

Hilde Soenen

List of Publications by Year in descending order

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59
papers

1,435
citations

331670

21
h-index

345221

36
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61
all docs

61
docs citations

61
times ranked

956
citing authors

#	ARTICLE	IF	CITATIONS
1	Parametric analysis and field validations of oxidative ageing in asphalt pavements using multiphysics modelling approaches. International Journal of Pavement Engineering, 2023, 24, .	4.4	8
2	Interlaboratory study on low temperature asphalt binder testing using Dynamic Shear Rheometer with 4â€mm diameter parallel plate geometry. Road Materials and Pavement Design, 2022, 23, 890-906.	4.0	9
3	Oxidative aging of bitumen: a structural and chemical investigation. Road Materials and Pavement Design, 2022, 23, 1091-1106.	4.0	10
4	Evaluation of the Properties of Bituminous Binders Recovered from Various Sites in Europe. RILEM Bookseries, 2022, , 841-847.	0.4	2
5	The Influence of Wax Model Compounds on the Surface Topography of Bitumen. RILEM Bookseries, 2022, , 1831-1837.	0.4	0
6	Experimental Validation of the Dual-Oxidation Routes in Bituminous Binders. RILEM Bookseries, 2022, , 903-909.	0.4	0
7	Rheological and chemical properties of field aged binders and their variation within the wearing course. Road Materials and Pavement Design, 2022, 23, 36-54.	4.0	7
8	Experimental and Statistical Analysis of Bitumenâ€™s Field Ageing in Asphalt Pavements. Transportation Research Record, 2022, 2676, 495-511.	1.9	5
9	Crystallinity of Bitumen via WAXD and DSC and Its Effect on the Surface Microstructure. Crystals, 2022, 12, 755.	2.2	11
10	Comparison of microscopic techniques to study the diversity of the bitumen microstructure. Micron, 2022, 159, 103294.	2.2	17
11	Structural and chemical imaging analysis of bitumen. Road Materials and Pavement Design, 2021, 22, 852-870.	4.0	6
12	Analysis of 4-mm DSR tests: calibration, sample preparation, and evaluation of repeatability and reproducibility. Road Materials and Pavement Design, 2021, 22, 557-571.	4.0	13
13	Exploring the oxidative mechanisms of bitumen after laboratory short- and long-term ageing. Construction and Building Materials, 2021, 289, 123182.	7.2	37
14	New evidence on the origin of â€bee structuresâ€™ on bitumen and oils, by atomic force microscopy (AFM) and confocal laser scanning microscopy (CLSM). Fuel, 2021, 303, 121265.	6.4	25
15	Analysis of asphaltenes and maltenes before and after long-term aging of bitumen. Fuel, 2021, 304, 121426.	6.4	21
16	Coupling AFM and CLSM to investigate the effect of ageing on the bee structures of bitumen. Micron, 2021, 151, 103149.	2.2	17
17	Experimental investigation of the oxidative ageing mechanisms in bitumen. Construction and Building Materials, 2020, 260, 119702.	7.2	32
18	Fundamental Approaches to Predict Moisture Damage in Asphalt Mixtures: State-of-the-Art Review. Infrastructures, 2020, 5, 20.	2.8	14

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19	Identification of ageing state clusters of reclaimed asphalt binders using principal component analysis (PCA) and hierarchical cluster analysis (HCA) based on chemo-rheological parameters. <i>Construction and Building Materials</i> , 2020, 244, 118276.	7.2	33
20	Peat Fibers and Finely Ground Peat Powder for Application in Asphalt. <i>Infrastructures</i> , 2019, 4, 3.	2.8	6
21	Visualization and Chemical Analysis of Bitumen Microstructures. <i>RILEM Bookseries</i> , 2019, , 168-173.	0.4	1
22	Peat as an Example of a Natural Fiber in Bitumen. <i>RILEM Bookseries</i> , 2019, , 300-305.	0.4	2
23	Bituminous Binder. <i>RILEM State-of-the-Art Reports</i> , 2018, , 15-74.	0.7	1
24	Systematic broadening of the viscoelastic and calorimetric glass transitions in complex glass-forming liquids. <i>Journal of Non-Crystalline Solids</i> , 2018, 483, 10-17.	3.1	9
25	Recommendation of RILEM TC 237-SIB on affinity between aggregates and bituminous binders. <i>Materials and Structures/Materiaux Et Constructions</i> , 2018, 51, 1.	3.1	2
26	Microstructures of bitumen observed by environmental scanning electron microscopy (ESEM) and chemical analysis using time-of-flight secondary ion mass spectrometry (TOF-SIMS). <i>Fuel</i> , 2018, 229, 198-208.	6.4	24
27	Low-temperature rheological and morphological characterization of SBS modified bitumen. <i>Construction and Building Materials</i> , 2018, 179, 348-359.	7.2	58
28	An empirical constitutive model for complex glass-forming liquids using bitumen as a model material. <i>Rheologica Acta</i> , 2018, 57, 57-70.	2.4	14
29	Investigation of the bulk and surface microstructure of bitumen by atomic force microscopy. <i>Construction and Building Materials</i> , 2018, 177, 158-169.	7.2	42
30	Structural and chemical analysis of bitumen using time-of-flight secondary ion mass spectrometry (TOF-SIMS). <i>Fuel</i> , 2017, 199, 206-218.	6.4	36
31	Investigation of bitumen low temperature properties using a dynamic shear rheometer with 4 mm parallel plates. <i>International Journal of Pavement Research and Technology</i> , 2017, 10, 15-22.	2.6	46
32	Oxidation of bitumen: molecular characterization and influence on rheological properties. <i>Rheologica Acta</i> , 2016, 55, 315-326.	2.4	67
33	Bitumen/Aggregate Affinity – Rilem Round Robin Test on Rolling Bottle Test. <i>RILEM Bookseries</i> , 2016, , 153-164.	0.4	14
34	The Interaction of Polyphosphoric Acid with Bituminous Binders. <i>RILEM Bookseries</i> , 2016, , 103-114.	0.4	3
35	Field experience of cold mix asphalt during 15 years. <i>Road Materials and Pavement Design</i> , 2016, 17, 223-242.	4.0	15
36	Rheological characterization of wax modified bituminous binders: Effect of specimen preparation and thermal history. <i>Construction and Building Materials</i> , 2015, 95, 269-278.	7.2	14

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37	Creep-recovery behavior of bituminous binders and its relation to asphalt mixture rutting. <i>Materials and Structures/Materiaux Et Constructions</i> , 2015, 48, 4039-4053.	3.1	92
38	Relation between bitumen chemistry and performance. <i>Fuel</i> , 2015, 140, 34-43.	6.4	165
39	Laboratory investigation of bitumen based on round robin DSC and AFM tests. <i>Materials and Structures/Materiaux Et Constructions</i> , 2014, 47, 1205-1220.	3.1	143
40	The effect of aromatic interactions on the elasticity of bituminous binders. <i>Rheologica Acta</i> , 2014, 53, 741-754.	2.4	32
41	The multiple stress creep-recovery test: a detailed analysis of repeatability and reproducibility. <i>Road Materials and Pavement Design</i> , 2013, 14, 2-11.	4.0	53
42	Binder Testing. <i>RILEM State-of-the-Art Reports</i> , 2013, , 15-83.	0.7	11
43	Differential Scanning Calorimetry Applied to Bitumen: Results of the RILEM NBM TG1 Round Robin Test. <i>RILEM Bookseries</i> , 2013, , 311-323.	0.4	6
44	Material Characteristics of Long Lasting Asphalt Pavements. <i>Road Materials and Pavement Design</i> , 2011, 12, 567-585.	4.0	13
45	Asphalt Production at Reduced Temperatures using Zeolites and the Impact on Asphalt Performance. <i>Road Materials and Pavement Design</i> , 2010, 11, 65-81.	4.0	13
46	Asphalt Production at Reduced Temperatures using Zeolites and the Impact on Asphalt Performanc. <i>Road Materials and Pavement Design</i> , 2010, 11, 65-81.	4.0	5
47	The Morphology of Bitumen-SBS Blends by UV Microscopy. <i>Road Materials and Pavement Design</i> , 2008, 9, 97-110.	4.0	37
48	The Morphology of Bitumen-SBS Blends by UV Microscopy. An Evaluation of Preparation Methods. <i>Road Materials and Pavement Design</i> , 2008, 9, 97-110.	4.0	21
49	Influence of thermal history on rheological properties of various bitumen. <i>Rheologica Acta</i> , 2006, 45, 729-739.	2.4	47
50	The Influence of Thermal History on Binder Rutting Indicators. <i>Road Materials and Pavement Design</i> , 2005, 6, 217-238.	4.0	17
51	Correlation between Bitumen Polarity and Rheology. <i>Road Materials and Pavement Design</i> , 2005, 6, 385-405.	4.0	17
52	The Influence of Thermal History on Binder Rutting Indicators. <i>Road Materials and Pavement Design</i> , 2005, 6, 217-238.	4.0	5
53	Correlation between Bitumen Polarity and Rheology. <i>Road Materials and Pavement Design</i> , 2005, 6, 385-405.	4.0	3
54	Fatigue Behaviour of Bituminous Materials: From Binders to Mixes. <i>Road Materials and Pavement Design</i> , 2003, 4, 7-27.	4.0	31

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55	Fatigue Behaviour of Bituminous Materials: From Binders to Mixes. Road Materials and Pavement Design, 2003, 4, 7-27.	4.0	3
56	Ordering and structure formation in triblock copolymer solutions. Part II. Small angle X-ray scattering and calorimetric observations. Polymer, 1997, 38, 5661-5665.	3.8	25
57	Ordering and structure formation in triblock copolymer solutions. Part I. Rheological observations. Polymer, 1997, 38, 5653-5660.	3.8	54
58	Gelation and structure formation in solutions of poly(vinyl chloride). Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 241-247.	2.1	12
59	Phase behavior and gelation of solutions of poly(vinylchloride). Polymer Gels and Networks, 1994, 2, 159-172.	0.6	4