Juan Aparicio

List of Publications by Year
in descending order

119 papers	2,296 citations	201658 27 h-index	254170 43 g-index
138 all docs	138 docs citations	138 times ranked	1146 citing authors

#	Article	IF	Citations
1	Random Forests and the measurement of super-efficiency in the context of Free Disposal Hull. European Journal of Operational Research, 2023, 304, 729-744.	5.7	17
2	Comparing the evolution of productivity and performance gaps in education systems through DEA: an application to Latin American countries. Operational Research, 2022, 22, 1443-1477.	2.0	11
3	Determining closest targets on the extended facet production possibility set in data envelopment analysis: Modeling and computational aspects. European Journal of Operational Research, 2022, 296, 927-939.	5.7	32
4	A hyper-matheuristic approach for solving mixed integer linear optimization models in the context of data envelopment analysis. PeerJ Computer Science, 2022, 8, e828.	4.5	8
5	The generalized range adjusted measure in data envelopment analysis: Properties, computational aspects and duality. European Journal of Operational Research, 2022, 302, 621-632.	5.7	6
6	The performance of regional governments under the results-based budgeting framework: A two-stage sectoral analysis. RAIRO - Operations Research, 2022, 56, 501-528.	1.8	2
7	Weight profiles in cross-efficiency evaluation based on hypervolume maximization. Socio-Economic Planning Sciences, 2022, 82, 101270.	5.0	2
8	Combining Data Envelopment Analysis and Machine Learning. Mathematics, 2022, 10, 909.	2.2	8
9	Multi-output Support Vector Frontiers. Computers and Operations Research, 2022, 143, 105765.	4.0	8
10	Learning to win on the PGA tour. Applied Economics, 2021, 53, 6104-6119.	2.2	0
11	Modelling environmental inefficiency under a quota system. Operational Research, 2021, 21, 1097-1124.	2.0	2
12	Russell Graph efficiency measures in Data Envelopment Analysis: The multiplicative approach. European Journal of Operational Research, 2021, 292, 663-674.	5.7	9
13	A new measure of technical efficiency in data envelopment analysis based on the maximization of hypervolumes: Benchmarking, properties and computational aspects. European Journal of Operational Research, 2021, 293, 263-275.	5.7	7
14	Economic cross-efficiency. Omega, 2021, 100, 102374.	5.9	13
15	The productivity of national innovation systems in Europe: Catching up or falling behind?. Technovation, 2021, 102, 102215.	7.8	28
16	Heuristic and Backtracking Algorithms for Improving the Performance of Efficiency Analysis Trees. IEEE Access, 2021, 9, 17421-17428.	4.2	13
17	The systemic approach as an instrument to evaluate higher education systems: Opportunities and challenges. Research Evaluation, 2021, 30, 336-348.	2.6	1
18	Data science for better productivity. Journal of the Operational Research Society, 2021, 72, 971-974.	3.4	2

#	Article	IF	Citations
19	The European tomato market. An approach by export competitiveness maps. PLoS ONE, 2021, 16, e0250867.	2.5	19
20	Efficiency Analysis with Educational Data: How to Deal with Plausible Values from International Large-Scale Assessments. Mathematics, 2021, 9, 1579.	2.2	11
21	Support vector frontiers: A new approach for estimating production functions through support vector machines. Omega, 2021, 104, 102490.	5.9	24
22	Comparing group performance over time through the Luenberger productivity indicator: An application to school ownership in European countries. European Journal of Operational Research, 2021, 294, 651-672.	5.7	3
23	Introducing a functional framework for integrating the empirical evidence about higher education institutionsâ€™ functions and capabilities: A literature review. Journal of Entrepreneurship, Management and Innovation, 2021, 17, 231-267.	1.3	2
24	The Estimation of Productive Efficiency Through Machine Learning Techniques: Efficiency Analysis Trees. Profiles in Operations Research, 2021, , 51-92.	0.4	1
25	Estimating and decomposing overall inefficiency by determining the least distance to the strongly efficient frontier in data envelopment analysis. Operational Research, 2020, 20, 747-770.	2.0	8
26	Efficiency and productivity change of regional tax offices in Spain: an empirical study using Malmquistâ€“Luenberger and Luenberger indices. Empirical Economics, 2020, 59, 1403-1434.	3.0	4
27	Defining a new graph inefficiency measure for the proportional directional distance function and introducing a new Malmquist productivity index. European Journal of Operational Research, 2020, 281, 222-230.	5.7	29
28	A linear ordering problem of sets. Annals of Operations Research, 2020, 288, 45-64.	4.1	5
29	A Parallel Algorithm for Matheuristics: A Comparison of Optimization Solvers. Electronics (Switzerland), 2020, 9, 1541.	3.1	3
30	Efficiency analysis trees: A new methodology for estimating production frontiers through decision trees. Expert Systems With Applications, 2020, 162, 113783.	7.6	39
31	Robust DEA Efficiency Scores: A Heuristic for the Combinatorial/Probabilistic Approach. Profiles in Operations Research, 2020, , 125-142.	0.4	0
32	The measurement of environmental economic inefficiency with pollution-generating technologies. Resources and Energy Economics, 2020, 62, 101185.	2.5	6
33	A Well-Defined Composite Indicator: An Application to Corporate Social Responsibility. Journal of Optimization Theory and Applications, 2020, 186, 299-323.	1.5	19
34	Introducing cross-productivity: A new approach for ranking productive units over time in Data Envelopment Analysis. Computers and Industrial Engineering, 2020, 144, 106456.	6.3	8
35	Testing Positive Endogeneity in Inputs in Data Envelopment Analysis. Profiles in Operations Research, 2020, , 53-66.	0.4	0
36	New Definitions of Economic Cross-efficiency. Profiles in Operations Research, 2020, , 11-32.	0.4	2

#	Article	IF	Citations
37	On the Estimation of Educational Technical Efficiency from Sample Designs: A New Methodology Using Robust Nonparametric Models. Profiles in Operations Research, 2020, , 87-105.	0.4	0
38	Grupos estratÃ©gicos en el sector privado de la educaciÃ³n superior. EducaciÃ³n XXI, 2020, 24, .	0.8	2
39	Luenberger-type indicators based on the weighted additive distance function. Annals of Operations Research, 2019, 278, 195-213.	4.1	7
40	Composite Indicators based on the Principle of Least Action and Data Envelopment Analysis. An application to Corporate Social Responsibility Data. SSRN Electronic Journal, 2019, , .	0.4	0
41	The curse of dimensionality of decision-making units: A simple approach to increase the discriminatory power of data envelopment analysis. European Journal of Operational Research, 2019, 279, 929-940.	5.7	78
42	Enhancing the Measurement of Composite Indicators of Corporate Social Performance. Social Indicators Research, 2019, 144, 807-826.	2.7	24
43	The Measurement of Environmental Economic Inefficiency with Pollution-generating Technologies. SSRN Electronic Journal, 2019, , .	0.4	0
44	Measuring efficiency in education: The influence of imprecision and variability in data on DEA estimates. Socio-Economic Planning Sciences, 2019, 68, 100698.	5.0	29
45	Accounting for slacks to measure dynamic inefficiency in data envelopment analysis. European Journal of Operational Research, 2019, 278, 463-471.	5.7	13
46	The measurement of revenue inefficiency over time: An additive perspective. Omega, 2019, 83, 167-180.	5.9	4
47	A Parallel Application of Matheuristics inÂData Envelopment Analysis. Advances in Intelligent Systems and Computing, 2019, , 172-179.	0.6	1
48	A note on measuring group performance over time with pseudo-panels. European Journal of Operational Research, 2018, 267, 227-235.	5.7	16
49	Using non-radial DEA to assess school efficiency in a cross-country perspective: An empirical analysis of OECD countries. Omega, 2018, 79, 9-20.	5.9	39
50	Economic crisis and public education. A productivity analysis using a Hicks-Moorsteen index. Economic Modelling, 2018, 71, 34-44.	3.8	23
51	Enhancing the Measurement of Composite Indicators of Corporate Social Performance. SSRN Electronic Journal, 2018, , .	0.4	0
52	Bounded directional distance function models. Central European Journal of Operations Research, 2018, 26, 985-1004.	1.8	6
53	Are charter value and supervision aligned? A segmentation analysis. Journal of Financial Stability, 2018, 37, 60-73.	5.2	5
54	Evaluating productive performance: A new approach based on the product-mix problem consistent with Data Envelopment Analysis. Omega, 2017, 67, 134-144.	5.9	15

#	Article	IF	Citations
55	Testing the consistency and feasibility of the standard Malmquist-Luenberger index: Environmental productivity in world air emissions. Journal of Environmental Management, 2017, 196, 148-160.	7.8	31
56	Measuring input-specific productivity change based on the principle of least action. Journal of Productivity Analysis, 2017, 47, 17-31.	1.6	7
57	Measuring and decomposing profit inefficiency through the Slacks-Based Measure. European Journal of Operational Research, 2017, 260, 650-654.	5.7	32
58	Revisiting the decomposition of cost efficiency for non-homothetic technologies: a directional distance function approach. Journal of Productivity Analysis, 2017, 48, 133-146.	1.6	6
59	Productivity change of Portuguese municipalities after local reforms. Applied Economics Letters, 2017, 24, 878-881.	1.8	4
60	A parameterized scheme of metaheuristics with exact methods for determining the Principle of Least Action in Data Envelopment Analysis. , 2017, , .		2
61	Graph productivity change measure using the least distance to the pareto-efficient frontier in data envelopment analysis. Omega, 2017, 72, 1-14.	5.9	20
62	Can Farrell's allocative efficiency be generalized by the directional distance function approach?. European Journal of Operational Research, 2017, 257, 345-351.	5.7	15
63	The determination of the least distance to the strongly efficient frontier in Data Envelopment Analysis oriented models: Modelling and computational aspects. Omega, 2017, 71, 1-10.	5.9	65
64	Comparing school ownership performance using a pseudo-panel database: A Malmquist-type index approach. European Journal of Operational Research, 2017, 256, 533-542.	5.7	34
65	Eficiencia tÃ©cnica de las denominaciones de origen protegidas en EspaÃ±a: Un anÃ¡lisis por tipo de vino comercializado. BIO Web of Conferences, 2017, 9, 03005.	0.2	0
66	Analysis of SpainÂ´s competitiveness in the European tomato market: An application of the Constant Market Share method. Spanish Journal of Agricultural Research, 2017, 15, e0113.	0.6	7
67	Production under a quota system: an extension of the weighted additive model to assess technical efficiency. Infor, 2017, 55, 227-242.	0.6	3
68	A Parameterized Scheme of Metaheuristics to Solve NP-Hard Problems in Data Envelopment Analysis. Profiles in Operations Research, 2016, , 195-224.	0.4	1
69	A survey on measuring efficiency through the determination of the least distance in data envelopment analysis. Journal of CENTRUM Cathedra (JCC) the Business and Economics Research Journal, 2016, 9, 143-167.	0.4	33
70	The weighted additive distance function. European Journal of Operational Research, 2016, 254, 338-346.	5.7	34
71	The directional distance function and the translation invariance property. Omega, 2016, 58, 1-3.	5.9	37
72	The Reverse Directional Distance Function. Profiles in Operations Research, 2016, , 15-57.	0.4	9

#	Article	IF	Citations
73	Loss Distance Functions and Profit Function: General Duality Results. Profiles in Operations Research, 2016, , 71-96.	0.4	10
74	ICT TRAINING FOR FUTURE TEACHERS. INTED Proceedings, 2016, , .	0.0	0
75	Changes in productivity in the virgin olive oil sector: An application to Protected Designations of Origin in Spain. Spanish Journal of Agricultural Research, 2016, 14, e0104.	0.6	3
76	Using Genetic Algorithms for Maximizing Technical Efficiency in Data Envelopment Analysis. Procedia Computer Science, 2015, 51, 374-383.	2.0	12
77	Translation Invariance in Data Envelopment Analysis. Profiles in Operations Research, 2015, , 245-268.	0.4	10
78	Measuring and decomposing firm×³s revenue and cost efficiency: The Russell measures revisited. International Journal of Production Economics, 2015, 165, 19-28.	8.9	35
79	An enhanced BAM for unbounded or partially bounded CRS additive models. Omega, 2015, 56, 16-24.	5.9	13
80	How to properly decompose economic efficiency using technical and allocative criteria with non-homothetic DEA technologies. European Journal of Operational Research, 2015, 240, 882-891.	5.7	41
81	Â¿Son los Vinos de Pago la figura mÃ¡s eficiente entre las DOP espaÃ±olas?. , 2015, , .		1
82	Benchmarking in Data Envelopment Analysis: An Approach Based on Genetic Algorithms and Parallel Programming. Advances in Operations Research, 2014, 2014, 1-9.	0.4	10
83	Closest targets and strong monotonicity on the strongly efficient frontier in DEA. Omega, 2014, 44, 51-57.	5.9	80
84	On how to properly calculate the Euclidean distance-based measure in DEA. Optimization, 2014, 63, 421-432.	1.7	50
85	Decomposing technical inefficiency using the principle of least action. European Journal of Operational Research, 2014, 239, 776-785.	5.7	24
86	Benchmarking and Data Envelopment Analysis. An Approach based on Metaheuristics. Procedia Computer Science, 2014, 29, 390-399.	2.0	10
87	Benchmarking in Healthcare: An Approach Based on Closest Targets. Profiles in Operations Research, 2014, , 67-91.	0.4	4
88	Modeling CRS bounded additive DEA models and characterizing their Pareto-efficient points. Journal of Productivity Analysis, 2013, 40, 285-292.	1.6	13
89	The directional profit efficiency measure: on why profit inefficiency is either technical or allocative. Journal of Productivity Analysis, 2013, 40, 257-266.	1.6	82
90	A well-defined efficiency measure for dealing with closest targets in DEA. Applied Mathematics and Computation, 2013, 219, 9142-9154.	2.2	57

#	Article	IF	Citations
91	Accounting for slacks to measure and decompose revenue efficiency in the Spanish Designation of Origin wines with DEA. European Journal of Operational Research, 2013, 231, 443-451.	5.7	51
92	On the inconsistency of the Malmquistâ€“Luenberger index. European Journal of Operational Research, 2013, 229, 738-742.	5.7	72
93	An overall measure of technical inefficiency at the firm and at the industry level: The â€˜lost profit on outlayâ€™. European Journal of Operational Research, 2013, 226, 154-162.	5.7	42
94	Application of Genetic Algorithms to Determine Closest Targets in Data Envelopment Analysis. Advances in Intelligent Systems and Computing, 2013, , 111-119.	0.6	4
95	RANKING AUCTIONS: A COOPERATIVE APPROACH. International Game Theory Review, 2012, 14, 1250003.	0.5	2
96	Standardization of short-term load forecasting models. , 2012, , .		4
97	Families of linear efficiency programs based on Debreuâ€™s loss function. Journal of Productivity Analysis, 2012, 38, 109-120.	1.6	40
98	Directional Distance Functions and Rate-of-Return Regulation. Advances in Decision Sciences, 2012, 2012, 1-11.	1.2	14
99	Application of SOM neural networks to short-term load forecasting: The Spanish electricity market case study. Electric Power Systems Research, 2012, 91, 18-27.	3.6	86
100	Benefit function and individual preferences. A generalization of the zero-maximum principle. Economics and Business Letters, 2012, 1, 12.	0.7	0
101	Development of a model for short-term load forecasting with neural networks and its application to the electrical Spanish market. , 2011, , .		5
102	A SOM neural network approach to load forecasting. Meteorological and time frame influence. , 2011, , .		1
103	Assessing communications technology options for smart grid applications. , 2011, , .		50
104	A General Input Distance Function Based on Opportunity Costs. Advances in Decision Sciences, 2011, 2011, 1-11.	1.2	7
105	BAM: a bounded adjusted measure of efficiency for use with bounded additive models. Journal of Productivity Analysis, 2011, 35, 85-94.	1.6	132
106	Decomposing profit inefficiency in DEA through the weighted additive model. European Journal of Operational Research, 2011, 212, 411-416.	5.7	61
107	A note on â€œA directional slacks-based measure of technical inefficiencyâ€• Socio-Economic Planning Sciences, 2010, 44, 174-175.	5.0	12
108	The relevance of DEA benchmarking information and the Least-Distance Measure: Comment. Mathematical and Computer Modelling, 2010, 52, 397-399.	2.0	46

#	Article	IF	Citations
109	Design and Implementation of a Decision Support System for Analysing Ranking Auction Markets for Internet Search Services. , 2010, , .		1
110	Using a Self Organizing Map Neural Network for Short-Term Load Forecasting, Analysis of Different Input Data Patterns. Advances in Intelligent and Soft Computing, 2010, , 397-400.	0.2	5
111	A new pricing scheme based on DEA for iterative multi-unit combinatorial auctions. Top, 2008, 16, 319-344.	1.6	11
112	Strategic bidding in continuous electricity auctions: anÂapplication to the Spanish electricity market. Annals of Operations Research, 2008, 158, 229-241.	4.1	7
113	Depreciation games. Annals of Operations Research, 2008, 158, 205-218.	4.1	5
114	Design and implementation of a decision support system for competitive electricity markets. Decision Support Systems, 2008, 44, 765-784.	5.9	13
115	Closest targets and minimum distance to the Pareto-efficient frontier in DEA. Journal of Productivity Analysis, 2007, 28, 209-218.	1.6	215
116	Are Charter Value and Supervision Aligned? A Segmentation Analysis. SSRN Electronic Journal, 0, , .	0.4	0
117	Economic Cross-Efficiency. SSRN Electronic Journal, 0, , .	0.4	0
118	New Definitions of Economic Cross-Efficiency. SSRN Electronic Journal, 0, , .	0.4	0
119	Plausible values and their use in efficiency analyses with educational data. Applied Economics, 0, , 1-13.	2.2	0