## Patrick T Harker

List of Publications by Year in descending order

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75 papers 7,460 citations

39 h-index 74163 75 g-index

80 all docs 80 docs citations

80 times ranked 3293 citing authors

#	Article	IF	CITATIONS
1	Finite-dimensional variational inequality and nonlinear complementarity problems: A survey of theory, algorithms and applications. Mathematical Programming, 1990, 48, 161-220.	2.4	1,499
2	The Theory of Ratio Scale Estimation: Saaty's Analytic Hierarchy Process. Management Science, 1987, 33, 1383-1403.	4.1	644
3	Competition and Outsourcing with Scale Economies. Management Science, 2002, 48, 1314-1333.	4.1	420
4	Incomplete pairwise comparisons in the analytic hierarchy process. Mathematical Modelling, 1987, 9, 837-848.	0.2	328
5	Generalized Nash games and quasi-variational inequalities. European Journal of Operational Research, 1991, 54, 81-94.	5.7	320
6	Reply to "Remarks on the Analytic Hierarchy Process―by J. S. Dyer. Management Science, 1990, 36, 269-273.	4.1	277
7	A Non-Interior-Point Continuation Method for Linear Complementarity Problems. SIAM Journal on Matrix Analysis and Applications, 1993, 14, 1168-1190.	1.4	217
8	Alternative modes of questioning in the analytic hierarchy process. Mathematical Modelling, 1987, 9, 353-360.	0.2	190
9	Tactical Scheduling of Rail Operations: The SCAN I System. Transportation Science, 1991, 25, 46-64.	4.4	162
10	Customer Efficiency. Journal of Service Research, 2002, 4, 253-267.	12.2	160
10	Customer Efficiency. Journal of Service Research, 2002, 4, 253-267.  Product Positioning Under Price Competition. Management Science, 1990, 36, 175-199.	12.2 4.1	160
11	Product Positioning Under Price Competition. Management Science, 1990, 36, 175-199.	4.1	154
11 12	Product Positioning Under Price Competition. Management Science, 1990, 36, 175-199.  Multiple Equilibrium Behaviors on Networks. Transportation Science, 1988, 22, 39-46.  A variational inequality approach for the determination of oligopolistic market equilibrium.	4.1	139
11 12 13	Product Positioning Under Price Competition. Management Science, 1990, 36, 175-199.  Multiple Equilibrium Behaviors on Networks. Transportation Science, 1988, 22, 39-46.  A variational inequality approach for the determination of oligopolistic market equilibrium. Mathematical Programming, 1984, 30, 105-111.  Smooth Approximations to Nonlinear Complementarity Problems. SIAM Journal on Optimization, 1997,	4.1 4.4 2.4	154 139 138
11 12 13	Product Positioning Under Price Competition. Management Science, 1990, 36, 175-199.  Multiple Equilibrium Behaviors on Networks. Transportation Science, 1988, 22, 39-46.  A variational inequality approach for the determination of oligopolistic market equilibrium. Mathematical Programming, 1984, 30, 105-111.  Smooth Approximations to Nonlinear Complementarity Problems. SIAM Journal on Optimization, 1997, 7, 403-420.	4.1 4.4 2.4 2.0	139 138 138
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19	Optimal Pacing of Trains in Freight Railroads: Model Formulation and Solution. Operations Research, 1991, 39, 82-99.	1.9	110
20	Newton's method for the nonlinear complementarity problem: A B-differentiable equation approach. Mathematical Programming, 1990, 48, 339-357.	2.4	107
21	Prediction of intercity freight flows, I: Theory. Transportation Research Part B: Methodological, 1986, 20, 139-153.	5.9	100
22	Projections Onto Efficient Frontiers: Theoretical and Computational Extensions to DEA. Journal of Productivity Analysis, 1999, 11, 275-300.	1.6	100
23	Existence of optimal solutions to mathematical programs with equilibrium constraints. Operations Research Letters, 1988, 7, 61-64.	0.7	97
24	ALTERNATIVE ALGORITHMS FOR THE GENERAL NETWORK SPATIAL PRICE EQUILIBRIUM PROBLEM*. Journal of Regional Science, 1984, 24, 475-507.	3.3	90
25	Derivatives of the Perron root of a positive reciprocal matrix: With application to the analytic hierarchy process. Applied Mathematics and Computation, 1987, 22, 217-232.	2.2	81
26	Globally effective questioning in the Analytic Hierarchy Process. European Journal of Operational Research, 1990, 48, 88-97.	5.7	81
27	Coordinating supply chains with competition: Capacity allocation in semiconductor manufacturing. European Journal of Operational Research, 2004, 159, 330-347.	5.7	74
28	Accelerating the convergence of the diagonalization and projection algorithms for finite-dimensional variational inequalities. Mathematical Programming, 1988, 41, 29-59.	2.4	73
29	Measuring aggregate process performance using AHP. European Journal of Operational Research, 1999, 116, 436-442.	5.7	72
30	Prediction of intercity freight flows, II: Mathematical formulations. Transportation Research Part B: Methodological, 1986, 20, 155-174.	5.9	71
31	Real-time scheduling of freight railroads. Transportation Research Part B: Methodological, 1995, 29, 213-229.	5.9	69
32	Predictive intercity freight network models: the state of the art. Transportation Research Part A: Policy and Practice, 1983, 17, 409-417.	0.2	66
33	Two Moments Estimation of the Delay on Single-Track Rail Lines with Scheduled Traffic. Transportation Science, 1990, 24, 261-275.	4.4	54
34	To Sell or Not to Sell. Journal of Service Research, 1999, 2, 19-33.	12.2	53
35	A nonsmooth Newton method for variational inequalities, I: Theory. Mathematical Programming, 1994, 65, 151-194.	2.4	52
36	Air traffic network equilibrium: Toward frequency, price and slot priority analysis. Transportation Research Part B: Methodological, 1992, 26, 307-323.	5.9	51

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37	Measuring the Efficiency of Service Delivery Processes. Journal of Service Research, 1999, 1, 300-312.	12.2	50
38	Pricing of track time in railroad operations: An internal market approach. Transportation Research Part B: Methodological, 1994, 28, 197-212.	5.9	49
39	The state of the art in the predictive analysis of freight transport systems. Transport Reviews, 1985, 5, 143-164.	8.8	44
40	A nonsmooth Newton method for variational inequalities, II: Numerical results. Mathematical Programming, 1994, 65, 195-216.	2.4	39
41	Multicriteria spatial price equilibrium network design: Theory and computational results. Transportation Research Part B: Methodological, 1983, 17, 411-426.	5.9	34
42	Capacity sizing in the presence of a common shared resource: Dimensioning an inbound call center. European Journal of Operational Research, 2003, 147, 464-483.	5.7	34
43	The use of equilibrium network models in logistics management: With application to the U.S. coal industry. Transportation Research Part B: Methodological, 1985, 19, 457-470.	5.9	33
44	A continuation method for monotone variational inequalities. Mathematical Programming, 1995, 69, 237-253.	2.4	31
45	Properties of the iterative optimization-equilibrium algorithm. Civil Engineering and Environmental Systems, 1985, 2, 142-154.	0.2	30
46	Noteâ€"A Numerical Approach to Deriving Long-Run Equilibrium Solutions in Spatial Positioning Models. Management Science, 1992, 38, 75-86.	4.1	28
47	Designing Workflow Coordination: Centralized Versus Market-Based Mechanisms. Information Systems Research, 1999, 10, 328-342.	3.7	27
48	Consumer and co-producer roles in e-service: analysing efficiency and effectiveness of e-service designs. International Journal of Electronic Business, 2005, 3, 174.	0.4	26
49	Dispersed Spatial Price Equilibrium. Environment and Planning A, 1988, 20, 353-368.	3.6	25
50	Modeling a Phone Center: Analysis of a Multichannel, Multiresource Processor Shared Loss System. Management Science, 2001, 47, 324-336.	4.1	24
51	A Noninterior Continuation Method for Quadratic and Linear Programming. SIAM Journal on Optimization, 1993, 3, 503-515.	2.0	22
52	Private Market Participation in Urban Mass Transportation: Application of Computable Equilibrium Models of Network Competition. Transportation Science, 1988, 22, 96-111.	4.4	21
53	Predicting on-time performance in scheduled railroad operations: methodology and application to train scheduling. Transportation Research, Part A: Policy and Practice, 1998, 32, 279-295.	4.2	20
54	Predicting On-Time Line-Haul Performance in Scheduled Railroad Operations. Transportation Science, 1996, 30, 364-378.	4.4	18

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55	Case-based reasoning for repetitive combinatorial optimization problems, part I: Framework. Journal of Heuristics, 1996, 2, 55-85.	1.4	16
56	Shortening the comparison process in the AHP. Mathematical Modelling, 1987, 8, 139-141.	0.2	14
57	A note on the existence of traffic equilibria. Applied Mathematics and Computation, 1986, 18, 277-283.	2.2	13
58	Rapid design and prototyping of customized rehabilitation aids. Communications of the ACM, 1996, 39, 55-61.	<b>4.</b> 5	12
59	Freight network equilibrium: a review of the state of the art., 1986,, 161-206.		11
60	A note on solving general equilibrium problems with variational inequality techniques. Operations Research Letters, 1990, 9, 335-339.	0.7	10
61	The spatial price equilibrium problem with path variables. Socio-Economic Planning Sciences, 1986, 20, 299-310.	5.0	9
62	A generalized spatial price equilibrium model. Papers in Regional Science, 1984, 54, 25-42.	1.9	7
63	Issues and Models for Planning and Regulating Freight Transport Systems. Lecture Notes in Economics and Mathematical Systems, 1988, , 374-408.	0.3	7
64	A polynomial-time algorithm for affine variational inequalities. Applied Mathematics Letters, 1991, 4, 31-34.	2.7	7
65	Continuation method for nonlinear complementarity problems via normal maps. European Journal of Operational Research, 1999, 116, 591-606.	5.7	7
66	Computing performance measures in a multi-class multi-resource processor-shared loss system. European Journal of Operational Research, 2000, 123, 61-72.	5 <b>.</b> 7	6
67	<b>Commentary</b> —Making Sense of Higher Education's Future: An Economics and Operations Perspective. Service Science, 2014, 6, 207-216.	1.3	6
68	Case-Based Reasoning for Repetitive Combinatorial Optimization Problems, Part II: Numerical Results. Journal of Heuristics, 1997, 3, 25-42.	1.4	5
69	THE CORE OF A SPATIAL PRICE EQUILIBRIUM GAME*. Journal of Regional Science, 1987, 27, 369-389.	3.3	4
70	Perturbation results for the linear complementarity problem. Applied Mathematics Letters, 1989, 2, 401-405.	2.7	4
71	Introduction: Service-Sector Productivity—The MS/OR Challenge. Interfaces, 1995, 25, 1-5.	1.5	4
72	Services and Technology: Reengineering the Railroads. Interfaces, 1995, 25, 72-80.	1.5	4

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73	Existence of competitive equilibria via Smith's non-linear complementarity result. Economics Letters, 1985, 19, 1-4.	1.9	1
74	Advances in equilibrium modeling, analysis and computation. European Journal of Operational Research, 1995, 84, 499.	5.7	1
75	Research directions in transportation regulation and pricing. Transportation Research Part A: Policy and Practice, 1985, 19, 489-491.	0.2	O