Hans-Christoph Nuerk

List of Publications by Year in descending order

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116 papers 4,664 citations

41 h-index 63 g-index

123 all docs

123
docs citations

123 times ranked 2402 citing authors

#	Article	IF	CITATIONS
1	Training causes activation increase in temporo-parietal and parietal regions in children with mathematical disabilities. Brain Structure and Function, 2022, 227, 1757-1771.	2.3	5
2	Mathematics–gender stereotype endorsement influences mathematics anxiety, selfâ€concept, and performance differently in men and women. Annals of the New York Academy of Sciences, 2022, 1513, 121-139.	3.8	8
3	The complexity of simple counting: ERP findings reveal early perceptual and late numerical processes in different arrangements. Scientific Reports, 2022, 12, 6763.	3.3	2
4	Finger-Based Numerical Training Increases Sensorimotor Activation for Arithmetic in Children—An fNIRS Study. Brain Sciences, 2022, 12, 637.	2.3	3
5	Automatic place-value activation in magnitude-irrelevant parity judgement. Psychological Research, 2021, 85, 777-792.	1.7	7
6	Basic reading and reading-related language skills in adults with deficient reading comprehension who read a transparent orthography. Reading and Writing, 2021, 34, 2357-2379.	1.7	4
7	Arithmetic Errors in Financial Contexts in Parkinson's Disease. Frontiers in Psychology, 2021, 12, 629984.	2.1	3
8	Deficits in or preservation of basic number processing in Parkinson's disease? A registered report. Journal of Neuroscience Research, 2021, 99, 2390-2405.	2.9	0
9	Pick the smaller number: No influence of linguistic markedness on three-digit number processing. Journal of Numerical Cognition, 2021, 7, 295-307.	1.2	3
10	Not all elementary school teachers are scared of math. Journal of Numerical Cognition, 2021, 7, 275-294.	1.2	6
11	Self-Regulation and Mathematics Performance in German and Iranian Students of More and Less Math-Related Fields of Study. Frontiers in Psychology, 2020, 11, 489371.	2.1	0
12	Professional mathematicians do not differ from others in the symbolic numerical distance and size effects. Scientific Reports, 2020, 10, 11531.	3.3	5
13	Editorial: On the Development of Space-Number Relations: Linguistic and Cognitive Determinants, Influences, and Associations. Frontiers in Psychology, 2020, 11, 182.	2.1	12
14	The spatial–numerical association of response codes effect and math skills: why related?. Annals of the New York Academy of Sciences, 2020, 1477, 5-19.	3.8	14
15	A Finger-Based Numerical Training Failed to Improve Arithmetic Skills in Kindergarten Children Beyond Effects of an Active Non-numerical Control Training. Frontiers in Psychology, 2020, 11, 529.	2.1	5
16	Functional lateralization of arithmetic processing in the intraparietal sulcus is associated with handedness. Scientific Reports, 2020, 10, 1775.	3.3	13
17	Blue Light and Melanopsin Contribution to the Pupil Constriction in the Blind-spot, Parafovea and Periphery. , 2020, , .		3
18	Negative Numbers are not yet Automatically Associated with Space in 6 th Graders. Journal of Cognition and Development, 2019, 20, 611-633.	1.3	1

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19	Oscillatory EEG Changes During Arithmetic Learning in Children. Developmental Neuropsychology, 2019, 44, 325-338.	1.4	14
20	Math Anxiety in Combination With Low Visuospatial Memory Impairs Math Learning in Children. Frontiers in Psychology, 2019, 10, 89.	2.1	22
21	Diversity of functional illiterate cases: Results from aÂmultiple-single case study. Zeitschrift Fur Erziehungswissenschaft, 2019, 22, 123-151.	2.9	2
22	The SNARC and MARC effects measured online: Large-scale assessment methods in flexible cognitive effects. Behavior Research Methods, 2019, 51, 1676-1692.	4.0	40
23	No Difference in the Neural Underpinnings of Number and Letter Copying in Children: Bayesian Analysis of Functional Nearâ€Infrared Spectroscopy Data. Mind, Brain, and Education, 2019, 13, 313-325.	1.9	3
24	Music-space associations are grounded, embodied and situated: examination of cello experts and non-musicians in a standard tone discrimination task. Psychological Research, 2019, 83, 894-906.	1.7	11
25	Individual differences influence two-digit number processing, but not their analog magnitude processing: a large-scale online study. Psychological Research, 2019, 83, 1444-1464.	1.7	20
26	Different Ways to Measure Math Anxiety. , 2019, , 20-41.		9
27	Stress-related dysfunction of the right inferior frontal cortex in high ruminators: An fNIRS study. Neurolmage: Clinical, 2018, 18, 510-517.	2.7	49
28	Visuospatial biases in preschool children: Evidence from line bisection in three-dimensional space. Journal of Experimental Child Psychology, 2018, 173, 16-27.	1.4	12
29	Reduction but no shift in brain activation after arithmetic learning in children: A simultaneous fNIRS-EEG study. Scientific Reports, 2018, 8, 1707.	3.3	41
30	Reduction of implicit cognitive bias with cathodal tDCS to the left prefrontal cortex. Cognitive, Affective and Behavioral Neuroscience, 2018, 18, 263-272.	2.0	4
31	Cortical hemodynamic changes during the Trier Social Stress Test: An fNIRS study. NeuroImage, 2018, 171, 107-115.	4.2	45
32	Spatial Presentations, but Not Response Formats Influence Spatial-Numerical Associations in Adults. Frontiers in Psychology, 2018, 9, 2608.	2.1	0
33	Disrupted prefrontal functional connectivity during post-stress adaption in high ruminators. Scientific Reports, 2018, 8, 15588.	3.3	18
34	More Space, Better Mathematics: Is Space a Powerful Tool or a Cornerstone for Understanding Arithmetic?. Research in Mathematics Education, 2018, , 77-116.	0.3	14
35	Attention allows the SNARC effect to operate on multiple number lines. Scientific Reports, 2018, 8, 13778.	3.3	8
36	Applications of Functional Near-Infrared Spectroscopy (fNIRS) in Studying Cognitive Development: The Case of Mathematics and Language. Frontiers in Psychology, 2018, 9, 277.	2.1	70

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37	How Deep Is Your SNARC? Interactions Between Numerical Magnitude, Response Hands, and Reachability in Peripersonal Space. Frontiers in Psychology, 2018, 9, 622.	2.1	9
38	A Mental Odd-Even Continuum Account: Some Numbers May Be "More Odd―Than Others and Some Numbers May Be "More Even―Than Others. Frontiers in Psychology, 2018, 9, 1081.	2.1	4
39	A large-scale survey on finger counting routines, their temporal stability and flexibility in educated adults. Peerl, 2018, 6, e5878.	2.0	14
40	Physiological threat responses predict number processing. Psychological Research, 2017, 81, 278-288.	1.7	11
41	Sex differences in number line estimation: The role of numerical estimation. British Journal of Psychology, 2017, 108, 334-350.	2.3	18
42	Increased arithmetic complexity is associated with domain-general but not domain-specific magnitude processing in children: A simultaneous fNIRS-EEG study. Cognitive, Affective and Behavioral Neuroscience, 2017, 17, 724-736.	2.0	30
43	Aberrant functional connectivity in depression as an index of state and trait rumination. Scientific Reports, 2017, 7, 2174.	3.3	53
44	Applying embodied cognition: from useful interventions and their theoretical underpinnings to practical applications. ZDM - International Journal on Mathematics Education, 2017, 49, 545-557.	2.2	33
45	Behavioral and Neurocognitive Evaluation of a Web-Platform for Game-Based Learning of Orthography and Numeracy. , 2017, , 149-176.		3
46	Prefrontal neuromodulation reverses spatial associations of non-numerical sequences, but not numbers. Biological Psychology, 2017, 128, 39-49.	2.2	14
47	Limitations of Transâ€Species Inferences: The Case of Spatialâ€Numerical Associations in Chicks and Humans. Cognitive Science, 2017, 41, 2267-2274.	1.7	6
48	Switching between Multiple Codes of SNARC-Like Associations: Two Conceptual Replication Attempts with Anodal tDCS in Sham-Controlled Cross-Over Design. Frontiers in Neuroscience, 2017, 11, 654.	2.8	16
49	Domain-general factors influencing numerical and arithmetic processing. Journal of Numerical Cognition, 2017, 3, 112-132.	1.2	6
50	Norms and validation of the online and paper-and-pencil versions of the Abbreviated Math Anxiety Scale (AMAS) for Polish adolescents and adults. Journal of Numerical Cognition, 2017, 3, 667-693.	1.2	18
51	Components of Mathematics Anxiety: Factor Modeling of the MARS30-Brief. Frontiers in Psychology, 2016, 7, 91.	2.1	16
52	A Review about Functional Illiteracy: Definition, Cognitive, Linguistic, and Numerical Aspects. Frontiers in Psychology, 2016, 7, 1617.	2.1	46
53	Mental Number Line in the Preliterate Brain: The Role of Early Directional Experiences. Child Development Perspectives, 2016, 10, 172-177.	3.9	29
54	Dancing with the SNARC: Measuring spatial-numerical associations on a digital dance mat Canadian Journal of Experimental Psychology, 2016, 70, 306-315.	0.8	9

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55	How to rapidly construct a spatial–numerical representation in preliterate children (at least) Tj ETQq1 1 0.78431	14.rgBT	Overlock 10 T
56	Combining brain stimulation and video game to promote long-term transfer of learning and cognitive enhancement. Scientific Reports, 2016, 6, 22003.	3.3	81
57	A general model framework for multisymbol number comparison Psychological Review, 2016, 123, 667-695.	3.8	36
58	Training the equidistant principle of number line spacing. Cognitive Processing, 2016, 17, 243-258.	1.4	16
59	Professional mathematicians differ from controls in their spatial-numerical associations. Psychological Research, 2016, 80, 710-726.	1.7	64
60	Processing multi-digit numbers: a translingual eye-tracking study. Psychological Research, 2016, 80, 422-433.	1.7	15
61	Finger gnosis predicts a unique but small part of variance in initial arithmetic performance. Journal of Experimental Child Psychology, 2016, 146, 1-16.	1.4	41
62	Rethinking the implications of numerical ratio effects for understanding the development of representational precision and numerical processing across formats Journal of Experimental Psychology: General, 2015, 144, 1021-1035.	2.1	68
63	Are Spatialâ€Numerical Associations a Cornerstone for Arithmetic Learning? The Lack of Genuine Correlations Suggests No. Mind, Brain, and Education, 2015, 9, 190-206.	1.9	49
64	Mathematics anxiety reduces default mode network deactivation in response to numerical tasks. Frontiers in Human Neuroscience, 2015, 9, 202.	2.0	59
65	Spatial displacement of numbers on a vertical number line in spatial neglect. Frontiers in Human Neuroscience, 2015, 9, 240.	2.0	8
66	Intransparent German number words complicate transcoding ââ,¬â€œ a translingual comparison with Japanese. Frontiers in Psychology, 2015, 06, 740.	2.1	20
67	Contribution of working memory in multiplication fact network in children may shift from verbal to visuo-spatial: a longitudinal investigation. Frontiers in Psychology, 2015, 6, 1062.	2.1	31
68	On the limits of language influences on numerical cognition $\hat{a} \in \text{``no inversion effects in three-digit}$ number magnitude processing in adults. Frontiers in Psychology, 2015, 6, 1216.	2.1	13
69	Neural correlates of math anxiety – an overview and implications. Frontiers in Psychology, 2015, 6, 1333.	2.1	31
70	Math Anxiety Assessment with the Abbreviated Math Anxiety Scale: Applicability and Usefulness: Insights from the Polish Adaptation. Frontiers in Psychology, 2015, 6, 1833.	2.1	51
71	Methodological aspects to be considered when measuring the approximate number system (ANS) ââ,¬â€œ a research review. Frontiers in Psychology, 2015, 6, 295.	2.1	70
72	How space-number associations may be created in preliterate children: six distinct mechanisms. Frontiers in Psychology, 2015, 6, 215.	2.1	46

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73	Does your body count? Embodied influences on the preferred counting direction of preschoolers. Journal of Cognitive Psychology, 2015, 27, 413-425.	0.9	24
74	Toward a model framework of generalized parallel componential processing of multi-symbol numbers Journal of Experimental Psychology: Learning Memory and Cognition, 2015, 41, 732-745.	0.9	16
75	Related but not the same: Ordinality, cardinality and 1-to-1 correspondence in finger-based numerical representations. Journal of Cognitive Psychology, 2015, 27, 426-441.	0.9	30
76	Computers in mathematics education – Training the mental number line. Computers in Human Behavior, 2015, 48, 597-607.	8.5	38
77	Multiplication facts and the mental number line: evidence from unbounded number line estimation. Psychological Research, 2015, 79, 95-103.	1.7	11
78	Full-body Movement in Numerical Trainings: A Pilot Study with an Interactive Whiteboard. International Journal of Serious Games, 2015, 2, .	1.1	17
79	Decimal fraction representations are not distinct from natural number representations ââ,¬â€œ evidence from a combined eye-tracking and computational modeling approach. Frontiers in Human Neuroscience, 2014, 8, 172.	2.0	34
80	How number-space relationships are assessed before formal schooling: A taxonomy proposal. Frontiers in Psychology, 2014, 5, 419.	2.1	50
81	NIRS in motionââ,¬â€unraveling the neurocognitive underpinnings of embodied numerical cognition. Frontiers in Psychology, 2014, 5, 743.	2.1	10
82	Hormonal contraceptives masculinize brain activation patterns in the absence of behavioral changes in two numerical tasks. Brain Research, 2014, 1543, 128-142.	2.2	55
83	Aspects of situated cognition in embodied numerosity: the case of finger counting. Cognitive Processing, 2014, 15, 317-328.	1.4	48
84	Dissociating Number Line Estimations from Underlying Numerical Representations. Quarterly Journal of Experimental Psychology, 2014, 67, 991-1003.	1.1	31
85	On the Relation between the Mental Number Line and Arithmetic Competencies. Quarterly Journal of Experimental Psychology, 2014, 67, 1597-1613.	1.1	83
86	Language affects symbolic arithmetic in children: The case of number word inversion. Journal of Experimental Child Psychology, 2014, 119, 17-25.	1.4	64
87	Walk the number line – An embodied training of numerical concepts. Trends in Neuroscience and Education, 2013, 2, 74-84.	3.1	117
88	A Computational Modeling Approach on Threeâ€Digit Number Processing. Topics in Cognitive Science, 2013, 5, 317-334.	1.9	13
89	Is the SNARC Effect Related to the Level of Mathematics? No Systematic Relationship Observed despite More Power, More Repetitions, and More Direct Assessment of Arithmetic Skill. Quarterly Journal of Experimental Psychology, 2013, 66, 1974-1991.	1.1	78
90	Dyscalculia from a developmental and differential perspective. Frontiers in Psychology, 2013, 4, 516.	2.1	117

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91	Unbounding the mental number lineâ€"new evidence on children's spatial representation of numbers. Frontiers in Psychology, 2013, 4, 1021.	2.1	51
92	Interventions Supporting Children's Mathematics School Success. European Psychologist, 2013, 18, 89-113.	3.1	15
93	Diagnostics and Intervention in Developmental Dyscalculia: Current Issues and Novel Perspectives. , 2012, , 233-275.		19
94	Learning and development of embodied numerosity. Cognitive Processing, 2012, 13, 271-274.	1.4	83
95	On the development of Arabic three-digit number processing in primary school children. Journal of Experimental Child Psychology, 2012, 113, 594-601.	1.4	21
96	Multi-digit number processing beyond the two-digit number range: A combination of sequential and parallel processes. Acta Psychologica, 2012, 140, 81-90.	1.5	30
97	Sensori-motor spatial training of number magnitude representation. Psychonomic Bulletin and Review, 2011, 18, 177-183.	2.8	127
98	The Influence of Implicit Hand-Based Representations on Mental Arithmetic. Frontiers in Psychology, 2011, 2, 197.	2.1	58
99	Language Effects on Children's Nonverbal Number Line Estimations. Journal of Cross-Cultural Psychology, 2011, 42, 598-613.	1.6	67
100	Multimodal Semantic Quantity Representations: Further Evidence from Korean Sign Language. Frontiers in Psychology, 2011, 2, 389.	2.1	17
101	Multi-Digit Number Processing. Zeitschrift Fur Psychologie / Journal of Psychology, 2011, 219, 1-2.	1.0	7
102	Extending the Mental Number Line. Zeitschrift Fur Psychologie / Journal of Psychology, 2011, 219, 3-22.	1.0	94
103	Attentional Strategies in Place-Value Integration. Zeitschrift Fur Psychologie / Journal of Psychology, 2011, 219, 42-49.	1.0	14
104	Embodied numerosity: Implicit hand-based representations influence symbolic number processing across cultures. Cognition, 2010, 116, 251-266.	2.2	186
105	Sequential or parallel decomposed processing of two-digit numbers? Evidence from eye-tracking. Quarterly Journal of Experimental Psychology, 2009, 62, 323-334.	1.1	59
106	On the language specificity of basic number processing: Transcoding in a language with inversion and its relation to working memory capacity. Journal of Experimental Child Psychology, 2009, 102, 60-77.	1.4	119
107	Children's early mental number line: Logarithmic or decomposed linear?. Journal of Experimental Child Psychology, 2009, 103, 503-515.	1.4	149
108	All for one but not one for all: How multiple number representations are recruited in one numerical task. Brain Research, 2008, 1187, 154-166.	2.2	47

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109	A special role for numbers in working memory? An fMRI study. Neurolmage, 2006, 29, 1-14.	4.2	42
110	Language effects in magnitude comparison: Small, but not irrelevant. Brain and Language, 2005, 92, 262-277.	1.6	97
111	The Universal SNARC Effect. Experimental Psychology, 2005, 52, 187-194.	0.7	234
112	On the Perceptual Generality of the Unit-Decade Compatibility Effect. Experimental Psychology, 2004, 51, 72-79.	0.7	62
113	Notational Modulation of the SNARC and the MARC (Linguistic Markedness of Response Codes) Effect. Quarterly Journal of Experimental Psychology Section A: Human Experimental Psychology, 2004, 57, 835-863.	2.3	177
114	On the Development of the Mental Number Line: More, Less, or Never Holistic With Increasing Age?. Developmental Psychology, 2004, 40, 1199-1211.	1.6	121
115	On The Impact of Different Number Representations in the Number Bisection Task. Cortex, 2002, 38, 691-715.	2.4	53
116	Decade breaks in the mental number line? Putting the tens and units back in different bins. Cognition, 2001, 82, B25-B33.	2.2	286