

Paul Schonfeld

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11685236/publications.pdf>

Version: 2024-02-01

124
papers

3,521
citations

117571

34
h-index

175177

52
g-index

124
all docs

124
docs citations

124
times ranked

1432
citing authors

#	ARTICLE	IF	CITATIONS
1	An evolutionary model for simultaneously optimizing three-dimensional highway alignments. Transportation Research Part B: Methodological, 2003, 37, 107-128.	2.8	148
2	Analyzing passenger train arrival delays with support vector regression. Transportation Research Part C: Emerging Technologies, 2015, 56, 251-262.	3.9	142
3	Joint optimization of a rail transit line and its feeder bus system. Journal of Advanced Transportation, 1998, 32, 253-284.	0.9	128
4	Applicability of highway alignment optimization models. Transportation Research Part C: Emerging Technologies, 2012, 21, 257-286.	3.9	114
5	Preliminary Highway Design with Genetic Algorithms and Geographic Information Systems. Computer-Aided Civil and Infrastructure Engineering, 2000, 15, 261-271.	6.3	106
6	Prescreening and Repairing in a Genetic Algorithm for Highway Alignment Optimization. Computer-Aided Civil and Infrastructure Engineering, 2009, 24, 109-119.	6.3	92
7	A highway alignment optimization model using geographic information systems. Transportation Research, Part A: Policy and Practice, 2004, 38, 455-481.	2.0	90
8	Mountain Railway Alignment Optimization with Bidirectional Distance Transform and Genetic Algorithm. Computer-Aided Civil and Infrastructure Engineering, 2017, 32, 691-709.	6.3	88
9	Integration of conventional and flexible bus services with timed transfers. Transportation Research Part B: Methodological, 2014, 68, 76-97.	2.8	82
10	Optimization of Grid Transit System in Heterogeneous Urban Environment. Journal of Transportation Engineering, 1997, 123, 28-35.	0.9	73
11	Optimal slack time for timed transfers at a transit terminal. Journal of Advanced Transportation, 1991, 25, 281-308.	0.9	69
12	Methodology for optimizing constrained 3-dimensional railway alignments in mountainous terrain. Transportation Research Part C: Emerging Technologies, 2016, 68, 549-565.	3.9	68
13	Multi-objective highway alignment optimization incorporating preference information. Transportation Research Part C: Emerging Technologies, 2014, 40, 36-48.	3.9	64
14	Schedule Coordination in a Multiple Hub Transit Network. Journal of the Urban Planning and Development Division, ASCE, 2005, 131, 112-124.	0.8	63
15	Optimizing Rail Transit Routes with Genetic Algorithms and Geographic Information System. Journal of the Urban Planning and Development Division, ASCE, 2007, 133, 161-171.	0.8	62
16	Metamodels for estimating waterway delays through series of queues. Transportation Research Part B: Methodological, 1998, 32, 1-19.	2.8	61
17	Using GIS, Genetic Algorithms, and Visualization in Highway Development. Computer-Aided Civil and Infrastructure Engineering, 2001, 16, 399-414.	6.3	60
18	Integrating bus services with mixed fleets. Transportation Research Part B: Methodological, 2013, 55, 227-244.	2.8	56

#	ARTICLE	IF	CITATIONS
19	Optimal Work Zone Lengths for Four-Lane Highways. <i>Journal of Transportation Engineering</i> , 2001, 127, 124-131.	0.9	55
20	Integrating Genetic Algorithms and Geographic Information System to Optimize Highway Alignments. <i>Transportation Research Record</i> , 2000, 1719, 233-240.	1.0	54
21	Optimizing dial-a-ride services in Maryland: Benefits of computerized routing and scheduling. <i>Transportation Research Part C: Emerging Technologies</i> , 2015, 55, 156-165.	3.9	53
22	Concurrent Optimization of Rail Transit Alignments and Station Locations. <i>Urban Rail Transit</i> , 2016, 2, 1-15.	0.9	53
23	A Method for Automatically Recreating the Horizontal Alignment Geometry of Existing Railways. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2019, 34, 71-94.	6.3	53
24	A three-dimensional distance transform for optimizing constrained mountain railway alignments. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2019, 34, 972-990.	6.3	51
25	Mountain railway alignment optimization using stepwise & hybrid particle swarm optimization incorporating genetic operators. <i>Applied Soft Computing Journal</i> , 2019, 78, 41-57.	4.1	51
26	Optimizing Work Zones for Two-Lane Highway Maintenance Projects. <i>Journal of Transportation Engineering</i> , 2002, 128, 145-155.	0.9	49
27	Optimal Work Zone Lengths for Two-Lane Highways. <i>Journal of Transportation Engineering</i> , 1999, 125, 21-29.	0.9	46
28	Multi-objective railway alignment optimization considering costs and environmental impacts. <i>Applied Soft Computing Journal</i> , 2020, 89, 106105.	4.1	46
29	A deep reinforcement learning approach to mountain railway alignment optimization. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2022, 37, 73-92.	6.3	46
30	Hybrid simulated annealing and genetic algorithm for optimizing arterial signal timings under oversaturated traffic conditions. <i>Journal of Advanced Transportation</i> , 2015, 49, 153-170.	0.9	43
31	Conventional, Flexible, and Variable-Type Bus Services. <i>Journal of Transportation Engineering</i> , 2012, 138, 263-273.	0.9	41
32	Scheduling Interdependent Waterway Projects through Simulation and Genetic Optimization. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 2005, 131, 89-97.	0.5	40
33	Control Alternatives at a Waterway Lock. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 2001, 127, 89-96.	0.5	37
34	Highway Alignment Optimization Incorporating Bridges and Tunnels. <i>Journal of Transportation Engineering</i> , 2007, 133, 71-81.	0.9	36
35	A rejected-reinsertion heuristic for the static Dial-A-Ride Problem. <i>Transportation Research Part B: Methodological</i> , 2007, 41, 736-755.	2.8	36
36	Geographic Information System-Based Analysis of Right-of-Way Cost for Highway Optimization. <i>Transportation Research Record</i> , 2000, 1719, 241-249.	1.0	35

#	ARTICLE	IF	CITATIONS
37	Cost Functions for Optimizing Highway Alignments. <i>Transportation Research Record</i> , 1999, 1659, 58-67.	1.0	33
38	Mountain railway alignment optimization considering geological impacts: A cost-hazard bi-objective model. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2020, 35, 1365-1386.	6.3	32
39	Optimization Through Simulation of Waterway Transportation Investments. <i>Transportation Research Record</i> , 1998, 1620, 11-16.	1.0	30
40	Intersection Modeling for Highway Alignment Optimization. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2004, 19, 119-129.	6.3	29
41	Stochastic dynamic switching in fixed and flexible transit services as market entry-exit real options. <i>Transportation Research Part C: Emerging Technologies</i> , 2018, 94, 288-306.	3.9	29
42	Optimal zone sizes and headways for flexible-route bus services. <i>Transportation Research Part B: Methodological</i> , 2019, 130, 67-81.	2.8	29
43	Highway alignment optimization through feasible gates. <i>Journal of Advanced Transportation</i> , 2007, 41, 115-144.	0.9	27
44	Bi-objective mountain railway alignment optimization incorporating seismic risk assessment. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2021, 36, 143-163.	6.3	27
45	Approximating Delays at Interdependent Locks. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 1995, 121, 300-307.	0.5	26
46	Parallel Three-Dimensional Distance Transform for Railway Alignment Optimization Using OpenMP. <i>Journal of Transportation Engineering Part A: Systems</i> , 2020, 146, .	0.8	26
47	Subsidies and welfare maximization tradeoffs in bus transit systems. <i>Annals of Regional Science</i> , 2008, 42, 643-660.	1.0	25
48	Optimization of Zonal Transit Service. <i>Journal of Transportation Engineering</i> , 1983, 109, 257-272.	0.9	24
49	Branched Transit Services: An Analysis. <i>Journal of Transportation Engineering</i> , 1984, 110, 112-128.	0.9	24
50	Genetic Algorithm for Selecting and Scheduling Interdependent Projects. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 2001, 127, 45-52.	0.5	24
51	Optimization of Rail Transit Alignments considering Vehicle Dynamics. <i>Transportation Research Record</i> , 2012, 2275, 77-87.	1.0	24
52	Comparison of Vertical Alignments for Rail Transit. <i>Journal of Transportation Engineering</i> , 2013, 139, 230-238.	0.9	24
53	Simultaneous optimization of 3D alignments and station locations for dedicated high-speed railways. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2022, 37, 405-426.	6.3	24
54	Railway Alignment Optimization in Mountainous Regions Considering Spatial Geological Hazards: A Sustainable Safety Perspective. <i>Sustainability</i> , 2021, 13, 1661.	1.6	23

#	ARTICLE	IF	CITATIONS
55	Intersection Construction Cost Functions for Alignment Optimization. <i>Journal of Transportation Engineering</i> , 2004, 130, 194-203.	0.9	22
56	Integrated Control for Series of Waterway Locks. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 1998, 124, 199-206.	0.5	21
57	Bilevel Highway Route Optimization. <i>Transportation Research Record</i> , 2010, 2197, 107-117.	1.0	21
58	Online Rejected-Reinsertion Heuristics for Dynamic Multivehicle Dial-a-Ride Problem. <i>Transportation Research Record</i> , 2011, 2218, 59-67.	1.0	21
59	Stochastic capacity expansion models for airport facilities. <i>Transportation Research Part B: Methodological</i> , 2015, 80, 1-18.	2.8	21
60	GIS-based multi-criteria railway design with spatial environmental considerations. <i>Applied Geography</i> , 2021, 131, 102449.	1.7	21
61	Efficiency versus Fairness in Priority Control: Waterway Lock Case. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 2001, 127, 82-88.	0.5	20
62	Maximizing net benefits for conventional and flexible bus services. <i>Transportation Research, Part A: Policy and Practice</i> , 2015, 80, 116-133.	2.0	20
63	Stochastic dynamic switching in fixed and flexible transit services as market entry-exit real options. <i>Transportation Research Procedia</i> , 2017, 23, 380-399.	0.8	19
64	Holding decisions for correlated vehicle arrivals at intermodal freight transfer terminals. <i>Transportation Research Part B: Methodological</i> , 2016, 90, 218-240.	2.8	18
65	Evolution of public transit modes in a commuter corridor. <i>Transportation Research Part C: Emerging Technologies</i> , 2017, 75, 84-102.	3.9	18
66	Dispatching control at transfer stations in multi-hub transit networks. <i>Journal of Advanced Transportation</i> , 2007, 41, 217-243.	0.9	17
67	Prioritizing Interrelated Road Projects Using Metaheuristics. <i>Journal of Infrastructure Systems</i> , 2016, 22, .	1.0	17
68	Evasive flow capture: A multi-period stochastic facility location problem with independent demand. <i>European Journal of Operational Research</i> , 2017, 257, 687-703.	3.5	17
69	Island Models for Stochastic Problem of Transportation Project Selection and Scheduling. <i>Transportation Research Record</i> , 2007, 2039, 16-23.	1.0	16
70	Evasive flow capture: Optimal location of weigh-in-motion systems, tollbooths, and security checkpoints. <i>Networks</i> , 2015, 65, 22-42.	1.6	16
71	Trade-offs Between Initial and Maintenance Costs of Highways in Cross-Slopes. <i>Journal of Infrastructure Systems</i> , 2003, 9, 16-25.	1.0	14
72	Modeling and Performance Assessment of Intermodal Transfers at Cargo Terminals. <i>Transportation Research Record</i> , 2010, 2162, 53-62.	1.0	13

#	ARTICLE	IF	CITATIONS
73	Implications of the cost of public funds in public transit subsidization and regulation. <i>Transportation Research, Part A: Policy and Practice</i> , 2016, 91, 236-250.	2.0	13
74	Optimization of grade-separated road and railway crossings based on a distance transform algorithm. <i>Engineering Optimization</i> , 2022, 54, 232-251.	1.5	13
75	Effects of Speed Control on Tow Travel Costs. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 1999, 125, 203-206.	0.5	12
76	Queuing network analysis for waterways with artificial neural networks. <i>Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM</i> , 1999, 13, 365-375.	0.7	12
77	Welfare maximization for bus transit systems with timed transfers and financial constraints. <i>Journal of Advanced Transportation</i> , 2016, 50, 421-433.	0.9	11
78	Schedule Coordination, Delay Propagation, and Disruption Resilience in Intermodal Logistics Networks. <i>Transportation Research Record</i> , 2016, 2548, 16-23.	1.0	11
79	Selecting and scheduling interrelated road projects with uncertain demand. <i>Transportmetrica A: Transport Science</i> , 2019, 15, 1712-1733.	1.3	11
80	Effects of Tow Sequencing on Capacity and Delay at a Waterway Lock. <i>Journal of Waterway, Port, Coastal and Ocean Engineering</i> , 1996, 122, 16-26.	0.5	10
81	A Hybrid Methodology for Freeway Work-Zone Optimization With Time Constraints. <i>Public Works Management Policy</i> , 2009, 13, 253-264.	0.7	10
82	Statistical and machine learning approach for planning dial-a-ride systems. <i>Transportation Research, Part A: Policy and Practice</i> , 2016, 89, 41-55.	2.0	10
83	How time-inconsistent preferences affect investment timing for rail transit. <i>Transportation Research Part B: Methodological</i> , 2018, 118, 172-192.	2.8	10
84	Robust Optimization Method for Mountain Railway Alignments Considering Preference Uncertainty for Costs and Seismic Risks. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering</i> , 2022, 8, .	1.1	10
85	Work Zone Optimization for Two-Lane Highway Maintenance Projects. <i>Transportation Research Record</i> , 2004, 1877, 95-105.	1.0	9
86	Work Zone Optimization for Two-Lane Highway Resurfacing Projects with an Alternate Route. <i>Transportation Research Record</i> , 2005, 1911, 51-66.	1.0	9
87	Work Zone Lengths for a Four-Lane Road with an Alternate Route. <i>Journal of Transportation Engineering</i> , 2005, 131, 780-789.	0.9	9
88	Optimal extension of rail transit lines. <i>International Journal of Sustainable Transportation</i> , 2018, 12, 753-769.	2.1	9
89	Selection and Scheduling of Interdependent Transportation Projects with Island Models. <i>Transportation Research Record</i> , 2006, 1981, 133-141.	1.0	8
90	Scheduling of Waterway Projects with Complex Interrelations. <i>Transportation Research Record</i> , 2008, 2062, 59-65.	1.0	8

#	ARTICLE	IF	CITATIONS
91	Maximum Gradient Decision-Making for Railways Based on Convolutional Neural Network. Journal of Transportation Engineering Part A: Systems, 2019, 145, .	0.8	8
92	Mountain railway alignment optimization integrating layouts of large-scale auxiliary construction projects. Computer-Aided Civil and Infrastructure Engineering, 2023, 38, 433-453.	6.3	8
93	Simulation-Based Scheduling of Mutually Exclusive Projects with Precedence and Regional Budget Constraints. Transportation Research Record, 2012, 2273, 1-9.	1.0	7
94	Uncertainty Analysis for Flexible Airport Gate Development. Procedia, Social and Behavioral Sciences, 2013, 96, 2953-2961.	0.5	7
95	Simulation-Based Rail Transit Optimization Model. Transportation Research Record, 2013, 2374, 143-153.	1.0	7
96	A Method for Optimizing the Phased Development of Rail Transit Lines. Urban Rail Transit, 2015, 1, 227-237.	0.9	7
97	Selection and Scheduling of Interdependent Transportation Projects with Island Models. , 0, .		7
98	Simulation-Based Scheduling of Waterway Projects Using a Parallel Genetic Algorithm. International Journal of Operations Research and Information Systems, 2015, 6, 49-63.	1.0	7
99	Demand Elasticity and Benefit Measurement in a Waterway Simulation Model. Transportation Research Record, 2007, 2033, 53-61.	1.0	6
100	A Hybrid Heuristic Technique for Optimizing Intermodal Logistics Timed Transfer Systems. Procedia, Social and Behavioral Sciences, 2012, 48, 2566-2576.	0.5	6
101	A hybrid heuristic technique for optimal coordination in intermodal logistics scheduling. International Journal of Shipping and Transport Logistics, 2017, 9, 475.	0.2	6
102	Switching service types for multi-region bus systems. Transportation Planning and Technology, 2018, 41, 617-643.	0.9	6
103	Estimating Highway Earthwork Cross Sections by Using Vector and Parametric Representation. Transportation Research Record, 2001, 1772, 48-54.	1.0	5
104	Alleviating Schedule Disruptions at Intermodal Freight Transfer Terminals. Transportation Research Record, 2011, 2238, 32-43.	1.0	5
105	A dispatching decision support system for countering delay propagation in intermodal logistics networks. Transportation Planning and Technology, 2016, 39, 254-268.	0.9	5
106	Development of rail transit network over multiple time periods. Transportation Research, Part A: Policy and Practice, 2019, 121, 235-250.	2.0	5
107	Time-dependent transit fare optimization with elastic and spatially distributed demand. Transportation Research, Part A: Policy and Practice, 2021, 148, 353-378.	2.0	4
108	Lagrangian Relaxation Heuristic for Selecting Interdependent Transportation Projects Under Cost Uncertainty. Transportation Research Record, 2005, 1931, 74-80.	1.0	4

#	ARTICLE	IF	CITATIONS
109	Modelling and optimization of constrained alignments for existing railway reconstruction. International Journal of Rail Transportation, 2023, 11, 428-447.	1.8	4
110	Simulation-Based Network Maintenance Planning and Scheduling. Transportation Research Record, 2009, 2100, 94-102.	1.0	3
111	Taxis as a Recourse Option for Ridesharing Services. Transportation Research Record, 2016, 2563, 86-97.	1.0	3
112	Resilient Schedule Coordination for a Bus Transit Corridor. Journal of Advanced Transportation, 2020, 2020, 1-12.	0.9	3
113	Data-Driven Robust Resource Allocation with Monotonic Cost Functions. Operations Research, 2022, 70, 73-94.	1.2	3
114	Simulation-Based Scheduling of Waterway Projects Using a Parallel Genetic Algorithm. , 2015, , 334-347.		2
115	Closure to Trade-offs between Initial and Maintenance Costs of Highways in Cross-Slopes by Manoj K. Jha and Paul Schonfeld. Journal of Infrastructure Systems, 2005, 11, 152-152.	1.0	1
116	An evolutionary path planning algorithm for military applications. , 2008, , .		1
117	Scheduling under Uncertainty for Single-Hub Intermodal Freight System. Transportation Research Record, 2011, 2238, 24-31.	1.0	1
118	Profit Maximization Model with Fare Structures and Subsidy Constraints for Urban Rail Transit. Journal of Advanced Transportation, 2021, 2021, 1-14.	0.9	1
119	Optimized two-directional phased development of a rail transit line. Transportation Research Part B: Methodological, 2022, 155, 424-447.	2.8	1
120	Scheduling for a Single-Terminal Intermodal System Recovery with Poisson Arrivals. Strojnicki Vestnik/Journal of Mechanical Engineering, 2013, 9, 564-572.	0.6	0
121	Implementation Sequence Optimization for Dedicated Bus Lane Projects. Transportation Research Record, 0, , 036119812110148.	1.0	0
122	Simulation-Based Scheduling of Waterway Projects Using a Parallel Genetic Algorithm. , 2016, , 1071-1084.		0
123	Optimal service zones and frequencies for flexible-route freight deliveries. Transportation Research, Part A: Policy and Practice, 2022, 159, 182-199.	2.0	0
124	Optimized Zone Sizes and Headways for Flexible-Route Bus Services – A Two Zone Case. KSCE Journal of Civil Engineering, 0, , .	0.9	0