

# Luc Pronzato

## List of Publications by Year in descending order

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Version: 2024-02-01

90  
papers

2,251  
citations

361413

20  
h-index

233421

45  
g-index

91  
all docs

91  
docs citations

91  
times ranked

1435  
citing authors

#	ARTICLE	IF	CITATIONS
1	Qualitative and quantitative experiment design for phenomenological models – A survey. <i>Automatica</i> , 1990, 26, 195-213.	5.0	275
2	Design of computer experiments: space filling and beyond. <i>Statistics and Computing</i> , 2012, 22, 681-701.	1.5	256
3	Optimal experimental design and some related control problems. <i>Automatica</i> , 2008, 44, 303-325.	5.0	187
4	A class of Rényi information estimators for multidimensional densities. <i>Annals of Statistics</i> , 2008, 36, .	2.6	173
5	Robust experiment design via stochastic approximation. <i>Mathematical Biosciences</i> , 1985, 75, 103-120.	1.9	141
6	On the identifiability and distinguishability of nonlinear parametric models. <i>Mathematics and Computers in Simulation</i> , 1996, 42, 125-134.	4.4	117
7	A general-purpose global optimizer: Implimentation and applications. <i>Mathematics and Computers in Simulation</i> , 1984, 26, 412-422.	4.4	114
8	Robust experiment design via maximin optimization. <i>Mathematical Biosciences</i> , 1988, 89, 161-176.	1.9	100
9	Improvements on removing nonoptimal support points in -optimum design algorithms. <i>Statistics and Probability Letters</i> , 2007, 77, 90-94.	0.7	48
10	Experiment design in a bounded-error context: Comparison with D-optimality. <i>Automatica</i> , 1989, 25, 383-391.	5.0	39
11	Minimal volume ellipsoids. <i>International Journal of Adaptive Control and Signal Processing</i> , 1994, 8, 15-30.	4.1	37
12	Minimum-entropy estimation in semi-parametric models. <i>Signal Processing</i> , 2005, 85, 937-949.	3.7	35
13	Identifiability and distinguishability concepts in electrochemistry. <i>Automatica</i> , 1996, 32, 973-984.	5.0	33
14	Minimum-volume ellipsoids containing compact sets. <i>Automatica</i> , 1994, 30, 1731-1739.	5.0	27
15	Nonlinear experimental design based on the distribution of estimators. <i>Journal of Statistical Planning and Inference</i> , 1992, 33, 385-402.	0.6	26
16	Penalized optimal designs for dose-finding. <i>Journal of Statistical Planning and Inference</i> , 2010, 140, 283-296.	0.6	25
17	An actively adaptive control policy for linear models. <i>IEEE Transactions on Automatic Control</i> , 1996, 41, 855-858.	5.7	24
18	A distribution-free criterion for robust identification, with applications in system modelling and image processing. <i>Automatica</i> , 1986, 22, 105-109.	5.0	22

#	ARTICLE	IF	CITATIONS
19	Adaptive optimization and $D$ -optimum experimental design. <i>Annals of Statistics</i> , 2000, 28, 1743.	2.6	22
20	Removing non-optimal support points in $D$ -optimum design algorithms. <i>Statistics and Probability Letters</i> , 2003, 63, 223-228.	0.7	22
21	One-step ahead adaptive $D$ -optimal design on a finite design space is asymptotically optimal. <i>Metrika</i> , 2010, 71, 219-238.	0.8	21
22	Information matrices with random regressors. Application to experimental design. <i>Journal of Statistical Planning and Inference</i> , 2002, 108, 189-200.	0.6	19
23	Bayesian Quadrature, Energy Minimization, and Space-Filling Design. <i>SIAM-ASA Journal on Uncertainty Quantification</i> , 2020, 8, 959-1011.	2.0	19
24	Dual Control of Linearly Parameterised Models via Prediction of Posterior Densities. <i>European Journal of Control</i> , 1996, 2, 135-143.	2.6	17
25	Robust Identification and Control Based on Ellipsoidal Parametric Uncertainty Descriptions. <i>European Journal of Control</i> , 2000, 6, 245-255.	2.6	17
26	Experimental design for estimating the optimum point in a response surface. <i>Acta Applicandae Mathematicae</i> , 1993, 33, 45-68.	1.0	15
27	A delimitation of the support of optimal designs for Kiefer's class of criteria. <i>Statistics and Probability Letters</i> , 2013, 83, 2721-2728.	0.7	14
28	Spectral Approximation of the IMSE Criterion for Optimal Designs in Kernel-Based Interpolation Models. <i>SIAM-ASA Journal on Uncertainty Quantification</i> , 2014, 2, 805-825.	2.0	14
29	Nonlinear prediction by kriging, with application to noise cancellation. <i>Signal Processing</i> , 2000, 80, 553-566.	3.7	13
30	A minimum-entropy estimator for regression problems with unknown distribution of observation errors. <i>AIP Conference Proceedings</i> , 2001, , .	0.4	13
31	Algorithmic construction of optimal designs on compact sets for concave and differentiable criteria. <i>Journal of Statistical Planning and Inference</i> , 2014, 154, 141-155.	0.6	13
32	Modeling Transient Tracing in Plug-Flow Reactors: A Case Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 1995, 34, 483-487.	3.7	12
33	Eliminating Suboptimal Local Minimizers in Nonlinear Parameter Estimation. <i>Technometrics</i> , 2001, 43, 434-442.	1.9	12
34	A Minimum-Entropy Procedure for Robust Motion Estimation. , 2006, , .		12
35	Asymptotic properties of nonlinear estimates in stochastic models with finite design space. <i>Statistics and Probability Letters</i> , 2009, 79, 2307-2313.	0.7	12
36	Sensitivity analysis via Karhunen-Loève expansion of a random field model: Estimation of Sobol' indices and experimental design. <i>Reliability Engineering and System Safety</i> , 2019, 187, 93-109.	8.9	12

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37	Experiment design for bounded-error models. <i>Mathematics and Computers in Simulation</i> , 1990, 32, 571-584.	4.4	11
38	Convex relaxation for IMSE optimal design in random-field models. <i>Computational Statistics and Data Analysis</i> , 2017, 113, 375-394.	1.2	11
39	Optimal experimental design and therapeutic drug monitoring. <i>International Journal of Bio-medical Computing</i> , 1994, 36, 95-101.	0.5	10
40	Entropy minimization for parameter estimation problems with unknown distribution of the output noise. , 0, , .		10
41	Optimal and asymptotically optimal decision rules for sequential screening and resource allocation. <i>IEEE Transactions on Automatic Control</i> , 2001, 46, 687-697.	5.7	10
42	Asymptotic behaviour of a family of gradient algorithms in $\hat{a}, d$ and Hilbert spaces. <i>Mathematical Programming</i> , 2006, 107, 409-438.	2.4	10
43	On the sequential construction of optimum bounded designs. <i>Journal of Statistical Planning and Inference</i> , 2006, 136, 2783-2804.	0.6	9
44	Gradient algorithms for quadratic optimization with $\hat{A}$ fast convergence rates. <i>Computational Optimization and Applications</i> , 2011, 50, 597-617.	1.6	9
45	An asymptotically optimal gradient algorithm for quadratic optimization with low computational cost. <i>Optimization Letters</i> , 2013, 7, 1047-1059.	1.6	9
46	Simplicial variances, potentials and Mahalanobis distances. <i>Journal of Multivariate Analysis</i> , 2018, 168, 276-289.	1.0	9
47	Comments about the coincident bit counting (CBC) criterion for image registration. <i>IEEE Transactions on Medical Imaging</i> , 1994, 13, 565-566.	8.9	8
48	A Dirac-function method for densities of nonlinear statistics and for marginal densities in nonlinear regression. <i>Statistics and Probability Letters</i> , 1996, 26, 159-167.	0.7	8
49	A generalized golden-section algorithm for line search. <i>IMA Journal of Mathematical Control and Information</i> , 1998, 15, 185-214.	1.7	8
50	Renormalised Steepest Descent in Hilbert Space Converges to a Two-Point Attractor. <i>Acta Applicandae Mathematicae</i> , 2001, 67, 1-18.	1.0	8
51	A minimax equivalence theorem for optimum bounded design measures. <i>Statistics and Probability Letters</i> , 2004, 68, 325-331.	0.7	8
52	Efficient prediction designs for random fields. <i>Applied Stochastic Models in Business and Industry</i> , 2015, 31, 178-194.	1.5	8
53	Bayesian Local Kriging. <i>Technometrics</i> , 2017, 59, 293-304.	1.9	8
54	Sequential Design and Active Control. <i>Lecture Notes-monograph Series / Institute of Mathematical Statistics</i> , 1998, , 138-151.	1.0	8

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55	On a property of the expected value of a determinant. <i>Statistics and Probability Letters</i> , 1998, 39, 161-165.	0.7	7
56	On the irregular behavior of LS estimators for asymptotically singular designs. <i>Statistics and Probability Letters</i> , 2006, 76, 1089-1096.	0.7	7
57	On the regularization of singular c-optimal designs. <i>Mathematica Slovaca</i> , 2009, 59, 611-626.	0.6	7
58	Information-regret compromise in covariate-adaptive treatment allocation. <i>Annals of Statistics</i> , 2017, 45, .	2.6	7
59	A Dynamical-System Analysis of the Optimum s-Gradient Algorithm. <i>Springer Optimization and Its Applications</i> , 2009, , 39-80.	0.9	7
60	Design of experiments for response diversity. <i>Journal of Physics: Conference Series</i> , 2008, 135, 012017.	0.4	6
61	An Introduction to Dynamical Search. <i>Nonconvex Optimization and Its Applications</i> , 2002, , 115-150.	0.1	5
62	Sequential experimental design and response optimisation. <i>Statistical Methods and Applications</i> , 2002, 11, 277-292.	1.2	5
63	Extended generalised variances, with applications. <i>Bernoulli</i> , 2017, 23, .	1.3	5
64	Measures Minimizing Regularized Dispersion. <i>Journal of Scientific Computing</i> , 2019, 78, 1550-1570.	2.3	5
65	Minimum-energy measures for singular kernels. <i>Journal of Computational and Applied Mathematics</i> , 2021, 382, 113089.	2.0	5
66	Sequential online subsampling for thinning experimental designs. <i>Journal of Statistical Planning and Inference</i> , 2021, 212, 169-193.	0.6	5
67	Minimum Entropy Estimation in Semi-Parametric Models: a Candidate for Adaptive Estimation?. <i>Contributions To Statistics</i> , 2004, , 125-132.	0.2	5
68	Quantile and Probability-level Criteria for Nonlinear Experimental Design. , 2007, , 157-164.		4
69	Adaptive control for sequential design. <i>Discussiones Mathematicae Probability and Statistics</i> , 2000, 20, 97.	0.1	4
70	Stochastic Analysis of Convergence via Dynamic Representation for a Class of Line-search Algorithms. <i>Combinatorics Probability and Computing</i> , 1997, 6, 205-229.	1.3	3
71	Using densities of estimators to compare pharmacokinetic experiments. <i>Computers in Biology and Medicine</i> , 2001, 31, 179-195.	7.0	3
72	Kantorovich-type inequalities for operators via D-optimal design theory. <i>Linear Algebra and Its Applications</i> , 2005, 410, 160-169.	0.9	3

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73	Beyond space-filling: An illustrative case. <i>Procedia Environmental Sciences</i> , 2011, 7, 14-19.	1.4	3
74	Extremal measures maximizing functionals based on simplicial volumes. <i>Statistical Papers</i> , 2016, 57, 1059-1075.	1.2	3
75	On the elimination of inessential points in the smallest enclosing ball problem. <i>Optimization Methods and Software</i> , 2019, 34, 225-247.	2.4	3
76	Incremental Space-Filling Design Based on Coverings and Spacings: Improving Upon Low Discrepancy Sequences. <i>Journal of Statistical Theory and Practice</i> , 2021, 15, 1.	0.5	3
77	Studying Convergence of Gradient Algorithms Via Optimal Experimental Design Theory. <i>Springer Optimization and Its Applications</i> , 2009, , 13-37.	0.9	3
78	Asymptotic Normality of Nonlinear Least Squares under Singular Experimental Designs. <i>Springer Optimization and Its Applications</i> , 2009, , 167-191.	0.9	3
79	Densities of Nonlinear Functions of the Nonlinear Least-Squares Estimator. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1994, 27, 157-162.	0.4	2
80	Bias Correction in Nonlinear Regression via Two-Stages Least-Squares Estimation. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1994, 27, 137-142.	0.4	2
81	Asymptotic Properties of Nonlinear Least Squares Estimates in Stochastic Regression Models Over a Finite Design Space. Application to Self-Tuning Optimisation. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009, 42, 156-161.	0.4	2
82	Estimation of Spectral Bounds in Gradient Algorithms. <i>Acta Applicandae Mathematicae</i> , 2013, 127, 117-136.	1.0	2
83	Bregman divergences based on optimal design criteria and simplicial measures of dispersion. <i>Statistical Papers</i> , 2019, 60, 545-564.	1.2	2
84	Simultaneous Choice of Design and Estimator in Nonlinear Regression with Parameterized Variance. <i>Contributions To Statistics</i> , 2004, , 117-124.	0.2	2
85	Asymptotic Properties of the LS Estimator. <i>Lecture Notes in Statistics</i> , 2013, , 21-77.	0.2	1
86	Criteria Based on the Small-Sample Precision of the LS Estimator. <i>Lecture Notes in Statistics</i> , 2013, , 167-186.	0.2	1
87	Local Optimality Criteria Based on Asymptotic Normality. <i>Lecture Notes in Statistics</i> , 2013, , 105-165.	0.2	0
88	Nonlocal Optimum Design. <i>Lecture Notes in Statistics</i> , 2013, , 235-275.	0.2	0
89	Removing inessential points in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1496" altimg="si9.svg"} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -and $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1501" altimg="si663.svg"} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -optimal design. <i>Journal of Statistical Planning and Inference</i> , 2021, 213, 233-252.	0.6	0
90	Asymptotic Properties of Adaptive Penalized Optimal Designs over a Finite Space. <i>Contributions To Statistics</i> , 2010, , 165-172.	0.2	0