Pedro P Balestrassi

List of Publications by Year in Descending Order

98 papers	**1,406** citations	**20** h-index	**34** g-index
105 ext. papers	**1,666** ext. citations	**4** avg, IF	**4.73** L-index

#	Paper	IF	Citations
98	Normal Boundary Intersection with factor analysis approach for multiobjective stochastic optimization of a cladding process focusing on reduction of energy consumption and rework. *Journal of Cleaner Production*, **2022**, 333, 129915	10.3	0
97	A Multi-aspect Dynamic System Model to´Assess Poverty Traps. *Studies in Applied Philosophy, Epistemology and Rational Ethics*, **2022**, 393-417	0.3	
96	Statistics and Engineering. *Studies in Applied Philosophy, Epistemology and Rational Ethics*, **2022**, 173-193	0.3	
95	Combining machine learning techniques with Kappa Kendall indexes for robust hard-cluster assessment in substation pattern recognition. *Electric Power Systems Research*, **2022**, 206, 107778	3.5	0
94	Multi-objective optimization algorithm for analysis of hardened steel turning manufacturing process. *Applied Mathematical Modelling*, **2022**, 106, 822-843	4.5	0
93	Modeling the Power Sector of Wonderland: an integrated system dynamics model to assess a sustainable regional development **2021**,		1
92	Regulatory impact of photovoltaic prosumer policies in Brazil based on a financial risk analysis. *Utilities Policy*, **2021**, 70, 101214	3.3	5
91	Design of experiments using artificial neural network ensemble for photovoltaic generation forecasting. *Renewable and Sustainable Energy Reviews*, **2021**, 135, 110450	16.2	18
90	A PCA-Based Consistency and Sensitivity Approach for Assessing Linkage Methods in Voltage Sag Studies. *IEEE Access*, **2021**, 9, 84871-84885	3.5	0
89	A new multiobjective optimization with elliptical constraints approach for nonlinear models implemented in a stainless steel cladding process. *International Journal of Advanced Manufacturing Technology*, **2021**, 113, 1469-1484	3.2	3
88	Project Portfolio Selection of Solar Energy by Photovoltaic Generation Using Gini-CAPM Multi-Criteria and Considering ROI Covariations. *Energies*, **2021**, 14, 8374	3.1	
87	The monitoring of mean vectors with VCS charts for multivariate processes. *Journal of Statistical Computation and Simulation*, **2020**, 90, 1897-1920	0.9	
86	Economic planning of wind farms from a NBI-RSM-DEA multiobjective programming. *Renewable Energy*, **2020**, 158, 628-641	8.1	9
85	Short-term forecasting models for automated data backup system: segmented regression analysis. *Acta Scientiarum - Technology*, **2020**, 42, e46073	0.5	
84	Contribution for bidding of wind-photovoltaic on grid farms based on NBI-EFA-SNR method. *Sustainable Energy Technologies and Assessments*, **2020**, 40, 100754	4.7	4
83	Evaluating economic feasibility and maximization of social welfare of photovoltaic projects developed for the Brazilian northeastern coast: An attribute agreement analysis. *Renewable and Sustainable Energy Reviews*, **2020**, 123, 109786	16.2	6
82	Integrating Multivariate Statistical Analysis Into Six Sigma DMAIC Projects: A Case Study on AISI 52100 Hardened Steel Turning. *IEEE Access*, **2020**, 8, 34246-34255	3.5	7

81	Toward a robust optimal point selection: a multiple-criteria decision-making process applied to multi-objective optimization using response surface methodology. *Engineering With Computers*, **2020**, 37, 2735	4.5	3
80	. *IEEE Access*, **2020**, 8, 61267-61276	3.5	7
79	Optimal tuning of the control parameters of an inverter-based microgrid using the methodology of design of experiments. *IET Power Electronics*, **2020**, 13, 3651-3660	2.2	0
78	Modelling and design of wind-solar hybrid generation projects in long-term energy auctions: a multi-objective optimisation approach. *IET Renewable Power Generation*, **2020**, 14, 2612-2619	2.9	0
77	Wind energy investments facing uncertainties in the Brazilian electricity spot market: A real options approach. *Sustainable Energy Technologies and Assessments*, **2020**, 42, 100876	4.7	6
76	A multiobjective optimization model for machining quality in the AISI 12L14 steel turning process using fuzzy multivariate mean square error. *Precision Engineering*, **2019**, 56, 303-320	2.9	17
75	Response surface methodology for advanced manufacturing technology optimization: theoretical fundamentals, practical guidelines, and survey literature review. *International Journal of Advanced Manufacturing Technology*, **2019**, 104, 1785-1837	3.2	17
74	Stochastic Optimization of AISI 52100 Hard Turning With Six Sigma Capability Constraint. *IEEE Access*, **2019**, 7, 46288-46294	3.5	2
73	Optimization of combined time series methods to forecast the demand for coffee in Brazil: A new approach using Normal Boundary Intersection coupled with mixture designs of experiments and rotated factor scores. *International Journal of Production Economics*, **2019**, 212, 186-211	9.3	8
72	Impact of stochastic industrial variables on the cost optimization of AISI 52100 hardened-steel turning process. *International Journal of Advanced Manufacturing Technology*, **2019**, 104, 4331-4340	3.2	2
71	Prediction capability of Pareto optimal solutions: A multi-criteria optimization strategy based on model capability ratios. *Precision Engineering*, **2019**, 59, 185-210	2.9	5
70	Optimizing production in machining of hardened steels using response surface methodology. *Acta Scientiarum - Technology*, **2019**, 41, 38091	0.5	0
69	A Design of Experiments Comparative Study on Clustering Methods. *IEEE Access*, **2019**, 7, 167726-167738	3.5	4
68	A multivariate normal boundary intersection PCA-based approach to reduce dimensionality in optimization problems for LBM process. *Engineering With Computers*, **2019**, 35, 1533-1544	4.5	11
67	Investigation of TQM implementation: empirical study in Brazilian ISO 9001-registered SMEs. *Total Quality Management and Business Excellence*, **2019**, 30, 641-659	2.7	24
66	A stochastic economic viability analysis of residential wind power generation in Brazil. *Renewable and Sustainable Energy Reviews*, **2018**, 90, 412-419	16.2	20
65	Six Sigma learning evaluation model using Bloom's Taxonomy. *International Journal of Lean Six Sigma*, **2018**, 9, 156-174	4.6	4
64	Multivariate process capability analysis applied to AISI 52100 hardened steel turning. *International Journal of Advanced Manufacturing Technology*, **2018**, 95, 3513-3522	3.2	8

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63	The Influence of Accreditation on the Sustainability of Organizations with the Brazilian Accreditation Methodology. *Journal of Healthcare Engineering*, **2018**, 2018, 1393585	3.7	5
62	Multivariate robust modeling and optimization of cutting forces of the helical milling process of the aluminum alloy Al 7075. *International Journal of Advanced Manufacturing Technology*, **2018**, 95, 2691-2715	3.2	9
61	Analysis of the wind average speed in different Brazilian states using the nested GR&R measurement system. *Measurement: Journal of the International Measurement Confederation*, **2018**, 115, 217-222	4.6	16
60	Análise das Causas de Variação Atribuídas a Diferentes Instrumentos Metrológicos para Verificação das Características Geométricas de um Processo de Soldagem por Pontos. *Soldagem E Inspecao*, **2018**, 23, 485-504	0.3	3
59	A multivariate GR&R approach to variability evaluation of measuring instruments in resistance spot welding process. *Journal of Manufacturing Processes*, **2018**, 36, 465-479	5	15
58	Proposed method for contracting of wind-photovoltaic projects connected to the Brazilian electric system using multiobjective programming. *Renewable and Sustainable Energy Reviews*, **2018**, 97, 377-389	16.2	13
57	Robust weighting applied to optimization of AISI H13 hardened-steel turning process with ceramic wiper tool: A diversity-based approach. *Precision Engineering*, **2017**, 50, 235-247	2.9	13
56	Multivariate Normal Boundary Intersection based on rotated factor scores: A multiobjective optimization method for methyl orange treatment. *Journal of Cleaner Production*, **2017**, 143, 413-439	10.3	24
55	Stochastic evaluation of robust portfolios based on hierarchical clustering and worst-case scenarios. *Acta Scientiarum - Technology*, **2017**, 39, 623	0.5	
54	Multivariate mean square error for the multiobjective optimization of AISI 52100 hardened steel turning with wiper ceramic inserts tool: a comparative study. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2017**, 39, 4021-4036	2	6
53	Weighted principal component analysis combined with Taguchi's signal-to-noise ratio to the multiobjective optimization of dry end milling process: a comparative study. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2017**, 39, 1663-1681	2	12
52	Robust multiple criteria decision making applied to optimization of AISI H13 hardened steel turning with PCBN wiper tool. *International Journal of Advanced Manufacturing Technology*, **2017**, 89, 2251-2268	3.2	20
51	Pattern recognition in audible sound energy emissions of AISI 52100 hardened steel turning: a MFCC-based approach. *International Journal of Advanced Manufacturing Technology*, **2017**, 88, 1383-1392	3.2	5
50	Mixture design of experiments on portfolio optimisation of power generation. *IET Generation, Transmission and Distribution*, **2017**, 11, 322-329	2.5	1
49	Entropic Data Envelopment Analysis: A Diversification Approach for Portfolio Optimization. *Entropy*, **2017**, 19, 352	2.8	3
48	Multiobjective portfolio optimization of ARMA–GARCH time series based on experimental designs. *Computers and Operations Research*, **2016**, 66, 434-444	4.6	11
47	Comparing DEA and principal component analysis in the multiobjective optimization of P-GMAW process. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2016**, 38, 2513-2526	2	17
46	Impact of Dynamic Thermal Limits of Transmission Lines on Power System Operation. *IEEE Latin America Transactions*, **2016**, 14, 1259-1264	0.7	0

45	Experimental Design and Data collection of a finishing end milling operation of AISI 1045 steel. *Data in Brief*, **2016**, 6, 609-13	1.2	2
44	Design of experiments and focused grid search for neural network parameter optimization. *Neurocomputing*, **2016**, 186, 22-34	5.4	82
43	Robust parameter optimization based on multivariate normal boundary intersection. *Computers and Industrial Engineering*, **2016**, 93, 55-66	6.4	19
42	A normal boundary intersection with multivariate mean square error approach for dry end milling process optimization of the AISI 1045 steel. *Journal of Cleaner Production*, **2016**, 135, 1658-1672	10.3	22
41	Comparison of Neural Networks and Logistic Regression in Assessing the Occurrence of Failures in Steel Structures of Transmission Lines. *Open Electrical and Electronic Engineering Journal*, **2016**, 10, 11-26	8	3
40	Comparisons of multivariate GR&R methods using bootstrap confidence interval. *Acta Scientiarum - Technology*, **2016**, 38, 489	0.5	3
39	A mel-frequency cepstral coefficient-based approach for surface roughness diagnosis in hard turning using acoustic signals and gaussian mixture models. *Applied Acoustics*, **2016**, 113, 230-237	3.1	18
38	Optimization of AISI 1045 end milling using robust parameter design. *International Journal of Advanced Manufacturing Technology*, **2015**, 84, 1185	3.2	2
37	Entropy-Based Weighting for Multiobjective Optimization: An Application on Vertical Turning. *Mathematical Problems in Engineering*, **2015**, 2015, 1-11	1.1	16
36	Entropy-Based weighting applied to normal boundary intersection approach: the vertical turning of martensitic gray cast iron piston rings case. *Acta Scientiarum - Technology*, **2015**, 37, 361	0.5	7
35	Detecção de mudança de nível em séries temporais não lineares usando Descritores de Hjorth. *Production*, **2015**, 25, 812-825	1.3	
34	A normal boundary intersection approach to multiresponse robust optimization of the surface roughness in end milling process with combined arrays. *Precision Engineering*, **2014**, 38, 628-638	2.9	45
33	Design of experiments applied to environmental variables analysis in electricity utilities efficiency: The Brazilian case. *Energy Economics*, **2014**, 45, 111-119	8.3	14
32	A multivariate robust parameter optimization approach based on Principal Component Analysis with combined arrays. *Computers and Industrial Engineering*, **2014**, 74, 186-198	6.4	22
31	A Didactic Activity for Introducing Design and Optimization of Experiments Assisted by Revised Bloom's Taxonomy. *International Journal of Higher Education*, **2014**, 3,	0.7	1
30	An experimental approach for developing radio frequency identification (RFID) ready packaging. *Journal of Cleaner Production*, **2014**, 85, 371-381	10.3	9
29	Weighted approach for multivariate analysis of variance in measurement system analysis. *Precision Engineering*, **2014**, 38, 651-658	2.9	21
28	A multivariate surface roughness modeling and optimization under conditions of uncertainty. *Measurement: Journal of the International Measurement Confederation*, **2013**, 46, 2555-2568	4.6	12

27	Weighted Multivariate Mean Square Error for processes optimization: A case study on flux-cored arc welding for stainless steel claddings. *European Journal of Operational Research*, **2013**, 226, 522-535	5.6	27
26	A new multivariate gage R&R method for correlated characteristics. *International Journal of Production Economics*, **2013**, 144, 301-315	9.3	37
25	A multivariate robust parameter design approach for optimization of AISI 52100 hardened steel turning with wiper mixed ceramic tool. *International Journal of Refractory Metals and Hard Materials* , **2012**, 30, 152-163	4.1	37
24	Optimization of Radial Basis Function neural network employed for prediction of surface roughness in hard turning process using Taguchi's orthogonal arrays. *Expert Systems With Applications*, **2012**, 39, 7776-7787	7.8	71
23	Mathematical Modeling of Weld Bead Geometry, Quality, and Productivity for Stainless Steel Claddings Deposited by FCAW. *Journal of Materials Engineering and Performance*, **2012**, 21, 1862-1872	1.6	13
22	Development of a special geometry carbide tool for the optimization of vertical turning of martensitic gray cast iron piston rings. *International Journal of Advanced Manufacturing Technology*, **2012**, 63, 523-534	3.2	2
21	Aircraft interior failure pattern recognition utilizing text mining and neural networks. *Journal of Intelligent Information Systems*, **2012**, 38, 741-766	2.1	8
20	Global Criterion Method Based on Principal Components to the Optimization of Manufacturing Processes with Multiple Responses. *Strojniski Vestnik/Journal of Mechanical Engineering*, **2012**, 58, 345-353	1.3	17
19	FCAW process optimization using the multivariate mean square error. *Welding International*, **2012**, 26, 79-86	0.1	2
18	Otimização do desempenho de amplificadores de radiofrequência banda larga: uma abordagem experimental. *Production*, **2011**, 21, 118-131	1.3	2
17	A multivariate descriptor method for change-point detection in nonlinear time series. *Journal of Applied Statistics*, **2011**, 38, 327-342	1	7
16	Crack avoidance in steel piston rings through the optimization of process and gas nitriding parameters. *International Journal of Advanced Manufacturing Technology*, **2011**, 56, 397-409	3.2	3
15	Portfolio optimization using Mixture Design of Experiments: Scheduling trades within electricity markets. *Energy Economics*, **2011**, 33, 24-32	8.3	14
14	Otimização de múltiplos objetivos na soldagem de revestimento de chapas de aço carbono ABNT 1020 utilizando arame tubular inoxidável austenítico. *Soldagem E Inspecao*, **2011**, 16, 232-342	0.3	1
13	A DOE based approach for the design of RBF artificial neural networks applied to prediction of surface roughness in AISI 52100 hardened steel turning. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, **2010**, 32, 503-510	2	6
12	Otimização do processo de soldagem FCAW usando o erro quadrático médio multivariado. *Soldagem E Inspecao*, **2010**, 15, 31-40	0.3	4
11	A Model to Long-Term, Multiarea, Multistage, and Integrated Expansion Planning of Electricity and Natural Gas Systems. *IEEE Transactions on Power Systems*, **2010**, 25, 1154-1168	7	156
10	Artificial neural networks for machining processes surface roughness modeling. *International Journal of Advanced Manufacturing Technology*, **2010**, 49, 879-902	3.2	51

9	Multi-objective optimization of pulsed gas metal arc welding process based on weighted principal component scores. *International Journal of Advanced Manufacturing Technology*, **2010**, 50, 113-125	3.2	20
8	Electricity demand and spot price forecasting using evolutionary computation combined with chaotic nonlinear dynamic model. *International Journal of Electrical Power and Energy Systems*, **2010**, 32, 108-116	5.1	39
7	Design of experiments on neural network's training for nonlinear time series forecasting. *Neurocomputing*, **2009**, 72, 1160-1178	5.4	94
6	A multivariate mean square error optimization of AISI 52100 hardened steel turning. *International Journal of Advanced Manufacturing Technology*, **2009**, 43, 631-643	3.2	40
5	Magneto-rheological fluids redispersibility a factorial design study of phosphate shell on carbonyl iron powder with dispersing additives. *Journal of Physics: Conference Series*, **2009**, 149, 012036	0.3	1
4	A multivariate hybrid approach applied to AISI 52100 hardened steel turning optimization. *Journal of Materials Processing Technology*, **2007**, 189, 26-35	5.3	74
3	Simulating Electricity Spot Prices in Brazil Using Neural Network and Design of Experiments **2007**,		10
2	A decision support tool for operational planning: a Digital Twin using simulation and forecasting methods. *Production*,30,	1.3	7
1	A multiobjective optimization of the welding process in aluminum alloy (AA) 6063 T4 tubes used in corona rings through normal boundary intersection and multivariate techniques. *International Journal of Advanced Manufacturing Technology*,1	3.2	