Elizabeth M Brannon

List of Publications by Year
in descending order

105 papers	9,966 citations	36271 51 h-index	36008 97 g-index
105 all docs	105 docs citations	105 times ranked	4078 citing authors

#	Article	IF	Citations
1	Relative numerical middle in rhesus monkeys. Biology Letters, 2022, 18, 20210426.	1.0	2
2	Young Children Intuitively Divide Before They Recognize the Division Symbol. Frontiers in Human Neuroscience, 2022, 16, 752190.	1.0	3
3	Increasing entropy reduces perceived numerosity throughout the lifespan. Cognition, 2022, 225, 105096.	1.1	5
4	Failure to replicate the benefit of approximate arithmetic training for symbolic arithmetic fluency in adults. Cognition, 2021, 207, 104521.	1.1	20
5	Approximate multiplication in young children prior to multiplication instruction. Journal of Experimental Child Psychology, 2021, 207, 105116.	0.7	7
6	Middle identification for rhesus monkeys is influenced by number but not extent. Scientific Reports, 2020, 10, 17402.	1.6	3
7	Number sense biases children's area judgments. Cognition, 2020, 204, 104352.	1.1	18
8	Shared and distinct neural circuitry for nonsymbolic and symbolic doubleâ€digit addition. Human Brain Mapping, 2019, 40, 1328-1343.	1.9	14
9	Numerical encoding in early visual cortex. Cortex, 2019, 114, 76-89.	1.1	58
10	Developmental trajectory of neural specialization for letter and number visual processing. Developmental Science, 2018, 21, e12578.	1.3	13
11	The Acuity and Manipulability of the ANS Have Separable Influences on Preschoolersâ€™ Symbolic Math Achievement. Frontiers in Psychology, 2018, 9, 2554.	1.1	5
12	Approximate Arithmetic Training Improves Informal Math Performance in Low Achieving Preschoolers. Frontiers in Psychology, 2018, 9, 606.	1.1	17
13	Does the Approximate Number System Serve as a Foundation for Symbolic Mathematics?. Language Learning and Development, 2017, 13, 171-190.	0.7	54
14	Five-year-olds do not show ambiguity aversion in a risk and ambiguity task with physical objects. Journal of Experimental Child Psychology, 2017, 159, 319-326.	0.7	6
15	Numerosity processing in early visual cortex. NeuroImage, 2017, 157, 429-438.	2.1	78
16	The contributions of numerical acuity and non-numerical stimulus features to the development of the number sense and symbolic math achievement. Cognition, 2017, 168, 222-233.	1.1	54
17	Direct and rapid encoding of numerosity in the visual stream. Behavioral and Brain Sciences, 2017, 40, e185.	0.4	8
18	Pharmacological inactivation does not support a unique causal role for intraparietal sulcus in the discrimination of visual number. PLoS ONE, 2017, 12, e0188820.	1.1	3

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19	Rapid and Direct Encoding of Numerosity in the Visual Stream. Cerebral Cortex, 2016, 26, bhv017.	1.6	111
20	Significant Inter-Test Reliability across Approximate Number System Assessments. Frontiers in Psychology, 2016, 7, 310.	1.1	38
21	Monkeys display classic signatures of human symbolic arithmetic. Animal Cognition, 2016, 19, 405-415.	0.9	22
22	Visuospatial working memory influences the interaction between space and time. Psychonomic Bulletin and Review, 2016, 23, 1839-1845.	1.4	17
23	Using cognitive training studies to unravel the mechanisms by which the approximate number system supports symbolic math ability. Current Opinion in Behavioral Sciences, 2016, 10, 73-80.	2.0	23
24	Non-symbolic approximate arithmetic training improves math performance in preschoolers. Journal of Experimental Child Psychology, 2016, 152, 278-293.	0.7	119
25	Implicit sequence learning in ringâ€tailed lemurs (<i>Lemur catta</i>). Journal of the Experimental Analysis of Behavior, 2016, 105, 123-132.	0.8	6
26	How to interpret cognitive training studies: A reply to Lindskog & Winman. Cognition, 2016, 150, 247-251.	1.1	41
27	Comparison of discrete ratios by rhesus macaques (Macaca mulatta). Animal Cognition, 2016, 19, 75-89.	0.9	24
28	Evidence against continuous variables driving numerical discrimination in infancy. Frontiers in Psychology, 2015, 6, 923.	1.1	19
29	Commentary on: Ã¢â,¬Å"Number-space mapping in the newborn chick resembles humans' mental number lineÃ¢â,¬Â• Frontiers in Psychology, 2015, 6, 352.	1.1	7
30	Modeling the approximate number system to quantify the contribution of visual stimulus features. Cognition, 2015, 142, 247-265.	1.1	187
31	Evolutionary and Developmental Continuities in Numerical Cognition. Advances in Mathematical Cognition and Learning, 2015, 1, 123-144.	0.5	4
32	Developmental Continuity in the Link Between Sensitivity to Numerosity and Physical Size. Journal of Numerical Cognition, 2015, 1, 7-20.	0.6	10
33	Neural connectivity patterns underlying symbolic number processing indicate mathematical achievement in children. Developmental Science, 2014, 17, 187-202.	1.3	27
34	Electrophysiological Evidence for the Involvement of the Approximate Number System in Preschoolers' Processing of Spoken Number Words. Journal of Cognitive Neuroscience, 2014, 26, 1891-1904.	1.1	14
35	Improving arithmetic performance with number sense training: An investigation of underlying mechanism. Cognition, 2014, 133, 188-200.	1.1	170
36	Lemurs and macaques show similar numerical sensitivity. Animal Cognition, 2014, 17, 503-515.	0.9	23

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37	The evolution of self-control. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2140-8.	3.3	602
38	Rhesus monkeys (Macaca mulatta) map number onto space. Cognition, 2014, 132, 57-67.	1.1	94
39	Number trumps area for 7-month-old infants.. Developmental Psychology, 2014, 50, 108-112.	1.2	59
40	Children do not exhibit ambiguity aversion despite intact familiarity bias. Frontiers in Psychology, 2014, 5, 1519.	1.1	17
41	Training the Approximate Number System Improves Math Proficiency. Psychological Science, 2013, 24, 2013-2019.	1.8	311
42	Number sense in infancy predicts mathematical abilities in childhood. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18116-18120.	3.3	271
43	Infants Show Ratioâ€dependent Number Discrimination Regardless of Set Size. Infancy, 2013, 18, 927-941.	0.9	54
44	Prosimian Primates Show Ratio Dependence in Spontaneous Quantity Discriminations. Frontiers in Psychology, 2012, 3, 550.	1.1	25
45	Malleability of the approximate number system: effects of feedback and training. Frontiers in Human Neuroscience, 2012, 6, 68.	1.0	145
46	Representation of numerosity in posterior parietal cortex. Frontiers in Integrative Neuroscience, 2012, 6, 25.	1.0	32
47	How does cognition evolve? Phylogenetic comparative psychology. Animal Cognition, 2012, 15, 223-238.	0.9	207
48	Inter-parietal white matter development predicts numerical performance in young children. Learning and Individual Differences, 2011, 21, 672-680.	1.5	23
49	Evolutionary Foundations of the Approximate Number System. , 2011, , 207-224.		38
50	Numerical Rule-Learning in Ring-Tailed Lemurs (Lemur Catta). Frontiers in Psychology, 2011, 2, 23.	1.1	23
51	Attending to One of Many: When Infants are Surprisingly Poor at Discriminating an Item's Size. Frontiers in Psychology, 2011, 2, 65.	1.1	28
52	Parallels in Stimulus-Driven Oscillatory Brain Responses to Numerosity Changes in Adults and Seven-Month-Old Infants. Developmental Neuropsychology, 2011, 36, 651-667.	1.0	16
53	Neurocognitive Development of Risk Aversion from Early Childhood to Adulthood. Frontiers in Human Neuroscience, 2011, 5, 178.	1.0	51
54	Individual differences in nonverbal number discrimination correlate with event-related potentials and measures of probabilistic reasoning. Neuropsychologia, 2010, 48, 3687-3695.	0.7	27

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55	Do monkeys think in metaphors? Representations of space and time in monkeys and humans. Cognition, 2010, 117, 191-202.	1.1	130
56	Spontaneous analog number representations in 3â€year€old children. Developmental Science, 2010, 13, 289-297.	1.3	51
57	Stable individual differences in number discrimination in infancy. Developmental Science, 2010, 13, 900-906.	1.3	140
58	Context affects the numerical semantic congruity effect in rhesus monkeys (Macaca mulatta). Behavioural Processes, 2010, 83, 191-196.	0.5	15
59	Numerical abstraction: It ain't broke. Behavioral and Brain Sciences, 2009, 32, 331-332.	0.4	5
60	Induced Alpha-band Oscillations Reflect Ratio-dependent Number Discrimination in the Infant Brain. Journal of Cognitive Neuroscience, 2009, 21, 2398-2406.	1.1	45
61	Behavioral and Neural Basis of Number Sense in Infancy. Current Directions in Psychological Science, 2009, 18, 346-351.	2.8	89
62	Comment on "Log or Linear? Distinct Intuitions of the Number Scale in Western and Amazonian Indigene Cultures". Science, 2009, 323, 38-38.	6.0	57
63	The Neural Development of an Abstract Concept of Number. Journal of Cognitive Neuroscience, 2009, 21, 2217-2229.	1.1	193
64	The relative salience of discrete and continuous quantity in young infants. Developmental Science, 2009, 12, 453-463.	1.3	110
65	Beyond the number domain. Trends in Cognitive Sciences, 2009, 13, 83-91.	4.0	483
66	Developmental changes in category-specific brain responses to numbers and letters in a working memory task. NeuroImage, 2009, 44, 1404-1414.	2.1	38
67	Empty sets as part of the numerical continuum: Conceptual precursors to the zero concept in rhesus monkeys.. Journal of Experimental Psychology: General, 2009, 138, 258-269.	1.5	51
68	Crossing the divide: Infants discriminate small from large numerosities.. Developmental Psychology, 2009, 45, 1583-1594.	1.2	128
69	Changes in the Ability to Detect Ordinal Numerical Relationships Between 9 and 11 Months of Age. Infancy, 2008, 13, 308-337.	0.9	58
70	Quantitative competencies in infancy. Developmental Science, 2008, 11, 803-808.	1.3	87
71	The Difficulties of Representing Continuous Extent in Infancy: Using Number Is Just Easier. Child Development, 2008, 79, 476-489.	1.7	123
72	Social complexity predicts transitive reasoning in prosimian primates. Animal Behaviour, 2008, 76, 479-486.	0.8	121

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73	Intersensory redundancy accelerates preverbal numerical competence. Cognition, 2008, 108, 210-221.	1.1	135
74	Monkeys match and tally quantities across senses. Cognition, 2008, 108, 617-625.	1.1	133
75	Electrophysiological Measures of Time Processing in Infant and Adult Brains: Weber's Law Holds. Journal of Cognitive Neuroscience, 2008, 20, 193-203.	1.1	85
76	Basic Math in Monkeys and College Students. PLoS Biology, 2007, 5, e328.	2.6	174
77	Monotonic Coding of Numerosity in Macaque Lateral Intraparietal Area. PLoS Biology, 2007, 5, e208.	2.6	198
78	How much does number matter to a monkey (Macaca mulatta)?. Journal of Experimental Psychology, 2007, 33, 32-41.	1.9	156
79	Adding up the effects of cultural experience on the brain. Trends in Cognitive Sciences, 2007, 11, 1-4.	4.0	66
80	Electrophysiological evidence for notation independence in numerical processing. Behavioral and Brain Functions, 2007, 3, 1.	1.4	237
81	Heterogeneity impairs numerical matching but not numerical ordering in preschool children. Developmental Science, 2007, 10, 431-440.	1.3	66
82	Temporal discrimination increases in precision over development and parallels the development of numerosity discrimination. Developmental Science, 2007, 10, 770-777.	1.3	153
83	Nonverbal representation of time and number in adults. Acta Psychologica, 2007, 124, 296-318.	0.7	51
84	The role of reference points in ordinal numerical comparisons by rhesus macaques (macaca mulatta).. Journal of Experimental Psychology, 2006, 32, 120-134.	1.9	33
85	The development of area discrimination and its implications for number representation in infancy. Developmental Science, 2006, 9, F59-F64.	1.3	164
86	The Effect of Heterogeneity on Numerical Ordering in Rhesus Monkeys. Infancy, 2006, 9, 173-189.	0.9	27
87	Weber's Law influences numerical representations in rhesus macaques (Macaca mulatta). Animal Cognition, 2006, 9, 159-172.	0.9	78
88	Re-visiting the competence/performance debate in the acquisition of the counting principles. Cognitive Psychology, 2006, 52, 130-169.	0.9	251
89	The representation of numerical magnitude. Current Opinion in Neurobiology, 2006, 16, 222-229.	2.0	243
90	The multisensory representation of number in infancy. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3486-3489.	3.3	206

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91	Shared System for Ordering Small and Large Numbers in Monkeys and Humans. Psychological Science, 2006, 17, 401-406.	1.8	474
92	Functional Imaging of Numerical Processing in Adults and 4-y-Old Children. PLoS Biology, 2006, 4, e125.	2.6	457
93	Monkeys Match the Number of Voices They Hear to the Number of Faces They See. Current Biology, 2005, 15, 1034-1038.	1.8	159
94	Analog number representations in mongoose lemurs (Eulemur mongoz): evidence from a search task. Animal Cognition, 2005, 8, 247-252.	0.9	54
95	Semantic congruity affects numerical judgments similarly in monkeys and humans. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16507-16511.	3.3	78
96	The independence of language and mathematical reasoning. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3177-3178.	3.3	39
97	Timing in the baby brain. Cognitive Brain Research, 2004, 21, 227-233.	3.3	83
98	Number bias for the discrimination of large visual sets in infancy. Cognition, 2004, 93, B59-B68.	1.1	202
99	Number knows no bounds. Trends in Cognitive Sciences, 2003, 7, 279-281.	4.0	16
100	The development of ordinal numerical knowledge in infancy. Cognition, 2002, 83, 223-240.	1.1	231
101	The Development of Ordinal Numerical Competence in Young Children. Cognitive Psychology, 2001, 43, 53-81.	0.9	135
102	Numerical Subtraction in the Pigeon: Evidence for a Linear Subjective Number Scale. Psychological Science, 2001, 12, 238-243.	1.8	209
103	Response to Dehaene. Psychological Science, 2001, 12, 247-247.	1.8	5
104	Representation of the numerosities 1â€“9 by rhesus macaques (Macaca mulatta).. Journal of Experimental Psychology, 2000, 26, 31-49.	1.9	140
105	Differences in feeding ecology predict differences in performance between golden lion tamarins (Leontopithecus rosalia) and Wiedâ€™s marmosets (Callithrix kuhli) on spatial and visual memory tasks. Learning and Behavior, 1996, 24, 384-393.	3.4	51