Lev Khazanovich

List of Publications by Year
in descending order

84	1,263	331538	454834
papers	citations	21 h-index	30 g-index

87	87	87	869
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reconsidering the strength of concrete pavements. International Journal of Pavement Engineering, 2023, 24, .	2.2	1
2	Poroelastic modeling of pore pressure development in granular pavement layers. International Journal of Pavement Engineering, 2023, 24, .	2.2	0
3	Mechanisticâ€“Empirical Model for Cracking Prediction in Unbonded Concrete Overlays on Concrete Pavements. Transportation Research Record, 2022, 2676, 527-541.	1.0	2
4	A self-contained element for modeling crack propagation in beams. Engineering Fracture Mechanics, 2021, 242, 107460.	2.0	2
5	Non-destructive ultrasonic evaluation of construction variability effect on concrete pavement performance. International Journal of Pavement Research and Technology, 2021, 14, 385-396.	1.3	4
6	Limited application of reflective surfaces can mitigate urban heat pollution. Nature Communications, 2021, 12, 3491.	5.8	23
7	PITTRIGID ME: Simplified Mechanistic-Empirical Design Tool for Pennsylvania Rigid Pavements Design and Analysis. Journal of Transportation Engineering Part B: Pavements, 2021, 147, 04021052.	0.8	1
8	Analytical solution for a viscoelastic plate on a Pasternak foundation. Road Materials and Pavement Design, 2020, 21, 800-820.	2.0	4
9	Structural analysis of transverse cracks in short continuously reinforced concrete pavements. International Journal of Pavement Engineering, 2020, 21, 1853-1863.	2.2	4
10	Numerical investigation of the effect of heterogeneity on the attenuation of shear waves in concrete. Ultrasonics, 2019, 91, 34-44.	2.1	20
11	Analytical reverse time migration with new imaging conditions for one-sided nondestructive evaluation of concrete elements using shear waves. Ultrasonics, 2019, 99, 105960.	2.1	5
12	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, , .	0.3	0
13	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.	0.8	5
14	Non-Destructive Evaluation of Crack Initiation and Propagation in Continuously Reinforced Concrete Pavements. Transportation Research Record, 2019, 2673, 375-385.	1.0	5
15	Dynamic analyses of a viscoelastic plate on a generalised Pasternak foundation. International Journal of Geotechnical Engineering, 2019, 13, 385-397.	1.1	1
16	Permeable pavement in northern North American urban areas: research review and knowledge gaps. International Journal of Pavement Engineering, 2019, 20, 143-162.	2.2	74
17	Analytical reverse time migration: An innovation in imaging of infrastructures using ultrasonic shear waves. Ultrasonics, 2018, 88, 185-192.	2.1	13
18	Nondestructive analysis of alkali-silica reaction damage in concrete slabs using shear waves. AIP Conference Proceedings, 2018, , .	0.3	2

#	Article	IF	Citations
19	Establishing the Interlayer Structural Response for Unbonded Concrete Overlays of Existing Concrete Pavements. Transportation Research Record, 2018, 2672, 254-263.	1.0	6
20	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.	1.0	3
21	Enhanced Model for Continuous Dielectric-Based Asphalt Compaction Evaluation. Transportation Research Record, 2018, 2672, 144-154.	1.0	18
22	Nondestructive analysis techniques for freeze-thaw damage detection in concrete slabs using shear waves. International Journal of Pavement Research and Technology, 2018, , .	1.3	1
23	Quantitative ultrasonic evaluation of concrete structures using one-sided access. AIP Conference Proceedings, 2016, , .	0.3	2
24	Nondestructive monitoring of subsurface damage progression in concrete columns damaged by earthquake loading. Engineering Structures, 2016, 114, 148-157.	2.6	19
25	Effects of Interlayer Systems on Reflective Cracking in Unbonded Overlays of Existing Concrete Pavements. Transportation Research Record, 2016, 2591, 33-41.	1.0	8
26	Characterization of concrete at various freeze-thaw damage conditions using SH-waves. AIP Conference Proceedings, 2016, , .	0.3	5
27	Dynamic Viscoelastic Analysis of Falling Weight Deflectometer Deflections for Rigid and Flexible Pavements. Transportation Research Record, 2015, 2525, 31-39.	1.0	3
28	Extended synthetic aperture focusing technique for ultrasonic imaging of concrete. NDT and E International, 2015, 74, 33-42.	1.7	46
29	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
30	State Design Procedure for Rigid Pavements Based on the AASHTO Mechanistic€“Empirical Pavement Design Guide. Transportation Research Record, 2015, 2524, 23-32.	1.0	5
31	Discrete Element Modeling of Effect of Moisture and Fine Particles in Lightweight Deflectometer Test. Transportation Research Record, 2014, 2433, 58-67.	1.0	0
32	Mechanistic modelling of tests of unbound granular materials. International Journal of Pavement Engineering, 2014, 15, 584-598.	2.2	9
33	Evaluation of Bearing Capacity of Low-Volume Roads in Minnesota. Transportation Research Record, 2014, 2433, 79-86.	1.0	2
34	Acoustic enhancement of concrete pavement surface through diamond grinding. International Journal of Pavement Engineering, 2013, 14, 579-589.	2.2	6
35	Investigation and Modification of Available Mechanistic€“Empirical Procedures for Reflective Cracking in Asphalt Overlays of Concrete Pavements. Transportation Research Record, 2013, 2368, 126-132.	1.0	3
36	Detection of Subsurface Joint Deterioration. Transportation Research Record, 2013, 2367, 3-12.	1.0	11

#	Article	IF	Citations
37	Concrete Pavement Thickness Variation Assessment with Cores and Nondestructive Testing Measurements. Transportation Research Record, 2013, 2347, 61-68.	1.0	11
38	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.	1.0	3
39	Laboratory and analytical modelling of misaligned dowel. International Journal of Pavement Engineering, 2012, 13, 209-215.	2.2	7
40	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
41	Concrete Pavement Joint Diagnostics with Ultrasonic Tomography. Transportation Research Record, 2012, 2305, 54-61.	1.0	22
42	Determination of Critical Bending Stresses in Portland Cement Concrete Layer with Asphalt Overlay. Transportation Research Record, 2012, 2306, 36-44.	1.0	2
43	Evaluation of Ultrasonic Technique for Detecting Delamination in Asphalt Pavements. Transportation Research Record, 2012, 2306, 105-110.	1.0	20
44	Modification of Mechanisticâ€“Empirical Pavement Design Guide Procedure for Two-Lift Composite Concrete Pavements. Transportation Research Record, 2012, 2305, 14-23.	1.0	5
45	Unified Mechanistic Approach for Modeling Tests of Unbound Pavement Materials. Journal of Transportation Engineering, 2012, 138, 1091-1098.	0.9	6
46	Correlation Analysis of 2D Tomographic Images for Flaw Detection in Pavements. Journal of Testing and Evaluation, 2012, 40, 247-255.	0.4	16
47	Optimal design of flexible pavements using a framework of DAKOTA and MEPDG. International Journal of Pavement Engineering, 2011, 12, 137-148.	2.2	7
48	Structural Analysis of Pervious Concrete Pavement. Transportation Research Record, 2011, 2226, 13-20.	1.0	27
49	Ultrasonic Tomography for Evaluation of Concrete Pavements. Transportation Research Record, 2011, 2232, 85-94.	1.0	53
50	Microscopic analysis of paste and aggregate distresses in pervious concrete in a wet, hard freeze climate. Cement and Concrete Composites, 2011, 33, 1080-1085.	4.6	40
51	Comprehensive Evaluation of Effect of Climate in Mechanisticâ€“Empirical Pavement Design GuidePredictions. Transportation Research Record, 2010, 2170, 45-55.	1.0	20
52	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
53	Evaluation of Characterization and Performance Modeling of Cementitiously Stabilized Layers in the Mechanisticâ€“Empirical Pavement Design Guide. Transportation Research Record, 2010, 2186, 111-119.	1.0	23
54	Local Calibration of Mechanisticâ€“Empirical Pavement Design Guide Rutting Model. Transportation Research Record, 2010, 2180, 130-141.	1.0	28

#	Article	IF	Citations
55	Probabilistic Numerical Simulation of Pavement Performance using MEPDG. Road Materials and Pavement Design, 2010, 11, 291-306.	2.0	12
56	Probabilistic Numerical Simulation of Pavement Performance using MEPDG. Road Materials and Pavement Design, 2010, 11, 291-306.	2.0	2
57	Evaluation of Dowel Alignment Constructability in Portland Cement Concrete Pavements. Transportation Research Record, 2009, 2098, 86-93.	1.0	12
58	Laboratory and Finite Element Evaluation of Joint Lockup. Transportation Research Record, 2009, 2095, 34-42.	1.0	13
59	Design and Construction of Sustainable Pavements. Transportation Research Record, 2009, 2098, 75-85.	1.0	17
60	Reappraisal of Recycled Concrete Aggregate as Coarse Aggregate in Concretes for Rigid Pavements. Transportation Research Record, 2009, 2113, 149-155.	1.0	16
61	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.	1.3	29
62	Benefits of the Minnesota Road Research Project. Transportation Research Record, 2008, 2087, 12-19.	1.0	7
63	Adaptation of Mechanistic-Empirical Pavement Design Guide for Design of Minnesota Low-Volume Portland Cement Concrete Pavements. Transportation Research Record, 2008, 2087, 57-67.	1.0	9
64	MnLayer. Transportation Research Record, 2007, 2037, 63-75.	1.0	66
65	Theoretical and field evaluation of interaction between ultra-thin whitetopping and existing asphalt pavement. International Journal of Pavement Engineering, 2006, 7, 251-260.	2.2	14
66	Finite element study of partial-depth cracks in restrained PCC slabs. International Journal of Pavement Engineering, 2006, 7, 323-329.	2.2	5
67	Reliability Analysis of Cracking and Faulting Prediction in the New Mechanistic-Empirical Pavement Design Procedure. Transportation Research Record, 2005, 1936, 150-160.	1.0	13
68	Evaluation of Top-Down Cracks in Asphalt Pavements by Using a Self-Calibrating Ultrasonic Technique. Transportation Research Record, 2005, 1940, 63-68.	1.0	9
69	Calibration of Mechanistic-Empirical Performance Model for Continuously Reinforced Concrete Pavement Punch-Outs. Transportation Research Record, 2004, 1896, 15-22.	1.0	7
70	Mechanistic-Empirical Model to Predict Transverse Joint Faulting. Transportation Research Record, 2004, 1896, 34-45.	1.0	33
71	Development of a Mechanistic-Empirical Structural Design Procedure for Continuously Reinforced Concrete Pavements. Transportation Research Record, 2004, 1896, 46-56.	1.0	23
72	Determining Amount of Built-in Curling in Jointed Plain Concrete Pavement: Case Study of Pennsylvania 1-80. Transportation Research Record, 2002, 1809, 85-92.	1.0	30

#	Article	IF	Citations
73	Development of Rapid Solutions for Prediction of Critical Continuously Reinforced Concrete Pavement Stresses. Transportation Research Record, 2001, 1778, 64-72.	1.0	27
74	Modeling of Jointed Plain Concrete Pavement Fatigue Cracking in PaveSpec 3.0. Transportation Research Record, 2001, 1778, 33-42.	1.0	3
75	Longevity of Diamond-Ground Concrete Pavements. Transportation Research Record, 1999, 1684, 128-136.	1.0	10
76	General Formulation for Multilayered Pavement Systems. Journal of Transportation Engineering, 1998, 124, 82-90.	0.9	8
77	Analysis of Concrete Pavement Responses to Temperature and Wheel Loads Measured from Intrumented Slabs. Transportation Research Record, 1998, 1639, 94-101.	1.0	64
78	Nonlinear Temperature Effects on Multilayered Concrete Pavements. Journal of Transportation Engineering, 1998, 124, 128-136.	0.9	44
79	Mechanistic-Based Model for Predicting Reflective Cracking in Asphalt Concreteâ€“Overlaid Pavements. Transportation Research Record, 1998, 1629, 234-241.	1.0	27
80	DIPLOBACK: Neural-Network-Based Backcalculation Program for Composite Pavements. Transportation Research Record, 1997, 1570, 143-150.	1.0	24
81	Finite-Element Analysis of Portland Cement Concrete Pavements with Cracks. Transportation Research Record, 1997, 1568, 1-9.	1.0	15
82	Local Calibration of Pavement Mechanistic-Empirical Faulting Reliability using Pavement Management Data. Transportation Research Record, 0, , 036119812110013.	1.0	1
83	Determination of Concrete Strength for Concrete Pavement Opening Decision-Making. International Journal of Pavement Research and Technology, 0, , 1.	1.3	1
84	Enhancement of sustainable road design towards compatibility between pavement materials. , 0, , .		1