Marie Davidian

List of Publications by Citations

108 papers	6,605 citations	39 h-index	80 g-index
118 ext. papers	7,473 ext. citations	3 avg, IF	5.96 L-index

#	Paper	IF	Citations
108	Stratification and weighting via the propensity score in estimation of causal treatment effects: a comparative study. *Statistics in Medicine*, **2004**, 23, 2937-60	2.3	888
107	Comment: Demystifying Double Robustness: A Comparison of Alternative Strategies for Estimating a Population Mean from Incomplete Data. *Statistical Science*, **2007**, 22, 569-573	2.4	585
106	Doubly robust estimation of causal effects. *American Journal of Epidemiology*, **2011**, 173, 761-7	3.8	391
105	A robust method for estimating optimal treatment regimes. *Biometrics*, **2012**, 68, 1010-8	1.8	244
104	Nonlinear models for repeated measurement data: An overview and update. *Journal of Agricultural, Biological, and Environmental Statistics*, **2003**, 8, 387-419	1.9	232
103	Differences in viral dynamics between genotypes 1 and 2 of hepatitis C virus. *Journal of Infectious Diseases*, **2000**, 182, 28-35	7	196
102	Linear mixed models with flexible distributions of random effects for longitudinal data. *Biometrics*, **2001**, 57, 795-802	1.8	185
101	Covariate adjustment for two-sample treatment comparisons in randomized clinical trials: a principled yet flexible approach. *Statistics in Medicine*, **2008**, 27, 4658-77	2.3	177
100	The nonlinear mixed effects model with a smooth random effects density. *Biometrika*, **1993**, 80, 475-4882		169
99	Improving efficiency and robustness of the doubly robust estimator for a population mean with incomplete data. *Biometrika*, **2009**, 96, 723-734	2	165
98	A semiparametric likelihood approach to joint modeling of longitudinal and time-to-event data. *Biometrics*, **2002**, 58, 742-53	1.8	151
97	The analysis of multivariate longitudinal data: a review. *Statistical Methods in Medical Research*, **2014**, 23, 42-59	2.3	149
96	Estimating Optimal Treatment Regimes from a Classification Perspective. *Stat*, **2012**, 1, 103-114	0.7	138
95	Improving efficiency of inferences in randomized clinical trials using auxiliary covariates. *Biometrics*, **2008**, 64, 707-715	1.8	132
94	HIV dynamics: Modeling, data analysis, and optimal treatment protocols. *Journal of Computational and Applied Mathematics*, **2005**, 184, 10-49	2.4	131
93	Randomized COMparison of platelet inhibition with abciximab, tiRofiban and eptifibatide during percutaneous coronary intervention in acute coronary syndromes: the COMPARE trial. Comparison Of Measurements of Platelet aggregation with Aggrastat, Reopro, and Eptifibatide. *Circulation*, **2002**, 106, 1470-6	16.7	116
92	Human immunodeficiency virus type 1-specific cytotoxic T lymphocyte activity is inversely correlated with HIV type 1 viral load in HIV type 1-infected long-term survivors. *AIDS Research and Human Retroviruses*, **1999**, 15, 1219-28	1.6	114

91	Q- and A-learning Methods for Estimating Optimal Dynamic Treatment Regimes. *Statistical Science*, **2014**, 29, 640-661	2.4	110
90	Robust estimation of optimal dynamic treatment regimes for sequential treatment decisions. *Biometrika*, **2013**, 100,	2	100
89	Marginal structural models for analyzing causal effects of time-dependent treatments: an application in perinatal epidemiology. *American Journal of Epidemiology*, **2004**, 159, 926-34	3.8	94
88	Estimating the Parameters in the Cox Model When Covariate Variables are Measured with Error. *Biometrics*, **1998**, 54, 1407	1.8	94
87	Smooth nonparametric maximum likelihood estimation for population pharmacokinetics, with application to quinidine. *Journal of Pharmacokinetics and Pharmacodynamics*, **1992**, 20, 529-56		87
86	Estimation of survival distributions of treatment policies in two-stage randomization designs in clinical trials. *Biometrics*, **2002**, 58, 48-57	1.8	86
85	An estimator for the proportional hazards model with multiple longitudinal covariates measured with error. *Biostatistics*, **2002**, 3, 511-28	3.7	82
84	A Monte Carlo EM algorithm for generalized linear mixed models with flexible random effects distribution. *Biostatistics*, **2002**, 3, 347-60	3.7	69
83	Variance functions and the minimum detectable concentration in assays. *Biometrika*, **1988**, 75, 549-556	2	68
82	Population Pharmacokinetic/Pharmacodynamic Methodology and Applications: A Bibliography. *Biometrics*, **1994**, 50, 566	1.8	58
81	Using decision lists to construct interpretable and parsimonious treatment regimes. *Biometrics*, **2015**, 71, 895-904	1.8	57
80	Survival Benefit of Lung Transplantation in the Modern Era of Lung Allocation. *Annals of the American Thoracic Society*, **2017**, 14, 172-181	4.7	56
79	A Two-Step Approach to Measurement Error in Time-Dependent Covariates in Nonlinear Mixed-Effects Models, with Application to IGF-I Pharmacokinetics. *Journal of the American Statistical Association*, **1997**, 92, 436-448	2.8	55
78	Some general estimation methods for nonlinear mixed-effects models. *Journal of Biopharmaceutical Statistics*, **1993**, 3, 23-55	1.3	55
77	Semiparametric Estimation of Treatment Effect in a Pretest-Posttest Study with Missing Data. *Statistical Science*, **2005**, 20, 261-301	2.4	53
76	A Placebo-Controlled, Prospective, Randomized Clinical Trial of Polyethylene Glycol and Methylprednisolone Sodium Succinate in Dogs with Intervertebral Disk Herniation. *Journal of Veterinary Internal Medicine*, **2016**, 30, 206-14	3.1	46
75	Regression and calibration with nonconstant error variance. *Chemometrics and Intelligent Laboratory Systems*, **1990**, 9, 231-248	3.8	46
74	Semiparametric estimation of treatment effect in a pretest-posttest study. *Biometrics*, **2003**, 59, 1046-55	1.8	45

73	Consequences of misspecifying assumptions in nonlinear mixed effects models. *Computational Statistics and Data Analysis*, **2000**, 34, 139-164	1.6	43
72	Some Simple Methods for Estimating Intraindividual Variability in Nonlinear Mixed Effects Models. *Biometrics*, **1993**, 49, 59	1.8	41
71	Gene-trait similarity regression for multimarker-based association analysis. *Biometrics*, **2009**, 65, 822-32	1.8	39
70	The Effect of Serial Dilution Error on Calibration Inference in Immunoassay. *Biometrics*, **1998**, 54, 19	1.8	39
69	Modelling HIV immune response and validation with clinical data. *Journal of Biological Dynamics*, **2008**, 2, 357-85	2.4	38
68	Estimation and prediction with HIV-treatment interruption data. *Bulletin of Mathematical Biology*, **2007**, 69, 563-84	2.1	38
67	Conditional estimation for generalized linear models when covariates are subject-specific parameters in a mixed model for longitudinal measurements. *Biometrics*, **2004**, 60, 1-7	1.8	36
66	Comment: Demystifying Double Robustness: A Comparison of Alternative Strategies for Estimating a Population Mean from Incomplete Data. *Statistical Science*, **2007**, 22,	2.4	36
65	"Smooth" semiparametric regression analysis for arbitrarily censored time-to-event data. *Biometrics*, **2008**, 64, 567-76	1.8	33
64	An Inverse Problem Statistical Methodology Summary **2009**, 249-302		33
63	Differential treatment benefit of platelet glycoprotein IIb/IIIa inhibition with percutaneous coronary intervention versus medical therapy for acute coronary syndromes: exploration of methods. *Circulation*, **2004**, 109, 641-6	16.7	30
62	Estimating data transformations in nonlinear mixed effects models. *Biometrics*, **2000**, 56, 65-72	1.8	28
61	Interpretable Dynamic Treatment Regimes. *Journal of the American Statistical Association*, **2018**, 113, 1541-1549	2.8	28
60	Denaturation and Aggregation of Chicken Myosin Isoforms. *Journal of Agricultural and Food Chemistry*, **1996**, 44, 1435-1440	5.7	27
59	Pyrimethamine pharmacokinetics in human immunodeficiency virus-positive patients seropositive for Toxoplasma gondii. *Antimicrobial Agents and Chemotherapy*, **1996**, 40, 1360-5	5.9	27
58	A note on covariate measurement error in nonlinear mixed effects models. *Biometrika*, **1996**, 83, 801-812		27
57	Improved doubly robust estimation when data are monotonely coarsened, with application to longitudinal studies with dropout. *Biometrics*, **2011**, 67, 536-45	1.8	26
56	Demographic and historical findings, including exposure to environmental tobacco smoke, in dogs with chronic cough. *Journal of Veterinary Internal Medicine*, **2010**, 24, 825-31	3.1	26

55	Low serum antibacterial activity coincides with increased prevalence of shell disease in blue crabs Callinectes sapidus. *Diseases of Aquatic Organisms*, **1994**, 19, 121-128	1.7	26
54	Bootstrap-Adjusted Calibration Confidence Intervals for Immunoassay. *Journal of the American Statistical Association*, **1997**, 92, 278-290	2.8	25
53	On Estimation of Optimal Treatment Regimes For Maximizing -Year Survival Probability. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, **2017**, 79, 1165-1185	3.9	23
52	The Effect of Variance Function Estimation on Nonlinear Calibration Inference in Immunoassay Data. *Biometrics*, **1996**, 52, 158	1.8	23
51	Latent-model robustness in structural measurement error models. *Biometrika*, **2006**, 93, 53-64	2	23
50	Assays for recombinant proteins: a problem in non-linear calibration. *Statistics in Medicine*, **1994**, 13, 1165-79	2.3	23
49	Mixed model analysis of censored longitudinal data with flexible random-effects density. *Biostatistics*, **2012**, 13, 61-73	3.7	22
48	On random sample size, ignorability, ancillarity, completeness, separability, and degeneracy: sequential trials, random sample sizes, and missing data. *Statistical Methods in Medical Research*, **2014**, 23, 11-41	2.3	20
47	Using mathematical modeling and control to develop structured treatment interruption strategies for HIV infection. *Drug and Alcohol Dependence*, **2007**, 88 Suppl 2, S41-51	4.9	18
46	Estimation of variance functions in assays with possibly unequal replication and nonnormal data. *Biometrika*, **1990**, 77, 43-54	2	17
45	Latent-model robustness in joint models for a primary endpoint and a longitudinal process. *Biometrics*, **2009**, 65, 719-27	1.8	16
44	Smoothing spline-based score tests for proportional hazards models. *Biometrics*, **2006**, 62, 803-12	1.8	16
43	Optimizing delivery of a behavioral pain intervention in cancer patients using a sequential multiple assignment randomized trial SMART. *Contemporary Clinical Trials*, **2017**, 57, 51-57	2.3	15
42	A moment-adjusted imputation method for measurement error models. *Biometrics*, **2011**, 67, 1461-70	1.8	15
41	Non-linear Models for Longitudinal Data. *American Statistician*, **2009**, 63, 378-388	5	15
40	Robust two-stage estimation in hierarchical nonlinear models. *Biometrics*, **2001**, 57, 266-72	1.8	15
39	Correcting for measurement error in individual-level covariates in nonlinear mixed effects models. *Biometrics*, **2000**, 56, 368-75	1.8	15
38	A Model for HCMV Infection in Immunosuppressed Patients. *Mathematical and Computer Modelling*, **2009**, 49, 1653-1663		14

37	Using pilot data to size a two-arm randomized trial to find a nearly optimal personalized treatment strategy. *Statistics in Medicine*, **2016**, 35, 1245-56	2.3	14
36	Inference on treatment effects from a randomized clinical trial in the presence of premature treatment discontinuation: the SYNERGY trial. *Biostatistics*, **2011**, 12, 258-69	3.7	13
35	A Two-Step Approach to Measurement Error in Time-Dependent Covariates in Nonlinear Mixed-Effects Models, with Application to IGF-I Pharmacokinetics		12
34	Optimal two-stage dynamic treatment regimes from a classification perspective with censored survival data. *Biometrics*, **2018**, 74, 1180-1192	1.8	11
33	Assessing the causal effect of organ transplantation on the distribution of residual lifetime. *Biometrics*, **2013**, 69, 820-9	1.8	9
32	Calibration Inference Based on Multiple Runs of an Immunoassay. *Biometrics*, **1997**, 53, 1304	1.8	9
31	Likelihood and Pseudo-likelihood Methods for Semiparametric Joint Models for a Primary Endpoint and Longitudinal Data. *Computational Statistics and Data Analysis*, **2007**, 51, 5776-5790	1.6	9
30	RSmoothRinference for survival functions with arbitrarily censored data. *Statistics in Medicine*, **2008**, 27, 5421-39	2.3	9
29	Therapeutic effects of diethylcarbamazine and 3Razido-3Rdeoxythymidine on feline leukemia virus lymphoma formation. *Veterinary Immunology and Immunopathology*, **1995**, 46, 181-94	2	9
28	Testing homogeneity of intra-run variance parameters in immunoassay. *Statistics in Medicine*, **1997**, 16, 1765-76	2.3	7
27	Analysis of repeated measurement data using the nonlinear mixed effects model. *Chemometrics and Intelligent Laboratory Systems*, **1993**, 20, 1-24	3.8	7
26	Variable selection for covariate-adjusted semiparametric inference in randomized clinical trials. *Statistics in Medicine*, **2012**, 31, 3789-804	2.3	6
25	Likelihood and conditional likelihood inference for generalized additive mixed models for clustered data. *Journal of Multivariate Analysis*, **2004**, 91, 90-106	1.4	6
24	Estimation After a Group Sequential Trial. *Statistics in Biosciences*, **2015**, 7, 187-205	1.5	5
23	Robust two-stage approach to repeated measurements analysis of chronic ozone exposure in rats. *Journal of Agricultural, Biological, and Environmental Statistics*, **2003**, 8, 438-454	1.9	5
22	Joint models for longitudinal data. *Chapman & Hall/CRC Interdisciplinary Statistics Series*, **2008**, 319-326		5
21	Bootstrap-Adjusted Calibration Confidence Intervals for Immunoassay		5
20	The analysis of multivariate longitudinal data: A review. *Statistical Methods in Medical Research*, **2017**, 26, 112	2.3	4

19	Moment Adjusted Imputation for Multivariate Measurement Error Data with Applications to Logistic Regression. *Computational Statistics and Data Analysis*, **2013**, 67, 15-24	1.6	3
18	The International Year of Statistics: A Celebration and A Call to Action. *Journal of the American Statistical Association*, **2013**, 108, 1141-1146	2.8	3
17	SNP_NLMM: A SAS Macro to Implement a Flexible Random Effects Density for Generalized Linear and Nonlinear Mixed Models. *Journal of Statistical Software*, **2014**, 56, 2	7.3	3
16	Dynamic treatment regimes, past, present, and future: A conversation with experts. *Statistical Methods in Medical Research*, **2017**, 26, 1605-1610	2.3	2
15	Discussion of "Combining biomarkers to optimize patient treatment recommendation". *Biometrics*, **2014**, 70, 707-10	1.8	2
14	Estimating vaccine efficacy over time after a randomized study is unblinded. *Biometrics*, **2021**,	1.8	2
13	Collaboration To Meet the Statistical Needs in the Chemistry Curriculum. *Journal of Chemical Education*, **2014**, 91, 12-12	2.4	1
12	Properties of Estimators in Exponential Family Settings with Observation-based Stopping Rules. *Journal of Biometrics & Biostatistics*, **2016**, 7,	4	1
11	Surgeons' economic profiles: can we get the "right" answers?. *Journal of Medical Systems*, **2005**, 29, 111-24	5.1	1
10	Research Methods for Clinical Trials in Personalized Medicine: A Systematic Review **2014**, 659-684		1
9	Rejoinder: Estimating vaccine efficacy over time after a randomized study is unblinded. *Biometrics*, **2021**,	1.8	1
8	Special Issue of Journal of Biopharmaceutical Statistics dedicated to 2016 Trends and Innovations in Clinical Trial Statistics (TICTS) Conference. *Journal of Biopharmaceutical Statistics*, **2017**, 27, 357	1.3	
7	Optimal Dynamic Treatment Regimes **2016**, 1-7		
6	Building the Biostatistics Pipeline: Summer Institutes for Training in Biostatistics (SIBS). *Chance*, **2013**, 26, 4-9	1	
5	Discussion of "Connections Between Survey Calibration Estimators and Semiparametric Models for Incomplete Data" by T. Lumley, P.A. Shaw & J.Y. Dai. *International Statistical Review*, **2011**, 79, 221-223	1.4	
4	Nonlinear Models for Repeated Measurement Data. *Journal of the American Statistical Association*, **1997**, 92, 789	2.8	
3	Discussion on "Statistical Issues Arising in the Women's Health Initiative". *Biometrics*, **2005**, 61, 933-935	1.8	
2	Bias Reduction in Logistic Regression with Estimated Variance Predictors. *Lecture Notes in Statistics* , **2013**, 33-51	2.9	

1 Q-Learning **2018**, 1-10