Lev Khazanovich

List of Publications by Year
in descending order

84 papers	1,263 citations	331670 21 h-index	434195 31 g-index
87 all docs	87 docs citations	87 times ranked	869 citing authors

#	Article	IF	Citations
1	Permeable pavement in northern North American urban areas: research review and knowledge gaps. International Journal of Pavement Engineering, 2019, 20, 143-162.	4.4	74
2	MnLayer. Transportation Research Record, 2007, 2037, 63-75.	1.9	66
3	Analysis of Concrete Pavement Responses to Temperature and Wheel Loads Measured from Intrumented Slabs. Transportation Research Record, 1998, 1639, 94-101.	1.9	64
4	Ultrasonic Tomography for Evaluation of Concrete Pavements. Transportation Research Record, 2011, 2232, 85-94.	1.9	53
5	Extended synthetic aperture focusing technique for ultrasonic imaging of concrete. NDT and E International, 2015, 74, 33-42.	3.7	46
6	Evaluating asphalt concrete air void variation via GPR antenna array data. Case Studies in Nondestructive Testing and Evaluation, 2015, 3, 27-33.	1.7	45
7	Nonlinear Temperature Effects on Multilayered Concrete Pavements. Journal of Transportation Engineering, 1998, 124, 128-136.	0.9	44
8	Location and Depth of Pervious Concrete Clogging Material before and after Void Maintenance with Common Municipal Utility Vehicles. Journal of Transportation Engineering, 2012, 138, 332-338.	0.9	43
9	Microscopic analysis of paste and aggregate distresses in pervious concrete in a wet, hard freeze climate. Cement and Concrete Composites, 2011, 33, 1080-1085.	10.7	40
10	Mechanistic-Empirical Model to Predict Transverse Joint Faulting. Transportation Research Record, 2004, 1896, 34-45.	1.9	33
11	Determining Amount of Built-in Curling in Jointed Plain Concrete Pavement: Case Study of Pennsylvania 1-80. Transportation Research Record, 2002, 1809, 85-92.	1.9	30
12	The elasticâ€"viscoelastic correspondence principle for non-homogeneous materials with time translation non-invariant properties. International Journal of Solids and Structures, 2008, 45, 4739-4747.	2.7	29
13	Local Calibration of Mechanisticâ€"Empirical Pavement Design Guide Rutting Model. Transportation Research Record, 2010, 2180, 130-141.	1.9	28
14	Mechanistic-Based Model for Predicting Reflective Cracking in Asphalt Concreteâ€"Overlaid Pavements. Transportation Research Record, 1998, 1629, 234-241.	1.9	27
15	Development of Rapid Solutions for Prediction of Critical Continuously Reinforced Concrete Pavement Stresses. Transportation Research Record, 2001, 1778, 64-72.	1.9	27
16	Structural Analysis of Pervious Concrete Pavement. Transportation Research Record, 2011, 2226, 13-20.	1.9	27
17	DIPLOBACK: Neural-Network-Based Backcalculation Program for Composite Pavements. Transportation Research Record, 1997, 1570, 143-150.	1.9	24
18	Development of a Mechanistic-Empirical Structural Design Procedure for Continuously Reinforced Concrete Pavements. Transportation Research Record, 2004, 1896, 46-56.	1.9	23

#	Article	IF	Citations
19	Evaluation of Characterization and Performance Modeling of Cementitiously Stabilized Layers in the Mechanisticâ€"Empirical Pavement Design Guide. Transportation Research Record, 2010, 2186, 111-119.	1.9	23
20	Limited application of reflective surfaces can mitigate urban heat pollution. Nature Communications, 2021, 12, 3491.	12.8	23
21	Concrete Pavement Joint Diagnostics with Ultrasonic Tomography. Transportation Research Record, 2012, 2305, 54-61.	1.9	22
22	Comprehensive Evaluation of Effect of Climate in Mechanisticâ€"Empirical Pavement Design GuidePredictions. Transportation Research Record, 2010, 2170, 45-55.	1.9	20
23	Evaluation of Ultrasonic Technique for Detecting Delamination in Asphalt Pavements. Transportation Research Record, 2012, 2306, 105-110.	1.9	20
24	Numerical investigation of the effect of heterogeneity on the attenuation of shear waves in concrete. Ultrasonics, 2019, 91, 34-44.	3.9	20
25	Nondestructive monitoring of subsurface damage progression in concrete columns damaged by earthquake loading. Engineering Structures, 2016, 114, 148-157.	5.3	19
26	Enhanced Model for Continuous Dielectric-Based Asphalt Compaction Evaluation. Transportation Research Record, 2018, 2672, 144-154.	1.9	18
27	Design and Construction of Sustainable Pavements. Transportation Research Record, 2009, 2098, 75-85.	1.9	17
28	Reappraisal of Recycled Concrete Aggregate as Coarse Aggregate in Concretes for Rigid Pavements. Transportation Research Record, 2009, 2113, 149-155.	1.9	16
29	Correlation Analysis of 2D Tomographic Images for Flaw Detection in Pavements. Journal of Testing and Evaluation, 2012, 40, 247-255.	0.7	16
30	Finite-Element Analysis of Portland Cement Concrete Pavements with Cracks. Transportation Research Record, 1997, 1568, 1-9.	1.9	15
31	Theoretical and field evaluation of interaction between ultra-thin whitetopping and existing asphalt pavement. International Journal of Pavement Engineering, 2006, 7, 251-260.	4.4	14
32	Laboratory and Finite Element Evaluation of Joint Lockup. Transportation Research Record, 2009, 2095, 34-42.	1.9	13
33	Analytical reverse time migration: An innovation in imaging of infrastructures using ultrasonic shear waves. Ultrasonics, 2018, 88, 185-192.	3.9	13
34	Reliability Analysis of Cracking and Faulting Prediction in the New Mechanistic-Empirical Pavement Design Procedure. Transportation Research Record, 2005, 1936, 150-160.	1.9	13
35	Evaluation of Dowel Alignment Constructability in Portland Cement Concrete Pavements. Transportation Research Record, 2009, 2098, 86-93.	1.9	12
36	Probabilistic Numerical Simulation of Pavement Performance using MEPDG. Road Materials and Pavement Design, 2010, 11, 291-306.	4.0	12

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37	Detection of Subsurface Joint Deterioration. Transportation Research Record, 2013, 2367, 3-12.	1.9	11
38	Concrete Pavement Thickness Variation Assessment with Cores and Nondestructive Testing Measurements. Transportation Research Record, 2013, 2347, 61-68.	1.9	11
39	Longevity of Diamond-Ground Concrete Pavements. Transportation Research Record, 1999, 1684, 128-136.	1.9	10
40	Adaptation of Mechanistic-Empirical Pavement Design Guide for Design of Minnesota Low-Volume Portland Cement Concrete Pavements. Transportation Research Record, 2008, 2087, 57-67.	1.9	9
41	Mechanistic modelling of tests of unbound granular materials. International Journal of Pavement Engineering, 2014, 15, 584-598.	4.4	9
42	Evaluation of Top-Down Cracks in Asphalt Pavements by Using a Self-Calibrating Ultrasonic Technique. Transportation Research Record, 2005, 1940, 63-68.	1.9	9
43	General Formulation for Multilayered Pavement Systems. Journal of Transportation Engineering, 1998, 124, 82-90.	0.9	8
44	Effects of Interlayer Systems on Reflective Cracking in Unbonded Overlays of Existing Concrete Pavements. Transportation Research Record, 2016, 2591, 33-41.	1.9	8
45	Calibration of Mechanistic-Empirical Performance Model for Continuously Reinforced Concrete Pavement Punch-Outs. Transportation Research Record, 2004, 1896, 15-22.	1.9	7
46	Benefits of the Minnesota Road Research Project. Transportation Research Record, 2008, 2087, 12-19.	1.9	7
47	Application of a matrix operator method to the thermoviscoelastic analysis of composite structures. Journal of Mechanics of Materials and Structures, 2010, 5, 837-854.	0.6	7
48	Optimal design of flexible pavements using a framework of DAKOTA and MEPDG. International Journal of Pavement Engineering, 2011, 12, 137-148.	4.4	7
49	Laboratory and analytical modelling of misaligned dowel. International Journal of Pavement Engineering, 2012, 13, 209-215.	4.4	7
50	Unified Mechanistic Approach for Modeling Tests of Unbound Pavement Materials. Journal of Transportation Engineering, 2012, 138, 1091-1098.	0.9	6
51	Acoustic enhancement of concrete pavement surface through diamond grinding. International Journal of Pavement Engineering, 2013, 14, 579-589.	4.4	6
52	Establishing the Interlayer Structural Response for Unbonded Concrete Overlays of Existing Concrete Pavements. Transportation Research Record, 2018, 2672, 254-263.	1.9	6
53	Finite element study of partial-depth cracks in restrained PCC slabs. International Journal of Pavement Engineering, 2006, 7, 323-329.	4.4	5
54	Modification of Mechanisticâ€"Empirical Pavement Design Guide Procedure for Two-Lift Composite Concrete Pavements. Transportation Research Record, 2012, 2305, 14-23.	1.9	5

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55	State Design Procedure for Rigid Pavements Based on the AASHTO Mechanisticâ€"Empirical Pavement Design Guide. Transportation Research Record, 2015, 2524, 23-32.	1.9	5
56	Characterization of concrete at various freeze-thaw damage conditions using SH-waves. AIP Conference Proceedings, 2016, , .	0.4	5
57	Analytical reverse time migration with new imaging conditions for one-sided nondestructive evaluation of concrete elements using shear waves. Ultrasonics, 2019, 99, 105960.	3.9	5
58	Impact of Joint Spacing on Bonded Concrete Overlay of Existing Asphalt Pavement in the AASHTOWare Pavement ME Design Software. Journal of Transportation Engineering Part B: Pavements, 2019, 145, 04019018.	1.5	5
59	Non-Destructive Evaluation of Crack Initiation and Propagation in Continuously Reinforced Concrete Pavements. Transportation Research Record, 2019, 2673, 375-385.	1.9	5
60	Analytical solution for a viscoelastic plate on a Pasternak foundation. Road Materials and Pavement Design, 2020, 21, 800-820.	4.0	4
61	Structural analysis of transverse cracks in short continuously reinforced concrete pavements. International Journal of Pavement Engineering, 2020, 21, 1853-1863.	4.4	4
62	Non-destructive ultrasonic evaluation of construction variability effect on concrete pavement performance. International Journal of Pavement Research and Technology, 2021, 14, 385-396.	2.6	4
63	Modeling of Jointed Plain Concrete Pavement Fatigue Cracking in PaveSpec 3.0. Transportation Research Record, 2001, 1778, 33-42.	1.9	3
64	Investigation and Modification of Available Mechanisticâ€"Empirical Procedures for Reflective Cracking in Asphalt Overlays of Concrete Pavements. Transportation Research Record, 2013, 2368, 126-132.	1.9	3
65	Use of the Mechanisticâ€"Empirical Pavement Design Guide and CalME to Mitigate Rutting in Asphalt Overlays of Concrete Pavements. Transportation Research Record, 2013, 2368, 36-44.	1.9	3
66	Dynamic Viscoelastic Analysis of Falling Weight Deflectometer Deflections for Rigid and Flexible Pavements. Transportation Research Record, 2015, 2525, 31-39.	1.9	3
67	Comparing the Bonded Concrete Overlays of Asphalt-Mechanistic Empirical Design Procedure and the Short Jointed Plain Concrete Pavement Module in the Pavement Mechanistic Empirical Design Procedure. Transportation Research Record, 2018, 2672, 242-253.	1.9	3
68	Determination of Critical Bending Stresses in Portland Cement Concrete Layer with Asphalt Overlay. Transportation Research Record, 2012, 2306, 36-44.	1.9	2
69	Evaluation of Bearing Capacity of Low-Volume Roads in Minnesota. Transportation Research Record, 2014, 2433, 79-86.	1.9	2
70	Quantitative ultrasonic evaluation of concrete structures using one-sided access. AIP Conference Proceedings, 2016, , .	0.4	2
71	Nondestructive analysis of alkali-silica reaction damage in concrete slabs using shear waves. AIP Conference Proceedings, 2018, , .	0.4	2
72	A self-contained element for modeling crack propagation in beams. Engineering Fracture Mechanics, 2021, 242, 107460.	4.3	2

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73	Probabilistic Numerical Simulation of Pavement Performance using MEPDG. Road Materials and Pavement Design, 2010, 11, 291-306.	4.0	2
74	Mechanisticâ€"Empirical Model for Cracking Prediction in Unbonded Concrete Overlays on Concrete Pavements. Transportation Research Record, 2022, 2676, 527-541.	1.9	2
75	Nondestructive analysis techniques for freeze-thaw damage detection in concrete slabs using shear waves. International Journal of Pavement Research and Technology, 2018, , .	2.6	1
76	Dynamic analyses of a viscoelastic plate on a generalised Pasternak foundation. International Journal of Geotechnical Engineering, 2019, 13, 385-397.	2.0	1
77	Local Calibration of Pavement Mechanistic-Empirical Faulting Reliability using Pavement Management Data. Transportation Research Record, 0, , 036119812110013.	1.9	1
78	PITTRIGID ME: Simplified Mechanistic-Empirical Design Tool for Pennsylvania Rigid Pavements Design and Analysis. Journal of Transportation Engineering Part B: Pavements, 2021, 147, 04021052.	1.5	1
79	Reconsidering the strength of concrete pavements. International Journal of Pavement Engineering, 2023, 24, .	4.4	1
80	Determination of Concrete Strength for Concrete Pavement Opening Decision-Making. International Journal of Pavement Research and Technology, 0, , 1.	2.6	1
81	Enhancement of sustainable road design towards compatibility between pavement materials. , 0, , .		1
82	Discrete Element Modeling of Effect of Moisture and Fine Particles in Lightweight Deflectometer Test. Transportation Research Record, 2014, 2433, 58-67.	1.9	0
83	A novel use of frequency-banded synthetic aperture focusing technique for reconstructions of alkali-silica reaction in thick-reinforced concrete structures. AIP Conference Proceedings, 2019, , .	0.4	0
84	Poroelastic modeling of pore pressure development in granular pavement layers. International Journal of Pavement Engineering, 2023, 24, .	4.4	0