Imad L Al-Qadi

List of Publications by Year in Descending Order

252 papers	5,277 citations	38 h-index	57 g-index
271 ext. papers	6,177 ext. citations	2.8 avg, IF	6.24 L-index

#	Paper	IF	Citations
252	Impact of rest period on asphalt concrete permanent deformation. *Construction and Building Materials*, **2022**, 332, 127329	6.7	1
251	Statistical Analysis of Hot-Mix Asphalt Pay for Performance versus Quality Control for Performance. *Journal of Transportation Engineering Part B: Pavements*, **2022**, 148,	1.4	1
250	Effect of Moisture Content on Calculated Dielectric Properties of Asphalt Concrete Pavements from Ground-Penetrating Radar Measurements. *Remote Sensing*, **2022**, 14, 34	5	6
249	Development of a Numerical Model to Predict the Dielectric Properties of Heterogeneous Asphalt Concrete. *Sensors*, **2021**, 21,	3.8	6
248	Impact of dynamic wheel load on roadway infrastructure sustainability. *Transportation Research, Part D: Transport and Environment*, **2021**, 94, 102811	6.4	2
247	Impact of New Generation Wide-Base Tires on Fuel Consumption. *Journal of Transportation Engineering Part B: Pavements*, **2021**, 147,	1.4	2
246	Benchmarking pavement practices in data-scarce regions □tase of Saudi Arabia. *International Journal of Pavement Engineering*, **2021**, 22, 294-306	2.6	1
245	Illinois Flexibility Index Test: Effect of Specimen Geometry and Test Configuration on the Asphalt Concrete Damage Zone. *Journal of Transportation Engineering Part B: Pavements*, **2021**, 147, 04020085	1.4	3
244	Fracture Degradation of Asphalt Concrete under Repeated Loading. *Journal of Transportation Engineering Part B: Pavements*, **2021**, 147, 04021032	1.4	0
243	Determining Road Networks□Platoonability. *Journal of Transportation Engineering Part A: Systems*, **2021**, 147, 04021060	1.5	0
242	Effect of Pavement Responses on Fatigue Cracking and Cement-Treated Reflective Cracking Failure Mechanisms. *Journal of Transportation Engineering Part B: Pavements*, **2021**, 147, 04021056	1.4	
241	Impact and Removal of Ground-Penetrating Radar Vibration on Continuous Asphalt Concrete Pavement Density Prediction. *IEEE Transactions on Geoscience and Remote Sensing*, **2021**, 1-14	8.1	2
240	One for all: Decentralized optimization of lateral position of autonomous trucks in a platoon to improve roadway infrastructure sustainability. *Transportation Research Part C: Emerging Technologies*, **2020**, 120, 102783	8.4	13
239	Factors Impacting Monitoring Asphalt Pavement Density by Ground Penetrating Radar. *NDT and E International*, **2020**, 115, 102296	4.1	16
238	Effect of Chemical Composition of Bio- and Petroleum-Based Modifiers on Asphalt Binder Rheology. *Applied Sciences (Switzerland)*, **2020**, 10, 3249	2.6	7
237	Wander 2D: a flexible pavement design framework for autonomous and connected trucks. *International Journal of Pavement Engineering*, **2020**, 1-16	2.6	18
236	Quantification of the Effect of Binder Source on Flexibility of Long-Term Aged Asphalt Concrete. *Transportation Research Record*, **2020**, 2674, 605-616	1.7	5

235	All for one: Centralized optimization of truck platoons to improve roadway infrastructure sustainability. *Transportation Research Part C: Emerging Technologies*, **2020**, 114, 84-98	8.4	25
234	Flexibility Index Threshold Optimization for Various Asphalt Concrete Mixes and Climatic Conditions. *Transportation Research Record*, **2020**, 2674, 104-112	1.7	2
233	Combined Life Cycle Cost Analysis and Life Cycle Assessment of Road Pavements. *Lecture Notes in Civil Engineering*, **2020**, 123-132	0.3	
232	Brittleness progression for short- and long-term aged asphalt binders with various levels of recycled binders. *International Journal of Pavement Engineering*, **2020**, 1-11	2.6	4
231	Effect of joint rotation on curling responses in airfield rigid pavements. *International Journal of Pavement Engineering*, **2020**, 1-8	2.6	
230	Structural and environmental impact of new-generation wide-base tires in New Brunswick, Canada. *Road Materials and Pavement Design*, **2020**, 21, 1968-1984	2.6	4
229	Tecnico accelerated ageing (TEAGE) – a new laboratory approach for bituminous mixture ageing simulation. *International Journal of Pavement Engineering*, **2020**, 21, 753-765	2.6	20
228	Mechanical modelling of asphalt concrete using grid division. *International Journal of Pavement Engineering*, **2020**, 21, 1012-1023	2.6	
227	Real-Time Density and Thickness Estimation of Thin Asphalt Pavement Overlay During Compaction Using Ground Penetrating Radar Data. *Surveys in Geophysics*, **2020**, 41, 431-445	7.6	13
226	Stochastic Analysis of Rolling Resistance Energy Dissipation for a Tractor-Trailer Model. *Transportation Research Record*, **2019**, 2673, 593-603	1.7	7
225	Iterative Framework for Performance and Environmental Impacts of Airfields. *Transportation Research Record*, **2019**, 2673, 179-187	1.7	0
224	Turning Maneuver Effect on Near-Surface Airfield Pavement Responses. *Transportation Research Record*, **2019**, 2673, 275-283	1.7	1
223	Real-Time Monitoring of Asphalt Concrete Pavement Density during Construction using Ground Penetrating Radar: Theory to Practice. *Transportation Research Record*, **2019**, 2673, 329-338	1.7	10
222	Algorithm development for real-time thin asphalt concrete overlay compaction monitoring using ground-penetrating radar. *NDT and E International*, **2019**, 104, 114-123	4.1	22
221	Effects of Pavement Condition on LCCA User Costs. *Transportation Research Record*, **2019**, 2673, 339-350	1.7	12
220	Environmental and economic impact of using new-generation wide-base tires. *International Journal of Life Cycle Assessment*, **2019**, 24, 753-766	4.6	8
219	Impact of Pavement Roughness and Deflection on Fuel Consumption Using Energy Dissipation. *Journal of Engineering Mechanics - ASCE*, **2019**, 145, 04019080	2.4	10
218	Homogeneous versus Heterogeneous Response of a Flexible Pavement Structure: Strain and Domain Analyses. *Journal of Engineering Mechanics - ASCE*, **2019**, 145, 04019068	2.4	3

217	Total Recycled Asphalt Mixes: Characteristics and Field Performance. *Transportation Research Record*, **2019**, 2673, 149-162	1.7	5
216	Fracture properties of asphalt concrete under various displacement conditions and temperatures. *Construction and Building Materials*, **2019**, 222, 332-341	6.7	20
215	Development of Long-Term Aging Protocol for Implementation of the Illinois Flexibility Index Test (I-FIT) **2019**,		11
214	Super-Resolution of 3-D GPR Signals to Estimate Thin Asphalt Overlay Thickness Using the XCMP Method. *IEEE Transactions on Geoscience and Remote Sensing*, **2019**, 57, 893-901	8.1	10
213	Model uncertainty analysis using data analytics for life-cycle assessment (LCA) applications. *International Journal of Life Cycle Assessment*, **2019**, 24, 945-959	4.6	14
212	Variable impact transportation (VIT) model for energy and environmental impact of hauling truck operation. *International Journal of Life Cycle Assessment*, **2019**, 24, 1154-1168	4.6	2
211	Influence of mix design parameters on asphalt concrete aging rate using I-FIT specimens. *Construction and Building Materials*, **2019**, 200, 181-187	6.7	9
210	Laboratory Characterization of Low-Rolling Resistance Danish Stone-Matrix Asphalt. *Journal of Transportation Engineering Part B: Pavements*, **2019**, 145, 04018060	1.4	1
209	Closed-Form Solution for Curling Responses in Rigid Pavements. *Journal of Engineering Mechanics - ASCE*, **2019**, 145, 04018133	2.4	2
208	Prediction of pavement fatigue cracking at an accelerated testing section using asphalt mixture performance tests. *International Journal of Pavement Engineering*, **2018**, 19, 264-278	2.6	29
207	Vehicle energy consumption and an environmental impact calculation model for the transportation infrastructure systems. *Journal of Cleaner Production*, **2018**, 174, 424-436	10.3	45
206	Life-cycle economic and environmental assessment of warm stone mastic asphalt. *Transportmetrica A: Transport Science*, **2018**, 14, 562-575	2.5	8
205	Effect of Methodological Choices on Pavement Life-Cycle Assessment. *Transportation Research Record*, **2018**, 2672, 78-87	1.7	2
204	Development of Domain Analysis to Predict Multi-Axial Flexible Airfield Pavement Responses Due to Gear and Environmental Loadings. *Transportation Research Record*, **2018**, 2672, 326-335	1.7	3
203	Micromechanical modeling of I-FIT asphalt concrete specimens. *Engineering Fracture Mechanics*, **2018**, 200, 234-250	4.2	6
202	Impact of Wide-Base Tires on Pavements: A National Study. *Transportation Research Record*, **2018**, 2672, 186-196	1.7	11
201	Concrete Pavement Blowup Considering Generalized Boundary Conditions. *Journal of Transportation Engineering Part B: Pavements*, **2018**, 144, 04018038	1.4	2
200	Development of Domain Analysis for Determining Potential Pavement Damage. *Journal of Transportation Engineering Part B: Pavements*, **2018**, 144, 04018030	1.4	5

199	Prediction of thin asphalt concrete overlay thickness and density using nonlinear optimization of GPR data. *NDT and E International*, **2018**, 100, 20-30	4.1	24
198	Continuous real-time monitoring of flexible pavement layer density and thickness using ground penetrating radar. *NDT and E International*, **2018**, 100, 48-54	4.1	29
197	Optimizing rejuvenator content in asphalt concrete to enhance its durability. *Construction and Building Materials*, **2018**, 179, 642-648	6.7	18
196	Developing Machine-Learning Models to Predict Airfield Pavement Responses. *Transportation Research Record*, **2018**, 2672, 23-34	1.7	17
195	Impact of Specimen Configuration and Characteristics on Illinois Flexibility Index. *Transportation Research Record*, **2018**, 2672, 383-393	1.7	8
194	Importance of Heterogeneity in Asphalt Pavement Modeling. *Journal of Engineering Mechanics - ASCE*, **2018**, 144, 04018060	2.4	7
193	Baseline rolling resistance for tires on-road fuel efficiency using finite element modeling. *International Journal of Pavement Engineering*, **2017**, 18, 424-432	2.6	14
192	Introducing realistic tire pavement contact stresses into Pavement Analysis using Nonlinear Damage Approach (PANDA). *International Journal of Pavement Engineering*, **2017**, 18, 1027-1038	2.6	19
191	Efficient surrogate method for predicting pavement response to various tire configurations. *Neural Computing and Applications*, **2017**, 28, 1355-1367	4.8	13
190	Development of Adjustment Factors for MEPDG Pavement Responses Utilizing Finite-Element Analysis. *Journal of Transportation Engineering Part A: Systems*, **2017**, 143, 04017022	1.5	9
189	Development of a Life-Cycle Assessment Tool to Quantify the Environmental Impacts of Airport Pavement Construction. *Transportation Research Record*, **2017**, 2603, 89-97	1.7	9
188	Damage zone development in heterogeneous asphalt concrete. *Engineering Fracture Mechanics*, **2017**, 182, 356-371	4.2	24
187	Using binder and mixture space diagrams to evaluate the effect of re-refined engine oil bottoms on binders and mixtures after ageing. *Road Materials and Pavement Design*, **2017**, 18, 154-182	2.6	17
186	Investigation of viscoelastic fracture fields in asphalt mixtures using digital image correlation. *International Journal of Fracture*, **2017**, 205, 37-56	2.3	27
185	Semicoupled Modeling of Interaction between Deformable Tires and Pavements. *Journal of Transportation Engineering Part A: Systems*, **2017**, 143, 04016015	1.5	9
184	Quantifying sustainable strategies for the construction of highway pavements in Illinois. *Transportation Research, Part D: Transport and Environment*, **2017**, 51, 1-13	6.4	17
183	Stochastic Analysis of Energy Dissipation of a Half-Car Model on Nondeformable Rough Pavement. *Journal of Transportation Engineering Part B: Pavements*, **2017**, 143, 04017016	1.4	11
182	Early-age performance characterization of hot-mix asphalt overlay with varying amounts of asphalt binder replacement. *Construction and Building Materials*, **2017**, 153, 294-306	6.7	15

181	Pavement drainage pipe condition assessment by GPR image reconstruction using FDTD modeling. *Construction and Building Materials*, **2017**, 154, 1283-1293	6.7	27
180	Impact of High Asphalt Binder Replacement on Level Binder Properties for Controlling Reflective Cracking. *Transportation Research Record*, **2017**, 2630, 118-127	1.7	5
179	New Stochastic Approach of Vehicle Energy Dissipation on Nondeformable Rough Pavements. *Journal of Engineering Mechanics - ASCE*, **2017**, 143, 04016118	2.4	12
178	Tire–pavement interaction modelling: hyperelastic tire and elastic pavement. *Road Materials and Pavement Design*, **2017**, 18, 1067-1083	2.6	20
177	Viscoelastic and Poisson's ratio characterization of asphalt materials: critical review and numerical simulations. *Materials and Structures/Materiaux Et Constructions*, **2017**, 50, 1	3.4	12
176	Development of regularization methods on simulated ground-penetrating radar signals to predict thin asphalt overlay thickness. *Signal Processing*, **2017**, 132, 261-271	4.4	24
175	Impact of high recycled mixed on HMA overlay crack development rate. *Road Materials and Pavement Design*, **2017**, 18, 311-327	2.6	15
174	Development of a Modified Adhesion Test for Hot-Poured Asphalt Crack Sealants. *Transportation Research Record*, **2017**, 2612, 85-95	1.7	6
173	Dilatancy in the Analysis of Interlayer Cyclic Shear Test Results. *Journal of Materials in Civil Engineering*, **2016**, 28, 04016171	3	5
172	Mechanics based model for predicting structure-induced rolling resistance (SRR) of the tire-pavement system. *Mechanics of Time-Dependent Materials*, **2016**, 20, 579-600	1.2	16
171	Fracture Characterization of Asphalt Mixtures with High Recycled Content Using Illinois Semicircular Bending Test Method and Flexibility Index. *Transportation Research Record*, **2016**, 2575, 130-137	1.7	75
170	Contact Phenomenon of Free-Rolling Wide-Base Tires: Effect of Speed and Temperature. *Journal of Transportation Engineering*, **2016**, 142, 04016060		6
169	Development of the fracture-based flexibility index for asphalt concrete cracking potential using modified semi-circle bending test parameters. *Construction and Building Materials*, **2016**, 115, 390-401	6.7	142
168	Algorithm development for the application of ground-penetrating radar on asphalt pavement compaction monitoring. *International Journal of Pavement Engineering*, **2016**, 17, 189-200	2.6	42
167	Quantitative Assessment of the Effect of Wide-Base Tires on Pavement Response by Finite Element Analysis. *Transportation Research Record*, **2016**, 2590, 37-43	1.7	14
166	4.75 mm SMA Performance and Cost-Effectiveness for Asphalt Thin Overlays. *International Journal of Pavement Engineering*, **2016**, 17, 799-809	2.6	8
165	Development of an analytic approach utilizing the extended common midpoint method to estimate asphalt pavement thickness with 3-D ground-penetrating radar. *NDT and E International*, **2016**, 78, 29-36	4.1	38
164	Tire Type Effect on Pavement Responses; Accelerated Pavement Testing Results **2016**, 277-288		1

163	Railway Ballast Fouling Detection Using GPR Data: Introducing a Combined Time-Frequency and Discrete Wavelet Techniques. *Near Surface Geophysics*, **2016**, 14, 145-153	1.6	7
162	Hyperelastic Modeling of Wide-Base Tire and Prediction of Its Contact Stresses. *Journal of Engineering Mechanics - ASCE*, **2016**, 142, 04015084	2.4	25
161	Effect of Wide-Base Tires on Nationwide Flexible Pavement Systems: Numerical Modeling. *Transportation Research Record*, **2016**, 2590, 104-112	1.7	23
160	Computational micromechanical analysis of the representative volume element of bituminous composite materials. *Mechanics of Time-Dependent Materials*, **2016**, 20, 441-453	1.2	5
159	Regional upstream life-cycle impacts of petroleum products in the United States. *Journal of Cleaner Production*, **2016**, 139, 1138-1149	10.3	16
158	In-Situ Validation of Three-Dimensional Pavement Finite Element Models **2016**, 145-159		11
157	Optimal pavement design and rehabilitation planning using a mechanistic-empirical approach. *EURO Journal on Transportation and Logistics*, **2015**, 4, 57-73	2.4	7
156	Mitigation of moisture damage in asphalt concrete: Testing techniques and additives/modifiers effectiveness. *Construction and Building Materials*, **2015**, 84, 437-443	6.7	27
155	Application of regularized deconvolution technique for predicting pavement thin layer thicknesses from ground penetrating radar data. *NDT and E International*, **2015**, 73, 1-7	4.1	36
154	System of Systems Model for Analysis of Biofuel Development. *Journal of Infrastructure Systems*, **2015**, 21, 04014050	2.9	17
153	Environmental and economic analyses of recycled asphalt concrete mixtures based on material production and potential performance. *Resources, Conservation and Recycling*, **2015**, 104, 141-151	11.9	58
152	. *IEEE Transactions on Geoscience and Remote Sensing*, **2015**, 53, 1538-1548	8.1	38
151	Prediction of Fatigue Failure at Asphalt Concrete Layer Interface from Monotonic Testing. *Transportation Research Record*, **2015**, 2507, 50-56	1.7	5
150	Field Aging and Development of Aging Model for Hot-Poured Crack Sealants. *Transportation Research Record*, **2015**, 2481, 90-99	1.7	11
149	Scenarios Developed for Improved Sustainability of Illinois Tollway: Life-Cycle Assessment Approach. *Transportation Research Record*, **2015**, 2523, 11-18	1.7	16
148	Airfield Pavement Response Caused by Heavy Aircraft Takeoff: Advanced Modeling for Consideration of Wheel Interaction. *Transportation Research Record*, **2015**, 2471, 40-47	1.7	4
147	Effects of Pavement Surface Roughness and Congestion on Expected Freeway Traffic Energy Consumption. *Transportation Research Record*, **2015**, 2503, 10-19	1.7	12
146	Managing Multiple Mandates: A System of Systems Model to Analyze Strategies for Producing Cellulosic Ethanol and Reducing Riverine Nitrate Loads in the Upper Mississippi River Basin. *Environmental Science & Technology*, **2015**, 49, 11932-40	10.3	19

145	Simulation of Shakedown Behavior for Flexible Pavements Unbound Granular Layer **2015**,		2
144	Micromechanical finite element modeling of moisture damage in bituminous composite materials. *Construction and Building Materials*, **2015**, 80, 9-17	6.7	12
143	Hybrid life cycle assessment for asphalt mixtures with high RAP content. *Resources, Conservation and Recycling*, **2014**, 83, 77-86	11.9	119
142	Full-depth flexible pavement responses to different truck tyre geometry configurations. *International Journal of Pavement Engineering*, **2014**, 15, 512-520	2.6	11
141	Content-based image retrieval approaches to interpret ground penetrating radar data. *Construction and Building Materials*, **2014**, 69, 10-17	6.7	6
140	Pattern recognition algorithms for density estimation of asphalt pavement during compaction: a simulation study. *Journal of Applied Geophysics*, **2014**, 107, 8-15	1.7	26
139	An innovative method for measuring pavement dielectric constant using the extended CMP method with two air-coupled GPR systems. *NDT and E International*, **2014**, 66, 90-98	4.1	49
138	Testing of Fine Asphalt Mixtures to Quantify Effectiveness of Asphalt Binder Replacement Using Recycled Shingles. *Transportation Research Record*, **2014**, 2445, 103-112	1.7	11
137	Pavement-Dependent Load Limits: Case Study in South Dakota for Different Tire Configurations. *Transportation Research Record*, **2014**, 2456, 107-114	1.7	1
136	Field Validation of Laboratory-Predicted Low-Temperature Performance of Hot-Poured Crack Sealants. *Transportation Research Record*, **2014**, 2431, 57-66	1.7	10
135	Pavement responses as function of truck tire type **2014**, 1125-1134		1
134	Performance Characterization of Hot In-Place Recycled Asphalt Mixtures. *Journal of Transportation Engineering*, **2014**, 140, 04014029		24
133	Asphalt Pavements with High Reclaimed Asphalt Pavement Content: Economic and Environmental Perspectives. *Transportation Research Record*, **2014**, 2456, 161-169	1.7	20
132	Analytical Approach for Predicting Three-Dimensional Tire Pavement Contact Load. *Transportation Research Record*, **2014**, 2456, 75-84	1.7	15
131	Engineering Cost Benefit Analysis of Thin, Durable Asphalt Overlays. *Transportation Research Record*, **2014**, 2456, 135-145	1.7	5
130	Life-Cycle Greenhouse Gases and Energy Consumption for Material and Construction Phases of Pavement with Traffic Delay. *Transportation Research Record*, **2014**, 2428, 27-34	1.7	24
129	Mechanical Property Characterization of Warm-Mix Asphalt Prepared with Chemical Additives. *Journal of Materials in Civil Engineering*, **2014**, 26, 304-311	3	50
128	Effect of Surface Friction on Tire Pavement Contact Stresses during Vehicle Maneuvering. *Journal of Engineering Mechanics - ASCE*, **2014**, 140, 04014001	2.4	51

127	Pavement Layer Interface Shear Strength Using a Hyperbolic Mohr-Coulomb Model and Finite Element Analysis **2013**,		1
126	Impact of Tire Loading and Tire Pressure on Measured 3D Contact Stresses **2013**,		19
125	Importance of Nonlinear Anisotropic Modeling of Granular Base for Predicting Maximum Viscoelastic Pavement Responses under Moving Vehicular Loading. *Journal of Engineering Mechanics - ASCE*, **2013**, 139, 29-38	2.4	60
124	Analysis of Near-Surface Cracking under Critical Loading Conditions Using Uncracked and Cracked Pavement Models. *Journal of Transportation Engineering*, **2013**, 139, 992-1000		31
123	Innovative Approach for Asphalt Pavement Compaction Monitoring with Ground-Penetrating Radar. *Transportation Research Record*, **2013**, 2347, 79-87	1.7	28
122	Innovative Sprinkle Treatment for Thin Durable Asphalt Overlays. *Transportation Research Record*, **2013**, 2366, 87-97	1.7	6
121	Interface Layer Tack Coat Optimization. *Transportation Research Record*, **2013**, 2372, 53-60	1.7	14
120	Performance Characterization of Asphalt Mixtures at High Asphalt Binder Replacement with Recycled Asphalt Shingles. *Transportation Research Record*, **2013**, 2371, 105-112	1.7	18
119	Rutting Potential of Thin and Durable Asphalt Wearing Courses: Laboratory Prediction and Field Performance **2013**,		3
118	Three-Dimensional Finite Element Modeling of Instrumented Airport Runway Pavement Responses. *Transportation Research Record*, **2013**, 2367, 76-83	1.7	19
117	Achieving Desired Volumetrics and Performance for Mixtures with High Percentage of Reclaimed Asphalt Pavement. *Transportation Research Record*, **2012**, 2294, 34-42	1.7	23
116	Ground-Penetrating Radar Data to Develop Wavelet Technique for Quantifying Railroad Ballast Fouling Conditions. *Transportation Research Record*, **2012**, 2289, 95-102	1.7	18
115	Geogrid-Reinforced Low-Volume Flexible Pavements: Pavement Response and Geogrid Optimal Location. *Journal of Transportation Engineering*, **2012**, 138, 1083-1090		27
114	Impact of Wide-Base Tires on Pavements: Results from Instrumentation Measurements and Modeling Analysis. *Transportation Research Record*, **2012**, 2304, 169-176	1.7	21
113	Characterisation of interface bonding between hot-mix asphalt overlay and concrete pavements: modelling and in-situ response to accelerated loading. *International Journal of Pavement Engineering*, **2012**, 13, 181-196	2.6	44
112	Effects of Curing Time and Reheating on Performance of Warm Stone-Matrix Asphalt. *Journal of Materials in Civil Engineering*, **2012**, 24, 1422-1428	3	16
111	Partial replacement of asphalt binder with bio-binder: characterisation and modification. *International Journal of Pavement Engineering*, **2012**, 13, 515-522	2.6	112
110	Short-Term Performance of Plant-Mixed Warm Stone Mastic Asphalt: Laboratory Testing and Field Evaluation. *Transportation Research Record*, **2012**, 2306, 86-94	1.7	9

109	Influence of Filler Fractional Voids on Mastic and Mixture Performance. *Transportation Research Record*, **2012**, 2294, 74-80	1.7	24
108	Simulation of tyre–pavement interaction for predicting contact stresses at static and various rolling conditions. *International Journal of Pavement Engineering*, **2012**, 13, 310-321	2.6	88
107	Field Application of Ground-Penetrating Radar for Measurement of Asphalt Mixture Density: Case Study of Illinois Route 72 Overlay. *Transportation Research Record*, **2012**, 2304, 133-141	1.7	29
106	Sand Mix Interlayer Retarding Reflective Cracking in Asphalt Concrete Overlay **2012**, 1241-1250		1
105	Impact Quantification of Wide-Base Tire Loading on Secondary Road Flexible Pavements. *Journal of Transportation Engineering*, **2011**, 137, 630-639		43
104	Impact of Non-Uniform Aircraft Tire Pressure on Airfield Pavement Responses **2011**,		4
103	Effects of Nonuniform and Three-Dimensional Contact Stresses on Near-Surface Cracking. *Transportation Research Record*, **2011**, 2210, 97-105	1.7	7
102	Geogrid mechanism in low-volume flexible pavements: accelerated testing of full-scale heavily instrumented pavement sections. *International Journal of Pavement Engineering*, **2011**, 12, 121-135	2.6	31
101	Development and validation for in situ asphalt mixture density prediction models. *NDT and E International*, **2011**, 44, 369-375	4.1	66
100	A three-dimensional generalised finite element analysis for the near-surface cracking problem in flexible pavements. *International Journal of Pavement Engineering*, **2011**, 12, 407-419	2.6	1
99	Development of a Pressurized Blister Test for Interface Characterization of Aggregate Highly Polymerized Bituminous Materials. *Journal of Materials in Civil Engineering*, **2011**, 23, 656-663	3	22
98	Effect of Mineral Filler Characteristics on Asphalt Mastic and Mixture Rutting Potential. *Transportation Research Record*, **2011**, 2208, 33-39	1.7	116
97	Sand Mix Interlayer to Control Reflective Cracking in Hot-Mix Asphalt Overlay. *Transportation Research Record*, **2011**, 2227, 53-60	1.7	6
96	Development of a Crack Sealant Adhesion Test (CSADT) Specification for Hot-Poured Bituminous Sealants. *Journal of Testing and Evaluation*, **2011**, 39, 103108	1	1
95	Data Analysis Techniques for GPR Used for Assessing Railroad Ballast in High Radio-Frequency Environment. *Journal of Transportation Engineering*, **2010**, 136, 392-399		36
94	Railroad Ballast Evaluation Using Ground-Penetrating Radar: Laboratory Investigation and Field Validation. *Transportation Research Record*, **2010**, 2159, 110-117	1.7	37
93	Linear Viscoelastic Modeling for Hot-Poured Crack Sealants at Low Temperature. *Journal of Materials in Civil Engineering*, **2010**, 22, 996-1004	3	7
92	Evaluation of Surface-Related Pavement Damage due to Tire Braking. *Road Materials and Pavement Design*, **2010**, 11, 101-121	2.6	40

91	Effects of Interface Conditions on Reflective Cracking Development in Hot-Mix Asphalt Overlays. *Road Materials and Pavement Design*, **2010**, 11, 307-334	2.6	34
90	Near-Surface Pavement Failure under Multiaxial Stress State in Thick Asphalt Pavement. *Transportation Research Record*, **2010**, 2154, 91-99	1.7	41
89	Development of a time-frequency approach to quantify railroad ballast fouling condition using ultra-wide band ground-penetrating radar data. *International Journal of Pavement Engineering*, **2010**, 11, 269-279	2.6	17
88	A strain-controlled hot-mix asphalt fatigue model considering low and high cycles. *International Journal of Pavement Engineering*, **2010**, 11, 565-574	2.6	22
87	Dynamic Analysis of Thin Asphalt Pavements by Using Cross-Anisotropic Stress-Dependent Properties for Granular Layer. *Transportation Research Record*, **2010**, 2154, 156-163	1.7	82
86	Runway Instrumentation and Response Measurements. *Transportation Research Record*, **2010**, 2153, 162-169	1.7	21
85	In-Place Hot-Mix Asphalt Density Estimation Using Ground-Penetrating Radar. *Transportation Research Record*, **2010**, 2152, 19-27	1.7	61
84	Threshold Identification and Field Validation of Performance-Based Guidelines to Select Hot-Poured Crack Sealants. *Transportation Research Record*, **2010**, 2150, 87-95	1.7	10
83	Optimization of antenna configuration in multiple-frequency ground penetrating radar system for railroad substructure assessment. *NDT and E International*, **2010**, 43, 20-28	4.1	26
82	Effects of Interface Conditions on Reflective Cracking Development in Hot-Mix Asphalt Overlays. *Road Materials and Pavement Design*, **2010**, 11, 307-334	2.6	2
81	Evaluation of Surface-Related Pavement Damage due to Tire Braking. *Road Materials and Pavement Design*, **2010**, 11, 101-121	2.6	2
80	GPR signal de-noising by discrete wavelet transform. *NDT and E International*, **2009**, 42, 696-703	4.1	69
79	Combined Effect of Moving Wheel Loading and Three-Dimensional Contact Stresses on Perpetual Pavement Responses. *Transportation Research Record*, **2009**, 2095, 53-61	1.7	83
78	Creep Behavior of Hot-Mix Asphalt due to Heavy Vehicular Tire Loading. *Journal of Engineering Mechanics - ASCE*, **2009**, 135, 1265-1273	2.4	39
77	Validated Mechanistic Model for Geogrid Base Reinforced Flexible Pavements. *Journal of Transportation Engineering*, **2009**, 135, 915-926		16
76	Interface Bonding between Hot-Mix Asphalt and various Portland Cement Concrete Surfaces: Assessment of Accelerated Pavement Testing and Measurement of Interface Strain. *Transportation Research Record*, **2009**, 2127, 20-28	1.7	20
75	Field and Laboratory Evaluation of Fracture Resistance of Illinois Hot-Mix Asphalt Overlay Mixtures. *Transportation Research Record*, **2009**, 2127, 146-154	1.7	16
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