# Thomas Wolbers

## List of Publications by Year
## in descending order

Source: https://exaly.com/author-pdf/8590765/publications.pdf

Version: 2024-02-01

68
papers

4,451
citations

126708

33
h-index

114278

63
g-index

75
all docs

75
docs citations

75
times ranked

3989
citing authors

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | What determines our navigational abilities?. Trends in Cognitive Sciences, 2010, 14, 138-146. | 4.0 | 613 |
| 2 | Hippocampus activity differentiates good from poor learners of a novel lexicon. NeuroImage, 2005, 25, 958-968. | 2.1 | 287 |
| 3 | Dissociable Retrosplenial and Hippocampal Contributions to Successful Formation of Survey Representations. Journal of Neuroscience, 2005, 25, 3333-3340. | 1.7 | 283 |
| 4 | The Aging Navigational System. Neuron, 2017, 95, 1019-1035. | 3.8 | 256 |
| 5 | Differential Recruitment of the Hippocampus, Medial Prefrontal Cortex, and the Human Motion Complex during Path Integration in Humans. Journal of Neuroscience, 2007, 27, 9408-9416. | 1.7 | 197 |
| 6 | Challenges for identifying the neural mechanisms that support spatial navigation: the impact of spatial scale. Frontiers in Human Neuroscience, 2014, 8, 571. | 1.0 | 192 |
| 7 | Spatial updating: how the brain keeps track of changing object locations during observer motion. Nature Neuroscience, 2008, 11, 1223-1230. | 7.1 | 143 |
| 8 | The Human Retrosplenial Cortex and Thalamus Code Head Direction in a Global Reference Frame. Journal of Neuroscience, 2016, 36, 6371-6381. | 1.7 | 128 |
| 9 | Maladaptive Bias for Extrahippocampal Navigation Strategies in Aging Humans. Journal of Neuroscience, 2013, 33, 6012-6017. | 1.7 | 127 |
| 10 | Modality-Independent Coding of Spatial Layout in the Human Brain. Current Biology, 2011, 21, 984-989. | 1.8 | 125 |
| 11 | Neural foundations of emerging route knowledge in complex spatial environments. Cognitive Brain Research, 2004, 21, 401-411. | 3.3 | 121 |
| 12 | The Human Dentate Gyrus Plays a Necessary Role in Discriminating New Memories. Current Biology, 2016, 26, 2629-2634. | 1.8 | 110 |
| 13 | Ageing effects on path integration and landmark navigation. Hippocampus, 2012, 22, 1770-1780. | 0.9 | 100 |
| 14 | Cardiovascular fitness modulates brain activation associated with spatial learning. NeuroImage, 2012, 59, 3003-3014. | 2.1 | 94 |
| 15 | Aging specifically impairs switching to an allocentric navigational strategy. Frontiers in Aging Neuroscience, 2012, 4, 29. | 1.7 | 94 |
| 16 | Compromised Grid-Cell-like Representations in Old Age as a Key Mechanism to Explain Age-Related Navigational Deficits. Current Biology, 2018, 28, 1108-1115.e6. | 1.8 | 93 |
| 17 | Dissociable contributions within the medial temporal lobe to encoding of object-location associations. Learning and Memory, 2005, 12, 343-351. | 0.5 | 91 |
| 18 | How cognitive aging affects multisensory integration of navigational cues. Neurobiology of Aging, 2014, 35, 2761-2769. | 1.5 | 85 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 19 | How age-related strategy switching deficits affect wayfinding in complex environments. Neurobiology of Aging, 2014, 35, 1095-1102. | 1.5 | 82 |
| 20 | The potential of virtual reality for spatial navigation research across the adult lifespan. Journal of Experimental Biology, 2019, 222, . | 0.8 | 74 |
| 21 | Decoding the direction of auditory motion in blind humans. NeuroImage, 2011, 56, 681-687. | 2.1 | 72 |
| 22 | Dissociable cognitive mechanisms underlying human path integration. Experimental Brain Research, 2011, 208, 61-71. | 0.7 | 72 |
| 23 | Cue combination in human spatial navigation. Cognitive Psychology, 2017, 95, 105-144. | 0.9 | 70 |
| 24 | Embodiment in the aging mind. Neuroscience and Biobehavioral Reviews, 2018, 86, 207-225. | 2.9 | 59 |
| 25 | Implementation of visuospatial cues in response selection. NeuroImage, 2006, 29, 286-294. | 2.1 | 56 |
| 26 | Rest boosts the long-term retention of spatial associative and temporal order information. Hippocampus, 2015, 25, 1017-1027. | 0.9 | 46 |
| 27 | The predictive value of white matter organization in posterior parietal cortex for spatial visualization ability. NeuroImage, 2006, 32, 1450-1455. | 2.1 | 45 |
| 28 | Rotated alphanumeric characters do not automatically activate frontoparietal areas subserving mental rotation. NeuroImage, 2009, 44, 1063-1073. | 2.1 | 45 |
| 29 | Wakeful rest promotes the integration of spatial memories into accurate cognitive maps. Hippocampus, 2016, 26, 185-193. | 0.9 | 44 |
| 30 | Changes in Connectivity Profiles as a Mechanism for Strategic Control over Interfering Subliminal Information. Cerebral Cortex, 2006, 16, 857-864. | 1.6 | 42 |
| 31 | Changes in pattern completion â€“ A key mechanism to explain age-related recognition memory deficits?. Cortex, 2015, 64, 343-351. | 1.1 | 42 |
| 32 | Learning New Sensorimotor Contingencies: Effects of Long-Term Use of Sensory Augmentation on the Brain and Conscious Perception. PLoS ONE, 2016, 11, e0166647. | 1.1 | 41 |
| 33 | Effects of a cognitive training on spatial learning and associated functional brain activations. BMC Neuroscience, 2013, 14, 73. | 0.8 | 39 |
| 34 | Sources of path integration error in young and aging humans. Nature Communications, 2020, 11, 2626. | 5.8 | 35 |
| 35 | Space, time, and numbers in the right posterior parietal cortex: Differences between response code associations and congruency effects. NeuroImage, 2016, 129, 72-79. | 2.1 | 31 |
| 36 | Comparable rest-related promotion of spatial memory consolidation in younger and older adults. Neurobiology of Aging, 2016, 48, 143-152. | 1.5 | 29 |

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|---|---|---|---|
| 37 | A novel virtual-reality-based route-learning test suite: Assessing the effects of cognitive aging on navigation. Behavior Research Methods, 2020, 52, 630-640. | 2.3 | 28 |
| 38 | Neural Dynamics of Learning Soundâ€"Action Associations. PLoS ONE, 2008, 3, e3845. | 1.1 | 25 |
| 39 | Physiological signal variability in hMT+ reflects performance on a direction discrimination task. Frontiers in Psychology, 2011, 2, 185. | 1.1 | 24 |
| 40 | Path integration in normal aging and Alzheimerâ€™s disease. Trends in Cognitive Sciences, 2022, 26, 142-158. | 4.0 | 21 |
| 41 | Representation of Spatial Information in Key Areas of the Descending Pain Modulatory System. Journal of Neuroscience, 2014, 34, 4634-4639. | 1.7 | 20 |
| 42 | Spatial memoryÃ¢â,¬â€a unique window into healthy and pathological aging. Frontiers in Aging Neuroscience, 2014, 6, 35. | 1.7 | 19 |
| 43 | The GridCAT: A Toolbox for Automated Analysis of Human Grid Cell Codes in fMRI. Frontiers in Neuroinformatics, 2017, 11, 47. | 1.3 | 19 |
| 44 | Increased Hippocampal Excitability and Altered Learning Dynamics Mediate Cognitive Mapping Deficits in Human Aging. Journal of Neuroscience, 2021, 41, 3204-3221. | 1.7 | 19 |
| 45 | The Effects of Attentional Engagement on Route Learning Performance in a Virtual Environment: An Aging Study. Frontiers in Aging Neuroscience, 2017, 9, 235. | 1.7 | 18 |
| 46 | Timing deficiencies in amnestic Mild Cognitive Impairment: Disentangling clock and memory processes. Behavioural Brain Research, 2019, 373, 112110. | 1.2 | 18 |
| 47 | Aging and spatial cues influence the updating of navigational memories. Scientific Reports, 2019, 9, 11469. | 1.6 | 17 |
| 48 | Computing distance information from landmarks and self-motion cues - Differential contributions of anterior-lateral vs. posterior-medial entorhinal cortex in humans. NeuroImage, 2019, 202, 116074. | 2.1 | 17 |
| 49 | The effect of feedback on temporal error monitoring and timing behavior. Behavioural Brain Research, 2019, 369, 111929. | 1.2 | 15 |
| 50 | Spatial Updating Depends on Gravity. Frontiers in Neural Circuits, 2020, 14, 20. | 1.4 | 14 |
| 51 | Repetitive transcranial magnetic stimulation reveals a causal role of the human precuneus in spatial updating. Scientific Reports, 2018, 8, 10171. | 1.6 | 13 |
| 52 | <scp>O</scp>n the (a)symmetry between the perception of time and space in largeâ€scale environments. Hippocampus, 2018, 28, 539-548. | 0.9 | 12 |
| 53 | Preserved multisensory body representations in advanced age. Scientific Reports, 2019, 9, 2663. | 1.6 | 12 |
| 54 | Spatial updating deficits in human aging are associated with traces of former memory representations. Neurobiology of Aging, 2019, 76, 53-61. | 1.5 | 12 |

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|---|---|---|---|
| 55 | Temporal context effects are associated with cognitive status in advanced age. Psychological Research, 2022, 86, 512-521. | 1.0 | 10 |
| 56 | Memory Image Completion: Establishing a task to behaviorally assess pattern completion in humans. Hippocampus, 2019, 29, 340-351. | 0.9 | 9 |
| 57 | Age-related changes in time perception: The impact of naturalistic environments and retrospective judgements on timing performance. Quarterly Journal of Experimental Psychology, 2021, 74, 2002-2012. | 0.6 | 9 |
| 58 | Systematic Underreproduction of Time Is Independent of Judgment Certainty. Neural Plasticity, 2016, 2016, 1-8. | 1.0 | 5 |
| 59 | Social targets improve body-based and environment-based strategies during spatial navigation. Experimental Brain Research, 2018, 236, 755-764. | 0.7 | 4 |
| 60 | Rapid improvement of cognitive maps in the awake state. Hippocampus, 2019, 29, 862-868. | 0.9 | 4 |
| 61 | Negative errors in time reproduction tasks. Psychological Research, 2020, 84, 168-176. | 1.0 | 4 |
| 62 | Reaching the Goal: Superior Navigators in Late Adulthood Provide a Novel Perspective into Successful Cognitive Aging. Topics in Cognitive Science, 2023, 15, 15-45. | 1.1 | 4 |
| 63 | Spatial Navigation. , 2015, , 161-171. |  | 3 |
| 64 | Population-Level Analysis of Human Grid Cell Activation. Neuromethods, 2019, , 257-279. | 0.2 | 3 |
| 65 | Impaired remapping of social relationships in older adults. Scientific Reports, 2021, 11, 21910. | 1.6 | 2 |
| 66 | Cross-dimensional interference between time and distance during spatial navigation is mediated by speed representations in intraparietal sulcus and area hMT+. NeuroImage, 2022, 257, 119336. | 2.1 | 2 |
| 67 | Using Discrete Time Markov Chains for Control of Idle Character Animation. , 2018, , . |  | 1 |
| 68 | Reducing the tendency for chronometric counting in duration discrimination tasks. Attention, Perception, and Psychophysics, 0, , . | 0.7 | 1 |