

Marwa Hassan

List of Publications by Year in descending order

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93
papers

2,018
citations

201385

27
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288905

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95
all docs

95
docs citations

95
times ranked

1679
citing authors

#	ARTICLE	IF	CITATIONS
1	Evaluation of the effects of engineered cementitious composites (ECC) plasticity on concrete pavement performance. International Journal of Pavement Engineering, 2022, 23, 4474-4486.	2.2	2
2	Field Evaluation and Cost-Effectiveness of Cement-Stabilized Full-Depth Reclamation of Asphalt Pavements in Hot and Humid Climates. Journal of Transportation Engineering Part B: Pavements, 2022, 148, .	0.8	2
3	Feasibility of ECC with high contents of post-processed bagasse ash as partial cement replacement. Construction and Building Materials, 2022, 319, 126023.	3.2	14
4	Development of Cost-Effective High-Modulus Asphalt Concrete Mixtures Using Crumb Rubber and Local Construction Materials in Louisiana. Transportation Research Record, 2022, 2676, 274-286.	1.0	4
5	Evaluation of Alternative Sources of Supplementary Cementitious Materials for Concrete Materials. Transportation Research Record, 2022, 2676, 287-301.	1.0	1
6	Development of Practical and Cost-Effective Ultra-High-Performance Engineered Cementitious Composites Using Natural Sand and No Silica Fume. Transportation Research Record, 2022, 2676, 312-328.	1.0	3
7	Feasibility of low fiber content PVA-ECC for jointless pavement application. Construction and Building Materials, 2021, 268, 121131.	3.2	33
8	Evaluation of Raw Bagasse Ash as Sand Replacement for the Production of Engineered Cementitious Composites. , 2021, , .		2
9	Development of Cost-Effective Restriping Strategies using Standard Width and Wide Waterborne Paints on Asphalt Pavements in Hot and Humid Climates. Transportation Research Record, 2021, 2675, 284-295.	1.0	4
10	Predicting the Retroreflectivity Degradation of Waterborne Paint Pavement Markings using Advanced Machine Learning Techniques. Transportation Research Record, 2021, 2675, 483-494.	1.0	5
11	Effect of Sand Type and PVA Fiber Content on the Properties of Metakaolin Based Engineered Geopolymer Composites. Transportation Research Record, 2021, 2675, 475-491.	1.0	1
12	Properties of Engineered Cementitious Composites with Raw Sugarcane Bagasse Ash Used as Sand Replacement. Journal of Materials in Civil Engineering, 2021, 33, 04021231.	1.3	11
13	Electrochemical evaluation of epoxy-coated-rebar containing pH-responsive nanocapsules in simulated carbonated concrete pore solution. Progress in Organic Coatings, 2021, 161, 106549.	1.9	6
14	Feasibility of Engineered Cementitious Composites Implementing Combined Systems of Post-Processed Bagasse Ash and Fly Ash as SCMs. , 2021, , .		1
15	Evaluation of Alternative Sources of SCMs for Concrete Materials. , 2021, , .		1
16	Evaluation of Cementitious Matrices for the Development of Ultra-High Performance Engineered Cementitious Composites. , 2021, , .		4
17	Evaluation of hollow-fibers encapsulating a rejuvenator in asphalt binders with recycled asphalt shingles. International Journal of Pavement Research and Technology, 2020, 13, 108-119.	1.3	8
18	Effect of Sodium Alginate Fibers Encapsulating Rejuvenators on the Self-Healing Capability and Cracking Resistance of Asphalt Mixtures. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	20

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19	Evaluation of novel jointless engineered cementitious composite ultrathin whitetopping (ECC-UTW) overlay. <i>Construction and Building Materials</i> , 2020, 265, 120659.	3.2	6
20	Rheological and Mechanical Evaluation of Polyurethane Prepolymer-Modified Asphalt Mixture with Self-Healing Abilities. <i>Journal of Materials in Civil Engineering</i> , 2020, 32, .	1.3	26
21	Evaluating the Self-Healing Efficiency of Hydrogel-Encapsulated Bacteria in Concrete. <i>Transportation Research Record</i> , 2020, 2674, 113-123.	1.0	19
22	Smart Coating Embedded with pH-Responsive Nanocapsules Containing a Corrosion Inhibiting Agent. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6451-6459.	4.0	42
23	Mechanical and Self-Healing Performances of Asphalt Mixtures Containing Recycled Asphalt Materials and Light-Activated Self-Healing Polymer. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, .	1.3	8
24	Laboratory Testing of Self-Healing Polymer Modified Asphalt Mixtures Containing Recycled Asphalt Materials (RAP/RAS). <i>MATEC Web of Conferences</i> , 2019, 271, 03003.	0.1	4
25	Cost-Effective ECC with Low Fiber Content for Pavement Application. <i>MATEC Web of Conferences</i> , 2019, 271, 07001.	0.1	16
26	Influence of Production Methodology on the Pozzolanic Activity of Sugarcane Bagasse Ash. <i>MATEC Web of Conferences</i> , 2019, 271, 07003.	0.1	8
27	Estimation of the degree of hydration of concrete through automated machine learning based microstructure analysis – A study on effect of image magnification. <i>Advanced Engineering Informatics</i> , 2019, 42, 100975.	4.0	33
28	Rheological properties of asphalt binder modified with recycled asphalt materials and light-activated self-healing polymers. <i>Construction and Building Materials</i> , 2019, 220, 187-195.	3.2	15
29	Investigation of the Mechanical Properties of Engineered Cementitious Composites with Low Fiber Content and with Crumb Rubber and High Fly Ash Content. <i>Transportation Research Record</i> , 2019, 2673, 418-428.	1.0	32
30	Laboratory Testing of Self-Healing Fibers in Asphalt Mixtures Prepared with Recycled Materials. <i>Transportation Research Record</i> , 2019, 2673, 513-523.	1.0	7
31	Self-Healing of SMA and Steel-Reinforced Mortar with Microcapsules. <i>Journal of Materials in Civil Engineering</i> , 2019, 31, .	1.3	4
32	Measuring the crack-repair efficiency of steel fiber reinforced concrete beams with microencapsulated calcium nitrate. <i>Construction and Building Materials</i> , 2019, 201, 526-538.	3.2	32
33	Effect of calcium nitrate healing microcapsules on concrete strength and air permeability. <i>Magazine of Concrete Research</i> , 2019, 71, 195-206.	0.9	6
34	Evaluation of the reuse and recycling of drill cuttings in concrete applications. <i>Construction and Building Materials</i> , 2018, 164, 400-409.	3.2	35
35	Dual Self-Healing Mechanisms with Microcapsules and Shape Memory Alloys in Reinforced Concrete. <i>Journal of Materials in Civil Engineering</i> , 2018, 30, 04017277.	1.3	24
36	Decision-Making Tool for Incorporating Cradle-to-Gate Sustainability Measures into Pavement Design. <i>Journal of Transportation Engineering Part B: Pavements</i> , 2018, 144, 04018051.	0.8	5

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37	Effects of Light-Activated Self-Healing Polymers on the Rheological Behaviors of Asphalt Binder Containing Recycled Asphalt Shingles. Transportation Research Record, 2018, 2672, 301-310.	1.0	9
38	Effects of Paver Stoppage on Temperature Segregation in Asphalt Pavements. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	15
39	Laboratory Testing of Self-Healing Microcapsules in Asphalt Mixtures Prepared with Recycled Asphalt Shingles. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	18
40	Microencapsulated Sunflower Oil for Rejuvenation and Healing of Asphalt Mixtures. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	26
41	Performance of Asphalt Rejuvenators in Hot-Mix Asphalt Containing Recycled Asphalt Shingles. Transportation Research Record, 2017, 2633, 108-116.	1.0	9
42	Characterization of Self-Healing Processes Induced by Calcium Nitrate Microcapsules in Cement Mortar. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	18
43	Characterization of Recycled Asphalt Shingles. , 2016, , .		0
44	Mechanistic, Environmental, and Economic Analysis of WMA Technologies in Louisiana. , 2016, , .		0
45	Micro-encapsulation of asphalt rejuvenators using melamine-formaldehyde. Construction and Building Materials, 2016, 114, 29-39.	3.2	38
46	Microencapsulation of Calcium Nitrate for Concrete Applications. Transportation Research Record, 2016, 2577, 8-16.	1.0	32
47	Effect of Self-Healing Calcium Nitrate Microcapsules on Concrete Properties. Transportation Research Record, 2016, 2577, 69-77.	1.0	28
48	Evaluation of Sunflower Oil as a Rejuvenator and Its Microencapsulation as a Healing Agent. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	45
49	Laboratory and Construction Evaluation of Warm-Mix Asphalt. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	23
50	Supervised Intelligence Committee Machine to Evaluate Field Performance of Photocatalytic Asphalt Pavement for Ambient Air Purification. Transportation Research Record, 2015, 2528, 96-105.	1.0	20
51	Evaluation of Self-Healing Mechanisms in Concrete with Double-Walled Sodium Silicate Microcapsules. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	100
52	Quantification of Residential Energy Consumption Reduction Using Glass-Modified Asphalt Shingle. Journal of Architectural Engineering, 2015, 21, .	0.8	4
53	Louisiana's Experience with WMA Technologies: Mechanistic, Environmental, and Economic Analysis. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	28
54	Durability Quantification of TiO ₂ Surface Coating on Concrete and Asphalt Pavements. Journal of Materials in Civil Engineering, 2014, 26, 331-337.	1.3	42

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55	Variability and Characteristics of Recycled Asphalt Shingles Sampled from Different Sources. Journal of Materials in Civil Engineering, 2014, 26, 748-754.	1.3	10
56	Heterogeneous Finite-Element Modeling of the Dynamic Complex Modulus Test of Asphalt Mixture Using X-ray Computed Tomography. Journal of Materials in Civil Engineering, 2014, 26, .	1.3	30
57	Development of the Simple Estimating Tool to Assess the Energy Cost Savings of Attic Radiant Barrier System in Temperate Climate Regions. , 2014, , .		0
58	Dicyclopentadiene and Sodium Silicate Microencapsulation for Self-Healing of Concrete. Journal of Materials in Civil Engineering, 2014, 26, 886-896.	1.3	98
59	Evaluation of the thermal performance of a roof-mounted radiant barrier in residential buildings: Experimental study. Journal of Building Physics, 2014, 38, 66-80.	1.2	7
60	Artificial intelligence modeling to evaluate field performance of photocatalytic asphalt pavement for ambient air purification. Environmental Science and Pollution Research, 2014, 21, 8847-8857.	2.7	37
61	Potential of Nanoparticles and Nitrates Released to Water from Photocatalytic Pavements. , 2014, , .		1
62	Kinetic Study of Photocatalytic Degradation of Nitrogen Monoxide with Titanium Dioxide Nanoparticles in Concrete Pavements. Transportation Research Record, 2014, 2441, 38-45.	1.0	3
63	Life cycle assessment of nano-sized titanium dioxide coating on residential windows. Construction and Building Materials, 2013, 40, 314-321.	3.2	54
64	Sustainable Photocatalytic Asphalt Pavements for Mitigation of Nitrogen Oxide and Sulfur Dioxide Vehicle Emissions. Journal of Materials in Civil Engineering, 2013, 25, 365-371.	1.3	64
65	Evaluating photocatalytic asphalt pavement effectiveness in real-world environments through developing models: a statistical and kinetic study. Road Materials and Pavement Design, 2013, 14, 92-105.	2.0	17
66	Performance evaluation of an attic radiant barrier system using three-dimensional transient finite element method. Journal of Building Physics, 2013, 36, 247-264.	1.2	18
67	Nitrogen Oxide Reduction and Nitrate Measurements on TiO ₂ Photocatalytic Pervious Concrete Pavement. , 2012, , .		2
68	Field Evaluation of Ability of Photocatalytic Concrete Pavements to Remove Nitrogen Oxides. Transportation Research Record, 2012, 2290, 154-160.	1.0	12
69	Quantification of Reduction of Nitrogen Oxides by Nitrate Accumulation on Titanium Dioxide Photocatalytic Concrete Pavement. Transportation Research Record, 2012, 2290, 147-153.	1.0	15
70	Development of Photocatalytic Pervious Concrete Pavement for Air and Storm Water Improvements. Transportation Research Record, 2012, 2290, 161-167.	1.0	29
71	Effect of overhead lifting on neck and shoulder muscle activity and upper extremity joint angles. Occupational Ergonomics, 2012, 10, 165-174.	0.3	3
72	Development and validation of a simple estimating tool to predict heating and cooling energy demand for attics of residential buildings. Energy and Buildings, 2012, 54, 12-21.	3.1	23

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73	Laboratory Evaluation of Environmental Performance of Photocatalytic Titanium Dioxide Warm-Mix Asphalt Pavements. <i>Journal of Materials in Civil Engineering</i> , 2012, 24, 599-605.	1.3	38
74	New Approach to Recycling Asphalt Shingles in Hot-Mix Asphalt. <i>Journal of Materials in Civil Engineering</i> , 2012, 24, 1403-1411.	1.3	20
75	Performance and Cost-Effectiveness of Sustainable Technologies in Flexible Pavements Using the Mechanistic-Empirical Pavement Design Guide. <i>Journal of Materials in Civil Engineering</i> , 2012, 24, 239-247.	1.3	12
76	Characterization of nanoparticles released during construction of photocatalytic pavements using engineered nanoparticles. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	0.8	19
77	Mechanical Characteristics of Asphaltic Mixtures Containing Titanium-Dioxide Photocatalyst. <i>Journal of Testing and Evaluation</i> , 2012, 40, 998-1005.	0.4	13
78	Effects of Shear Bond Characteristics of Tack Coats on Pavement Performance at the Interface. <i>Transportation Research Record</i> , 2011, 2209, 1-8.	1.0	33
79	Effects of Roadway Contaminants on Titanium Dioxide Photodegradation of Nitrogen Oxides. <i>Transportation Research Record</i> , 2011, 2240, 22-29.	1.0	14
80	Evaluation of Nano-Titanium Dioxide Additive on Asphalt Binder Aging Properties. <i>Transportation Research Record</i> , 2011, 2207, 11-15.	1.0	35
81	New Approach to Compare Glare and Light Characteristics of Conventional and Balloon Lighting Systems. <i>Journal of Construction Engineering and Management - ASCE</i> , 2011, 137, 39-44.	2.0	4
82	Laboratory Investigation of the Effect of Mixed Nitrogen Dioxide and Nitrogen Oxide Gases on Titanium Dioxide Photocatalytic Efficiency in Concrete Pavements. <i>Journal of Materials in Civil Engineering</i> , 2011, 23, 1087-1093.	1.3	36
83	Evaluation of the durability of titanium dioxide photocatalyst coating for concrete pavement. <i>Construction and Building Materials</i> , 2010, 24, 1456-1461.	3.2	197
84	Quantification of the Environmental Benefits of Ultrafine/Nanotitanium Dioxide Photocatalyst Coatings for Concrete Pavement Using Hybrid Life-Cycle Assessment. <i>Journal of Infrastructure Systems</i> , 2010, 16, 160-166.	1.0	21
85	Evaluation of Environmental Effectiveness of Titanium Dioxide Photocatalyst Coating for Concrete Pavement. <i>Transportation Research Record</i> , 2010, 2164, 46-51.	1.0	49
86	Evaluation of the Environmental and Economic Impacts of Warm-Mix Asphalt Using Life-Cycle Assessment. <i>International Journal of Construction Education and Research</i> , 2010, 6, 238-250.	1.1	45
87	Modeling of an integrated solar system. <i>Building and Environment</i> , 2008, 43, 804-810.	3.0	68
88	Simulation of Concrete Paving Operations on Interstate-74. <i>Journal of Construction Engineering and Management - ASCE</i> , 2008, 134, 2-9.	2.0	39
89	Measurement of Pavement Surface Reflectance for a Balloon Lighting System. <i>Journal of Transportation Engineering</i> , 2008, 134, 432-437.	0.9	3
90	SDFlex: A Framework for the Assessment and Construction of Sustainable Flexible Pavements. <i>Journal of Green Building</i> , 2008, 3, 108-118.	0.4	7

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91	Design, construction and performance prediction of integrated solar roof collectors using finite element analysis. Construction and Building Materials, 2007, 21, 1069-1078.	3.2	36
92	Effect of Raw Sugarcane Bagasse Ash as Sand Replacement on the Fiber-Bridging Properties of Engineered Cementitious Composites. Transportation Research Record, 0, , 036119812110237.	1.0	6
93	Evaluation of the Environmental and Economic Impacts of Warm-Mix Asphalt Using Life-Cycle Assessment. , 0, .		1