2008, 134, 856-866.	2.9	11
29	Innovative Algorithm to Solve Axisymmetric Displacement and Stress Fields in Multilayered Pavement Systems. Journal of Transportation Engineering, 2011, 137, 287-295.	0.9	11
30	Fracture Energy Approach to Characterize Concrete Crack Surface Roughness and Shear Stiffness. Journal of Materials in Civil Engineering, 2008, 20, 275-282.	2.9	10
31	Performance of Continuously Reinforced Concrete Pavement Containing Recycled Concrete Aggregates. Transportation Research Record, 2011, 2253, 32-39.	1.9	10
32	Effect of Static and Fatigue Cracking on Concrete Strain Measurements. Transportation Research Record, 1999, 1684, 51-60.	1.9	8
33	Prediction of Potential Cracking Failure Modes in Three-Dimensional Airfield Rigid Pavements with Existing Cracks and Flaws. Transportation Research Record, 2012, 2266, 11-19.	1.9	7
34	Finite element analysis of a concrete slab under various non-uniform support conditions. International Journal of Pavement Engineering, 2014, 15, 460-470.	4.4	7
35	Unrestrained Curling in Concrete with Fine Lightweight Aggregates. Journal of Materials in Civil Engineering, 2017, 29, .	2.9	4
36	Noncontact Ultrasonic and Computer Vision Assessment for Sawcut Initiation Time. Journal of Transportation Engineering Part B: Pavements, 2020, 146, 04020055.	1.5	4

#	ARTICLE	IF	CITATIONS
37	A method for evaluating CRCP performance based on edge-loaded FWD test. Materials and Structures/Materiaux Et Constructions, 2020, 53, 1.	3.1	4
38	Rapid detection of concrete joint activation using normalized shear wave transmission energy. International Journal of Pavement Engineering, 2022, 23, 1025-1037.	4.4	3
39	Characterization of Cement Treated Base Course Using Reclaimed Asphalt Pavement, Aggregate By-Products, and Macro-Synthetic Fibers. , 2016, , .		2
40	Early Age Monitoring of High Cement Replacement Mixtures for Pavement. Transportation Research Record, 2023, 2677, 1646-1657.	1.9	2
41	Location and Timing of Fatigue Cracks on Jointed Plain Concrete Pavements. , 2008, , .		1
42	Accounting for Self-Equilibrating Stresses Due to Non-Linear Temperature Profiles in Rigid Pavements. , 2008, , .		0
43	Slab-Base Interface Friction Evaluation for Continuously Reinforced Concrete Pavement. Journal of Transportation Engineering Part B: Pavements, 2022, 148, .	1.5	0