FranÃ§ois Osiurak

List of Publications by Year
in descending order

131	2,847	201674	214800
papers	citations	27 h-index	47 g-index

144	144	144	1343
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Grasping the affordances, understanding the reasoning: Toward a dialectical theory of human tool use.. Psychological Review, 2010, 117, 517-540.	3.8	206
2	What is an affordance? 40 years later. Neuroscience and Biobehavioral Reviews, 2017, 77, 403-417.	6.1	152
3	Tool use and affordance: Manipulation-based versus reasoning-based approaches.. Psychological Review, 2016, 123, 534-568.	3.8	146
4	What Neuropsychology Tells us About Human Tool Use? The Four Constraints Theory (4CT): Mechanics, Space, Time, and Effort. Neuropsychology Review, 2014, 24, 88-115.	4.9	126
5	Re-examining the gesture engram hypothesis. New perspectives on apraxia of tool use. Neuropsychologia, 2011, 49, 299-312.	1.6	119
6	On the neurocognitive origins of human tool use : A critical review of neuroimaging data. Neuroscience and Biobehavioral Reviews, 2016, 64, 421-437.	6.1	116
7	Unusual use of objects after unilateral brain damage. The technical reasoning model. Cortex, 2009, 45, 769-783.	2.4	105
8	Apraxia of tool use: More evidence for the technical reasoning hypothesis. Cortex, 2013, 49, 2322-2333.	2.4	82
9	Pliers, not fingers: Tool-action effect in a motor intention paradigm. Cognition, 2014, 130, 66-73.	2.2	71
10	The elephant in the room: What matters cognitively in cumulative technological culture. Behavioral and Brain Sciences, 2020, 43, e156.	0.7	71
11	Acceptance and acceptability criteria: a literature review. Cognition, Technology and Work, 2018, 20, 165-177.	3.0	70
12	Apraxia and Alzheimerâ€™s Disease: Review and Perspectives. Neuropsychology Review, 2013, 23, 234-256.	4.9	64
13	Tool use and perceived distance: when unreachable becomes spontaneously reachable. Experimental Brain Research, 2012, 218, 331-339.	1.5	56
14	Mechanical problem-solving strategies in left-brain damaged patients and apraxia of tool use. Neuropsychologia, 2013, 51, 1964-1972.	1.6	56
15	Object utilization and object usage: A single-case study. Neurocase, 2008, 14, 169-183.	0.6	52
16	Automotive HMI design and participatory user involvement: review and perspectives. Ergonomics, 2017, 60, 541-552.	2.1	45
17	Neuroergonomics of car driving: A critical meta-analysis of neuroimaging data on the human brain behind the wheel. Neuroscience and Biobehavioral Reviews, 2018, 95, 464-479.	6.1	42
18	Tool use disorders after left brain damage. Frontiers in Psychology, 2014, 5, 473.	2.1	41

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19	A goal-based mechanism for delayed motor intention: considerations from motor skills, tool use and action memory. Psychological Research, 2015, 79, 345-360.	1.7	39
20	To Watch is to Work: a Review of NeuroImaging Data on Tool Use Observation Network. Neuropsychology Review, 2019, 29, 484-497.	4.9	39
21	Tool use disorders in neurodegenerative diseases: Roles of semantic memory and technical reasoning. Cortex, 2016, 82, 119-132.	2.4	38
22	Different constraints on grip selection in brain-damaged patients: Object use versus object transport. Neuropsychologia, 2008, 46, 2431-2434.	1.6	37
23	Cerebral correlates of imitation of intransitive gestures: An integrative review of neuroimaging data and brain lesion studies. Neuroscience and Biobehavioral Reviews, 2018, 95, 44-60.	6.1	37
24	Physical intelligence does matter to cumulative technological culture.. Journal of Experimental Psychology: General, 2016, 145, 941-948.	2.1	36
25	Within reach but not so reachable: Obstacles matter in visual perception of distances. Psychonomic Bulletin and Review, 2013, 20, 462-467.	2.8	33
26	Technition: When Tools Come Out of the Closet. Perspectives on Psychological Science, 2020, 15, 880-897.	9.0	30
27	Definition: Limb apraxia. Cortex, 2017, 93, 228.	2.4	28
28	Looking for intoolligence: A unified framework for the cognitive study of human tool use and technology.. American Psychologist, 2018, 73, 169-185.	4.2	28
29	Mechanical problem-solving strategies in Alzheimerâ€™s disease and semantic dementia.. Neuropsychology, 2016, 30, 612-623.	1.3	28
30	Use of tools and misuse of embodied cognition: Reply to Buxbaum (2017).. Psychological Review, 2017, 124, 361-368.	3.8	28
31	Digital, analogue, or redundant speedometers for truck driving: Impact on visual distraction, efficiency and usability. Applied Ergonomics, 2017, 65, 12-22.	3.1	24
32	Semantic and action tool knowledge in the brain: Identifying common and distinct networks. Neuropsychologia, 2021, 159, 107918.	1.6	24
33	Getting a tool gives wings: overestimation of tool-related benefits in a motor imagery task and a decision task. Psychological Research, 2014, 78, 1-9.	1.7	23
34	Roles of Technical Reasoning, Theory of Mind, Creativity, and Fluid Cognition in Cumulative Technological Culture. Human Nature, 2019, 30, 326-340.	1.6	22
35	Highly Automated Driving Impact on Driversâ€™ Gaze Behaviors during a Car-Following Task. International Journal of Human-Computer Interaction, 2019, 35, 1008-1017.	4.8	22
36	Utilization behavior: Clinical and theoretical approaches. Journal of the International Neuropsychological Society, 2010, 16, 453-462.	1.8	21

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37	Handing a tool to someone can take more time than using it. Cognition, 2013, 128, 76-81.	2.2	19
38	Does the Tempo of Music Impact Human Behavior Behind the Wheel?. Human Factors, 2018, 60, 556-574.	3.5	19
39	The ideomotor recycling theory for tool use, language, and foresight. Experimental Brain Research, 2017, 235, 365-377.	1.5	18
40	Apraxia of tool use is not a matter of affordances. Frontiers in Human Neuroscience, 2013, 7, 890.	2.0	17
41	How Our Cognition Shapes and Is Shaped by Technology: A Common Framework for Understanding Human Tool-Use Interactions in the Past, Present, and Future. Frontiers in Psychology, 2018, 9, 293.	2.1	17
42	To Do It or to Let an Automatic Tool Do It?. Experimental Psychology, 2013, 60, 453-468.	0.7	17
43	The castaway island: Distinct roles of theory of mind and technical reasoning in cumulative technological culture.. Journal of Experimental Psychology: General, 2020, 149, 58-66.	2.1	17
44	Rethinking the Cognitive Mechanisms Underlying Pantomime of Tool Use: Evidence from Alzheimerâ€™s Disease and Semantic Dementia. Journal of the International Neuropsychological Society, 2017, 23, 128-138.	1.8	16
45	The cortical thickness of the area PF of the left inferior parietal cortex mediates technical-reasoning skills. Scientific Reports, 2022, 12, .	3.3	16
46	When Do We Use Automatic Tools Rather Than Doing a Task Manually? Influence of Automatic Tool Speed. American Journal of Psychology, 2015, 128, 77-88.	0.3	15
47	Tool use in neurodegenerative diseases: Planning or technical reasoning?. Journal of Neuropsychology, 2018, 12, 409-426.	1.4	15
48	Hazardous tools: the emergence of reasoning in human tool use. Psychological Research, 2021, 85, 3108-3118.	1.7	15
49	Technical reasoning is important for cumulative technological culture. Nature Human Behaviour, 2021, 5, 1643-1651.	12.0	14
50	Technical reasoning bolsters cumulative technological culture through convergent transformations. Science Advances, 2022, 8, eabl7446.	10.3	14
51	Make a gesture and I will tell you what you are miming. Pantomime recognition in healthy subjects. Cortex, 2012, 48, 584-592.	2.4	13
52	Involvement of the Left Supramarginal Gyrus in Manipulation Judgment Tasks: Contributions to Theories of Tool Use. Journal of the International Neuropsychological Society, 2017, 23, 685-691.	1.8	13
53	A cognitive-based model of tool use in normal aging. Aging, Neuropsychology, and Cognition, 2017, 24, 363-386.	1.3	13
54	On the Temporal Dynamics of Tool Use. Frontiers in Human Neuroscience, 2020, 14, 579378.	2.0	13

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55	Semantic congruency effects of prime words on tool visual exploration. Brain and Cognition, 2021, 152, 105758.	1.8	13
56	Are You Sure You're Faster When Using a Cognitive Tool?. American Journal of Psychology, 2017, 130, 493.	0.3	13
57	Cognitive Paleoanthropology and Technology: Toward a Parsimonious Theory (PATH). Review of General Psychology, 2017, 21, 292-307.	3.2	12
58	Numerical cognition: A meta-analysis of neuroimaging, transcranial magnetic stimulation and brain-damaged patients studies. NeuroImage: Clinical, 2019, 24, 102053.	2.7	12
59	The â€“ weak â€“ role of memory in tool use: Evidence from neurodegenerative diseases. Neuropsychologia, 2019, 129, 117-132.	1.6	12
60	Four ways of (mis-)conceiving embodiment in tool use. SynthÃˆse, 2020, , 1.	1.1	12
61	From the Age of 5 Humans Decide Economically, Whereas Crows Exhibit Individual Preferences. Scientific Reports, 2017, 7, 17043.	3.3	11
62	Ground-hornbills (Bucorvus) show means-end understanding in a horizontal two-string discrimination task. Journal of Ethology, 2019, 37, 117-122.	0.8	11
63	Using tools effectively despite defective hand posture: A single-case study. Cortex, 2020, 129, 406-422.	2.4	11
64	On the psychological origins of tool use. Neuroscience and Biobehavioral Reviews, 2022, 134, 104521.	6.1	11
65	Dynamic scan paths investigations under manual and highly automated driving. Scientific Reports, 2021, 11, 3776.	3.3	10
66	Pantomime of tool use: looking beyond apraxia. Brain Communications, 2021, 3, fcab263.	3.3	10
67	On the nature of eye-hand coordination in natural steering behavior. PLoS ONE, 2020, 15, e0242818.	2.5	10
68	Driving Under the Influence: How Music Listening Affects Driving Behaviors. Journal of Visualized Experiments, 2019, , .	0.3	9
69	Mechanical knowledge does matter to tool use even when assessed with a nonâ€production task: Evidence from left brainâ€damaged patients. Journal of Neuropsychology, 2019, 13, 198-213.	1.4	9
70	Usability and acceptance of truck dashboards designed by drivers: Two participatory design approaches compared to a user-centered design. International Journal of Industrial Ergonomics, 2021, 81, 103073.	2.6	9
71	Tools donâ€™tâ€”and wonâ€™tâ€”make the man: A cognitive look at the future.. Journal of Experimental Psychology: General, 2018, 147, 782-788.	2.1	9
72	What about mechanical knowledge?. Physics of Life Reviews, 2014, 11, 269-270.	2.8	8

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73	Validation en langue franÃ§aise des Ã©chelles de maximation et de regret de Schwartz et collaborateurs. Psychologie Francaise, 2015, 60, 301-316.	0.4	8
74	Involvement of Technical Reasoning More Than Functional Knowledge in Development of Tool Use in Childhood. Frontiers in Psychology, 2016, 7, 1625.	2.1	8
75	Tool use in left brain damage and <scp>A</scp>lzheimer's disease: What about function and manipulation knowledge?. Journal of Neuropsychology, 2016, 10, 154-159.	1.4	8
76	Imitation and matching of meaningless gestures: distinct involvement from motor and visual imagery. Psychological Research, 2017, 81, 525-537.	1.7	8
77	Apraxia: a gestural or a cognitive disorder?. Brain, 2015, 138, e333-e333.	7.6	7
78	Gestural apraxia. Revue Neurologique, 2017, 173, 430-439.	1.5	7
79	Tool Use and Generalized Motor Programs: We All Are Natural Born Poly-Dexters. Scientific Reports, 2018, 8, 10429.	3.3	7
80	Imitation of meaningless gestures in normal aging. Aging, Neuropsychology, and Cognition, 2020, 27, 729-747.	1.3	7
81	The elephant in the China shop: When technical reasoning meets cumulative technological culture. Behavioral and Brain Sciences, 2020, 43, e183.	0.7	7
82	The visual encoding of graspable unfamiliar objects. Psychological Research, 2023, 87, 452-461.	1.7	7
83	Tool use and manual actions: The human body as a means versus an end. Cortex, 2014, 57, 281-282.	2.4	6
84	Gauges design for a digital instrument cluster: Efficiency, visual capture, and satisfaction assessment for truck driving. International Journal of Industrial Ergonomics, 2019, 72, 290-297.	2.6	6
85	Thirst for Intention? Grasping a Glass Is a Thirst-Controlled Action. Frontiers in Psychology, 2019, 10, 1248.	2.1	6
86	Daily life activities in patients with Alzheimerâ€™s disease or semantic dementia: Multitasking assessment. Neuropsychologia, 2021, 150, 107714.	1.6	5
87	Disembodying (tool-use) action understanding. Neuroscience and Biobehavioral Reviews, 2020, 114, 229-231.	6.1	5
88	Transport and use of common objects: Influence of weight on action planning. Visual Cognition, 2014, 22, 1154-1172.	1.6	4
89	Mechanical problem-solving and imitation of meaningless postures in left brain damaged patients: Two sides of the same coin?. Cortex, 2015, 63, 214-216.	2.4	4
90	What is the future for tool-specific generalized motor programs?. Phenomenology and the Cognitive Sciences, 2017, 16, 701-708.	1.8	4

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91	Creating semantics in tool use. Cognitive Processing, 2017, 18, 129-134.	1.4	4
92	Tool use and dexterity: beyond the embodied theory. Animal Behaviour, 2018, 139, e1-e4.	1.9	4
93	Male yellow-crowned bishops (Euplectes afer afer) acquire a novel foraging behaviour by social learning. Journal of Ethology, 2019, 37, 235-239.	0.8	4
94	Which cognitive tools do we prefer to use, and is that preference rational?. Cognition, 2019, 186, 108-114.	2.2	4
95	Mechanical knowledge, but not manipulation knowledge, might support action prediction. Frontiers in Human Neuroscience, 2014, 8, 737.	2.0	3
96	The more intelligent people are, the more they use tools. Psychologie Francaise, 2017, 62, 85-91.	0.4	3
97	Is Bodily Experience an Epiphenomenon of Multisensory Integration and Cognition?. Frontiers in Human Neuroscience, 2019, 13, 316.	2.0	3
98	Effect of object substitution, spontaneous compensation and repetitive training on reaching movements in a patient with optic ataxia. Neuropsychological Rehabilitation, 2020, 30, 1786-1813.	1.6	3
99	Social learning in great white pelicans (Pelecanus onocrotalus): A preliminary study. Learning and Behavior, 2020, 48, 344-350.	1.0	3
100	Parcourir la ville sans voirÂ: effet de lâ€™environnement urbain sur la perception et le ressenti des personnes aveugles lors dâ€™un dÃ©placement in situ. Annee Psychologique, 2012, 112, 403-433.	0.3	3
101	Limb apraxia in neurodegenerative disorders. Neurodegenerative Disease Management, 2013, 3, 353-361.	2.2	2
102	Lâ€™appropriation de lâ€™espace chez les personnes Ã¢gÃ©es dÃ©pendantes rÃ©sidants en EHPAD. Pratiques Psychologiques, 2013, 19, 135-146.	0.4	2
103	The cognitive and neural bases of human tool use. Frontiers in Psychology, 2014, 5, 1107.	2.1	2
104	The lowest common denominator between species for teaching behaviors. Behavioral and Brain Sciences, 2015, 38, e33.	0.7	2
105	Visual objects speak louder than words: Motor planning and weight in tool use and object transport. Acta Psychologica, 2015, 162, 76-80.	1.5	2
106	Novel Tool Selection in Left Brain-Damaged Patients With Apraxia of Tool Use: A Study of Three Cases. Journal of the International Neuropsychological Society, 2018, 24, 524-529.	1.8	2
107	One century after Liepmann's work on apraxia: Where are we now?. Cortex, 2020, 129, 526-528.	2.4	2
108	Tool-number interaction during a prospective memory task. Cognitive Processing, 2020, 21, 501-508.	1.4	2

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109	Getting a tool gives wings even in schizophrenia: underestimation of tool-related effort in a motor imagery task. NPJ Schizophrenia, 2021, 7, 45.	3.6	2
110	The Toolman effect: Preexisting non-tool-use experience improves subsequent tool-use performance. Acta Psychologica, 2021, 220, 103389.	1.5	2
111	On the Neurocognitive Coâ€Evolution of Tool Behavior and Language: Insights from the Massive Redeployment Framework. Topics in Cognitive Science, 2021, 13, 684-707.	1.9	2
112	Editors' Introduction to Tasks, Tools, and Techniques. Topics in Cognitive Science, 2021, 13, 540-547.	1.9	2
113	The Pedagogue, the Engineer, and the Friend. Human Nature, 2020, 31, 462-482.	1.6	2
114	Exclusion by donkeyâ€™s ears: Donkeys (Equus asinus) use acoustic information to find hidden food in a two-way object-choice task.. Journal of Comparative Psychology (Washington, D C: 1983), 2022, 136, 68-78.	0.5	2
115	Commentary: Effects of dividing attention on memory for declarative and procedural aspects of tool use. Frontiers in Psychology, 2016, 7, 1488.	2.1	1
116	Is There Really a Loss of Agency in Patients With Apraxia of Tool Use?. Frontiers in Psychology, 2019, 10, 87.	2.1	1
117	Extraversion level predicts perceived benefits from social resources and tool use. Scientific Reports, 2021, 11, 12260.	3.3	1
118	Tool acceptance and acceptability: insights from a real tool use activity. Cognitive Processing, 2021, 22, 627-639.	1.4	1
119	Physical understanding in neurodegenerative diseases. Cognitive Neuropsychology, 2021, 38, 490-514.	1.1	1
120	One century after Liepmann's work on apraxia: Where do we go now?. Cortex, 2022, 154, 333-339.	2.4	1
121	Neurocognitive bases of tool use. Annals of Physical and Rehabilitation Medicine, 2015, 58, e26.	2.3	0
122	Apraxia in neurodegenerative diseases. Annals of Physical and Rehabilitation Medicine, 2015, 58, e28.	2.3	0
123	Les fondements cognitifs de la culture et de lâ€™Ã©volution culturelle cumulative : une revue de la littÃ©rature. Annee Psychologique, 2017, 117, 351-378.	0.3	0
124	Age differences in maximization. Psychologie Francaise, 2019, 64, 47-54.	0.4	0
125	Definition: Astereognosia. Cortex, 2020, 127, 399.	2.4	0
126	Complex nests but no use of tools: An investigation of problem solving in weaverbirds (Ploceidae). Behavioural Processes, 2021, 192, 104493.	1.1	0

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127	Learning versus reasoning to use tools in children. Journal of Experimental Child Psychology, 2021, 211, 105232.	1.4	0
128	Nos performances de conduite sont-elles sous lâ€™influence du tempo de la musique que nous Ã©coutonsÂ? Une Ã©tude sur simulateur. Recherche - Transports - Securite, 2016, 2015, 75-85.	0.1	0
129	Great white pelicans (Pelecanus onocrotalus) fail to use tools flexibly in problemâ€solving tasks. Ethology, 2022, 128, 99-110.	1.1	0
130	Les fondements cognitifs de la culture et de lâ€™Ã©volution culturelle cumulative : une revue de la littÃ©rature. Annee Psychologique, 2017, Vol. 117, 351-378.	0.3	0
131	Impact of Intrinsic Cognitive Skills and Metacognitive Beliefs on Tool Use Performance. American Journal of Psychology, 2022, 135, 59-68.	0.3	0