Enrique Del Castillo

List of Publications by Citations

121 papers	2,381 citations	26 h-index	44 g-index
132 ext. papers	2,675 ext. citations	2.7 avg, IF	5.22 L-index

#	Paper	IF	Citations
121	Modified Desirability Functions for Multiple Response Optimization. *Journal of Quality Technology*, **1996**, 28, 337-345	1.4	235
120	A Nonlinear Programming Solution to the Dual Response Problem. *Journal of Quality Technology*, **1993**, 25, 199-204	1.4	222
119	Run-to-Run Process Control: Literature Review and Extensions. *Journal of Quality Technology*, **1997**, 29, 184-196	1.4	171
118	Process Optimization. *Profiles in Operations Research*, **2007**,	1	95
117	Long run and transient analysis of a double EWMA feedback controller. *IIE Transactions*, **1999**, 31, 1157-1169		67
116	A multivariate double EWMA process adjustment scheme for drifting processes. *IIE Transactions*, **2002**, 34, 1055-1068		64
115	An adaptive run-to-run optimizing controller for linear and nonlinear semiconductor processes. *IEEE Transactions on Semiconductor Manufacturing*, **1998**, 11, 285-295	2.6	63
114	A Bayesian Approach for Multiple Response Surface Optimization in the Presence of Noise Variables. *Journal of Applied Statistics*, **2004**, 31, 251-270	1	63
113	Economic Modeling for Statistical Process Control. *Journal of Quality Technology*, **1997**, 29, 144-147	1.4	62
112	A Bayesian Reliability Approach to Multiple Response Optimization with Seemingly Unrelated Regression Models. *Quality Technology and Quantitative Management*, **2009**, 6, 353-369	1.9	42
111	Some Properties of EWMA Feedback Quality Adjustment Schemes for Drifting Disturbances. *Journal of Quality Technology*, **2001**, 33, 153-166	1.4	42
110	A general model for the optimal economic design of X□charts used to control short or long run processes. *IIE Transactions*, **1996**, 28, 193-201		42
109	Two Approaches for Improving the Dual Response Method in Robust Parameter Design. *Journal of Quality Technology*, **2004**, 36, 154-168	1.4	41
108	Multiresponse Process Optimization via Constrained Confidence Regions. *Journal of Quality Technology*, **1996**, 28, 61-70	1.4	40
107	Short-run statistical process control: Q-chart enhancements and alternative methods. *Quality and Reliability Engineering International*, **1994**, 10, 87-97	2.6	40
106	Model-Robust Process Optimization Using Bayesian Model Averaging. *Technometrics*, **2005**, 47, 152-163	1.4	36
105	A review of statistical process control techniques for short run manufacturing systems. *Communications in Statistics - Theory and Methods*, **1996**, 25, 2723-2737	0.5	35

104	The Computation of Global Optima in Dual Response Systems. *Journal of Quality Technology*, **1997**, 29, 347-353	1.4	34
103	Geodesic Gaussian Processes for the Parametric Reconstruction of a Free-Form Surface. *Technometrics*, **2015**, 57, 87-99	1.4	33
102	The Geometry of Nutrient Space-Based Life-History Trade-Offs: Sex-Specific Effects of Macronutrient Intake on the Trade-Off between Encapsulation Ability and Reproductive Effort in Decorated Crickets. *American Naturalist*, **2018**, 191, 452-474	3.7	32
101	Optimal Short Horizon Distribution Operations in Reusable Container Systems. *Journal of the Operational Research Society*, **1996**, 47, 48-60	2	30
100	Statistical testing of optimality conditions in multiresponse simulation-based optimization. *European Journal of Operational Research*, **2009**, 199, 448-458	5.6	29
99	A Unifying View of Some Process Adjustment Methods. *Journal of Quality Technology*, **2003**, 35, 286-293	1.4	29
98	A Multivariate Self-Tuning Controller for Run-To-Run Process Control under Shift and Trend Disturbances. *IIE Transactions*, **1996**, 28, 1011-1021		28
97	Optimization of dual response systems: A comprehensive procedure for degenerate and nondegenerate problems. *European Journal of Operational Research*, **1999**, 112, 174-186	5.6	27
96	Statistical Shape Analysis of Experiments for Manufacturing Processes. *Technometrics*, **2011**, 53, 1-15	1.4	26
95	A general approach to confidence regions for optimal factor levels of response surfaces. *Biometrics*, **2002**, 58, 422-31	1.8	26
94	Query-by-committee improvement with diversity and density in batch active learning. *Information Sciences*, **2018**, 454-455, 401-418	7.7	25
93	Evaluation of Run Length Distribution for X Charts with Unknown Variance. *Journal of Quality Technology*, **1996**, 28, 116-122	1.4	25
92	Run length distributions and economic design of(bar X) charts with unknown process variance. *Metrika*, **1996**, 43, 189-201	0.8	25
91	AN ANALYSIS AND MIMO EXTENSION OF A DOUBLE EWMA RUN-TO-RUN CONTROLLER FOR NON-SQUARED SYSTEMS. *International Journal of Reliability, Quality and Safety Engineering*, **2003**, 10, 417-428	0.6	24
90	Optimal Monitoring of Multivariate Data for Fault Patterns. *Journal of Quality Technology*, **2007**, 39, 159-172	1.4	23
89	A Dual-Response Approach to the Multivariate Robust Parameter Design Problem. *Technometrics*, **2004**, 46, 176-187	1.4	23
88	Model and Distribution-Robust Process Optimization with Noise Factors. *Journal of Quality Technology*, **2005**, 37, 210-222	1.4	21
87	A Tool for Computing Confidence Regions on the Stationary Point of a Response Surface. *American Statistician*, **2001**, 55, 358-365	5	21

86	Statistical process adjustment: a brief retrospective, current status, and some opportunities for further work. *Statistica Neerlandica*, **2006**, 60, 309-326	0.9	19
85	Bayesian Modeling and Optimization of Functional Responses Affected by Noise Factors. *Journal of Quality Technology*, **2012**, 44, 117-135	1.4	17
84	Integration of Sequential Process Adjustment and Process Monitoring Techniques. *Quality and Reliability Engineering International*, **2003**, 19, 371-386	2.6	17
83	Multiple-criteria optimal design of X□control charts. *IIE Transactions*, **1996**, 28, 467-474		17
82	Setup adjustment under unknown process parameters and fixed adjustment cost. *Journal of Statistical Planning and Inference*, **2006**, 136, 1039-1060	0.8	16
81	Bayesian approaches for on-line robust parameter design. *IIE Transactions*, **2009**, 41, 359-371		15
80	A multivariate double EWMA process adjustment scheme for drifting processes. *IIE Transactions*, **2002**, 34, 1055-1068		15
79	A heuristic algorithm for minimax sensor location in the plane. *European Journal of Operational Research*, **2007**, 183, 42-55	5.6	14
78	Intervention Effectiveness Research: Understanding and Optimizing Industrial Safety Programs Using Leading Indicators. *Chemical Health & Safety American Chemical Society, Division of Chemical Health and Safety*, **2004**, 11, 9-19		13
77	Identification and fine tuning of closed-loop processes under discrete EWMA and PI adjustments. *Quality and Reliability Engineering International*, **2001**, 17, 419-427	2.6	13
76	Adaptation of the stochastic formulation of the surface rejuvenation model to turbulent convection heat transfer. *Chemical Engineering Science*, **1974**, 29, 1639-1644	4.4	13
75	A research model--forecasting incident rates from optimized safety program intervention strategies. *Journal of Safety Research*, **2005**, 36, 341-51	4	12
74	Statistical metamodeling of dynamic network loading. *Transportation Research Procedia*, **2017**, 23, 263-282	2.4	11
73	Gaussian Process Modeling and Optimization of Profile Response Experiments. *Quality and Reliability Engineering International*, **2014**, 30, 449-462	2.6	11
72	Model-Robust Two-Level Designs Using Coordinate Exchange Algorithms and a Maximin Criterion. *Technometrics*, **2012**, 54, 367-375	1.4	11
71	Exchange Algorithms for Constructing Model-Robust Experimental Designs. *Journal of Quality Technology*, **2011**, 43, 28-42	1.4	11
70	Robust parameter design optimization of simulation experiments using stochastic perturbation methods. *Journal of the Operational Research Society*, **2011**, 62, 198-205	2	11
69	A note on two process adjustment models. *Quality and Reliability Engineering International*, **1998**, 14, 23-28	2.6	11

68	Monitoring of thread quality when tapping nodular cast iron with TiN-coated HSS cutting taps. *International Journal of Advanced Manufacturing Technology*, **2013**, 69, 1273-1282	3.2	10
67	Announcement from the Editor. *Journal of Quality Technology*, **2009**, 41, 1-1	1.4	10
66	A Bayesian approach for multiple criteria decision making with applications in Design for Six Sigma. *Journal of the Operational Research Society*, **2007**, 58, 779-790	2	9
65	Setup Error Adjustment: Sensitivity Analysis and a New MCMC Control Rule. *Quality and Reliability Engineering International*, **2006**, 22, 403-418	2.6	9
64	A kalman filtering process control scheme with an application in semiconductor short run manufacturing. *Quality and Reliability Engineering International*, **1995**, 11, 101-105	2.6	9
63	Model Context Selection for Run-to-Run Control. *IEEE Transactions on Semiconductor Manufacturing* , **2007**, 20, 506-516	2.6	8
62	Setup adjustment for discrete-part manufacturing processes with asymmetric cost functions. *International Journal of Production Research*, **2005**, 43, 3837-3854	7.8	8
61	RUN LENGTH COMPARISONS OF SHEWHART CHARTS AND MOST POWERFUL TEST CHARTS FOR THE DETECTION OF TRENDS AND SHIFTS. *Communications in Statistics Part B: Simulation and Computation*, **2001**, 30, 355-376	0.6	8
60	Calculation of an optimal region of operation for dual response systems fitted from experimental data. *Journal of the Operational Research Society*, **1999**, 50, 826-836	2	8
59	Fuzzy numbers from raw discrete data using linear regression. *Information Sciences*, **2013**, 233, 1-14	7.7	7
58	Optimal multivariate bounded adjustment. *IIE Transactions*, **2010**, 42, 746-752		7
57	A New Design Criterion for Robust Parameter Experiments. *Journal of Quality Technology*, **2007**, 39, 279-295	1.4	7
56	Small Sample Performance of Some Statistical Setup Adjustment Methods. *Communications in Statistics Part B: Simulation and Computation*, **2003**, 32, 923-941	0.6	7
55	A Sequential Markov Chain Monte Carlo Approach to Set-up Adjustment of a Process over a Set of Lots. *Journal of Applied Statistics*, **2004**, 31, 499-520	1	7
54	Closed-Loop Disturbance Identification and Controller Tuning for Discrete Manufacturing Processes. *Technometrics*, **2002**, 44, 134-141	1.4	7
53			7
52	An adaptive two-stage Bayesian model averaging approach to planning and analyzing accelerated life tests under model uncertainty. *Journal of Quality Technology*, **2019**, 51, 181-197	1.4	6
51	Robustness of three-level response surface designs against missing data. *IIE Transactions*, **2013**, 45, 544-553		6

50	Optimal setup of a multihead weighing machine. *European Journal of Operational Research*, **2017**, 259, 384-393	5.6	6
49	Computation of Confidence Regions for Optimal Factor Levels in Constrained Response Surface Problems. *Journal of Computational and Graphical Statistics*, **2004**, 13, 499-518	1.4	6
48	Relations between control chart design variables and production control. *International Journal of Production Research*, **1995**, 33, 2709-2721	7.8	6
47	Statistical metamodeling of dynamic network loading. *Transportation Research Part B: Methodological*, **2018**, 117, 740-756	7.2	5
46	Model-robust designs for split-plot experiments. *Computational Statistics and Data Analysis*, **2012**, 56, 4111-4121	1.6	5
45	A matrix-T approach to the sequential design of optimization experiments. *IIE Transactions*, **2010**, 43, 54-68		5
44	Improved design of a three roll tube bending process under geometrical uncertainties **2011**,		5
43	Closed-Loop System Identification for Small Samples With Constraints. *Technometrics*, **2007**, 49, 382-394	1.4	5
42	Scheduling methods for the statistical setup adjustment problem. *International Journal of Production Research*, **2003**, 41, 1467-1481	7.8	5
41	An Enhanced Recursive Stopping Rule for Steepest Ascent Searches in Response Surface Methodology. *Communications in Statistics Part B: Simulation and Computation*, **2004**, 33, 201-228	0.6	5
40	On the monitoring of trended and regularly adjusted processes. *International Journal of Production Research*, **2001**, 39, 3641-3650	7.8	5
39	Statistical Shape Analysis of Manufacturing Data **2011**, 215-234		5
38	Process control via random forest classification of profile signals: An application to a tapping process. *Journal of Manufacturing Processes*, **2020**, 58, 736-748	5	5
37	An Intrinsic Geometrical Approach for Statistical Process Control of Surface and Manifold Data. *Technometrics*, **2021**, 63, 295-312	1.4	5
36	A Bayesian Approach to Sequential Optimization based on Computer Experiments. *Quality and Reliability Engineering International*, **2015**, 31, 1001-1012	2.6	4
35	Setup Adjustment of Multiple Lots Using a Sequential Monte Carlo Method. *Technometrics*, **2006**, 48, 373-385	1.4	4
34	A Bayesian method for robust tolerance control and parameter design. *IIE Transactions*, **2006**, 38, 685-697		4
33	Artificial intelligence and statistics for quality technology: an introduction to the special issue. *Journal of Quality Technology*, **2021**, 53, 443-453	1.4	4

32	On active learning methods for manifold data. *Test*, **2020**, 29, 1-33	1.1	4
31	Four-parameter beta distribution estimation and skewness test. *Quality and Reliability Engineering International*, **2002**, 18, 395-402	2.6	3
30	On the frequency and location of set point adjustments in sequential tolerance control. *International Journal of Production Research*, **2001**, 39, 2659-2674	7.8	3
29	A variance-constrained proportional-integral feedback controller that tunes itself. *IIE Transactions*, **2000**, 32, 479-491		3
28	Short-run statistical process control: Q-Chart enhancements and alternative methods. *Quality and Reliability Engineering International*, **1996**, 12, 157-157	2.6	3
27	Industrial statistics and manifold data. *Quality Engineering*, **2020**, 32, 155-167	1.4	3
26	Bayesian predictive optimization of multiple and profile response systems in the process industry: A review and extensions. *Chemometrics and Intelligent Laboratory Systems*, **2020**, 206, 104121	3.8	2
25	Multivariate bounded process adjustment schemes. *Quality Technology and Quantitative Management*, **2018**, 15, 253-273	1.9	2
24	Setup Adjustment for Asymmetric Cost Functions Under Unknown Process Parameters. *Quality Technology and Quantitative Management*, **2014**, 11, 471-489	1.9	2
23	An overview of George Box's contributions to process monitoring and feedback adjustment. *Applied Stochastic Models in Business and Industry*, **2014**, 30, 53-61	1.1	2
22	Announcements from the Editor. *Journal of Quality Technology*, **2007**, 39, 1-2	1.4	2
21	Adaptive deadband control of a drifting process with unknown parameters. *Statistics and Probability Letters*, **2007**, 77, 843-852	0.6	2
20	A unified framework for probabilistic sequential tolerance control. *International Journal of Production Research*, **2004**, 42, 1443-1453	7.8	2
19	Confidence regions for the location of response surface optima: the R package OptimaRegion. *Communications in Statistics Part B: Simulation and Computation*, **2020**, 1-21	0.6	2
18	On the Multihead Weigher Machine Setup Problem. *Packaging Technology and Science*, **2016**, 29, 175-188	2.3	2
17	Statistical performance of tests for factor effects on the shape of objects with application in manufacturing. *IIE Transactions*, **2013**, 45, 121-131		1
16	D-optimal design of artifacts used in-machine software error compensation. *International Journal of Production Research*, **2009**, 47, 1895-1912	7.8	1
15	Scheduling methods for the statistical setup adjustment problem: a correction and clarification. *International Journal of Production Research*, **2004**, 42, 211-212	7.8	1

14	An adaptive sphere-fitting method for sequential tolerance control. *International Journal of Production Research*, **2002**, 40, 2757-2767	7.8	1
13	A variance-constrained proportional□integral feedback controller that tunes itself. *IIE Transactions*, **2000**, 32, 479-491		1
12	Long run and transient analysis of a double EWMA feedback controller. *IIE Transactions*, **1999**, 31, 1157-1169		1
11	Run length analysis of Shewhart charts applied to drifting processes under an integrative SPC/EPC model. *Metrika*, **1999**, 50, 0137-0161	0.8	1
10	An application of network scheduling optimization in a pharmaceutical firm. *Computers in Industry*, **1992**, 18, 279-287	11.6	1
9	Statistical Process Monitoring for Manifold Data1-8		1
8	Multivariate stabilizing sexual selection and the evolution of male and female genital morphology in the red flour beetle. *Evolution; International Journal of Organic Evolution*, **2020**, 74, 883-896	3.8	1
7	Exponential random graph modeling of a faculty hiring network: The IEOR case. *IISE Transactions*, **2020**, 52, 43-60	3.3	0
6	Optimal constrained adjustments for quality control. *International Journal of Production Research*, **1997**, 35, 2445-2458	7.8	
5	Response by the authors to Dr. Quesenberry's comments. *Quality and Reliability Engineering International*, **1996**, 12, 163-164	2.6	
4	A registration-free approach for statistical process control of 3D scanned objects via FEM. *Precision Engineering*, **2021**, 74, 247-247	2.9	
3	A SEARCH METHOD FOR THE EXPLORATION OF NEW REGIONS IN ROBUST PARAMETER DESIGN **2006**, 89-121		
2	Rejoinder on: □On active learning methods for manifold data□*Test*, **2020**, 29, 42-49	1.1	
1	Computing confidence intervals from massive data via penalized quantile smoothing splines. *Computational Statistics and Data Analysis*, **2020**, 144, 106885	1.6	