

Laboratorial investigation on optical and thermal properties of nano-coatings for urban heat island mitigation

Building and Environment

147, 231-240

DOI: [10.1016/j.buildenv.2018.10.017](https://doi.org/10.1016/j.buildenv.2018.10.017)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Optical and durability performance of near-infrared reflective coatings for cool pavement: Laboratorial investigation. Building and Environment, 2019, 163, 106334.	3.0	41
2	Alleviating urban heat island effect using high-conductivity permeable concrete pavement. Journal of Cleaner Production, 2019, 237, 117722.	4.6	76
3	A black near-infrared reflective coating based on nano-technology. Energy and Buildings, 2019, 205, 109523.	3.1	24
4	Solar/road from "forced coexistence"™ to "harmonious symbiosis"™. Applied Energy, 2019, 255, 113808.	5.1	20
5	Using Lightweight Materials to Enhance Thermal Resistance of Asphalt Mixture for Cooling Asphalt Pavement. Advances in Civil Engineering, 2019, 2019, 1-10.	0.4	13
6	Thermal Performance of Novel Multilayer Cool Coatings for Asphalt Pavements. Materials, 2019, 12, 1903.	1.3	13
7	Removal effect on stormwater runoff pollution of porous concrete treated with nanometer titanium dioxide. Transportation Research, Part D: Transport and Environment, 2019, 73, 34-45.	3.2	52
8	Laboratorial investigation on effects of microscopic void characteristics on properties of porous asphalt mixture. Construction and Building Materials, 2019, 213, 434-446.	3.2	35
9	Façade cool coatings: an experiment on colour and surface quality. Intelligent Buildings International, 2021, 13, 293-310.	1.3	1
10	Development of Super Road Heat-Reflective Coating and Its Field Application. Coatings, 2019, 9, 802.	1.2	24
11	Enhancing heat release of asphalt pavement by a gradient heat conduction channel. Construction and Building Materials, 2020, 230, 117018.	3.2	14
12	Characterization of thermal, high-temperature rheological and fatigue properties of asphalt mastic containing fly ash cenosphere. Construction and Building Materials, 2020, 233, 117345.	3.2	14
13	Multi-modified effects of varying admixtures on the mechanical properties of pervious concrete based on optimum design of gradation and cement-aggregate ratio. Construction and Building Materials, 2020, 233, 117178.	3.2	28
14	Evaluation of cooling effect and pavement performance for thermochromic material modified asphalt mixtures under solar radiation. Construction and Building Materials, 2020, 261, 120589.	3.2	21
15	Evaluation of thermal and anti-rutting behaviors of thermal resistance asphalt pavement with glass microsphere. Construction and Building Materials, 2020, 263, 120609.	3.2	22
16	Effects of accelerated weathering on the optical characteristics of reflective coatings for cool pavement. Solar Energy Materials and Solar Cells, 2020, 215, 110698.	3.0	27
17	Research on Low-Brightness and High-Reflective Coatings Suitable for Buildings in Tropical Areas. Coatings, 2020, 10, 829.	1.2	9
18	Using bio-oils for improving environmental performance of an advanced resinous binder for pavement applications with heat and noise island mitigation potential. Sustainable Energy Technologies and Assessments, 2020, 39, 100706.	1.7	11

#	ARTICLE	IF	CITATIONS
19	Performance evaluation of solar-responsive asphalt mixture with thermochromic materials and nano-TiO ₂ scatterers. <i>Construction and Building Materials</i> , 2020, 247, 118605.	3.2	23
20	Evaluation of thermal behavior and high-temperature performances of asphalt mixture containing fly ash cenosphere. <i>Construction and Building Materials</i> , 2020, 245, 118429.	3.2	15
21	Reflective coatings for high albedo pavement. , 2020, , 127-146.		3
22	Incorporating hollow glass microsphere to cool asphalt pavement: Preliminary evaluation of asphalt mastic. <i>Construction and Building Materials</i> , 2020, 244, 118380.	3.2	14
23	Preparation and performance of colored Ultra-Thin overlay for preventive maintenance. <i>Construction and Building Materials</i> , 2020, 249, 118619.	3.2	19
24	Radiosity from Individual Urban Landscape Elements Measured Using a Modified Low-Cost Temperature Sensor. <i>Urban Science</i> , 2020, 4, 14.	1.1	0
25	Laboratory evaluation of rutting resistance for asphalt binders and mixtures modified with different thermochromic microcapsule powders. <i>Construction and Building Materials</i> , 2020, 252, 119099.	3.2	11
26	Cool Materials for Passive Cooling in Buildings. , 2021, , 505-537.		0
27	Experimental study on pigmented coatings using two particle types with complementary optical features. <i>Solar Energy</i> , 2021, 214, 421-429.	2.9	1
28	Cooling asphalt pavement by increasing thermal conductivity of steel fiber asphalt mixture. <i>Solar Energy</i> , 2021, 217, 308-316.	2.9	16
29	Combating Urban Heat Island Effect—A Review of Reflective Pavements and Tree Shading Strategies. <i>Buildings</i> , 2021, 11, 93.	1.4	66
30	A Study on Radiation Cooling Effect on Asphalt Concrete Pavement Using Basic Oxygen Furnace Slag to Replace Partial Aggregates. <i>Sustainability</i> , 2021, 13, 3708.	1.6	4
31	Evaluation of changes in surface temperature of TiO ₂ functionalized pavements at outdoor conditions. <i>Energy and Buildings</i> , 2021, 237, 110817.	3.1	11
32	Using steel fibers to accelerate the heat conduction in asphalt mixture and its performance evaluation. <i>Construction and Building Materials</i> , 2021, 282, 122637.	3.2	16
33	Impact of Incorporating NIR Reflective Pigments in Finishing Coatings of ETICS. <i>Infrastructures</i> , 2021, 6, 79.	1.4	18
34	The Effect of the Substrate on the Optic Performance of Retro-Reflective Coatings: An In-Lab Investigation. <i>Energies</i> , 2021, 14, 2921.	1.6	8
35	Leachate risks of fine solid wastes in porous asphalt pavement and runoff purification effects of diatomite filler. <i>Journal of Cleaner Production</i> , 2021, 297, 126623.	4.6	11
36	Long Persistent Luminescence: A Road Map Toward Promising Future Developments in Energy and Environmental Science. <i>Annual Review of Materials Research</i> , 2021, 51, 409-433.	4.3	26

#	ARTICLE	IF	CITATIONS
37	Cool pavements for urban heat island mitigation: A synthetic review. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 146, 111171.	8.2	75
38	Experimental study of optical and cooling performances of CuO and TiO ₂ near-infrared reflective blending coatings. <i>Solar Energy</i> , 2021, 225, 19-32.	2.9	12
39	Emerging technologies in cool pavements: A review. <i>Construction and Building Materials</i> , 2021, 299, 123892.	3.2	49
40	Laboratory scale characterization of cool roof paints: Comparison among different artificial radiation sources. <i>Progress in Organic Coatings</i> , 2021, 161, 106464.	1.9	8
41	Research and application progress of nano-modified coating in improving the durability of cement-based materials. <i>Progress in Organic Coatings</i> , 2021, 161, 106529.	1.9	19
42	Effect of the bitumen type on the temperature resistance of hot mix asphalt. <i>Materials Today: Proceedings</i> , 2021, 45, 7428-7431.	0.9	3
43	For the mitigation of urban heat island and urban noise island: two simultaneous sides of urban discomfort. <i>Environmental Research Letters</i> , 2020, 15, 103004.	2.2	22
44	Impact of Nanotechnology Patents on Green Development of China's Building Industry. <i>Recent Patents on Nanotechnology</i> , 2020, 14, 141-152.	0.7	6
45	Development of Water Retentive and Thermal Resistant Cement Concrete and Cooling Effects Evaluation. <i>Materials</i> , 2021, 14, 6141.	1.3	6
46	The effect of superplasticizer admixture on the engineering characteristics of roller-compacted concrete pavement. <i>International Journal of Pavement Engineering</i> , 2022, 23, 2432-2447.	2.2	10
47	New innovations in pavement materials and engineering: A review on pavement engineering research 2021. <i>Journal of Traffic and Transportation Engineering (English Edition)</i> , 2021, 8, 815-999.	2.0	59
48	Durability of a heat-reflective coating on an asphalt pavement. <i>Road Materials and Pavement Design</i> , 2022, 23, 2651-2668.	2.0	7
49	Synthesis and characterization of novel yellow-green Al-doped Y ₃ Fe ₅ O ₁₂ nano-pigments with high NIR reflectance. <i>Journal of Alloys and Compounds</i> , 2022, 896, 162883.	2.8	13
50	Experimental evaluation of the thermal performance of cool pavement materials in cold regions of China. <i>Environmental Science and Pollution Research</i> , 2022, 29, 31121-31132.	2.7	1
51	Improving outdoor human-thermal environment by optimizing the reflectance of water-retaining pavement through subjective field-based measurements. <i>Building and Environment</i> , 2022, 210, 108695.	3.0	11
52	Development of Zn-ZrB ₂ Nanocomposite Coating for Wear, Corrosion Resistance and Microstructure Enhancement of Carbon Steel in Marine Environment. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
53	Could a bio-resin and transparent pavement improve the urban environment? An in field thermo-optical investigation and life-cycle assessment. <i>Sustainable Cities and Society</i> , 2022, 79, 103597.	5.1	9
54	Development of polyurethane-based solid-solid phase change materials for cooling asphalt pavements. <i>Energy and Buildings</i> , 2022, 259, 111873.	3.1	17

#	ARTICLE	IF	CITATIONS
55	Matching the Color Difference Between Asphalt Mixture and Cement Grouting Paste Used in Semi-flexible Pavement. <i>Frontiers in Materials</i> , 2022, 9, .	1.2	2
56	Cool Surface Strategies with an Emphasis on the Materials Dimension: A Review. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 1893.	1.3	10
57	Research on deviation theory of atmospheric transmittance and solution for deviation extreme value. <i>Urban Climate</i> , 2022, 42, 101137.	2.4	0
58	Thermal performance of building prototype with different cool roof structures in composite climate. <i>International Journal of Sustainable Energy</i> , 2022, 41, 1434-1465.	1.3	3
59	A super-cooling solar reflective coating with waterborne polyurethane for asphalt pavement. <i>Progress in Organic Coatings</i> , 2022, 165, 106741.	1.9	13
60	Advances and development trends in eco-friendly pavements. , 2021, 1, 1-42.		58
61	Toward Sustainable Transportation: A Pavement Strategy Selection Based on the Extension of Dual-Hesitant Fuzzy Multicriteria Decision-Making Methods. <i>IEEE Transactions on Fuzzy Systems</i> , 2023, 31, 380-393.	6.5	18
62	Application of Qualitative and Quantitative Infrared Thermography at Urban Level: Potential and Limitations. <i>Lecture Notes in Civil Engineering</i> , 2022, , 3-19.	0.3	2
63	Laboratorial Investigation on Optical and Thermal Properties of Thermochromic Pavement Coatings for Dynamic Thermoregulation and Urban Heat Island Mitigation. <i>Sustainable Cities and Society</i> , 2022, 83, 103950.	5.1	9
64	Analyzing the Effectiveness of Cooling Projects for Climate-vulnerable Groups through IoT-based Monitoring System : A Case Study of Residential Area in Jinyeong-eup, Gimhae-si. <i>Journal of Climate Change Research</i> , 2022, 13, 383-398.	0.1	0
65	Review of regulation techniques of asphalt pavement high temperature for climate change adaptation. <i>Journal of Infrastructure Preservation and Resilience</i> , 2022, 3, .	1.5	5
66	Quantifying the effect of ground view factor and ground temperature on outdoor mean radiant temperature. <i>Sustainable Cities and Society</i> , 2022, 84, 104030.	5.1	3
67	Effects of load and environment on the durability and anti-skid performance of road heat-reflective coating. <i>Construction and Building Materials</i> , 2022, 346, 128520.	3.2	5
68	Materials to Mitigate the Urban Heat Island Effect for Cool Pavement: A Brief Review. <i>Buildings</i> , 2022, 12, 1221.	1.4	7
69	Development of two-dimensional nano Mts/SA phase change materials for self-adjusting temperature of pavement. <i>Construction and Building Materials</i> , 2022, 349, 128753.	3.2	10
70	Towards field implementation of photoluminescence in the built environment for passive cooling and lighting energy efficiency. <i>Applied Energy</i> , 2022, 324, 119687.	5.1	8
71	ConTrack Distress Dataset: A Continuous Observation for Pavement Deterioration Spatio-Temporal Analysis. <i>IEEE Transactions on Intelligent Transportation Systems</i> , 2022, 23, 25004-25017.	4.7	6
72	Solution combustion synthesis of gray-blue Mn-doped YBO ₃ pigments with high NIR reflectance for energy-saving buildings. <i>Ceramics International</i> , 2022, 48, 37203-37211.	2.3	6

#	ARTICLE	IF	CITATIONS
73	Evaluation of the effect of titanium dioxide on hot mix asphalt mixtures for flexible pavement at high temperatures. , 2022, , .		0
74	Semi-flexible pavement with glass for alleviating the heat island effect. Construction and Building Materials, 2023, 367, 130275.	3.2	4
75	Effect of organically modified titania and zirconia nanoparticles on characteristics, properties of coating based on acrylic emulsion polymer for outdoor applications. Journal of Applied Polymer Science, 2023, 140, .	1.3	1
76	Developing a solidâ€“solid phase change heat storage asphalt pavement material and its application as functional filler for cooling asphalt pavement. Energy and Buildings, 2023, 285, 112935.	3.1	37
77	Reduction of critical positive temperature gradients in jointed plain concrete pavements. International Journal of Pavement Engineering, 2023, 24, .	2.2	2
78	Investigation of the properties of cast asphalt concrete mixture with the addition of fiber from the fly ash of thermal power plants. Materials Science-Poland, 2022, 40, 125-146.	0.4	2