Edith Arãmbula Mercado

List of Publications by Year
in descending order

54 papers	1,720 citations	331259 21 h-index	301761 39 g-index
55 all docs	55 docs citations	55 times ranked	954 citing authors

#	Article	IF	Citations
1	Development of an index to evaluate the cracking potential of asphalt mixtures using the semi-circular bending test. Construction and Building Materials, 2018, 167, 286-298.	3.2	136
2	Use of recycling agents in asphalt mixtures with high recycled materials contents in the United States: A literature review. Construction and Building Materials, 2019, 211, 974-987.	3.2	128
3	Three-dimensional image processing methods to identify and characterise aggregates in compacted asphalt mixtures. International Journal of Pavement Engineering, 2010, 11, 511-528.	2.2	112
4	Influence of Air Void Distribution on the Moisture Susceptibility of Asphalt Mixes. Journal of Materials in Civil Engineering, 2007, 19, 655-664.	1.3	94
5	Novel Method for Moisture Susceptibility and Rutting Evaluation Using Hamburg Wheel Tracking Test. Transportation Research Record, 2014, 2446, 1-7.	1.0	76
6	Mix design, performance and maintenance of Permeable Friction Courses (PFC) in the United States: State of the Art. Construction and Building Materials, 2016, 111, 358-367.	3.2	71
7	The crossover temperature: significance and application towards engineering balanced recycled binder blends. Road Materials and Pavement Design, 2019, 20, 1391-1412.	2.0	70
8	Evaluation of recycling agent dosage selection and incorporation methods for asphalt mixtures with high RAP and RAS contents. Construction and Building Materials, 2018, 158, 432-442.	3.2	67
9	Experimental Measurement and Numerical Simulation of Water Vapor Diffusion through Asphalt Pavement Materials. Journal of Materials in Civil Engineering, 2010, 22, 588-598.	1.3	65
10	Effect of recycling agents in recycled asphalt binders observed with microstructural and rheological tests. Construction and Building Materials, 2018, 158, 61-74.	3.2	65
11	Characterising the long-term rejuvenating effectiveness of recycling agents on asphalt blends and mixtures with high RAP and RAS contents. Road Materials and Pavement Design, 2017, 18, 273-292.	2.0	64
12	Long-term ageing of asphalt mixtures. Road Materials and Pavement Design, 2017, 18, 2-27.	2.0	52
13	Stiffness Characterization of Asphalt Mixtures with High Recycled Material Content and Recycling Agents. Transportation Research Record, 2017, 2633, 58-68.	1.0	47
14	Evaluation and classification of recycling agents for asphalt binders. Construction and Building Materials, 2020, 260, 119864.	3.2	42
15	Properties of Foamed Asphalt for Warm Mix Asphalt Applications. , 2015, , .		40
16	Evaluation of the Moisture Susceptibility of WMA Technologies. , 2014, , .		40
17	Short-Term Laboratory Conditioning of Asphalt Mixtures. , 2015, , .		37
18	Performance of asphalt mixtures with high recycled materials content and recycling agents. International Journal of Pavement Engineering, 2020, 21, 863-877.	2.2	36

#	Article	IF	Citations
19	Moisture Susceptibility of Asphalt Mixtures with Known Field Performance. Transportation Research Record, 2007, 2001, 20-28.	1.0	32
20	Modelling the location and consequences of aircraft accidents. Safety Science, 2013, 51, 178-186.	2.6	30
21	Characteristics of Asphalt Binders Foamed in the Laboratory to Produce Warm Mix Asphalt. Journal of Materials in Civil Engineering, 2014, 26, .	1.3	27
22	Use of the Resilient Modulus Test to Characterize Asphalt Mixtures with Recycled Materials and Recycling Agents. Transportation Research Record, 2015, 2506, 45-53.	1.0	25
23	Investigation of fracture behavior of asphalt mixture composite using energy-based approach. Composites Part B: Engineering, 2020, 181, 107324.	5.9	24
24	Evaluation of Moisture Susceptibility Minimization Strategies for Warm-Mix Asphalt: Case Study. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	21
25	Numerical analysis of moisture vapor diffusion in asphalt mixtures using digital images. Materials and Structures/Materiaux Et Constructions, 2010, 43, 897-911.	1.3	20
26	Numerical modelling of ravelling in porous friction courses (PFC). Road Materials and Pavement Design, 2018, 19, 668-689.	2.0	20
27	Determining the Relationship Among Hamburg Wheel-Tracking Test Parameters and Correlation to Field Performance of Asphalt Pavements. Transportation Research Record, 2020, 2674, 281-291.	1.0	20
28	Comparative evaluation of ageing effects on the properties of regular and highly polymer modified asphalt binders. Construction and Building Materials, 2021, 302, 124163.	3.2	20
29	Multiscale Characterization of Aging and Rejuvenation in Asphalt Binder Blends with High RAP Contents. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	18
30	Effect of Water Content on Binder Foaming Characteristics and Foamed Mixture Properties. Transportation Research Record, 2015, 2506, 1-7.	1.0	17
31	Mixture-based rheological evaluation tool for cracking in asphalt pavements. Road Materials and Pavement Design, 2019, 20, S299-S314.	2.0	16
32	Prediction and evaluation of rutting and moisture susceptibility in rejuvenated asphalt mixtures. Journal of Cleaner Production, 2022, 333, 129980.	4.6	16
33	Application of Low Field Nuclear Magnetic Resonance to evaluate asphalt binder viscosity in recycled mixes. Construction and Building Materials, 2018, 170, 725-736.	3.2	14
34	Relationship between Rheological Indices and Cracking Performance of Virgin, Recycled, and Rejuvenated Asphalt Binders and Mixtures. Transportation Research Record, 2021, 2675, 93-109.	1.0	14
35	Mix design procedure for foamed asphalt mixtures. Road Materials and Pavement Design, 2016, 17, 946-957.	2.0	12
36	Effect of laboratory foamer on asphalt foaming characteristics and foamed mixture properties. International Journal of Pavement Engineering, 2017, 18, 358-366.	2.2	12

#	Article	IF	Citations
37	Strategies for Producing Asphalt Mixtures with High RAP Content. Journal of Materials in Civil Engineering, 2019, 31, .	1.3	12
38	Effects of ageing and recycling agents on the multiscale properties of binders with high RAP contents. International Journal of Pavement Engineering, 2022, 23, 1248-1270.	2.2	12
39	Laboratory and field investigation of moisture susceptibility of hot and warm mix asphalts. International Journal of Pavement Engineering, 2021, 22, 1389-1398.	2.2	10
40	Factors Affecting Binder Properties between Production and Construction. Journal of Materials in Civil Engineering, 2005, 17, 89-98.	1.3	9
41	Revision and Further Validation of Surface Performance-Graded Specification for Chip Seal Binders. Transportation Research Record, 2013, 2370, 44-52.	1.0	9
42	Warm-Mix Asphalt Moisture Susceptibility Evaluation for Mix Design and Quality Assurance. Transportation Research Record, 2016, 2575, 39-47.	1.0	9
43	Exploring master curve parameters to distinguish between mixture variables. Road Materials and Pavement Design, 2019, 20, S812-S826.	2.0	9
44	Thermal, microscopic, and rheological characterization of rejuvenated asphalt binders. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1.	1.3	8
45	Development and Validation of Pavement Performance Models for the State of Maryland. Transportation Research Record, 2011, 2225, 25-31.	1.0	7
46	Tension-Compression Fatigue Test Evaluation Using Fracture Mechanics and Field Data. Road Materials and Pavement Design, 2009, 10, 83-108.	2.0	6
47	Use of Artificial Neural Networks to Detect Aggregates in Poor-Quality X-Ray CT Images of Asphalt Concrete. , 2008, , .		5
48	Effects of Asphalt Source, Asphalt Grade, and Inclusion of Additives on Asphalt Foaming Characteristics. Transportation Research Record, 2015, 2505, 76-83.	1.0	4
49	A method for characterising RAP degree of binder activity. Road Materials and Pavement Design, 2022, 23, 2250-2270.	2.0	4
50	Methods for Accumulating Construction and Material Quality Test Results and Their Effect on Acceptance Decisions. Journal of Construction Engineering and Management - ASCE, 2014, 140, 06014006.	2.0	3
51	Evaluation of the use of a HiMA binder to extend the durability of porous friction courses (PFC). International Journal of Pavement Engineering, 2023, 24, .	2.2	2
52	Machine learning techniques to estimate the degree of binder activity of reclaimed asphalt pavement. Materials and Structures/Materiaux Et Constructions, 2022, 55, .	1.3	2
53	Evaluation of Functionality in Porous Friction Courses. Transportation Research Record, 2017, 2633, 25-36.	1.0	1
54	Laboratory Evaluation of Aggregate Friction and Texture Properties. Transportation Research Record, 0, , 036119812110164.	1.0	0