Denis Jelagin

List of Publications by Year
in descending order

51	775	516710 16	552781 26
papers	citations	h-index	g-index

51	51	51	583
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An empirical framework for determining asphalt mastic viscosity as a function of mineral filler concentration. Construction and Building Materials, 2012, 35, 23-29.	7.2	64
2	Force transmission and soil fabric of binary granular mixtures. Geotechnique, 2016, 66, 578-583.	4.0	58
3	Gradation-based framework for asphalt mixture. Materials and Structures/Materiaux Et Constructions, 2013, 46, 1401-1414.	3.1	51
4	Packing theory-based framework to evaluate permanent deformation of unbound granular materials. International Journal of Pavement Engineering, 2013, 14, 309-320.	4.4	47
5	Hertz contact at finite friction and arbitrary profiles. Journal of the Mechanics and Physics of Solids, 2005, 53, 1422-1447.	4.8	40
6	New discrete element framework for modelling asphalt compaction. Road Materials and Pavement Design, 2019, 20, S604-S616.	4.0	34
7	Effects of surface texture deterioration and wet surface conditions on asphalt runway skid resistance. Tribology International, 2021, 153, 106589.	5.9	32
8	Influence of aggregate packing structure on California bearing ratio values of unbound granular materials. Road Materials and Pavement Design, 2014, 15, 102-113.	4.0	31
9	Dynamic response of flexible pavements at vehicleâ€“road interaction. Road Materials and Pavement Design, 2015, 16, 256-276.	4.0	31
10	Packing theory-based framework for evaluating resilient modulus of unbound granular materials. International Journal of Pavement Engineering, 2014, 15, 689-697.	4.4	26
11	Mechanics-based top-down fatigue cracking initiation prediction framework for asphalt pavements. Road Materials and Pavement Design, 2015, 16, 907-927.	4.0	21
12	Investigation of the asphalt mixture morphology influence on its ageing susceptibility. Materials and Structures/Materiaux Et Constructions, 2015, 48, 987-1000.	3.1	21
13	A computational framework for viscoelastic analysis of flexible pavements under moving loads. Materials and Structures/Materiaux Et Constructions, 2012, 45, 1655-1671.	3.1	20
14	A contact model for the normal force between viscoelastic particles in discrete element simulations. Powder Technology, 2019, 342, 985-991.	4.2	19
15	On indentation and initiation of fracture in glass. International Journal of Solids and Structures, 2008, 45, 2993-3008.	2.7	18
16	Evaluation of the low temperature cracking performance of asphalt mixtures utilizing HMA fracture mechanics. Construction and Building Materials, 2013, 47, 594-600.	7.2	18
17	A new viscoelastic micromechanical model for bitumen-filler mastic. Construction and Building Materials, 2020, 253, 119062.	7.2	16
18	Asphalt Internal Structure Characterization with X-Ray Computed Tomography and Digital Image Processing. RILEM Bookseries, 2013, , 139-158.	0.4	16

#	Article	IF	Citations
19	Micro-mechanical modelling of low temperature-induced micro-damage initiation in asphalt concrete based on cohesive zone model. Construction and Building Materials, 2021, 286, 122971.	7.2	15
20	Hertzian fracture at unloading. Journal of the Mechanics and Physics of Solids, 2006, 54, 2453-2473.	4.8	14
21	Towards asphalt mixture morphology evaluation with the virtual specimen approach. Road Materials and Pavement Design, 2016, 17, 579-599.	4.0	14
22	Vibration-induced aggregate segregation in asphalt mixtures. Materials and Structures/Materiaux Et Constructions, 2020, 53, 1.	3.1	14
23	Numerical study of the aggregate contact effect on the complex modulus of asphalt concrete. Materials and Design, 2022, 213, 110342.	7.0	13
24	Binder distribution model for asphalt mixtures based on packing of the primary structure. International Journal of Pavement Engineering, 2015, 16, 144-156.	4.4	12
25	Contact-induced deformation and damage of rocks used in pavement materials. Materials and Design, 2017, 133, 255-265.	7.0	12
26	Measurement of the viscoelastic properties of asphalt mortar and its components with indentation tests. Road Materials and Pavement Design, 2019, 20, S797-S811.	4.0	12
27	Measurement of the Viscoelastic Properties of Bitumen Using Instrumented Spherical Indentation. Experimental Mechanics, 2013, 53, 1233-1244.	2.0	10
28	The non-stationary response of flexible pavements to moving loads. International Journal of Pavement Engineering, 2016, 17, 458-470.	4.4	10
29	On the Measurement of two Independent Viscoelastic Functions with Instrumented Indentation Tests. Experimental Mechanics, 2018, 58, 301-314.	2.0	10
30	Computational framework for analysis of contact-induced damage in brittle rocks. International Journal of Solids and Structures, 2019, 167, 24-35.	2.7	10
31	Experimental and numerical analysis of asphalt flow in a slump test. Road Materials and Pavement Design, 2019, 20, S446-S461.	4.0	9
32	Micro-mechanical Investigation of Low Temperature Fatigue Cracking Behaviour of Bitumen. RILEM Bookseries, 2012, , 1281-1290.	0.4	9
33	Modelling the flow of asphalt under simulated compaction using discrete element. Construction and Building Materials, 2019, 227, 116432.	7.2	7
34	Evaluation of a novel calibrated-mechanistic model to design against fracture under Swedish conditions. Road Materials and Pavement Design, 2012, 13, 49-66.	4.0	6
35	Spherical indentation test for quasi-non-destructive characterisation of asphalt concrete. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1.	3.1	6
36	Hertzian fracture at finite friction: A parametric study. Wear, 2008, 265, 840-848.	3.1	5

#	Article	IF	Citations
37	Atomic Force Microscopy to Characterize the Healing Potential of Asphaltic Materials. , 2012, , .		4
38	Exploratory study on bitumen content determination for foamed bitumen mixes based on porosity and indirect tensile strength. Journal of Traffic and Transportation Engineering (English Edition), 2017, 4, 131-144.	4.2	4
39	The viscoelastic characterisation of asphalt mixtures using the indentation test. Road Materials and Pavement Design, 2021, 22, S411-S424.	4.0	3
40	Effect of micro-scale morphological parameters on meso-scale response of Asphalt Concrete. , 2014, , 1775-1784.		2
41	Numerical analysis concerning the skid resistance of rubber-contaminated runway grooves. Tribology International, 2021, 163, 107157.	5.9	2
42	Numerical Evaluation of Crushing Resistance of Unbound Road Material. Lecture Notes in Civil Engineering, 2020, , 201-210.	0.4	2
43	Predicting the master curves of bituminous mastics with micromechanical modelling. Road Materials and Pavement Design, 2022, 23, 86-98.	4.0	2
44	Evaluation of predictive material models used in the new Swedish mechanistic-empirical design module. Road Materials and Pavement Design, 2012, 13, 300-311.	4.0	1
45	Using Life Cycle Assessment to Optimize Pavement Crack-Mitigation. , 2012, , 299-306.		1
46	Nonlocal Frictional Effects at Indentation of Elastic Materials. Tribology Letters, 2013, 51, 397-407.	2.6	1
47	Experimental Study of Dowel Bar Alternatives Based on Similarity Model Test. Advances in Materials Science and Engineering, 2017, 2017, 1-9.	1.8	1
48	Towards a New Experimental and Numerical Protocol for Determining Mastic Viscosity. , 2012, , 103-113.		1
49	On indenter boundary effects at elastic contact. Journal of Mechanics of Materials and Structures, 2012, 7, 165-182.	0.6	0
50	Special Issue on Silicate Solid Waste Recycling. Materials, 2021, 14, 3776.	2.9	0
51	Predicting the Master Curve of Bituminous Mastics with Micromechanical Modelling. RILEM Bookseries, 2022, , 1473-1479.	0.4	0