Mihai O Marasteanu

List of Publications by Year
in descending order

74	2,144	201385 27	253896 43
papers	citations	h-index	g-index

74	74	74	1055
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	One-Dimensional Nonlocal Model for Gyratory Compaction of Hot Asphalt Mixtures. Journal of Engineering Mechanics - ASCE, 2022, 148, .	1.6	7
2	Relating N_{design} to Field Compaction: A Case Study in Minnesota. Transportation Research Record, 2022, 2676, 192-201.	1.0	5
3	Mechanism-based evaluation of compactability of asphalt mixtures. Road Materials and Pavement Design, 2021, 22, S482-S497.	2.0	11
4	Field Density Investigation of Asphalt Mixtures in Minnesota. Transportation Research Record, 2021, 2675, 1670-1680.	1.0	5
5	Mechanical and compaction properties of graphite nanoplatelet-modified asphalt binders and mixtures. Road Materials and Pavement Design, 2020, 21, 1799-1814.	2.0	34
6	Obtaining asphalt binder rheological properties from BBR strength testâ€"the effect of loading rate. Mechanics of Time-Dependent Materials, 2020, , 1.	2.3	1
7	Evaluation of Graphite Nanoplatelets Influence on the Lubrication Properties of Asphalt Binders. Materials, 2020, 13, 772.	1.3	19
8	Simple Method to Evaluate Strength and Relaxation Properties of Asphalt Binders at Low Temperature. Transportation Research Record, 2019, 2673, 492-500.	1.0	5
9	Improved Chemical System for Molecular Simulations of Asphalt. Energy & Fuels, 2019, 33, 3187-3198.	2.5	40
10	Review of experimental characterisation and modelling of asphalt binders at low temperature. International Journal of Pavement Engineering, 2018, 19, 279-291.	2.2	16
11	Rheological characterization of asphalt binders treated with bio sealants for pavement preservation. Canadian Journal of Civil Engineering, 2018, 45, 407-412.	0.7	7
12	Influence of cooling medium on low temperature strength of asphalt binders. Construction and Building Materials, 2018, 162, 80-87.	3.2	3
13	Use of fine aggregate matrix for computational modeling of low temperature fracture of asphalt concrete. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	1.3	17
14	Size effect in asphalt mixture at low temperature: Types I and II. Road Materials and Pavement Design, 2017, 18, 235-257.	2.0	9
15	Testing protocol to obtain failure properties of asphalt binders at low temperature using creep compliance and stress-controlled strength test. Road Materials and Pavement Design, 2017, 18, 352-367.	2.0	10
16	Low temperature rheological properties of asphalt mixtures containing different recycled asphalt materials. International Journal of Pavement Research and Technology, 2017, 10, 84-97.	1.3	17
17	On the representative volume element of asphalt concrete at low temperature. Mechanics of Time-Dependent Materials, 2016, 20, 343-366.	2.3	7
18	Comparison of rheological parameters of asphalt binders obtained from bending beam rheometer and dynamic shear rheometer at low temperatures. Road Materials and Pavement Design, 2015, 16, 211-227.	2.0	21

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19	Indirect determination of size effect on strength of asphalt mixtures at low temperatures. Materials and Structures/Materiaux Et Constructions, 2014, 47, 157-169.	1.3	26
20	Investigation of limiting criteria for low temperature cracking of asphalt mixture. KSCE Journal of Civil Engineering, 2014, 18, 172-181.	0.9	12
21	Using recycled asphalt materials as an alternative material source in asphalt pavements. KSCE Journal of Civil Engineering, 2014, 18, 149-159.	0.9	29
22	Calculation of particle heating times of reclaimed asphalt pavement material. Road Materials and Pavement Design, 2014, 15, 721-732.	2.0	12
23	Investigation of asphalt mixture strength at low temperatures with the bending beam rheometer. Road Materials and Pavement Design, 2014, 15, 28-44.	2.0	28
24	Determination of strength distribution of quasibrittle structures from mean size effect analysis. Mechanics of Materials, 2013, 66, 79-87.	1.7	21
25	Effect of load application rate and temperature on the fracture energy of asphalt mixtures. FÃ©nix and semi-circular bending tests. Construction and Building Materials, 2013, 48, 1067-1071.	3.2	54
26	Microstructural Characterization of Asphalt Mixtures Containing Recycled Asphalt Materials. Journal of Materials in Civil Engineering, 2013, 25, 45-53.	1.3	27
27	Histogram testing for strength size effect in asphalt mixtures at low temperature. Road Materials and Pavement Design, 2013, 14, 52-64.	2.0	7
28	Rheological modelling of asphalt materials properties at low temperatures: from time domain to frequency domain. Road Materials and Pavement Design, 2013, 14, 810-830.	2.0	24
29	Investigation on asphalt binder strength at low temperatures. Road Materials and Pavement Design, 2012, 13, 804-816.	2.0	32
30	Investigation of size effect in asphalt mixture fracture testing at low temperature. Road Materials and Pavement Design, 2012, 13, 88-101.	2.0	29
31	Low Temperature Fracture Properties of Polyphosphoric Acid Modified Asphalt Mixtures. Journal of Materials in Civil Engineering, 2012, 24, 1089-1096.	1.3	43
32	Microstructural and rheological investigation of asphalt mixtures containing recycled asphalt materials. Construction and Building Materials, 2012, 35, 321-329.	3.2	40
33	Pressure Aging Vessel and Low-Temperature Properties of Asphalt Binders. Transportation Research Record, 2011, 2207, 117-124.	1.0	7
34	Bending beam rheometer testing of asphalt mixtures. International Journal of Pavement Engineering, 2011, 12, 461-474.	2.2	28
35	Application of a matrix operator method to the thermoviscoelastic analysis of composite structures. Journal of Mechanics of Materials and Structures, 2010, 5, 837-854.	0.4	7
36	The fracture process zone in asphalt mixture at low temperature. Engineering Fracture Mechanics, 2010, 77, 1175-1190.	2.0	137

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37	Parameter Identification Procedure for Heterogeneous Viscoelastic Composites Using Iterative Functions. Journal of Engineering Mechanics - ASCE, 2010, 136, 849-857.	1.6	3
38	Comparison of Data Interpretation Procedures for Indirect Tensile Creep Test for Linear Viscoelastic Materials. Road Materials and Pavement Design, 2010, 11, 411-441.	2.0	4
39	Factors Study in Low-Temperature Fracture Resistance of Asphalt Concrete. Journal of Materials in Civil Engineering, 2010, 22, 145-152.	1.3	57
40	Microstructure Characterization of Asphalt Mixtures with 2- and 3-Point Correlation Functions. Road Materials and Pavement Design, 2010, 11, 251-272.	2.0	12
41	Revising Thermal Stresses in the TSRST for Low-Temperature Cracking Prediction. Journal of Materials in Civil Engineering, 2009, 21, 680-687.	1.3	13
42	Using recycled taconite as alternative aggregate in asphalt pavements. Construction and Building Materials, 2009, 23, 3070-3078.	3.2	23
43	Investigation of In-Place Asphalt Film Thickness and Performance of Hot-Mix Asphalt Mixtures. Journal of Materials in Civil Engineering, 2009, 21, 262-270.	1.3	32
44	Investigation of Asphalt Mixture Creep Compliance at Low Temperatures. Road Materials and Pavement Design, 2008, 9, 269-285.	2.0	35
45	Effect of Reclaimed Asphalt Pavement (Proportion and Type) and Binder Grade on Asphalt Mixtures. Transportation Research Record, 2008, 2051, 90-97.	1.0	130
46	Effect of Factors Affecting Fracture Energy of Asphalt Concrete at Low Temperature. Road Materials and Pavement Design, 2008, 9, 397-416.	2.0	80
47	Determination of Asphalt Mixture Creep Compliance at Low Temperatures by Using Thin Beam Specimens. Transportation Research Record, 2008, 2057, 134-139.	1.0	33
48	Emerging Methods in Asphalt Binder Rheological Characterization. Road Materials and Pavement Design, 2007, 8, 257-284.	2.0	9
49	Effect of Binder Type, Aggregate, and Mixture Composition on Fracture Energy of Hot-Mix Asphalt in Cold Climates. Transportation Research Record, 2007, 2001, 102-109.	1.0	51
50	Investigation of Superpave Fine Aggregate Angularity Criterion for Asphalt Concrete. Transportation Research Record, 2007, 1998, 75-81.	1.0	10
51	The Role of Temperature and Binder Type on the Fracture Resistance of Asphalt Mixtures at Low Temperatures. Road Materials and Pavement Design, 2006, 7, 331-348.	2.0	12
52	Observation of Crack Propagation in Asphalt Mixtures with Acoustic Emission. Transportation Research Record, 2006, 1970, 171-177.	1.0	15
53	Rheological Characterization of Asphalt Emulsions Residues. Journal of Materials in Civil Engineering, 2006, 18, 398-407.	1.3	24
54	Evaluation of field aging effects on asphalt binder properties. Road Materials and Pavement Design, 2006, 7, 57-73.	2.0	38

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55	Investigation of Low Temperature Cracking in Asphalt Mixtures by Acoustic Emission. Road Materials and Pavement Design, 2006, 7, 491-512.	2.0	51
56	Cohesive Modeling of Fracture in Asphalt Mixtures at Low Temperatures. International Journal of Fracture, 2005, 136, 285-308.	1.1	61
57	High-Temperature Rheological Properties of Asphalt Binders. Transportation Research Record, 2005, 1901, 52-59.	1.0	16
58	Timeâ€“Temperature Superposition and AASHTO MP1a Critical Temperature for Low-temperature Cracking. International Journal of Pavement Engineering, 2004, 5, 31-38.	2.2	23
59	Stiffness m-value and the Low Temperature Relaxation Properties of Asphalt Binders. Road Materials and Pavement Design, 2004, 5, 121-131.	2.0	28
60	Field Validation Study of Low-Temperature Performance Grading Tests for Asphalt Binders. Transportation Research Record, 2004, 1875, 14-21.	1.0	26
61	Role of Bending Beam Rheometer Parameters in Thermal Stress Calculations. Transportation Research Record, 2004, 1875, 9-13.	1.0	25
62	Time-Temperature Superposition and Physical Hardening Effects in Low-Temperature Asphalt Binder Grading. Transportation Research Record, 2003, 1829, 1-7.	1.0	36
63	Determining the Low-Temperature Fracture Toughness of Asphalt Mixtures. Transportation Research Record, 2002, 1789, 191-199.	1.0	93
64	Evaluation of Fatigue Criteria for Asphalt Binders. Transportation Research Record, 2001, 1766, 48-56.	1.0	176
65	Low-Temperature Thermal Cracking of Asphalt Binders as Ranked by Strength and Fracture Properties. Transportation Research Record, 2001, 1766, 1-6.	1.0	75
66	Techniques for Determining Errors in Asphalt Binder Rheological Data. Transportation Research Record, 2001, 1766, 32-39.	1.0	16
67	Factors Affecting Variability in Strategic Highway Research Program Binder Tests. Transportation Research Record, 2000, 1728, 28-35.	1.0	3
68	Establishing Linear Viscoelastic Conditions for Asphalt Binders. Transportation Research Record, 2000, 1728, 1-6.	1.0	39
69	Physical Hardening of Asphalt Binders Relative to Their Glass Transition Temperatures. Transportation Research Record, 1999, 1661, 27-34.	1.0	75
70	Field Performance of Modified Asphalt Binders Evaluated with Superpave Test Methods: I-80 Test Project. Transportation Research Record, 1999, 1661, 60-68.	1.0	22
71	Pavement condition and crashes. , 0, , .		1
72	Investigations of electrical conductivity and damage healing of graphite nano-platelet (GNP)-taconite modified asphalt materials. Road Materials and Pavement Design, 0, , 1-12.	2.0	0

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73	Heterogeneous Markov Chain Model to Predict Pavement Performance and Deterioration. Transportation Research Record, 0, , 036119812210882.	1.0	0
74	Are New Pavement Condition Indices Necessary for Long-Poor Pavements?. Transportation Research Record, 0, , 036119812210920.	1.0	0