Maria Castro

List of Publications by Year
in descending order

48 papers	754 citations	567144 15 h-index	552653 26 g-index
48 all docs	48 docs citations	48 times ranked	587 citing authors

#	Article	IF	Citations
1	Fatigue and Healing of Asphalt Mixtures: Discriminate Analysis of Fatigue Curves. Journal of Transportation Engineering, 2006, 132, 168-174.	0.9	74
2	Geometric modelling of highways using global positioning system (GPS) data and spline approximation. Transportation Research Part C: Emerging Technologies, 2006, 14, 233-243.	3.9	62
3	Sight distance analysis of highways using GIS tools. Transportation Research Part C: Emerging Technologies, 2011, 19, 997-1005.	3.9	56
4	Estimation of asphalt concrete fatigue curves â€“ A damage theory approach. Construction and Building Materials, 2008, 22, 1232-1238.	3.2	48
5	GIS-Based System for Sight Distance Analysis of Highways. Journal of Computing in Civil Engineering, 2014, 28, .	2.5	43
6	GIS Tools for Analyzing Accidents and Road Design: A Review. Transportation Research Procedia, 2016, 18, 242-247.	0.8	35
7	Operating Speed and Speed Differential for Highway Design Consistency. Journal of Transportation Engineering, 2011, 137, 837-840.	0.9	34
8	LIDAR-based roadway and roadside modelling for sight distance studies. Survey Review, 2016, 48, 309-315.	0.7	34
9	Automated GIS-Based System for Speed Estimation and Highway Safety Evaluation. Journal of Computing in Civil Engineering, 2008, 22, 325-331.	2.5	30
10	Analysis of the temperature influence on flexible pavement deflection. Construction and Building Materials, 2011, 25, 3530-3539.	3.2	30
11	Using smartphones as a very low-cost tool for road inventories. Transportation Research Part C: Emerging Technologies, 2014, 38, 136-145.	3.9	26
12	Highway Geometric Design Consistency: Speed Models and Local or Global Assessment. International Journal of Civil Engineering, 2016, 14, 347-355.	0.9	23
13	Reliability-Based Analysis of Sight Distance Modelling for Traffic Safety. Journal of Advanced Transportation, 2017, 2017, 1-12.	0.9	19
14	Spatial analysis of geometric design consistency and road sight distance. International Journal of Geographical Information Science, 2015, 29, 2061-2074.	2.2	18
15	Highway safety analysis using geographic information systems. Proceedings of the Institution of Civil Engineers: Transport, 2008, 161, 91-97.	0.3	17
16	Sight Distance Studies on Roads: Influence of Digital Elevation Models and Roadside Elements. Procedia, Social and Behavioral Sciences, 2014, 160, 449-458.	0.5	16
17	Using Small Unmanned Aerial Vehicle in 3D Modeling of Highways with Tree-Covered Roadsides to Estimate Sight Distance. Remote Sensing, 2019, 11, 2625.	1.8	15
18	A Method to Identify and Classify the Vertical Alignment of Existing Roads. Computer-Aided Civil and Infrastructure Engineering, 2017, 32, 952-963.	6.3	14

#	Article	IF	Citations
19	Damage Based Model for Prediction of Asphalt Concrete Fatigue Curves. Journal of Materials in Civil Engineering, 2007, 19, 700-702.	1.3	13
20	Structural design of asphalt pavement on concrete bridges. Canadian Journal of Civil Engineering, 2004, 31, 695-702.	0.7	12
21	Terrain Model Resolution Effect on Sight Distance on Roads. Periodica Polytechnica: Civil Engineering, 2015, 59, 165-172.	0.6	11
22	Evaluating Pedestriansâ€™ Safety on Urban Intersections: A Visibility Analysis. Sustainability, 2019, 11, 6630.	1.6	11
23	Thermal Sensitivity and Fatigue Life of Gap-Graded Asphalt Mixes Incorporating Crumb Rubber from Tire Waste. Transportation Research Record, 2007, 1998, 132-139.	1.0	9
24	Linear visco-elastic behavior of asphalt pavements: 3D-FE response models. Construction and Building Materials, 2017, 136, 414-425.	3.2	9
25	Three-Dimensional Virtual Highway Model for Sight-Distance Evaluation of Highway Underpasses. Journal of Surveying Engineering, - ASCE, 2018, 144, 05018003.	1.0	9
26	Effect of vehicle swiveling headlamps and highway geometric design on nighttime sight distance. Mathematics and Computers in Simulation, 2020, 170, 32-50.	2.4	8
27	Highway design software as support of a projectâ€based learning course. Computer Applications in Engineering Education, 2012, 20, 468-473.	2.2	7
28	Development of a local operating speed model for consistency analysis integrating laser, GPS and GIS for measuring vehicles speed. Baltic Journal of Road and Bridge Engineering, 2013, 8, 281-288.	0.4	7
29	Reliability-Based Safety Evaluation of Headlight Sight Distance Applied to Road Sag Curve Standards. IEEE Access, 2020, 8, 43606-43617.	2.6	6
30	Spatial analysis of road crash frequency using Bayesian models with Integrated Nested Laplace Approximation (INLA). Journal of Transportation Safety and Security, 2021, 13, 1240-1262.	1.1	6
31	Driver glare exposure with different vehicle frontlighting systems. Journal of Safety Research, 2021, 76, 228-237.	1.7	6
32	Vehicle speed measurement: Cosine error correction. Measurement: Journal of the International Measurement Confederation, 2012, 45, 2128-2134.	2.5	5
33	Impact on driver behaviour of guardrails of different height in horizontal-vertical coordinated road scenarios with a limited available sight distance. Transportation Research Part F: Traffic Psychology and Behaviour, 2022, 84, 287-300.	1.8	5
34	Operating speed models for two-lane rural highways. Proceedings of the Institution of Civil Engineers: Transport, 2012, 165, 107-118.	0.3	4
35	Assessment of intersection conflicts between riders and pedestrians using a GIS-based framework and portable LiDAR. GIScience and Remote Sensing, 2021, 58, 587-602.	2.4	4
36	A comprehensive methodology for the analysis of highway sight distance. , 2017, , 193-200.		4

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37	A methodology to measure sight-hidden dipsâ€™ parameters. Measurement: Journal of the International Measurement Confederation, 2014, 52, 85-93.	2.5	3
38	Suitability Testing of LiDAR Processing Software Aimed at 3-D Sight Distance Estimations. Transportation Research Procedia, 2018, 33, 163-170.	0.8	3
39	Framework for 3D Point Cloud Modelling Aimed at Road Sight Distance Estimations. Remote Sensing, 2019, 11, 2730.	1.8	3
40	3D Modeling of Highway Guardrails for Sight Distance Assessment. Journal of Transportation Engineering Part A: Systems, 2021, 147, 04021078.	0.8	3
41	An index for sight-hidden dips assessment. Proceedings of the Institution of Civil Engineers: Transport, 2016, 169, 24-33.	0.3	2
42	A Combined Approach to Address Road Traffic Crashes beyond Cities: Hot Zone Identification and Countermeasures in Indonesia. Sustainability, 2020, 12, 1801.	1.6	2
43	Analysis of sight distances at urban intersections from a vulnerable usersâ€™ approach: A case study. Transportation Research Procedia, 2020, 45, 226-233.	0.8	2
44	Addressing sight-distance-related safety effects of installing median barriers at horizontal curves of undivided highways under a 3D approach. , 2018, , .		2
45	Modeling Urban Road Scenarios to Evaluate Intersection Visibility. Sustainability, 2022, 14, 354.	1.6	2
46	Risk-Based Calibration of Road Sag Vertical Curve Design Guidelines on Undivided Highways. Journal of Transportation Engineering Part A: Systems, 2021, 147, 04021055.	0.8	1
47	Finding and characterizing hidden dips in roads. Baltic Journal of Road and Bridge Engineering, 2015, 10, 340-345.	0.4	1
48	Databases for Highway Inventories. Proposal for a New Model. Transportation Research Procedia, 2016, 18, 205-211.	0.8	0