Olivier Thas

List of Publications by Year
in descending order

138 papers	4,181 citations
136950 32 h-index	133252 59 g-index
146 all docs	146 docs citations
146 times ranked	7605 citing authors

#	Article	IF	Citations
1	Statistical detection of synergy: New methods and a comparative study. Pharmaceutical Statistics, 2022, 21, 345-360.	1.3	1
2	Unbiasedness and efficiency of non-parametric and UMVUE estimators of the probabilistic index and related statistics. Statistical Methods in Medical Research, 2021, 30, 747-768.	1.5	12
3	Graduate Education in Statistics and Data Science: The Why, When, Where, Who, and What. Annual Review of Statistics and Its Application, 2021, 8, 25-39.	7.0	3
4	Development of a 3′:5′ digital PCR assay to determine horse mRNA integrity. Analytical Biochemistry, 2021, 626, 114217.	2.4	2
5	Exploring the Microbiome Analysis and Visualization Landscape. Frontiers in Bioinformatics, 2021, 1, .	2.1	4
6	Model-based joint visualization of multiple compositional omics datasets. NAR Genomics and Bioinformatics, 2020, 2, lqaa050.	3.2	4
7	Evaluation of a zinc chelate on clinical swine dysentery under field conditions. Porcine Health Management, 2020, 6, 1.	2.6	6
8	SPsimSeq: semi-parametric simulation of bulk and single-cell RNA-sequencing data. Bioinformatics, 2020, 36, 3276-3278.	4.1	30
9	Sequence count data are poorly fit by the negative binomial distribution. PLoS ONE, 2020, 15, e0224909.	2.5	31
10	On the utility of RNA sample pooling to optimize cost and statistical power in RNA sequencing experiments. BMC Genomics, 2020, 21, 312.	2.8	56
11	From Population to Subject-Specific Reference Intervals. Lecture Notes in Computer Science, 2020, , 468-482.	1.3	2
12	High-dimensional prediction of binary outcomes in the presence of between-study heterogeneity. Statistical Methods in Medical Research, 2019, 28, 2848-2867.	1.5	0
13	Semiparametric linear transformation models: Effect measures, estimators, and applications. Statistics in Medicine, 2019, 38, 1484-1501.	1.6	8
14	A Practical Protocol for the Experimental Design of Comparative Studies on Water Treatment. Water (Switzerland), 2019, 11, 162.	2.7	5
15	A unified framework for unconstrained and constrained ordination of microbiome read count data. PLoS ONE, 2019, 14, e0205474.	2.5	14
16	A broken promise: microbiome differential abundance methods do not control the false discovery rate. Briefings in Bioinformatics, 2019, 20, 210-221.	6.5	132
17	Quantifying the uncertainty of a model-reconstructed soilscape for archaeological land evaluation. Geoderma, 2018, 320, 74-81.	5.1	5
18	Prognostic and Therapeutic Implications of Circulating Androgen Receptor Gene Copy Number in Prostate Cancer Patients Using Droplet Digital Polymerase Chain Reaction. Clinical Genitourinary Cancer, 2018, 16, 197-205.e5.	1.9	7

#	Article	IF	Citations
19	Small sample inference for probabilistic index models. Computational Statistics and Data Analysis, 2018, 121, 137-148.	1.2	5
20	A new approach for modeling patient overall radiosensitivity and predicting multiple toxicity endpoints for breast cancer patients. Acta OncolÃ³gica, 2018, 57, 604-612.	1.8	4
21	Model-based analysis of the relationship between macroinvertebrate traits and environmental river conditions. Environmental Modelling and Software, 2018, 106, 57-67.	4.5	28
22	Model-Based Analysis of Increased Loads on the Performance of Activated Sludge and Waste Stabilization Ponds. Water (Switzerland), 2018, 10, 1410.	2.7	6
23	A comprehensive overview of genomic imprinting in breast and its deregulation in cancer. Nature Communications, 2018, 9, 4120.	12.8	47
24	Statistically-Based Comparison of the Removal Efficiencies and Resilience Capacities between Conventional and Natural Wastewater Treatment Systems: A Peak Load Scenario. Water (Switzerland), 2018, 10, 328.	2.7	9
25	On determining the power of digital PCR experiments. Analytical and Bioanalytical Chemistry, 2018, 410, 5731-5739.	3.7	3
26	Differential gene expression analysis tools exhibit substandard performance for long non-coding RNA-sequencing data. Genome Biology, 2018, 19, 96.	8.8	43
27	A Closer Look on Spatiotemporal Variations of Dissolved Oxygen in Waste Stabilization Ponds Using Mixed Models. Water (Switzerland), 2018, 10, 201.	2.7	18
28	Confirmation of <i>Mycoplasma hyopneumoniae</i> in a breeding herd through tracheobronchial swab sampling and PCR. Veterinary Record, 2018, 183, 325-325.	0.3	6
29	Reducing Bias in Digital PCR Quantification Experiments: The Importance of Appropriately Modeling Volume Variability. Analytical Chemistry, 2018, 90, 6540-6547.	6.5	17
30	Use of trachea-bronchial swab qPCR testing to confirm Mycoplasma hyopneumoniae seropositivity in an SPF breeding herd. Porcine Health Management, 2018, 4, 12.	2.6	8
31	A Mannâ€"Whitney type effect measure of interaction for factorial designs. Communications in Statistics - Theory and Methods, 2017, 46, 11243-11260.	1.0	9
32	Quality control of digital PCR assays and platforms. Analytical and Bioanalytical Chemistry, 2017, 409, 5919-5931.	3.7	12
33	Assessing the fit of finite mixture distributions. Australian and New Zealand Journal of Statistics, 2017, 59, 463-483.	0.9	3
34	Exhaled breath to screen for malignant pleural mesothelioma: a validation study. European Respiratory Journal, 2017, 50, 1700919.	6.7	27
35	Breath analysis by gas chromatography-mass spectrometry and electronic nose to screen for pleural mesothelioma: a cross-sectional case-control study. Oncotarget, 2017, 8, 91593-91602.	1.8	55
36	A unified censored normal regression model for qPCR differential gene expression analysis. PLoS ONE, 2017, 12, e0182832.	2.5	6

#	Article	IF	Citations
37	BIGL: Biochemically Intuitive Generalized Loewe null model for prediction of the expected combined effect compatible with partial agonism and antagonism. Scientific Reports, 2017, 7, 17935.	3.3	12
38	Constrained Ordination Analysis with Enrichment of Bell-Shaped Response Functions. PLoS ONE, 2016, 11, e0154079.	2.5	4
39	The Future of Digital Polymerase Chain Reaction in Virology. Molecular Diagnosis and Therapy, 2016, 20, 437-447.	3.8	33
40	Pitfalls in Prediction Modeling for Normal Tissue Toxicity in Radiation Therapy: An Illustration With the Individual Radiation Sensitivity and Mammary Carcinoma Risk Factor Investigation Cohorts. International Journal of Radiation Oncology Biology Physics, 2016, 95, 1466-1476.	0.8	13
41	Detection of malignant pleural mesothelioma in exhaled breath by multicapillary column/ion mobility spectrometry (MCC/IMS). Journal of Breath Research, 2016, 10, 046001.	3.0	18
42	Flexible analysis of digital PCR experiments using generalized linear mixed models. Biomolecular Detection and Quantification, 2016, 9, 1-13.	7.0	14
43	A web application for sample size and power calculation in case-control microbiome studies. Bioinformatics, 2016, 32, 2038-2040.	4.1	57
44	Principal bicorrelation analysis: Unraveling associations between three data sources. Journal of Biopharmaceutical Statistics, 2016, 26, 534-551.	0.8	0
45	Generalised Smooth Tests of Goodness of Fit Utilising L€moments. Australian and New Zealand Journal of Statistics, 2015, 57, 481-499.	0.9	0
46	Extended Analysis of At Least Partially Ordered Multi€factor ANOVA. Australian and New Zealand Journal of Statistics, 2015, 57, 211-224.	0.9	6
47	ddpcRquant: threshold determination for single channel droplet digital PCR experiments. Analytical and Bioanalytical Chemistry, 2015, 407, 5827-5834.	3.7	108
48	Using transcriptomics to guide lead optimization in drug discovery projects: Lessons learned from the QSTAR project. Drug Discovery Today, 2015, 20, 505-513.	6.4	80
49	Mining for viral fragments in methylation enriched sequencing data. Frontiers in Genetics, 2015, 6, 16.	2.3	5
50	A proportional score test over the nuisance parameter space: Properties and applications. Statistics and Probability Letters, 2015, 106, 295-300.	0.7	0
51	A Regression Framework for Rank Tests Based on the Probabilistic Index Model. Journal of the American Statistical Association, 2015, 110, 1276-1283.	3.1	20
52	ViVaMBC: estimating viral sequence variation in complex populations from illumina deep-sequencing data using model-based clustering. BMC Bioinformatics, 2015, 16, 59.	2.6	12
53	Seasonality Modifies the Effect of a Lipid-Based Nutrient Supplement for Pregnant Rural Women on Birth Length. Journal of Nutrition, 2015, 145, 634-639.	2.9	20
54	Robust regression methods for real-time polymerase chain reaction. Analytical Biochemistry, 2015, 480, 34-36.	2.4	7

#	Article	IF	Citations
55	Increasing the power of the Mann€Whitney test in randomized experiments through flexible covariate adjustment. Statistics in Medicine, 2015, 34, 1012-1030.	1.6	33
56	VirVarSeq: a low-frequency virus variant detection pipeline for Illumina sequencing using adaptive base-calling accuracy filtering. Bioinformatics, 2015, 31, 94-101.	4.1	47
57	Smooth Tests of Fit for Gaussian Mixtures. Studies in Classification, Data Analysis, and Knowledge Organization, 2015, , 133-142.	0.2	0
58	Dissemination and Implementation of the ARIA Guidelines for Allergic Rhinitis in General Practice. International Archives of Allergy and Immunology, 2014, 163, 106-113.	2.1	15
59	unifiedWMWqPCR: the unified Wilcoxon-Mann-Whitney test for analyzing RT-qPCR data in R. Bioinformatics, 2014, 30, 2494-2495.	4.1	4
60	Next€generation technologies and data analytical approaches for epigenomics. Environmental and Molecular Mutagenesis, 2014, 55, 155-170.	2.2	55
61	The more, the merrier: heterotroph richness stimulates methanotrophic activity. ISME Journal, 2014, 8, 1945-1948.	9.8	132
62	Comparison of the Abiotic Preferences of Macroinvertebrates in Tropical River Basins. PLoS ONE, 2014, 9, e108898.	2.5	25
63	Relating taxonomy-based traits of macroinvertebrates with river sediment quality based on basic and zero-inflated Poisson models. Ecological Informatics, 2013, 18, 49-60.	5.2	4
64	Calculating Bivariate Orthonormal Polynomials By Recurrence. Australian and New Zealand Journal of Statistics, 2013, 55, 15-24.	0.9	3
65	A predictive model for dysphagia following IMRT for head and neck cancer: Introduction of the EMLasso technique. Radiotherapy and Oncology, 2013, 107, 295-299.	0.6	31
66	Environmental conditions and community evenness determine the outcome of biological invasion. Nature Communications, 2013, 4, 1383.	12.8	129
67	Butyrate-producing *Clostridium* cluster XIVa species specifically colonize mucins in an *in vitro* gut model. ISME Journal, 2013, 7, 949-961.	9.8	501
68	An extension of the Wilcoxon-Mann-Whitney test for analyzing RT-qPCR data. Statistical Applications in Genetics and Molecular Biology, 2013, 12, 333-46.	0.6	15
69	Goodness-of-Fit Methods for Probabilistic Index Models. Communications in Statistics - Theory and Methods, 2013, 42, 1193-1207.	1.0	6
70	EMLasso: logistic lasso with missing data. Statistics in Medicine, 2013, 32, 3143-3157.	1.6	18
71	Constrained ordination analysis in the presence of zero inflation. Statistical Modelling, 2012, 12, 463-485.	1.1	8
72	The Effect of Clinical Covariates on the Diagnostic and Prognostic Value of Soluble Mesothelin and Megakaryocyte Potentiating Factor. Chest, 2012, 141, 477-484.	0.8	44

#	Article	IF	Citations
73	Fast Wavelet Based Functional Models for Transcriptome Analysis with Tiling Arrays. Statistical Applications in Genetics and Molecular Biology, 2012, 11, 1-36.	0.6	5
74	The potential for adaptation in a natural Daphnia magna population: broad and narrow-sense heritability of net reproductive rate under Cd stress at two temperatures. Ecotoxicology, 2012, 21, 1899-1910.	2.4	15
75	Flow cytometry for fast microbial community fingerprinting. Water Research, 2012, 46, 907-919.	11.3	110
76	Improved base-calling and quality scores for 454 sequencing based on a Hurdle Poisson model. BMC Bioinformatics, 2012, 13, 303.	2.6	15
77	Biodiversity of Freshwater Diatom Communities during 1000 Years of Metal Mining, Land Use, and Climate Change in Central Sweden. Environmental Science & Technology, 2012, 46, 9097-9105.	10.0	10
78	Analysis of tiling array expression studies with flexible designs in Bioconductor (waveTiling). BMC Bioinformatics, 2012, 13, 234.	2.6	0
79	Trends in atmospheric nitrogen and sulphur deposition in northern Belgium. Atmospheric Environment, 2012, 49, 186-196.	4.1	24
80	An Omnibus Consistent Adaptive Percentile Modified Wilcoxon Rank Sum Test with Applications in Gene Expression Studies. Biometrics, 2012, 68, 446-454.	1.4	7
81	Using orthogonal trend contrasts for testing ranked data with ordered alternatives. Statistica Neerlandica, 2012, 66, 452-471.	1.6	9
82	Probabilistic Index Models. Journal of the Royal Statistical Society Series B: Statistical Methodology, 2012, 74, 623-671.	2.2	94
83	Development of a Multicomponent Prediction Model for Acute Esophagitis in Lung Cancer Patients Receiving Chemoradiotherapy. International Journal of Radiation Oncology Biology Physics, 2011, 81, 537-544.	0.8	27
84	Generalised Smooth Tests for the Generalised Pareto Distribution. Journal of Statistical Theory and Practice, 2011, 5, 737-750.	0.5	2
85	Smooth tests of goodness of fit. Wiley Interdisciplinary Reviews: Computational Statistics, 2011, 3, 397-406.	3.9	6
86	MicroRNA Expression in Induced Sputum of Smokers and Patients with Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2011, 183, 898-906.	5.6	209
87	Smooth tests for the gamma distribution. Journal of Statistical Computation and Simulation, 2011, 81, 843-855.	1.2	7
88	Regulatory Networks Governed by MicroRNAs in T-ALL Oncogenesis and Normal T-Cell Development. Blood, 2011, 118, 1366-1366.	1.4	0
89	Easily applied tests of fit for the Rayleigh distribution. Sankhya B, 2010, 72, 254-263.	0.9	16
90	Accurate particle size distribution determination by nanoparticle tracking analysis based on 2-D Brownian dynamics simulation. Journal of Colloid and Interface Science, 2010, 352, 593-600.	9.4	124

#	Article	IF	Citations
91	Comparing Distributions. Springer Series in Statistics, 2010, , .	0.9	67
92	Four tests of fit for the beta-binomial distribution. Journal of Applied Statistics, 2010, 37, 1547-1554.	1.3	0
93	Introduction to Modern Goodness of Fit Methods. Journal of Statistical Theory and Practice, 2009, 3, 537-541.	0.5	0
94	Testing for trends in the violation frequency of an environmental threshold in rivers. Environmetrics, 2009, 20, 53-67.	1.4	4
95	Nonparametric trend detection in river monitoring network data: a spatio–temporal approach. Environmetrics, 2009, 20, 283-297.	1.4	5
96	Comments on: Goodness-of-fit tests in mixed modes. Test, 2009, 18, 260-264.	1.1	5
97	DATA–DRIVEN SMOOTH TESTS AND A DIAGNOSTIC TOOL FOR LACK–OF–FIT FOR CIRCULAR DATA. Australian and New Zealand Journal of Statistics, 2009, 51, 461-480.	0.9	2
98	Excretion of endogenous boldione in human urine: Influence of phytosterol consumption. Journal of Steroid Biochemistry and Molecular Biology, 2009, 117, 8-14.	2.5	14
99	Multiple putative oncogenes at the chromosome 20q amplicon contribute to colorectal adenoma to carcinoma progression. Gut, 2009, 58, 79-89.	12.1	205
100	Anscombe's Tests of Fit for the Negative Binomial Distribution. Journal of Statistical Theory and Practice, 2009, 3, 555-565.	0.5	4
101	Generalised Smooth Tests of Goodness of Fit. Journal of Statistical Theory and Practice, 2009, 3, 665-679.	0.5	7
102	Informative Statistical Analyses Using Smooth Goodness of Fit Tests. Journal of Statistical Theory and Practice, 2009, 3, 705-733.	0.5	11
103	Comparison of some tests of fit for the Laplace distribution. Computational Statistics and Data Analysis, 2008, 52, 5338-5343.	1.2	5
104	Feasibility of isolation perimeters for genetically modified maize. Agronomy for Sustainable Development, 2008, 28, 195-206.	5.3	19
105	Tests and Diagnostic Plots for Detecting Lack–of–Fit for Circular–Linear Regression Models. Biometrics, 2008, 64, 912-920.	1.4	4
106	A GENERALIZED EMERSON RECURRENCE RELATION. Australian and New Zealand Journal of Statistics, 2008, 50, 235-240.	0.9	24
107	Multi-method approach indicates no presence of sub-lethally injured Listeria monocytogenes cells after mild heat treatment. International Journal of Food Microbiology, 2008, 123, 262-268.	4.7	36
108	Determination of water droplet size distribution in butter: Pulsed field gradient NMR in comparison with confocal scanning laser microscopy. International Dairy Journal, 2008, 18, 12-22.	3.0	38

#	Article	IF	Citations
109	Optimization of sewage sludge conditioning and pressure dewatering by statistical modelling. Water Research, 2008, 42, 1061-1074.	11.3	45
110	Forecasting the Feasibility of Implementing Isolation Perimeters Between GM and non-GM Maize Fields Under Agricultural Conditions. , 2008, , .		0
111	X^2 and its components as tests of normality for grouped data. Journal of Applied Statistics, 2008, 35, 481-492.	1.3	3
112	Efficacy of Quetiapine for Impulsivity and Affective Symptoms in Borderline Personality Disorder. Journal of Clinical Psychopharmacology, 2008, 28, 147-155.	1.4	53
113	A method to search for optimal field allocations of transgenic maize in the context of co-existence. Environmental Biosafety Research, 2008, 7, 97-104.	1.1	11
114	Comparison of Five Tests of Fit for the Extreme Value Distribution. Journal of Statistical Theory and Practice, 2007, 1, 89-99.	0.5	9
115	Goodness of fit for the zero-truncated Poisson distribution. Journal of Statistical Computation and Simulation, 2007, 77, 585-591.	1.2	11
116	Statistical Thinking in Computer-Based Learning Environments. International Statistical Review, 2007, 75, 365-371.	1.9	4
117	Implementing isolation perimeters around genetically modified maize fields. Agronomy for Sustainable Development, 2007, 27, 155-165.	5.3	32
118	Interactions between Î¹-carrageenan, milk proteins and modified starch in sterilized dairy desserts. International Dairy Journal, 2006, 16, 482-488.	3.0	76
119	Regional residual plots for assessing the fit of linear regression models. Computational Statistics and Data Analysis, 2006, 50, 1995-2013.	1.2	6
120	New Composite Index Based on Midlatency Auditory Evoked Potential and Electroencephalographic Parameters to Optimize Correlation with Propofol Effect Site Concentration. Anesthesiology, 2005, 103, 500-507.	2.5	39
121	Influence of polyelectrolyte characteristics on pressure-driven activated sludge dewatering. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 262, 40-51.	4.7	52
122	Correcting Standard Errors in Two-stage Estimation Procedures with Generated Regressands*. Oxford Bulletin of Economics and Statistics, 2005, 67, 421-433.	1.7	32
123	MORE INFORMATIVE TESTING FOR BIVARIATE SYMMETRY. Australian and New Zealand Journal of Statistics, 2005, 47, 211-217.	0.9	1
124	Smooth Tests for the Zero-Inflated Poisson Distribution. Biometrics, 2005, 61, 808-815.	1.4	30
125	Tests for Symmetry Based on the One-Sample Wilcoxon Signed Rank Statistic. Communications in Statistics Part B: Simulation and Computation, 2005, 34, 957-973.	1.2	15
126	Textural properties of gelled dairy desserts containing Î¹-carrageenan and starch. Food Hydrocolloids, 2004, 18, 817-823.	10.7	65

#	Article	IF	Citations
127	An extension of the Anderson–Darling k-sample test to arbitrary sample space partition sizes. Journal of Statistical Computation and Simulation, 2004, 74, 651-665.	1.2	6
128	A Nonparametric Test for Independence Based on Sample Space Partitions. Communications in Statistics Part B: Simulation and Computation, 2004, 33, 711-728.	1.2	8
129	Spectral Entropy as an Electroencephalographic Measure of Anesthetic Drug Effect. Anesthesiology, 2004, 101, 34-42.	2.5	153
130	Title is missing!. BioControl, 2003, 48, 39-55.	2.0	70
131	Mixture design approach on the dynamic rheological and uniaxial compression behaviour of milk desserts. Food Hydrocolloids, 2003, 17, 311-320.	10.7	28
132	Some generalizations of the Anderson–Darling statistic. Statistics and Probability Letters, 2003, 64, 255-261.	0.7	11
133	Four-dimensional imaging and computer-assisted track analysis of nuclear migration in root hairs of Arabidopsis thaliana. Journal of Microscopy, 2003, 211, 167-178.	1.8	24
134	Determination of the Refractive Index of Water-dispersible Granules for Use in Laser Diffraction Experiments. Particle and Particle Systems Characterization, 2002, 19, 426-432.	2.3	32
135	How to estimate moments and quantiles of environmental data sets with non-detected observations? A case study on volatile organic compounds in marine water samples. Journal of Chromatography A, 2002, 975, 123-133.	3.7	32
136	Determining environmental standards using bootstrapping, bayesian and maximum likelihood techniques: a comparative study. Analytica Chimica Acta, 2001, 446, 427-436.	5.4	22
137	Comparison of computer-controlled administration of propofol with two manually controlled infusion techniques. Anaesthesia, 1997, 52, 41-50.	3.8	50
138	Smooth tests of goodness of fit for the distributional assumption of regression models. Australian and New Zealand Journal of Statistics, 0, , .	0.9	0