Matthias von Davier

List of Publications by Year
in descending order

90	2,844	236925 25	206112 48
papers	citations	h-index	g-index

98	98	98	1483
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Scoring Graphical Responses in TIMSS 2019 Using Artificial Neural Networks. Educational and Psychological Measurement, 2023, 83, 556-585.	2.4	1
2	A Robust Method for Detecting Item Misfit in Large-Scale Assessments. Educational and Psychological Measurement, 2023, 83, 740-765.	2.4	3
3	A Response-Time-Based Latent Response Mixture Model for Identifying and Modeling Careless and Insufficient Effort Responding in Survey Data. Psychometrika, 2022, 87, 593-619.	2.1	17
4	Can studentsâ€™ attitudes towards mathematics and science be compared across countries? Evidence from measurement invariance modeling in TIMSS 2019. Studies in Educational Evaluation, 2022, 74, 101169.	2.3	5
5	Modeling Item Revisit Behavior: The Hierarchical Speedâ€“Accuracyâ€“Revisits Model. Educational and Psychological Measurement, 2021, 81, 363-387.	2.4	16
6	Model meets reality: Validating a new behavioral measure for test-taking effort. Educational Assessment, 2021, 26, 104-124.	1.5	16
7	Reframing rankings in educational assessments. Science, 2021, 372, 338-340.	12.6	10
8	Commentary: Matching IRT Models to PRO Constructsâ€” Modeling Alternatives, and Some Thoughts on What Makes a Model Different. Psychometrika, 2021, 86, 825-832.	2.1	0
9	A semiparametric approach for item response function estimation to detect item misfit. British Journal of Mathematical and Statistical Psychology, 2021, 74, 157-175.	1.4	3
10	Adjusting Person Fit Index for Skewness in Cognitive Diagnosis Modeling. Journal of Classification, 2020, 37, 399-420.	2.2	0
11	Using Response Times for Joint Modeling of Response and Omission Behavior. Multivariate Behavioral Research, 2020, 55, 425-453.	3.1	32
12	A Multiprocess Item Response Model for Not-Reached Items due to Time Limits and Quitting. Educational and Psychological Measurement, 2020, 80, 522-547.	2.4	11
13	A hierarchical latent response model for inferences about examinee engagement in terms of guessing and itemâ€level nonâ€response. British Journal of Mathematical and Statistical Psychology, 2020, 73, 83-112.	1.4	51
14	Comparing College Aspirations across PISA Countries: Are 17 Percent Oranges Less than 75 Percent Apples?. , 2020, , 18-33.		0
15	Editorial, Spring 2020. Psychometrika, 2020, 85, 1-4.	2.1	3
16	Conditional Subscore Reporting Using Iterated Discrete Convolutions. Journal of Educational and Behavioral Statistics, 2020, 45, 515-533.	1.7	3
17	Ensuring Validity in International Comparisons Using State-of-the-Art Psychometric Methodologies. IEA Research for Education, 2020, , 187-219.	0.6	2
18	Psychometrics. , 2020, , 4157-4161.		0

#	Article	IF	Citations
19	Combining mixture distribution and multidimensional IRTree models for the measurement of extreme response styles. British Journal of Mathematical and Statistical Psychology, 2019, 72, 538-559.	1.4	13
20	Developments in Psychometric Population Models for Technology-Based Large-Scale Assessments: An Overview of Challenges and Opportunities. Journal of Educational and Behavioral Statistics, 2019, 44, 671-705.	1.7	30
21	Evaluating item response theory linking and model fit for data from PISA 2000â€“2012. Assessment in Education, 2019, 26, 466-488.	1.2	28
22	Using Response Times to Model Not-Reached Items due to Time Limits. Psychometrika, 2019, 84, 892-920.	2.1	22
23	Predictive Feature Generation and Selection Using Process Data From PISA Interactive Problem-Solving Items: An Application of Random Forests. Frontiers in Psychology, 2019, 10, 2461.	2.1	30
24	Effects of Discontinue Rules on Psychometric Properties of Test Scores. Psychometrika, 2019, 84, 147-163.	2.1	3
25	CDMs in Vocational Education: Assessment and Usage of Diagnostic Problem-Solving Strategies in Car Mechatronics. Methodology of Educational Measurement and Assessment, 2019, , 461-488.	0.4	5
26	GDM Software mdltm Including Parallel EM Algorithm. Methodology of Educational Measurement and Assessment, 2019, , 603-628.	0.4	6
27	The General Diagnostic Model. Methodology of Educational Measurement and Assessment, 2019, , 133-153.	0.4	5
28	Introduction: From Latent Classes to Cognitive Diagnostic Models. Methodology of Educational Measurement and Assessment, 2019, , 1-17.	0.4	3
29	Applying the General Diagnostic Model to Proficiency Data from a National Skills Survey. Methodology of Educational Measurement and Assessment, 2019, , 489-501.	0.4	1
30	Diagnosing Diagnostic Models: From Von Neumannâ€™s Elephant to Model Equivalencies and Network Psychometrics. Measurement, 2018, 16, 59-70.	0.2	9
31	Automated Item Generation with Recurrent Neural Networks. Psychometrika, 2018, 83, 847-857.	2.1	18
32	Detecting and treating errors in tests and surveys. Quality Assurance in Education, 2018, 26, 243-262.	1.5	1
33	A Note on Construct Validity of the Anchoring Method in PISA 2012. Journal of Psychoeducational Assessment, 2018, 36, 709-724.	1.5	10
34	The Effects of Vignette Scoring on Reliability and Validity of Self-Reports. Applied Psychological Measurement, 2018, 42, 291-306.	1.0	23
35	Commentary: On the Importance of the Speed-Ability Trade-Off When Dealing With Not Reached Items. Frontiers in Psychology, 2018, 9, 1988.	2.1	7
36	Modeling Omitted and Not-Reached Items in IRT Models. Psychometrika, 2017, 82, 795-819.	2.1	54

#	Article	IF	Citations
37	CTT and No-DIF andÂ?Â=Â(Almost) Rasch Model. Methodology of Educational Measurement and Assessment, 2017, , 249-272.	0.4	4
38	Developing a Machineâ€Supported Coding System for Constructedâ€Response Items in PISA. ETS Research Report Series, 2017, 2017, 1-15.	0.8	4
39	The use of test scores from large-scale assessment surveys: psychometric and statistical considerations. Large-Scale Assessments in Education, 2017, 5, .	2.0	29
40	Large-Scale Assessments of Adult Literacy. Methodology of Educational Measurement and Assessment, 2017, , 285-310.	0.4	3
41	Advancing Human Assessment: A Synthesis Over Seven Decades. Methodology of Educational Measurement and Assessment, 2017, , 635-687.	0.4	0
42	New Results on an Improved Parallel EM Algorithm for Estimating Generalized Latent Variable Models. Springer Proceedings in Mathematics and Statistics, 2017, , 1-8.	0.2	3
43	Item Response Theory. Methodology of Educational Measurement and Assessment, 2017, , 133-178.	0.4	8
44	Highâ€Performance Psychometrics: The Parallelâ€E Parallelâ€M Algorithm for Generalized Latent Variable Models. ETS Research Report Series, 2016, 2016, 1-11.	0.8	8
45	Analyzing Process Data from Problem-Solving Items with N-Grams. Advances in Higher Education and Professional Development Book Series, 2016, , 750-777.	0.2	45
46	Assessing Problem Solving in Technology-Rich Environments. Advances in Higher Education and Professional Development Book Series, 2016, , 706-724.	0.2	1
47	An Alternative Way to Model Population Ability Distributions in Large-Scale Educational Surveys. Educational and Psychological Measurement, 2015, 75, 739-763.	2.4	9
48	Identifying Feature Sequences from Process Data in Problem-Solving Items with N-Grams. Springer Proceedings in Mathematics and Statistics, 2015, , 173-190.	0.2	30
49	The Logâ€Linear Cognitive Diagnostic Model (<scp>LCDM</scp>) as a Special Case of the General Diagnostic Model (<scp>GDM</scp>). ETS Research Report Series, 2014, 2014, 1-13.	0.8	35
50	Toward Increasing Fairness in Score Scale Calibrations Employed in International Large-Scale Assessments. International Journal of Testing, 2014, 14, 1-21.	0.3	48
51	The <scp>DINA</scp> model as a constrained general diagnostic model: Two variants of a model equivalency. British Journal of Mathematical and Statistical Psychology, 2014, 67, 49-71.	1.4	73
52	Hierarchical Diagnostic Classification Models Morphing into Unidimensional â€˜Diagnosticâ€™ Classification Modelsâ€”A Commentary. Psychometrika, 2014, 79, 340-346.	2.1	32
53	Measuring Response Styles Across the Big Five: A Multiscale Extension of an Approach Using Multinomial Processing Trees. Multivariate Behavioral Research, 2014, 49, 161-177.	3.1	66
54	A Third-Order Item Response Theory Model for Modeling the Effects of Domains and Subdomains in Large-Scale Educational Assessment Surveys. Journal of Educational and Behavioral Statistics, 2014, 39, 235-256.	1.7	25

#	Article	IF	Citations
55	ITEM RESPONSE THEORY. ETS Research Report Series, 2013, 2013, i.	0.8	8
56	Editorial. British Journal of Mathematical and Statistical Psychology, 2013, 66, 199-200.	1.4	0
57	Statistical Models and Inference for the True Equating Transformation in the Context of Local Equating. Journal of Educational Measurement, 2013, 50, 315-320.	1.2	11
58	Local Equating Using the Rasch Model, the OPLM, and the 2PL IRT Modelâ€"orâ€"What Is It Anyway if the Model Captures Everything There Is to Know About the Test Takers?. Journal of Educational Measurement, 2013, 50, 295-303.	1.2	8
59	Why item parcels are (almost) never appropriate: Two wrongs do not make a rightâ€"Camouflaging misspecification with item parcels in CFA models.. Psychological Methods, 2013, 18, 257-284.	3.5	290
60	Differentiating Response Styles and Construct-Related Responses: A New IRT Approach Using Bifactor and Second-Order Models. Springer Proceedings in Mathematics and Statistics, 2013, , 463-487.	0.2	8
61	On the Growing Importance of International Large-Scale Assessments. , 2013, , 1-11.		12
62	Factorial Versus Typological Models: A Comparison of Methods for Personality Data. Measurement, 2012, 10, 185-208.	0.2	18
63	EQUIVALENCY OF THE DINA MODEL AND A CONSTRAINED GENERAL DIAGNOSTIC MODEL. ETS Research Report Series, 2011, 2011, i.	0.8	6
64	Measuring Growth in a Longitudinal Large-Scale Assessment withÂaÂGeneral Latent Variable Model. Psychometrika, 2011, 76, 318-336.	2.1	56
65	VARIANCE ESTIMATION FOR NAEP DATA USING A RESAMPLINGâ€BASED APPROACH: AN APPLICATION OF COGNITIVE DIAGNOSTIC MODELS. ETS Research Report Series, 2010, 2010, i.	0.8	2
66	MODELING NONIGNORABLE MISSING DATA WITH ITEM RESPONSE THEORY (IRT). ETS Research Report Series, 2010, 2010, i.	0.8	69
67	Why Sum Scores May Not Tell Us All About Test Takers. Newborn and Infant Nursing Reviews, 2010, 10, 27-36.	0.4	7
68	International Large-Scale Assessment Data. Educational Researcher, 2010, 39, 142-151.	5.4	338
69	Stochastic Approximation Methods for Latent Regression Item Response Models. Journal of Educational and Behavioral Statistics, 2010, 35, 174-193.	1.7	36
70	Some Notes on the Reinvention of Latent Structure Models as Diagnostic Classification Models. Measurement, 2009, 7, 67-74.	0.2	24
71	A general diagnostic model applied to language testing data. British Journal of Mathematical and Statistical Psychology, 2008, 61, 287-307.	1.4	299
72	FITTING THE STRUCTURED GENERAL DIAGNOSTIC MODEL TO NAEP DATA. ETS Research Report Series, 2008, 2008, i.	0.8	44

#	Article	IF	Citations
73	COMPARISON OF MULTIDIMENSIONAL ITEM RESPONSE MODELS: MULTIVARIATE NORMAL ABILITY DISTRIBUTIONS VERSUS MULTIVARIATE POLYTOMOUS ABILITY DISTRIBUTIONS. ETS Research Report Series, 2008, 2008, i.	0.8	25
74	An Importance Sampling EM Algorithm for Latent Regression Models. Journal of Educational and Behavioral Statistics, 2007, 32, 233-251.	1.7	21
75	MIXTURE DISTRIBUTION DIAGNOSTIC MODELS. ETS Research Report Series, 2007, 2007, i.	0.8	8
76	HIERARCHICAL GENERAL DIAGNOSTIC MODELS. ETS Research Report Series, 2007, 2007, i.	0.8	18
77	Multivariate and Mixture Distribution Rasch Models. , 2007, , .		72
78	A Unified Approach to IRT Scale Linking and Scale Transformations. Methodology, 2007, 3, 115-124.	1.1	47
79	Introduction: Extending the Rasch Model. , 2007, , 1-12.		7
80	Mixture-Distribution and HYBRID Rasch Models. , 2007, , 99-115.		41
81	REPORTING TEST OUTCOMES USING MODELS FOR COGNITIVE DIAGNOSIS. ETS Research Report Series, 2006, 2006, i-28.	0.8	7
82	32 The Statistical Procedures Used in National Assessment of Educational Progress: Recent Developments and Future Directions. Handbook of Statistics, 2006, 26, 1039-1055.	0.6	25
83	COGNITIVE DIAGNOSIS FOR NAEP PROFICIENCY DATA. ETS Research Report Series, 2006, 2006, i.	0.8	23
84	31B Some Notes on Models for Cognitively Based Skills Diagnosis. Handbook of Statistics, 2006, 26, 1031-1038.	0.6	15
85	19 Mixture Distribution Item Response Models. Handbook of Statistics, 2006, 26, 643-661.	0.6	20
86	A GENERAL DIAGNOSTIC MODEL APPLIED TO LANGUAGE TESTING DATA. ETS Research Report Series, 2005, 2005, i-35.	0.8	169
87	Partially Observed Mixtures of IRT Models: An Extension of the Generalized Partial-Credit Model. Applied Psychological Measurement, 2004, 28, 389-406.	1.0	64
88	A person-fit index for polytomous rasch models, latent class models, and their mixture generalizations. Psychometrika, 2003, 68, 213-228.	2.1	19
89	Polytomous Mixed Rasch Models. , 1995, , 371-379.		49
90	A Conditional Item-Fit Index for Rasch Models. Applied Psychological Measurement, 1994, 18, 171-182.	1.0	63