

# Canlin Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

75  
papers

2,126  
citations

185998

28  
h-index

264894

42  
g-index

75  
all docs

75  
docs citations

75  
times ranked

1040  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of thermal oxidative ageing on dynamic viscosity, TG/DTC, DTA and FTIR of SBS- and SBS/sulfur-modified asphalts. <i>Construction and Building Materials</i> , 2011, 25, 129-137.	3.2	228
2	Effect of ageing on rheological properties of storage-stable SBS/sulfur-modified asphalts. <i>Journal of Hazardous Materials</i> , 2010, 182, 507-517.	6.5	159
3	Preparation and application of microcapsules containing toluene-di-isocyanate for self-healing of concrete. <i>Construction and Building Materials</i> , 2019, 202, 762-769.	3.2	74
4	Effect of expanded vermiculite on aging properties of bitumen. <i>Construction and Building Materials</i> , 2012, 26, 244-248.	3.2	60
5	Influence of UV aging on the rheological properties of bitumen modified with surface organic layered double hydroxides. <i>Construction and Building Materials</i> , 2016, 123, 574-580.	3.2	60
6	Effect of nano-zinc oxide on ultraviolet aging properties of bitumen with 60/80 penetration grade. <i>Materials and Structures/Materiaux Et Constructions</i> , 2015, 48, 3249-3257.	1.3	56
7	Synthesis and characterization of layered double hydroxides intercalated by UV absorbents and their application in improving UV aging resistance of bitumen. <i>Applied Clay Science</i> , 2015, 114, 112-119.	2.6	55
8	Effect of ion chelating agent on self-healing performance of Cement-based materials. <i>Construction and Building Materials</i> , 2018, 190, 308-316.	3.2	53
9	Synthesis and characterization of organic intercalated layered double hydroxides and their application in bitumen modification. <i>Materials Chemistry and Physics</i> , 2015, 152, 54-61.	2.0	52
10	Microstructures and thermal aging mechanism of expanded vermiculite modified bitumen. <i>Construction and Building Materials</i> , 2013, 47, 919-926.	3.2	47
11	Rheological evaluation of bitumen containing different ultraviolet absorbers. <i>Construction and Building Materials</i> , 2012, 29, 591-596.	3.2	43
12	Study on the gradient heating and healing behaviors of asphalt concrete induced by induction heating. <i>Construction and Building Materials</i> , 2019, 208, 638-645.	3.2	42
13	Preparation and characterization of active rejuvenated SBS modified bitumen for the sustainable development of high-grade asphalt pavement. <i>Journal of Cleaner Production</i> , 2020, 273, 123012.	4.6	42
14	Investigation of Molecular Structure and Thermal Properties of Thermo-Oxidative Aged SBS in Blends and Their Relations. <i>Materials</i> , 2017, 10, 768.	1.3	41
15	Effect of different rejuvenators on the rheological properties of aged SBS modified bitumen in long term aging. <i>Construction and Building Materials</i> , 2019, 215, 709-717.	3.2	41
16	Study on all-components regeneration of ultraviolet aged SBS modified asphalt for high-performance recycling. <i>Journal of Cleaner Production</i> , 2020, 276, 123376.	4.6	41
17	Preparation and characterization of nano-SiO <sub>2</sub> /paraffin/PE wax composite shell microcapsules containing TDI for self-healing of cementitious materials. <i>Construction and Building Materials</i> , 2020, 231, 117060.	3.2	39
18	Effect of reactive rejuvenators on structure and properties of UV-aged SBS modified bitumen. <i>Construction and Building Materials</i> , 2017, 155, 780-788.	3.2	37

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19	Effect of expanded vermiculite on microstructures and aging properties of styrene-butadiene-styrene copolymer modified bitumen. <i>Construction and Building Materials</i> , 2013, 40, 224-230.	3.2	36
20	Structure and artificial ageing behavior of organo montmorillonite bitumen nanocomposites. <i>Applied Clay Science</i> , 2013, 72, 49-54.	2.6	35
21	Effect of reactive rejuvenating system on physical properties and rheological characteristics of aged SBS modified bitumen. <i>Construction and Building Materials</i> , 2018, 176, 35-42.	3.2	34
22	Laboratory evaluation of rejuvenation effect of reactive rejuvenator on aged SBS modified bitumen. <i>Materials and Structures/Materiaux Et Constructions</i> , 2017, 50, 1.	1.3	33
23	Investigation of $\gamma$ -(2,3-Epoxypropoxy)propyltrimethoxy Silane Surface Modified Layered Double Hydroxides Improving UV Ageing Resistance of Asphalt. <i>Materials</i> , 2017, 10, 78.	1.3	33
24	Investigation of self-healing capability on surface and internal cracks of cement mortar with ion chelator. <i>Construction and Building Materials</i> , 2020, 236, 117598.	3.2	32
25	Performance Evaluation of SBS Modified Asphalt with Different Anti-aging Additives. <i>Journal of Testing and Evaluation</i> , 2012, 40, 728-733.	0.4	32
26	Effect of Layered Double Hydroxides (LDHs) on Aging Properties of Bitumen. <i>Journal of Testing and Evaluation</i> , 2012, 40, 734-739.	0.4	32
27	Effect of temperatures on self-healing capabilities of concrete with different shell composition microcapsules containing toluene-di-isocyanate. <i>Construction and Building Materials</i> , 2020, 247, 118575.	3.2	31
28	Evaluation of ultraviolet aging resistance of bitumen containing different organic layered double hydroxides. <i>Construction and Building Materials</i> , 2018, 192, 696-703.	3.2	29
29	Structure and performance evaluation on aged SBS modified bitumen with bi- or tri-epoxy reactive rejuvenating system. <i>Construction and Building Materials</i> , 2017, 151, 479-486.	3.2	28
30	Rheological and aging properties of ultraviolet absorber/styrene-butadiene-styrene modified bitumens. <i>Journal of Applied Polymer Science</i> , 2013, 128, 2571-2577.	1.3	25
31	Investigation of the ultraviolet aging resistance of organic layered double hydroxides modified bitumen. <i>Construction and Building Materials</i> , 2015, 96, 127-134.	3.2	24
32	Effect of 4,4'-stilbenedicarboxylic acid-intercalated layered double hydroxides on UV aging resistance of bitumen. <i>RSC Advances</i> , 2015, 5, 95504-95511.	1.7	22
33	Evaluation of ultraviolet aging resistance of bitumen modified with isobutyltriethoxysilane surface organic grafted LDH. <i>Construction and Building Materials</i> , 2020, 241, 118016.	3.2	22
34	Effect of moisture conditioning on mechanical and healing properties of inductive asphalt concrete. <i>Construction and Building Materials</i> , 2020, 241, 118139.	3.2	22
35	Effect of Rectorite and Its Organic Modification on Properties of Bitumen. <i>Journal of Materials in Civil Engineering</i> , 2015, 27, .	1.3	21
36	Effect of etched Layered double hydroxides on anti ultraviolet aging properties of bitumen. <i>Construction and Building Materials</i> , 2018, 178, 42-50.	3.2	19

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37	Investigation of ultraviolet aging resistance of bitumen modified by layered double hydroxides with different particle sizes. <i>Construction and Building Materials</i> , 2019, 196, 166-174.	3.2	19
38	Laboratory evaluation of the effect of rejuvenators on the interface performance of rejuvenated SBS modified bitumen mixture by surface free energy method. <i>Construction and Building Materials</i> , 2021, 271, 121866.	3.2	18
39	Intercalation of p-methycinnamic acid anion into Zn-Al layered double hydroxide to improve UV aging resistance of asphalt. <i>AIP Advances</i> , 2015, 5, .	0.6	17
40	Physical and UV Aging Resistance Properties of Asphalts Modified by UV Absorbent Compositd and Intercalated Layered Double Hydroxides. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 12714-12719.	0.9	17
41	Investigation of road performances of reaction-rejuvenated SBS modified bitumen mixture. <i>Construction and Building Materials</i> , 2018, 183, 523-533.	3.2	17
42	Investigation of ion chelator and mineral admixtures improving salt-frost resistance of cement-based materials. <i>Construction and Building Materials</i> , 2019, 227, 116670.	3.2	17
43	Preparation and characterization of lignosulfonate grafted layered double hydroxides and their applications as anti-ultraviolet additives for bitumen. <i>Construction and Building Materials</i> , 2019, 195, 432-440.	3.2	17
44	Evaluation of aging performance of bitumen containing layered double hydroxides intercalated by UV absorbents. <i>International Journal of Pavement Engineering</i> , 2019, 20, 499-505.	2.2	17
45	Preparation and properties of silane coupling agent modified zeolite as warm mix additive. <i>Construction and Building Materials</i> , 2020, 244, 118408.	3.2	17
46	Effect of layered double hydroxides on ultraviolet aging resistance of SBS modified bitumen membrane. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2015, 30, 494-499.	0.4	16
47	Influence of characteristics of recycling agent on the early and long-term performance of regenerated SBS modified bitumen. <i>Construction and Building Materials</i> , 2020, 237, 117631.	3.2	16
48	Effect of ion chelator on hydration process of Portland cement. <i>Construction and Building Materials</i> , 2020, 259, 119727.	3.2	16
49	Influence of external environment on self-repairing ability of the cement-based materials containing paraffin/toluene-di-isocyanate microcapsules. <i>Construction and Building Materials</i> , 2021, 281, 122584.	3.2	15
50	Effect of surface organic modified layered double hydroxide on UV ageing resistance of bitumen. <i>Petroleum Science and Technology</i> , 2017, 35, 488-494.	0.7	14
51	Evaluation of viscosity-temperature characteristics and rheological properties of rejuvenated SBS modified bitumen with active warm additive. <i>Construction and Building Materials</i> , 2020, 236, 117548.	3.2	14
52	Effect of ion chelator on pore structure, mechanical property and self-healing capability of seawater exposed mortar. <i>Construction and Building Materials</i> , 2020, 246, 118480.	3.2	14
53	Effects of Reactive Chain Extension Rejuvenation Systems on the Viscosity-temperature Characteristics, Rheological Properties, and Morphology of Aged Styrene-butadiene-styrene-Modified Bitumen. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 16474-16484.	3.2	14
54	Effect of salicylic acid intercalated layered double hydroxides on ultraviolet aging properties of bitumen. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 1235-1244.	1.3	13

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55	Rheological properties of lignosulfonate intercalated layered double hydroxides modified bitumen before and after ultraviolet aging. <i>Construction and Building Materials</i> , 2018, 180, 342-350.	3.2	13
56	Workability and Rheological Property Evolution of Active Rejuvenated Styrene-Butadiene-Styrene-Modified Bitumen in the Early Stage. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 19129-19139.	3.2	13
57	Preparation of reactive chain extension rejuvenators and its application in the aged SBS modified bitumen sustainable recycling. <i>Journal of Cleaner Production</i> , 2021, 314, 127954.	4.6	13
58	Development of novel composite rejuvenators for efficient recycling of aged SBS modified bitumen. <i>Fuel</i> , 2022, 318, 123715.	3.4	13
59	Assessment on Physical and Rheological Properties of Aged SBS Modified Bitumen Containing Rejuvenating Systems of Isocyanate and Epoxy Substances. <i>Materials</i> , 2019, 12, 618.	1.3	12
60	Preparation and characterization of lignin grafted layered double hydroxides for sustainable service of bitumen under ultraviolet light. <i>Journal of Cleaner Production</i> , 2022, 350, 131536.	4.6	12
61	Effect of silane coupling agent modified zeolite warm mix additives on properties of asphalt. <i>Construction and Building Materials</i> , 2020, 259, 119713.	3.2	11
62	Preparation and performance of 3-aminopropyltriethoxysilane surface modified layered double hydroxides on ultraviolet aging resistance of bitumen. <i>Construction and Building Materials</i> , 2021, 292, 123411.	3.2	10
63	A Study on Photo-thermal Coupled Aging Kinetics of Bitumen. <i>Journal of Testing and Evaluation</i> , 2012, 40, 20120065.	0.4	10
64	Investigation of migration and self-healing ability of ion chelator in cement-based materials by a novel method. <i>Construction and Building Materials</i> , 2020, 262, 120917.	3.2	9
65	Effect of ion chelator on microstructure and properties of cement-based materials under sulfate dry-wet cycle attack. <i>Construction and Building Materials</i> , 2020, 257, 119527.	3.2	9
66	Synergistic effect of ion chelating agent and inorganic compound on pore structure, mechanical and self-healing performance of cement-based materials. <i>Smart Materials and Structures</i> , 2021, 30, 015011.	1.8	8
67	SBS Modified Bitumen with Organic Layered Double Hydroxides: Compatibility and Aging Effects on Rheological Properties. <i>Materials</i> , 2021, 14, 4201.	1.3	6
68	Investigation of anti-aging of SBS modified bitumen containing surface organic layered double hydroxide. <i>RSC Advances</i> , 2021, 11, 22131-22139.	1.7	6
69	Influence of ion chelator and CO <sub>2</sub> -rich environment on self-healing capabilities of cement-based materials. <i>Construction and Building Materials</i> , 2020, 259, 119685.	3.2	4
70	Influence of ion chelator on pore structure, water transport and crack-healing properties of cement pastes incorporating high-volume fly ash and blast-furnace slag. <i>Journal of Building Engineering</i> , 2022, 55, 104696.	1.6	3
71	The rheological behavior of rejuvenated SBS modified asphalt incorporating oil slurry and tri-epoxide. <i>Petroleum Science and Technology</i> , 2019, 37, 1523-1528.	0.7	2
72	Preparation of dodecyltrimethoxysilane surface organic LDHs and application in aging resistance of SBS modified bitumen. <i>Materials Research Express</i> , 2021, 8, 075101.	0.8	2

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73	Preparation and Characterization of Lignosulfonate Intercalated Layered Double Hydroxides and Their Application in Improving Ultraviolet Aging Resistance for Bitumen. Journal Wuhan University of Technology, Materials Science Edition, 2019, 34, 446-452.	0.4	1
74	Influence of oxygen partial pressure on SmBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> film deposited by laser chemical vapor deposition. Journal of Asian Ceramic Societies, 2021, 9, 197-207.	1.0	1
75	Evaluation of 3-methacryloxypropyltrimethoxysilane organic layered double hydroxide on the aging resistance of bitumen. IOP Conference Series: Materials Science and Engineering, 2021, 1167, 012016.	0.3	0