Marie Davidian

List of Publications by Year
in descending order

110 papers	8,678 citations	66343 42 h-index	45317 90 g-index
118 all docs	118 docs citations	118 times ranked	7737 citing authors

#	Article	IF	Citations
1	Stratification and weighting via the propensity score in estimation of causal treatment effects: a comparative study. Statistics in Medicine, 2004, 23, 2937-2960.	1.6	1,163
2	Demystifying Double Robustness: A Comparison of Alternative Strategies for Estimating a Population Mean from Incomplete Data. Statistical Science, 2007, 22, 569-573.	2.8	726
3	Doubly Robust Estimation of Causal Effects. American Journal of Epidemiology, 2011, 173, 761-767.	3.4	671
4	A Robust Method for Estimating Optimal Treatment Regimes. Biometrics, 2012, 68, 1010-1018.	1.4	317
5	Nonlinear models for repeated measurement data: An overview and update. Journal of Agricultural, Biological, and Environmental Statistics, 2003, 8, 387-419.	1.4	292
6	Linear Mixed Models with Flexible Distributions of Random Effects for Longitudinal Data. Biometrics, 2001, 57, 795-802.	1.4	231
7	Covariate adjustment for twoâ€sample treatment comparisons in randomized clinical trials: A principled yet flexible approach. Statistics in Medicine, 2008, 27, 4658-4677.	1.6	228
8	Nonlinear Models for Repeated Measurement Data. Journal of the American Statistical Association, 1997, 92, 789.	3.1	220
9	Improving efficiency and robustness of the doubly robust estimator for a population mean with incomplete data. Biometrika, 2009, 96, 723-734.	2.4	219
10	Differences in Viral Dynamics between Genotypes 1 and 2 of Hepatitis C Virus. Journal of Infectious Diseases, 2000, 182, 28-35.	4.0	214
11	The analysis of multivariate longitudinal data: A review. Statistical Methods in Medical Research, 2014, 23, 42-59.	1.5	199
12	The nonlinear mixed effects model with a smooth random effects density. Biometrika, 1993, 80, 475-488.	2.4	191
13	A Semiparametric Likelihood Approach to Joint Modeling of Longitudinal and Time-to-Event Data. Biometrics, 2002, 58, 742-753.	1.4	186
14	HIV dynamics: Modeling, data analysis, and optimal treatment protocols. Journal of Computational and Applied Mathematics, 2005, 184, 10-49.	2.0	177
15	Estimating optimal treatment regimes from a classification perspective. Stat, 2012, 1, 103-114.	0.4	177
16	Improving Efficiency of Inferences in Randomized Clinical Trials Using Auxiliary Covariates. Biometrics, 2008, 64, 707-715.	1.4	163
17	$mathbf{Q}$- and $mathbf{A}$-Learning Methods for Estimating Optimal Dynamic Treatment Regimes. Statistical Science, 2014, 29, 640-661.	2.8	145
18	Robust estimation of optimal dynamic treatment regimes for sequential treatment decisions. Biometrika, 2013, 100, 681-694.	2.4	138

#	Article	IF	Citations
19	Randomized COMparison of Platelet Inhibition With Abciximab, TiRofiban and Eptifibatide During Percutaneous Coronary Intervention in Acute Coronary Syndromes. Circulation, 2002, 106, 1470-1476.	1.6	128
20	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, 1219-1228.	1.1	120
21	Estimating the Parameters in the Cox Model When Covariate Variables are Measured with Error. Biometrics, 1998, 54, 1407.	1.4	116
22	Marginal Structural Models for Analyzing Causal Effects of Time-dependent Treatments: An Application in Perinatal Epidemiology. American Journal of Epidemiology, 2004, 159, 926-934.	3.4	113
23	Smooth nonparametric maximum likelihood estimation for population pharmacokinetics, with application to quinidine. Journal of Pharmacokinetics and Pharmacodynamics, 1992, 20, 529-556.	0.6	103
24	Estimation of Survival Distributions of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. Biometrics, 2002, 58, 48-57.	1.4	97
25	An estimator for the proportional hazards model with multiple longitudinal covariates measured with error. Biostatistics, 2002, 3, 511-528.	1.5	91
26	Survival Benefit of Lung Transplantation in the Modern Era of Lung Allocation. Annals of the American Thoracic Society, 2017, 14, 172-181.	3.2	91
27	A Monte Carlo EM algorithm for generalized linear mixed models with flexible random effects distribution. Biostatistics, 2002, 3, 347-360.	1.5	80
28	Variance functions and the minimum detectable concentration in assays. Biometrika, 1988, 75, 549-556.	2.4	76
29	Using Decision Lists to Construct Interpretable and Parsimonious Treatment Regimes. Biometrics, 2015, 71, 895-904.	1.4	76
30	Population Pharmacokinetic/Pharmacodynamic Methodology and Applications: A Bibliography. Biometrics, 1994, 50, 566.	1.4	75
31	Ten Simple Rules for Effective Statistical Practice. PLoS Computational Biology, 2016, 12, e1004961.	3.2	69
32	Some general estimation methods for nonlinear mixed-effects model. Journal of Biopharmaceutical Statistics, 1993, 3, 23-55.	0.8	67
33	Semiparametric Estimation of Treatment Effect in a Pretestâ€“Posttest Study with Missing Data. Statistical Science, 2005, 20, 261-301.	2.8	66
34	A Placeboâ€€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, 206-214.	1.6	59
35	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.	3.1	58
36	Regression and calibration with nonconstant error variance. Chemometrics and Intelligent Laboratory Systems, 1990, 9, 231-248.	3.5	55

#	Article	IF	Citations
37	Semiparametric Estimation of Treatment Effect in a Pretestâ€Posttest Study. Biometrics, 2003, 59, 1046-1055.	1.4	55
38	Some Simple Methods for Estimating Intraindividual Variability in Nonlinear Mixed Effects Models. Biometrics, 1993, 49, 59.	1.4	54
39	An Inverse Problem Statistical Methodology Summary. , 2009, , 249-302.		52
40	Consequences of misspecifying assumptions in nonlinear mixed effects models. Computational Statistics and Data Analysis, 2000, 34, 139-164.	1.2	48
41	Modelling HIV immune response and validation with clinical data. Journal of Biological Dynamics, 2008, 2, 357-385.	1.7	47
42	Interpretable Dynamic Treatment Regimes. Journal of the American Statistical Association, 2018, 113, 1541-1549.	3.1	46
43	The Effect of Serial Dilution Error on Calibration Inference in Immunoassay. Biometrics, 1998, 54, 19.	1.4	45
44	Geneâ€Trait Similarity Regression for Multimarkerâ€Based Association Analysis. Biometrics, 2009, 65, 822-832.	1.4	45
45	Low serum antibacterial activity coincides with increased prevalence of shell disease in blue crabs Callinectes sapidus. Diseases of Aquatic Organisms, 1994, 19, 121-128.	1.0	45
46	Comment: Demystifying Double Robustness: A Comparison of Alternative Strategies for Estimating a Population Mean from Incomplete Data. Statistical Science, 2007, 22, .	2.8	44
47	Estimation and Prediction With HIV-Treatment Interruption Data. Bulletin of Mathematical Biology, 2007, 69, 563-584.	1.9	42
48	â€œSmoothâ€•Semiparametric Regression Analysis for Arbitrarily Censored Timeâ€toâ€Event Data. Biometrics, 2008, 64, 567-576.	1.4	41
49	On Estimation of Optimal Treatment Regimes for Maximizing t-Year Survival Probability. Journal of the Royal Statistical Society Series B: Statistical Methodology, 2017, 79, 1165-1185.	2.2	40
50	Conditional Estimation for Generalized Linear Models When Covariates Are Subjectâ€Specific Parameters in a Mixed Model for Longitudinal Measurements. Biometrics, 2004, 60, 1-7.	1.4	39
51	Why Statistics?. Science, 2012, 336, 12-12.	12.6	37
52	Differential Treatment Benefit of Platelet Glycoprotein IIb/IIIa Inhibition With Percutaneous Coronary Intervention Versus Medical Therapy for Acute Coronary Syndromes. Circulation, 2004, 109, 641-646.	1.6	35
53	A note on covariate measurement error in nonlinear mixed effects models. Biometrika, 1996, 83, 801-812.	2.4	32
54	Improved Doubly Robust Estimation When Data Are Monotonely Coarsened, with Application to Longitudinal Studies with Dropout. Biometrics, 2011, 67, 536-545.	1.4	32

#	Article	IF	Citations
55	Demographic and Historical Findings, Including Exposure to Environmental Tobacco Smoke, in Dogs with Chronic Cough. Journal of Veterinary Internal Medicine, 2010, 24, 825-831.	1.6	31
56	Assays for recombinant proteins: A problem in non-linear calibration. Statistics in Medicine, 1994, 13, 1165-1179.	1.6	29
57	Denaturation and Aggregation of Chicken Myosin Isoforms. Journal of Agricultural and Food Chemistry, 1996, 44, 1435-1440.	5.2	29
58	Pyrimethamine pharmacokinetics in human immunodeficiency virus-positive patients seropositive for Toxoplasma gondii. Antimicrobial Agents and Chemotherapy, 1996, 40, 1360-1365.	3.2	29
59	Bootstrap-Adjusted Calibration Confidence Intervals for Immunoassay. Journal of the American Statistical Association, 1997, 92, 278-290.	3.1	29
60	Estimating Data Transformations in Nonlinear Mixed Effects Models. Biometrics, 2000, 56, 65-72.	1.4	29
61	The Effect of Variance Function Estimation on Nonlinear Calibration Inference in Immunoassay Data. Biometrics, 1996, 52, 158.	1.4	27
62	Latent-model robustness in structural measurement error models. Biometrika, 2006, 93, 53-64.	2.4	27
63	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.	1.8	27
64	Nonlinear Models for Longitudinal Data. American Statistician, 2009, 63, 378-388.	1.6	24
65	Mixed model analysis of censored longitudinal data with flexible random-effects density. Biostatistics, 2012, 13, 61-73.	1.5	24
66	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.	1.5	23
67	Using mathematical modeling and control to develop structured treatment interruption strategies for HIV infection. Drug and Alcohol Dependence, 2007, 88, S41-S51.	3.2	22
68	Estimation of variance functions in assays with possibly unequal replication and nonnormal data. Biometrika, 1990, 77, 43-54.	2.4	20
69	Latentâ€Model Robustness in Joint Models for a Primary Endpoint and a Longitudinal Process. Biometrics, 2009, 65, 719-727.	1.4	20
70	Smoothing Spline-Based Score Tests for Proportional Hazards Models. Biometrics, 2006, 62, 803-812.	1.4	19
71	A model for HCMV infection in immunosuppressed patients. Mathematical and Computer Modelling, 2009, 49, 1653-1663.	2.0	19
72	A Moment-Adjusted Imputation Method for Measurement Error Models. Biometrics, 2011, 67, 1461-1470.	1.4	19

#	Article	IF	Citations
73	Using pilot data to size a twoâ€arm randomized trial to find a nearly optimal personalized treatment strategy. Statistics in Medicine, 2016, 35, 1245-1256.	1.6	19
74	Optimal Two-Stage Dynamic Treatment Regimes from a Classification Perspective with Censored Survival Data. Biometrics, 2018, 74, 1180-1192.	1.4	19
75	Robust Twoâ€Stage Estimation in Hierarchical Nonlinear Models. Biometrics, 2001, 57, 266-272.	1.4	18
76	Correcting for Measurement Error in Individual-Level Covariates in Nonlinear Mixed Effects Models. Biometrics, 2000, 56, 368-375.	1.4	16
77	Assessing the Causal Effect of Organ Transplantation on the Distribution of Residual Lifetime. Biometrics, 2013, 69, 820-829.	1.4	16
78	Inference on treatment effects from a randomized clinical trial in the presence of premature treatment discontinuation: the SYNERGY trial. Biostatistics, 2011, 12, 258-269.	1.5	14
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.	3.1	12
80	â€˜Smoothâ€™ inference for survival functions with arbitrarily censored data. Statistics in Medicine, 2008, 27, 5421-5439.	1.6	11
81	Therapeutic effects of diethylcarbamazine and 3â€²-azido-3â€²-deoxythymidine on feline leukemia virus lymphoma formation. Veterinary Immunology and Immunopathology, 1995, 46, 181-194.	1.2	10
82	Analysis of repeated measurement data using the nonlinear mixed effects model. Chemometrics and Intelligent Laboratory Systems, 1993, 20, 1-24.	3.5	9
83	Calibration Inference Based on Multiple Runs of an Immunoassay. Biometrics, 1997, 53, 1304.	1.4	9
84	Testing homogeneity of intra-run variance parameters in immunoassay. , 1997, 16, 1765-1776.		9
85	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.	1.2	9
86	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.	1.4	7
87	Likelihood and conditional likelihood inference for generalized additive mixed models for clustered data. Journal of Multivariate Analysis, 2004, 91, 90-106.	1.0	7
88	Variable selection for covariateâ€adjusted semiparametric inference in randomized clinical trials. Statistics in Medicine, 2012, 31, 3789-3804.	1.6	6
89	Estimation After a Group Sequential Trial. Statistics in Biosciences, 2015, 7, 187-205.	1.2	6
90	Dynamic treatment regimes, past, present, and future: A conversation with experts. Statistical Methods in Medical Research, 2017, 26, 1605-1610.	1.5	6

#	Article	IF	Citations
91	Moment adjusted imputation for multivariate measurement error data with applications to logistic regression. Computational Statistics and Data Analysis, 2013, 67, 15-24.	1.2	5
92	Collaboration To Meet the Statistical Needs in the Chemistry Curriculum. Journal of Chemical Education, 2014, 91, 12-12.	2.3	5
93	Estimating vaccine efficacy over time after a randomized study is unblinded. Biometrics, 2022, 78, 825-838.	1.4	5
94	Bootstrap-Adjusted Calibration Confidence Intervals for Immunoassay. Journal of the American Statistical Association, 1997, 92, 278.	3.1	5
95	Discussion of â€œCombining biomarkers to optimize patient treatment recommendationâ€• Biometrics, 2014, 70, 707-710.	1.4	4
96	The analysis of multivariate longitudinal data: A review. Statistical Methods in Medical Research, 2017, 26, 112-112.	1.5	4
97	<tt>SNP_NLMM</tt>: ASASMacro to Implement a Flexible Random Effects Density for Generalized Linear and Nonlinear Mixed Models. Journal of Statistical Software, 2014, 56, 2.	3.7	4
98	The International Year of Statistics: A Celebration and A Call to Action. Journal of the American Statistical Association, 2013, 108, 1141-1146.	3.1	3
99	Properties of Estimators in Exponential Family Settings with Observationbased Stopping Rules. Journal of Biometrics & Biostatistics, 2015, 07, .	4.0	3
100	Surgeons? Economic Profiles: Can We Get the ?Right? Answers?. Journal of Medical Systems, 2005, 29, 111-124.	3.6	1
101	Biometrics, JABES and the International Biometric Society. Journal of Agricultural, Biological, and Environmental Statistics, 2017, 22, 221-223.	1.4	1
102	Rejoinder: Estimating vaccine efficacy over time after a randomized study is unblinded. Biometrics, 2022, 78, 848-851.	1.4	1
103	Research Methods for Clinical Trials in Personalized Medicine: A Systematic Review. , 2014, , 659-684.		1
104	Estimation of the Odds Ratio in a Proportional Odds Model with Censored Time-Lagged Outcome in a Randomized Clinical Trial. Biometrics, 2023, 79, 975-987.	1.4	1
105	Discussion on "Statistical Issues Arising in the Women's Health Initiative". Biometrics, 2005, 61, 933-935.	1.4	0
106	Discussions. International Statistical Review, 2011, 79, 221-223.	1.9	0
107	Building the Biostatistics Pipeline: Summer Institutes for Training in Biostatistics (SIBS). Chance, 2013, 26, 4-9.	0.2	0
108	Chapter 9: Value search estimators for optimal dynamic treatment regimes. , 2015, , 135-155.		0

#	Article	IF	Citations
109	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, 357-357.	0.8	0
110	Methods Based on Semiparametric Theory for Analysis in the Presence of Missing Data. Annual Review of Statistics and Its Application, 2022, 9, 167-196.	7.0	0