Hans-Christoph Nuerk

List of Publications by Year
in descending order

116	4,664	71102	114465
papers	citations	41 h-index	63 g-index

123	123	123	2402
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Decade breaks in the mental number line? Putting the tens and units back in different bins. Cognition, 2001, 82, B25-B33.	2.2	286
2	The Universal SNARC Effect. Experimental Psychology, 2005, 52, 187-194.	0.7	234
3	Embodied numerosity: Implicit hand-based representations influence symbolic number processing across cultures. Cognition, 2010, 116, 251-266.	2.2	186
4	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
5	Childrenâ€™s early mental number line: Logarithmic or decomposed linear?. Journal of Experimental Child Psychology, 2009, 103, 503-515.	1.4	149
6	Sensori-motor spatial training of number magnitude representation. Psychonomic Bulletin and Review, 2011, 18, 177-183.	2.8	127
7	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
8	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
9	Walk the number line â€“ An embodied training of numerical concepts. Trends in Neuroscience and Education, 2013, 2, 74-84.	3.1	117
10	Dyscalculia from a developmental and differential perspective. Frontiers in Psychology, 2013, 4, 516.	2.1	117
11	Language effects in magnitude comparison: Small, but not irrelevant. Brain and Language, 2005, 92, 262-277.	1.6	97
12	Extending the Mental Number Line. Zeitschrift Fur Psychologie / Journal of Psychology, 2011, 219, 3-22.	1.0	94
13	Learning and development of embodied numerosity. Cognitive Processing, 2012, 13, 271-274.	1.4	83
14	On the Relation between the Mental Number Line and Arithmetic Competencies. Quarterly Journal of Experimental Psychology, 2014, 67, 1597-1613.	1.1	83
15	Combining brain stimulation and video game to promote long-term transfer of learning and cognitive enhancement. Scientific Reports, 2016, 6, 22003.	3.3	81
16	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
17	Methodological aspects to be considered when measuring the approximate number system (ANS) Ã¢â‚¬â€œ a research review. Frontiers in Psychology, 2015, 6, 295.	2.1	70
18	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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19	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
20	Language Effects on Childrenâ€™s Nonverbal Number Line Estimations. Journal of Cross-Cultural Psychology, 2011, 42, 598-613.	1.6	67
21	Language affects symbolic arithmetic in children: The case of number word inversion. Journal of Experimental Child Psychology, 2014, 119, 17-25.	1.4	64
22	Professional mathematicians differ from controls in their spatial-numerical associations. Psychological Research, 2016, 80, 710-726.	1.7	64
23	On the Perceptual Generality of the Unit-Decade Compatibility Effect. Experimental Psychology, 2004, 51, 72-79.	0.7	62
24	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
25	Mathematics anxiety reduces default mode network deactivation in response to numerical tasks. Frontiers in Human Neuroscience, 2015, 9, 202.	2.0	59
26	The Influence of Implicit Hand-Based Representations on Mental Arithmetic. Frontiers in Psychology, 2011, 2, 197.	2.1	58
27	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
28	On The Impact of Different Number Representations in the Number Bisection Task. Cortex, 2002, 38, 691-715.	2.4	53
29	Aberrant functional connectivity in depression as an index of state and trait rumination. Scientific Reports, 2017, 7, 2174.	3.3	53
30	Unbounding the mental number lineâ€"new evidence on children's spatial representation of numbers. Frontiers in Psychology, 2013, 4, 1021.	2.1	51
31	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
32	How number-space relationships are assessed before formal schooling: A taxonomy proposal. Frontiers in Psychology, 2014, 5, 419.	2.1	50
33	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
34	Stress-related dysfunction of the right inferior frontal cortex in high ruminators: An fNIRS study. NeuroImage: Clinical, 2018, 18, 510-517.	2.7	49
35	Aspects of situated cognition in embodied numerosity: the case of finger counting. Cognitive Processing, 2014, 15, 317-328.	1.4	48
36	How to rapidly construct a spatialâ€"numerical representation in preliterate children (at least) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 T	2.4	48

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37	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
38	How space-number associations may be created in preliterate children: six distinct mechanisms. Frontiers in Psychology, 2015, 6, 215.	2.1	46
39	A Review about Functional Illiteracy: Definition, Cognitive, Linguistic, and Numerical Aspects. Frontiers in Psychology, 2016, 7, 1617.	2.1	46
40	Cortical hemodynamic changes during the Trier Social Stress Test: An fNIRS study. NeuroImage, 2018, 171, 107-115.	4.2	45
41	A special role for numbers in working memory? An fMRI study. NeuroImage, 2006, 29, 1-14.	4.2	42
42	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
43	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
44	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
45	Computers in mathematics education â€“ Training the mental number line. Computers in Human Behavior, 2015, 48, 597-607.	8.5	38
46	A general model framework for multisymbol number comparison.. Psychological Review, 2016, 123, 667-695.	3.8	36
47	Decimal fraction representations are not distinct from natural number representations Ã¢â‚¬â€œ evidence from a combined eye-tracking and computational modeling approach. Frontiers in Human Neuroscience, 2014, 8, 172.	2.0	34
48	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
49	Dissociating Number Line Estimations from Underlying Numerical Representations. Quarterly Journal of Experimental Psychology, 2014, 67, 991-1003.	1.1	31
50	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
51	Neural correlates of math anxiety â€“ an overview and implications. Frontiers in Psychology, 2015, 6, 1333.	2.1	31
52	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
53	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
54	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

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55	Mental Number Line in the Preliterate Brain: The Role of Early Directional Experiences. Child Development Perspectives, 2016, 10, 172-177.	3.9	29
56	Does your body count? Embodied influences on the preferred counting direction of preschoolers. Journal of Cognitive Psychology, 2015, 27, 413-425.	0.9	24
57	Math Anxiety in Combination With Low Visuospatial Memory Impairs Math Learning in Children. Frontiers in Psychology, 2019, 10, 89.	2.1	22
58	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
59	Intransparent German number words complicate transcoding Ã¢â‚¬â€œ a translingual comparison with Japanese. Frontiers in Psychology, 2015, 06, 740.	2.1	20
60	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
61	Diagnostics and Intervention in Developmental Dyscalculia: Current Issues and Novel Perspectives. , 2012, , 233-275.		19
62	Sex differences in number line estimation: The role of numerical estimation. British Journal of Psychology, 2017, 108, 334-350.	2.3	18
63	Disrupted prefrontal functional connectivity during post-stress adaption in high ruminators. Scientific Reports, 2018, 8, 15588.	3.3	18
64	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
65	Multimodal Semantic Quantity Representations: Further Evidence from Korean Sign Language. Frontiers in Psychology, 2011, 2, 389.	2.1	17
66	Full-body Movement in Numerical Trainings: A Pilot Study with an Interactive Whiteboard. International Journal of Serious Games, 2015, 2, .	1.1	17
67	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
68	Components of Mathematics Anxiety: Factor Modeling of the MARS30-Brief. Frontiers in Psychology, 2016, 7, 91.	2.1	16
69	Training the equidistant principle of number line spacing. Cognitive Processing, 2016, 17, 243-258.	1.4	16
70	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
71	Processing multi-digit numbers: a translingual eye-tracking study. Psychological Research, 2016, 80, 422-433.	1.7	15
72	Interventions Supporting Childrenâ€™s Mathematics School Success. European Psychologist, 2013, 18, 89-113.	3.1	15

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73	Prefrontal neuromodulation reverses spatial associations of non-numerical sequences, but not numbers. Biological Psychology, 2017, 128, 39-49.	2.2	14
74	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
75	Oscillatory EEG Changes During Arithmetic Learning in Children. Developmental Neuropsychology, 2019, 44, 325-338.	1.4	14
76	The spatialâ€“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
77	Attentional Strategies in Place-Value Integration. Zeitschrift Fur Psychologie / Journal of Psychology, 2011, 219, 42-49.	1.0	14
78	A large-scale survey on finger counting routines, their temporal stability and flexibility in educated adults. PeerJ, 2018, 6, e5878.	2.0	14
79	A Computational Modeling Approach on Threeâ€Digit Number Processing. Topics in Cognitive Science, 2013, 5, 317-334.	1.9	13
80	On the limits of language influences on numerical cognition â€“ no inversion effects in three-digit number magnitude processing in adults. Frontiers in Psychology, 2015, 6, 1216.	2.1	13
81	Functional lateralization of arithmetic processing in the intraparietal sulcus is associated with handedness. Scientific Reports, 2020, 10, 1775.	3.3	13
82	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
83	Editorial: On the Development of Space-Number Relations: Linguistic and Cognitive Determinants, Influences, and Associations. Frontiers in Psychology, 2020, 11, 182.	2.1	12
84	Multiplication facts and the mental number line: evidence from unbounded number line estimation. Psychological Research, 2015, 79, 95-103.	1.7	11
85	Physiological threat responses predict number processing. Psychological Research, 2017, 81, 278-288.	1.7	11
86	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
87	NIRS in motionÃ¢â‚¬â€unraveling the neurocognitive underpinnings of embodied numerical cognition. Frontiers in Psychology, 2014, 5, 743.	2.1	10
88	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
89	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
90	Different Ways to Measure Math Anxiety. , 2019, , 20-41.		9

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91	Spatial displacement of numbers on a vertical number line in spatial neglect. Frontiers in Human Neuroscience, 2015, 9, 240.	2.0	8
92	Attention allows the SNARC effect to operate on multiple number lines. Scientific Reports, 2018, 8, 13778.	3.3	8
93	Mathematicsâ€“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
94	Automatic place-value activation in magnitude-irrelevant parity judgement. Psychological Research, 2021, 85, 777-792.	1.7	7
95	Multi-Digit Number Processing. Zeitschrift Fur Psychologie / Journal of Psychology, 2011, 219, 1-2.	1.0	7
96	Limitations of Transâ€Species Inferences: The Case of Spatialâ€Numerical Associations in Chicks and Humans. Cognitive Science, 2017, 41, 2267-2274.	1.7	6
97	Domain-general factors influencing numerical and arithmetic processing. Journal of Numerical Cognition, 2017, 3, 112-132.	1.2	6
98	Not all elementary school teachers are scared of math. Journal of Numerical Cognition, 2021, 7, 275-294.	1.2	6
99	Professional mathematicians do not differ from others in the symbolic numerical distance and size effects. Scientific Reports, 2020, 10, 11531.	3.3	5
100	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
101	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
102	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
103	A Mental Odd-Even Continuum Account: Some Numbers May Be â€œMore Oddâ€•Than Others and Some Numbers May Be â€œMore Evenâ€•Than Others. Frontiers in Psychology, 2018, 9, 1081.	2.1	4
104	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
105	Behavioral and Neurocognitive Evaluation of a Web-Platform for Game-Based Learning of Orthography and Numeracy. , 2017, , 149-176.		3
106	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
107	Arithmetic Errors in Financial Contexts in Parkinsonâ€™s Disease. Frontiers in Psychology, 2021, 12, 629984.	2.1	3
108	Blue Light and Melanopsin Contribution to the Pupil Constriction in the Blind-spot, Parafovea and Periphery. , 2020, , .		3

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109	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
110	Finger-Based Numerical Training Increases Sensorimotor Activation for Arithmetic in Childrenâ€"An fNIRS Study. Brain Sciences, 2022, 12, 637.	2.3	3
111	Diversity of functional illiterate cases: Results from aÂmultiple-single case study. Zeitschrift Fur Erziehungswissenschaft, 2019, 22, 123-151.	2.9	2
112	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
113	Negative Numbers are not yet Automatically Associated with Space in 6th Graders. Journal of Cognition and Development, 2019, 20, 611-633.	1.3	1
114	Spatial Presentations, but Not Response Formats Influence Spatial-Numerical Associations in Adults. Frontiers in Psychology, 2018, 9, 2608.	2.1	0
115	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
116	Deficits in or preservation of basic number processing in Parkinsonâ€™s disease? A registered report. Journal of Neuroscience Research, 2021, 99, 2390-2405.	2.9	0