

# Samuel Labi

## List of Publications by Year in descending order

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Version: 2024-02-01

111  
papers

2,718  
citations

186265

28  
h-index

254184

43  
g-index

118  
all docs

118  
docs citations

118  
times ranked

1575  
citing authors

#	ARTICLE	IF	CITATIONS
1	Graph neural network and reinforcement learning for multi-agent cooperative control of connected autonomous vehicles. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2021, 36, 838-857.	9.8	103
2	Impact of road-surface condition on rural highway safety: A multivariate random parameters negative binomial approach. <i>Analytic Methods in Accident Research</i> , 2017, 16, 75-89.	8.2	83
3	A deep learning algorithm for simulating autonomous driving considering prior knowledge and temporal information. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2020, 35, 305-321.	9.8	79
4	Decision support for optimal scheduling of highway pavement preventive maintenance within resurfacing cycle. <i>Decision Support Systems</i> , 2008, 46, 376-387.	5.9	78
5	An empirical discourse on forecasting the use of autonomous vehicles using consumers'™ preferences. <i>Technological Forecasting and Social Change</i> , 2020, 158, 120130.	11.6	77
6	Three-Stage Least-Squares Analysis of Time and Cost Overruns in Construction Contracts. <i>Journal of Construction Engineering and Management - ASCE</i> , 2010, 136, 1207-1218.	3.8	74
7	Measures of Short-Term Effectiveness of Highway Pavement Maintenance. <i>Journal of Transportation Engineering</i> , 2003, 129, 673-683.	0.9	73
8	Life-Cycle Evaluation of Flexible Pavement Preventive Maintenance. <i>Journal of Transportation Engineering</i> , 2005, 131, 744-751.	0.9	71
9	Evaluating the Cost Effectiveness of Flexible Rehabilitation Treatments Using Different Performance Criteria. <i>Journal of Transportation Engineering</i> , 2009, 135, 753-763.	0.9	64
10	Efficacies of roadway safety improvements across functional subclasses of rural two-lane highways. <i>Journal of Safety Research</i> , 2011, 42, 231-239.	3.6	64
11	Empirical Assessment of the Likelihood and Duration of Highway Project Time Delays. <i>Journal of Construction Engineering and Management - ASCE</i> , 2012, 138, 390-398.	3.8	63
12	Planning-stage estimation of highway project duration on the basis of anticipated project cost, project type, and contract type. <i>International Journal of Project Management</i> , 2011, 29, 78-92.	5.6	59
13	Effectiveness of Highway Pavement Seal Coating Treatments. <i>Journal of Transportation Engineering</i> , 2004, 130, 14-23.	0.9	55
14	Estimating Cost Discrepancies in Highway Contracts: Multistep Econometric Approach. <i>Journal of Construction Engineering and Management - ASCE</i> , 2008, 134, 953-962.	3.8	51
15	Frequency of Change Orders in Highway Construction Using Alternate Count-Data Modeling Methods. <i>Journal of Construction Engineering and Management - ASCE</i> , 2010, 136, 886-893.	3.8	51
16	Effectiveness of Microsurfacing Treatments. <i>Journal of Transportation Engineering</i> , 2007, 133, 298-307.	0.9	50
17	Trade-Off Analysis for Multiobjective Optimization in Transportation Asset Management by Generating Pareto Frontiers Using Extreme Points Nondominated Sorting Genetic Algorithm II. <i>Journal of Transportation Engineering</i> , 2012, 138, 798-808.	0.9	44
18	Methodology for Probabilistic Modeling of Highway Bridge Infrastructure Condition: Accounting for Improvement Effectiveness and Incorporating Random Effects. <i>Journal of Infrastructure Systems</i> , 2017, 23, .	1.8	43

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19	Safety sensitivity to roadway characteristics: A comparison across highway classes. <i>Accident Analysis and Prevention</i> , 2019, 123, 39-50.	5.7	43
20	Safety impacts of pavement surface roughness at two-lane and multi-lane highways: accounting for heterogeneity and seemingly unrelated correlation across crash severities. <i>Transportmetrica A: Transport Science</i> , 2019, 15, 18-33.	2.0	42
21	Establishing optimal project-level strategies for pavement maintenance and rehabilitation – A framework and case study. <i>Engineering Optimization</i> , 2012, 44, 565-589.	2.6	39
22	Space-weighted information fusion using deep reinforcement learning: The context of tactical control of lane-changing autonomous vehicles and connectivity range assessment. <i>Transportation Research Part C: Emerging Technologies</i> , 2021, 128, 103192.	7.6	39
23	Understanding electric bike riders'™ intention to violate traffic rules and accident proneness in China. <i>Travel Behaviour &amp; Society</i> , 2021, 23, 25-38.	5.0	38
24	Comparison of Methods for Evaluating Pavement Interventions. <i>Transportation Research Record</i> , 2009, 2108, 25-36.	1.9	35
25	Estimation of Routine Maintenance Expenditures for Highway Pavement Segments: Accounting for Heterogeneity Using Random-Effects Models. <i>Journal of Transportation Engineering Part A: Systems</i> , 2017, 143, 04017006.	1.4	33
26	Determining the Service Life of Thin Hot-Mix Asphalt Overlay by Means of Different Performance Indicators. <i>Transportation Research Record</i> , 2009, 2108, 37-45.	1.9	32
27	Optimal Performance Threshold Determination for Highway Asset Interventions: Analytical Framework and Application. <i>Journal of Transportation Engineering</i> , 2011, 137, 128-139.	0.9	32
28	Predicting Cost Escalation Pathways and Deviation Severities of Infrastructure Projects Using Risk-Based Econometric Models and Monte Carlo Simulation. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2017, 32, 620-640.	9.8	32
29	Transportation infrastructure asset management in the new millennium: continuing issues, and emerging challenges and opportunities. <i>Transportmetrica A: Transport Science</i> , 2017, 13, 591-606.	2.0	31
30	Analyzing the Duration and Prolongation of Performance-Based Contracts through Hazard-Based Duration and Zero-Inflated Random Parameters Poisson Models. <i>Transportation Research Record</i> , 2009, 2136, 11-19.	1.9	29
31	A Hybrid Pareto Frontier Generation Method for Trade-Off Analysis in Transportation Asset Management. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2015, 30, 163-180.	9.8	29
32	Analysis of Long-Term Effectiveness of Thin Hot-Mix Asphaltic Concrete Overlay Treatments. <i>Transportation Research Record</i> , 2005, 1940, 2-12.	1.9	27
33	Exploratory State-Level Empirical Assessment of Pavement Performance. <i>Journal of Infrastructure Systems</i> , 2011, 17, 200-215.	1.8	27
34	Factors Affecting Highway Safety, Health Care Services, and Motorization – An Exploratory Empirical Analysis using Aggregate Data. <i>Journal of Transportation Safety and Security</i> , 2012, 4, 94-115.	1.6	26
35	Performance Evaluation and Life Prediction of Highway Concrete Bridge Superstructure across Design Types. <i>Journal of Performance of Constructed Facilities</i> , 2017, 31, .	2.0	25
36	Preparing Road Infrastructure to Accommodate Connected and Automated Vehicles: System-Level Perspective. <i>Journal of Infrastructure Systems</i> , 2021, 27, .	1.8	25

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37	Promoting Autonomous Vehicles Using Travel Demand and Lane Management Strategies. <i>Frontiers in Built Environment</i> , 2020, 6, .	2.3	23
38	Modeling Deterioration of Bridge Components with Binary Probit Techniques with Random Effects. <i>Transportation Research Record</i> , 2016, 2550, 96-105.	1.9	22
39	Cost-Effectiveness Evaluation of Warranty Pavement Projects. <i>Journal of Construction Engineering and Management - ASCE</i> , 2007, 133, 217-224.	3.8	21
40	Establishing the Weights of Performance Criteria: Case Studies in Transportation Facility Management. <i>Journal of Transportation Engineering</i> , 2009, 135, 619-631.	0.9	21
41	Hazard-Based Duration Models for Predicting Actual Duration of Highway Projects Using Nonparametric and Parametric Survival Analysis. <i>Journal of Management in Engineering - ASCE</i> , 2019, 35, .	4.8	21
42	Influence of Highway Project Characteristics on Contract Type Selection: Empirical Assessment. <i>Journal of Infrastructure Systems</i> , 2010, 16, 323-333.	1.8	20
43	Analysing the main and interaction effects of commercial vehicle mix and roadway attributes on crash rates using a Bayesian random-parameter Tobit model. <i>Accident Analysis and Prevention</i> , 2021, 154, 106089.	5.7	20
44	Performance Measures for Enhanced Bridge Management. <i>Transportation Research Record</i> , 2007, 1991, 43-53.	1.9	19
45	Estimating Annual Maintenance Expenditures for Infrastructure: Artificial Neural Network Approach. <i>Journal of Infrastructure Systems</i> , 2016, 22, .	1.8	19
46	Network-level scheduling of road construction projects considering user and business impacts. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2020, 35, 650-667.	9.8	19
47	Comparative Analysis of Markovian Methodologies for Modeling Infrastructure System Performance. <i>Journal of Infrastructure Systems</i> , 2021, 27, .	1.8	19
48	Optimal Reconstruction Periods for Stochastically Deteriorating Infrastructures. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2007, 22, 389-399.	9.8	18
49	An analysis of the cost-effectiveness of rigid pavement rehabilitation treatments. <i>Structure and Infrastructure Engineering</i> , 2011, 7, 715-727.	3.7	18
50	Scale and Condition Economies in Asset Preservation Cost Functions: Case Study Involving Flexible Pavement Treatments. <i>Journal of Transportation Engineering</i> , 2012, 138, 218-228.	0.9	18
51	Multiobjective Optimization for Project Selection in Network-Level Bridge Management Incorporating Decision-Maker's Preference Using the Concept of Holism. <i>Journal of Bridge Engineering</i> , 2013, 18, 879-889.	2.9	18
52	Bundling or Grouping Pavement and Bridge Projects: Analysis and Strategies. <i>Transportation Research Record</i> , 2017, 2613, 37-44.	1.9	18
53	Addressing the Local-Road VMT Estimation Problem Using Spatial Interpolation Techniques. <i>Journal of Transportation Engineering Part A: Systems</i> , 2017, 143, .	1.4	17
54	Influence of highway construction projects on economic development: an empirical assessment. <i>Annals of Regional Science</i> , 2008, 42, 545-563.	2.1	16

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55	Multidimensional benefit-cost evaluation of asphaltic concrete overlays of rigid pavements. Structure and Infrastructure Engineering, 2014, 10, 792-810.	3.7	16
56	Connectivity, Accessibility, and Mobility Relationships in the Context of Low-Volume Road Networks. Transportation Research Record, 2019, 2673, 717-727.	1.9	16
57	Incident Occurrence Models for Freeway Incident Management. Transportation Research Record, 2003, 1856, 125-135.	1.9	15
58	Image-Processing Technology to Evaluate Static Segregation Resistance of Hardened Self-Consolidating Concrete. Transportation Research Record, 2007, 2020, 1-9.	1.9	15
59	Comparative Evaluation of Public-Private Partnerships in Roadway Preservation. Transportation Research Record, 2011, 2235, 9-19.	1.9	15
60	Acquiring insights into infrastructure repair policy using discrete choice models. Transportation Research, Part A: Policy and Practice, 2018, 113, 491-508.	4.2	15
61	Methodology for analyzing the trade-offs associated with multi-objective optimization in transportation asset management under uncertainty. Computer-Aided Civil and Infrastructure Engineering, 2021, 36, 381-401.	9.8	15
62	Rural two-lane highway shoulder and lane width policy evaluation using multiobjective optimization. Transportmetrica A: Transport Science, 2017, 13, 631-656.	2.0	14
63	Bundling Bridge and Other Highway Projects: Patterns and Policies. Transportation Research Record, 2018, 2672, 167-178.	1.9	14
64	Influence of Project Bundling on Maintenance of Traffic Costs across Highway Project Types. Journal of Construction Engineering and Management - ASCE, 2019, 145, .	3.8	14
65	Optimizing the selection and scheduling of multi-class projects using a Stackelberg framework. European Journal of Operational Research, 2020, 286, 508-522.	5.7	14
66	Spatio-weighted information fusion and DRL-based control for connected autonomous vehicles. , 2020, , .		14
67	ESTIMATION OF REST PERIODS FOR NEWLY CONSTRUCTED/RECONSTRUCTED PAVEMENTS. Transport, 2016, 31, 183-191.	1.2	14
68	A Methodology to Account for One-Way Infrastructure Interdependency in Preservation Activity Scheduling. Computer-Aided Civil and Infrastructure Engineering, 2018, 33, 905-925.	9.8	13
69	Quantifying the Similarity between Different Project Types Based on Their Pay Item Compositions: Application to Bundling. Journal of Construction Engineering and Management - ASCE, 2019, 145, .	3.8	13
70	Urban road space allocation incorporating the safety and construction cost impacts of lane and footpath widths. Journal of Safety Research, 2020, 75, 222-232.	3.6	13
71	Public Acceptance of Local Government Transportation Sales Taxes: A Statistical Assessment. State and Local Government Review, 2008, 40, 150-159.	0.6	12
72	Implementation and Evaluation of Self-Financing Highway Pricing Schemes. Transportation Research Record, 2007, 1996, 25-33.	1.9	11

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73	A framework for assessing the consequences of deferred or hastened highway asset interventions. Structure and Infrastructure Engineering, 2015, 11, 282-296.	3.7	11
74	Updating State and Local Highway Cost Allocation and Revenue Attribution: A Case Study for Indiana. Transportation Research Record, 2016, 2597, 1-10.	1.9	11
75	Effects of bundling policy on project cost under market uncertainty: A comparison across different highway project types. Transportation Research, Part A: Policy and Practice, 2019, 130, 606-625.	4.2	11
76	Using Enhanced Econometric Techniques to Verify the Service Life of Asset Interventions. Transportation Research Record, 2014, 2431, 16-23.	1.9	10
77	Methodology for safety improvement programming using constrained network-level optimization. Transportation Research Part C: Emerging Technologies, 2015, 50, 106-116.	7.6	10
78	Costs and effectiveness of standard treatments applied to flexible and rigid pavements: case study in Indiana, USA. Infrastructure Asset Management, 2019, 6, 15-29.	1.6	10
79	Can interdependency considerations enhance forecasts of bridge infrastructure condition? Evidence using a multivariate regression approach. Structure and Infrastructure Engineering, 2020, 16, 1177-1185.	3.7	10
80	Contract bundling considerations in urban road project scheduling. Computer-Aided Civil and Infrastructure Engineering, 2022, 37, 427-450.	9.8	10
81	Project-Level Life-Cycle Benefit-Cost Analysis Approach for Evaluating Highway Segment Safety Hardware Improvements. Transportation Research Record, 2010, 2160, 1-11.	1.9	8
82	Evaluating Methods and Algorithms for Multicriteria Bridge Management at the Network Level. Transportation Research Record, 2011, 2220, 38-47.	1.9	8
83	Estimating the marginal cost of pavement damage by highway users on the basis of practical schedules for pavement maintenance, rehabilitation and reconstruction. Structure and Infrastructure Engineering, 2015, 11, 1069-1082.	3.7	8
84	Elemental Decomposition and Multicriteria Method for Valuing Transportation Infrastructure. Transportation Research Record, 2014, 2460, 137-145.	1.9	7
85	Developing statistical limits for using the light weight deflectometer in pavement construction quality assurance. Road Materials and Pavement Design, 2018, 19, 783-802.	4.0	7
86	Transportation Asset Valuation: Pre-, Peri- and Post-Fourth Industrial Revolution. Transportation Research Record, 2019, 2673, 163-172.	1.9	6
87	GAQ-EBkSP: A DRL-based Urban Traffic Dynamic Rerouting Framework using Fog-Cloud Architecture. , 2021, , .		6
88	Assessing preservation needs for a bridge network: a comparison of alternative approaches. Structure and Infrastructure Engineering, 2008, 4, 221-235.	3.7	5
89	General Framework for Evaluating Long-Term Leasing of Toll Roads. Transportation Research Record, 2013, 2345, 83-91.	1.9	5
90	Efficiency Measurement of Bridge Management with Data Envelopment Analysis. Transportation Research Record, 2015, 2481, 1-9.	1.9	5

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91	Rolling stock purchase cost for rail and road public transportation: random-parameter modelling and marginal effect analysis. <i>Transportmetrica A: Transport Science</i> , 2016, 12, 436-457.	2.0	5
92	“The Answer My Friend is Blowin’ in the Wind”: A stochastic assessment of wind farms financial feasibility and economic efficiency. <i>Energy Policy</i> , 2021, 159, 112598.	8.8	5
93	Perspectives of the Operational Performance of Public Transportation Agencies with Data Envelopment Analysis Technique. <i>Transportation Research Record</i> , 2013, 2351, 30-37.	1.9	4
94	Cluster Forecasting of Corruption Using Nonlinear Autoregressive Models with Exogenous Variables (NARX)—An Artificial Neural Network Analysis. <i>Sustainability</i> , 2021, 13, 11366.	3.2	4
95	Scalable Traffic Signal Controls Using Fog-Cloud Based Multiagent Reinforcement Learning. <i>Computers</i> , 2022, 11, 38.	3.3	4
96	Geographic Information System Tool for Enhancing Administration of Overweight-Vehicle Permits. <i>Transportation Research Record</i> , 2015, 2478, 75-81.	1.9	3
97	Statistical Assessment of the Cost Effectiveness of Highway Pavement Warranty Contracts. <i>Journal of Infrastructure Systems</i> , 2016, 22, .	1.8	3
98	Inputs for bridge painting decision support: a synthesis. <i>Infrastructure Asset Management</i> , 2018, 5, 56-74.	1.6	3
99	Repositioning Shared Urban Personal Transport Units: Considerations of Travel Cost and Demand Uncertainty. <i>Journal of Infrastructure Systems</i> , 2021, 27, .	1.8	3
100	Enhanced Bridge Replacement Cost Models for Indiana's Bridge Management System. <i>Transportation Research Record</i> , 2006, 1958, 13-23.	1.9	2
101	Use of Kriging Estimation to Enhance the Integrity of Geospatial Climate Data for Infrastructure Management. <i>Transportation Research Record</i> , 2014, 2440, 60-68.	1.9	2
102	Feasibility of long-term NDT programme for system-wide monitoring of bridge deck condition in Indiana, USA. <i>Infrastructure Asset Management</i> , 2018, 5, 105-117.	1.6	2
103	Leveraging UAV Capabilities for Vehicle Tracking and Collision Risk Assessment at Road Intersections. <i>Sustainability</i> , 2022, 14, 4034.	3.2	2
104	A Framework for Lane-Change Maneuvers of Connected Autonomous Vehicles in a Mixed-Traffic Environment. <i>Electronics (Switzerland)</i> , 2022, 11, 1350.	3.1	2
105	Highway-user fees for overweight trucks: Consequences of deviations from the fourth-power law. <i>International Journal of Sustainable Transportation</i> , 2016, 10, 567-577.	4.1	1
106	An influential journal elevating the civil engineering profession and raising its image in the engineering league. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2021, 36, 1227-1228.	9.8	1
107	Anticipated User Equity Impacts of a Proposed Transportation Infrastructure Finance Legislation: Case Study in Indiana. <i>Journal of Infrastructure Systems</i> , 2021, 27, 05021007.	1.8	1
108	Investigating the Sensitivity of Optimal Network Safety Needs to Key Safety Management Inputs. <i>Transportation Research Record</i> , 2005, 1922, 52-61.	1.9	0

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109	2019 Matthew G. Karlaftis Best Paper Award. Journal of Infrastructure Systems, 2020, 26, 01220001.	1.8	0
110	A Nonparametric Efficiency Methodology for Comparative Assessment of Infrastructure Agency Performance. Transportation Engineering, 2021, 6, 100092.	4.2	0
111	Measuring the benefits of civil systems connectivity and automation â€” a discussion in the context of highway transport. Civil Engineering and Environmental Systems, 2022, 39, 27-47.	0.9	0