Torkel Klingberg

List of Publications by Year in Descending Order

85 papers	12,525 citations	42 h-index	90 g-index
90 ext. papers	13,882 ext. citations	6.1 avg, IF	6.81 L-index

#	Paper	IF	Citations
85	Assessing the impact of environmental factors on the adolescent brain: the importance of regional analyses and genetic controls.. *World Psychiatry*, **2022**, 21, 146-147	14.4	0
84	Working Memory Training **2022**, 606-622		
83	The impact of digital media on children\'s intelligence while controlling for genetic differences in cognition and socioeconomic background.. *Scientific Reports*, **2022**, 12, 7720	4.9	2
82	Working memory capacity, variability, and response to intervention at age 6 and its association to inattention and mathematics age 9. *Cognitive Development*, **2021**, 58, 101013	1.7	0
81	Training spatial cognition enhances mathematical learning in a randomized study of 17,000 children. *Nature Human Behaviour*, **2021**, 5, 1548-1554	12.8	13
80	Change by challenge: A common genetic basis behind childhood cognitive development and cognitive training. *Npj Science of Learning*, **2021**, 6, 16	6	1
79	Resting State EEG Related to Mathematical Improvement After Spatial Training in Children. *Frontiers in Human Neuroscience*, **2021**, 15, 698367	3.3	0
78	Cognitive and brain development is independently influenced by socioeconomic status and polygenic scores for educational attainment. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 12411-12418	11.5	27
77	Cortical surface area of the left frontal pole is associated with visuospatial working memory capacity. *Neuropsychologia*, **2020**, 143, 107486	3.2	3
76	Inter-Individual Differences in Striatal Connectivity Is Related to Executive Function Through Fronto-Parietal Connectivity. *Cerebral Cortex*, **2020**, 30, 672-681	5.1	1
75	Structural variation within the left globus pallidus is associated with task-switching, not stimulus updating or distractor filtering. *Cognitive Neuroscience*, **2020**, 11, 229-238	1.7	0
74	Working Memory Training in Alcohol Use Disorder: A Randomized Controlled Trial. *Alcoholism: Clinical and Experimental Research*, **2019**, 43, 135-146	3.7	27
73	Improving Methodological Standards in Behavioral Interventions for Cognitive Enhancement. *Journal of Cognitive Enhancement: Towards the Integration of Theory and Practice*, **2019**, 3, 2-29	2.4	91
72	Functional differentiation between convergence and non-convergence zones of the striatum in children. *NeuroImage*, **2018**, 173, 384-393	7.9	3
71	Short and long-term effects of a mathematics tablet intervention for low performing second graders.. *Journal of Educational Psychology*, **2018**, 110, 1127-1148	5.3	13
70	Connectivity of the Human Number Form Area Reveals Development of a Cortical Network for Mathematics. *Frontiers in Human Neuroscience*, **2018**, 12, 465	3.3	5
69	Human ROBO1 regulates white matter structure in corpus callosum. *Brain Structure and Function*, **2017**, 222, 707-716	4	4

68	Working Memory Training **2017**, 491-512		2
67	Timing of White Matter Development Determines Cognitive Abilities at School Entry but Not in Late Adolescence. *Cerebral Cortex*, **2017**, 27, 4516-4522	5.1	3
66	Specialization of the Right Intraparietal Sulcus for Processing Mathematics During Development. *Cerebral Cortex*, **2017**, 27, 4436-4446	5.1	9
65	Identification of NCAN as a candidate gene for developmental dyslexia. *Scientific Reports*, **2017**, 7, 9294	4.9	14
64	No Long-Term Effect of Physical Activity Intervention on Working Memory or Arithmetic in Preadolescents. *Frontiers in Psychology*, **2017**, 8, 1342	3.4	10
63	Transcranial Electric Stimulation Can Impair Gains during Working Memory Training and Affects the Resting State Connectivity. *Frontiers in Human Neuroscience*, **2017**, 11, 364	3.3	12
62	Grit Is Associated with Structure of Nucleus Accumbens and Gains in Cognitive Training. *Journal of Cognitive Neuroscience*, **2016**, 28, 1688-1699	3.1	16
61	Behavior and neuroimaging at baseline predict individual response to combined mathematical and working memory training in children. *Developmental Cognitive Neuroscience*, **2016**, 20, 43-51	5.5	31
60	The neuroscience of working memory capacity and training. *Nature Reviews Neuroscience*, **2016**, 17, 438-49	13.5	243
59	Neural basis of cognitive training and development. *Current Opinion in Behavioral Sciences*, **2016**, 10, 97-101	4	6
58	Quantitative susceptibility mapping of striatum in children and adults, and its association with working memory performance. *NeuroImage*, **2016**, 136, 208-14	7.9	25
57	Neonatal MRI is associated with future cognition and academic achievement in preterm children. *Brain*, **2015**, 138, 3251-62	11.2	36
56	Mutation in CEP63 co-segregating with developmental dyslexia in a Swedish family. *Human Genetics*, **2015**, 134, 1239-48	6.3	15
55	CTNND2-a candidate gene for reading problems and mild intellectual disability. *Journal of Medical Genetics*, **2015**, 52, 111-22	5.8	24
54	Benefits of a working memory training program for inattention in daily life: a systematic review and meta-analysis. *PLoS ONE*, **2015**, 10, e0119522	3.7	124
53	The role of fronto-parietal and fronto-striatal networks in the development of working memory: a longitudinal study. *Cerebral Cortex*, **2015**, 25, 1587-95	5.1	131
52	Structural maturation and brain activity predict future working memory capacity during childhood development. *Journal of Neuroscience*, **2014**, 34, 1592-8	6.6	97
51	Stratified medicine for mental disorders. *European Neuropsychopharmacology*, **2014**, 24, 5-50	1.2	121

50	Childhood cognitive development as a skill. *Trends in Cognitive Sciences*, **2014**, 18, 573-9	14	30
49	Effect of working memory training on working memory, arithmetic and following instructions. *Psychological Research*, **2014**, 78, 869-77	2.5	67
48	Music practice is associated with development of working memory during childhood and adolescence. *Frontiers in Human Neuroscience*, **2014**, 7, 926	3.3	62
47	DRD2/ANKK1 polymorphism modulates the effect of ventral striatal activation on working memory performance. *Neuropsychopharmacology*, **2014**, 39, 2357-65	8.7	26
46	Polymorphisms in the dopamine receptor 2 gene region influence improvements during working memory training in children and adolescents. *Journal of Cognitive Neuroscience*, **2014**, 26, 54-62	3.1	52
45	DCDC2 polymorphism is associated with left temporoparietal gray and white matter structures during development. *Journal of Neuroscience*, **2014**, 34, 14455-62	6.6	32
44	Trade-off between capacity and precision in visuospatial working memory. *Journal of Cognitive Neuroscience*, **2014**, 26, 211-22	3.1	12
43	Three dyslexia susceptibility genes, DYX1C1, DCDC2, and KIAA0319, affect temporo-parietal white matter structure. *Biological Psychiatry*, **2012**, 72, 671-6	7.9	114
42	Is working memory capacity fixed?. *Journal of Applied Research in Memory and Cognition*, **2012**, 1, 194-196	2.3	22
41	Dopamine, working memory, and training induced plasticity: implications for developmental research. *Developmental Psychology*, **2012**, 48, 836-43	3.7	49
40	Brain activity during a visuospatial working memory task predicts arithmetical performance 2 years later. *Cerebral Cortex*, **2012**, 22, 1078-85	5.1	132
39	Computerized training of non-verbal reasoning and working memory in children with intellectual disability. *Frontiers in Human Neuroscience*, **2012**, 6, 271	3.3	66
38	The dyslexia candidate locus on 2p12 is associated with general cognitive ability and white matter structure. *PLoS ONE*, **2012**, 7, e50321	3.7	34
37	Influence of the COMT genotype on working memory and brain activity changes during development. *Biological Psychiatry*, **2011**, 70, 222-9	7.9	119
36	Gains in fluid intelligence after training non-verbal reasoning in 4-year-old children: a controlled, randomized study. *Developmental Science*, **2011**, 14, 591-601	4.5	166
35	The SNAP25 gene is linked to working memory capacity and maturation of the posterior cingulate cortex during childhood. *Biological Psychiatry*, **2010**, 68, 1120-5	7.9	51
34	Training and plasticity of working memory. *Trends in Cognitive Sciences*, **2010**, 14, 317-24	14	1095
33	Measuring working memory capacity with greater precision in the lower capacity ranges. *Developmental Neuropsychology*, **2010**, 35, 81-95	1.8	44

32	Mechanism for top-down control of working memory capacity. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 6802-7	11.5	236
31	Working memory remediation and the D1 receptor. *American Journal of Psychiatry*, **2009**, 166, 515-6	11.9	8
30	Training and transfer effects of executive functions in preschool children. *Developmental Science*, **2009**, 12, 106-13	4.5	692
29	Changes in cortical dopamine D1 receptor binding associated with cognitive training. *Science*, **2009**, 323, 800-2	33.3	414
28	Prefrontal cortex and basal ganglia control access to working memory. *Nature Neuroscience*, **2008**, 11, 103-7	25.5	718
27	Phonological working memory with auditory presentation of pseudo-words -- an event related fMRI Study. *Brain Research*, **2008**, 1212, 48-54	3.7	57
26	Common and unique components of inhibition and working memory: an fMRI, within-subjects investigation. *Neuropsychologia*, **2008**, 46, 2668-82	3.2	149
25	Visual working memory influences the performance in virtual image-guided surgical intervention. *Surgical Endoscopy and Other Interventional Techniques*, **2007**, 21, 2044-50	5.2	24
24	Neuronal firing rates account for distractor effects on mnemonic accuracy in a visuo-spatial working memory task. *Biological Cybernetics*, **2007**, 96, 407-19	2.8	12
23	Brain activity related to working memory and distraction in children and adults. *Cerebral Cortex*, **2007**, 17, 1047-54	5.1	133
22	Stronger synaptic connectivity as a mechanism behind development of working memory-related brain activity during childhood. *Journal of Cognitive Neuroscience*, **2007**, 19, 750-60	3.1	90
21	Fronto-parietal connection asymmetry regulates working memory distractibility. *Journal of Integrative Neuroscience*, **2007**, 6, 567-96	1.5	15
20	Changes in cortical activity after training of working memory--a single-subject analysis. *Physiology and Behavior*, **2007**, 92, 186-92	3.5	176
19	Development of a superior frontal-intraparietal network for visuo-spatial working memory. *Neuropsychologia*, **2006**, 44, 2171-7	3.2	263
18	Training Working Memory. *The ADHD Report*, **2006**, 14, 6-8	1.4	2
17	Working memory and image guided surgical simulation. *Studies in Health Technology and Informatics*, **2006**, 119, 188-93	0.5	3
16	Computerized training of working memory in children with ADHD--a randomized, controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, **2005**, 44, 177-86	7.2	1347
15	Diffusion tensor imaging on teenagers, born at term with moderate hypoxic-ischemic encephalopathy. *Pediatric Research*, **2005**, 58, 936-40	3.2	27

14	Visuo-spatial working memory span: a sensitive measure of cognitive deficits in children with ADHD. *Child Neuropsychology*, **2004**, 10, 155-61	2.7	152
13	Visuo-Spatial Working Memory Span: A Sensitive Measure of Cognitive Deficits in Children With ADHD. *Child Neuropsychology*, **2004**, 10, 155-161	2.7	6
12	Increased prefrontal and parietal activity after training of working memory. *Nature Neuroscience*, **2004**, 7, 75-9	25.5	981
11	Maturation of white matter is associated with the development of cognitive functions during childhood. *Journal of Cognitive Neuroscience*, **2004**, 16, 1227-33	3.1	587
10	Preterm children have disturbances of white matter at 11 years of age as shown by diffusion tensor imaging. *Pediatric Research*, **2003**, 54, 672-9	3.2	159
9	Combined analysis of DTI and fMRI data reveals a joint maturation of white and grey matter in a fronto-parietal network. *Cognitive Brain Research*, **2003**, 18, 48-57		300
8	Increased brain activity in frontal and parietal cortex underlies the development of visuospatial working memory capacity during childhood. *Journal of Cognitive Neuroscience*, **2002**, 14, 1-10	3.1	572
7	Training of working memory in children with ADHD. *Journal of Clinical and Experimental Neuropsychology*, **2002**, 24, 781-91	2.1	727
6	Activity in motor areas while remembering action events. *NeuroReport*, **2000**, 11, 2199-201	1.7	64
5	Limitations in information processing in the human brain: neuroimaging of dual task performance and working memory tasks. *Progress in Brain Research*, **2000**, 126, 95-102	2.9	45
4	Microstructure of temporo-parietal white matter as a basis for reading ability: evidence from diffusion tensor magnetic resonance imaging. *Neuron*, **2000**, 25, 493-500	13.9	606
3	Interference between two concurrent tasks is associated with activation of overlapping fields in the cortex. *Cognitive Brain Research*, **1997**, 6, 1-8		81
2	Two different areas within the primary motor cortex of man. *Nature*, **1996**, 382, 805-7	50.4	521
1	Activation of multi-modal cortical areas underlies short-term memory. *European Journal of Neuroscience*, **1996**, 8, 1965-71	3.5	60