Fernand Gobet

List of Publications by Year in descending order

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169 7,830 45 81 papers citations h-index g-index

181 181 181 4304 all docs docs citations times ranked citing authors

#	Article	lF	CITATIONS
1	Chunking mechanisms in human learning. Trends in Cognitive Sciences, 2001, 5, 236-243.	7.8	734
2	Templates in Chess Memory: A Mechanism for Recalling Several Boards. Cognitive Psychology, 1996, 31, 1-40.	2.2	451
3	Deliberate practice: Is that all it takes to become an expert?. Intelligence, 2014, 45, 34-45.	3.0	241
4	Expert Chess Memory: Revisiting the Chunking Hypothesis. Memory, 1998, 6, 225-255.	1.7	221
5	Expert memory: a comparison of four theories. Cognition, 1998, 66, 115-152.	2.2	197
6	Recall of rapidly presented random chess positions is a function of skill. Psychonomic Bulletin and Review, $1996, 3, 159-163$.	2.8	190
7	Does Far Transfer Exist? Negative Evidence From Chess, Music, and Working Memory Training. Current Directions in Psychological Science, 2017, 26, 515-520.	5. 3	182
8	Five Seconds or Sixty? Presentation Time in Expert Memory. Cognitive Science, 2000, 24, 651-682.	1.7	178
9	Why good thoughts block better ones: The mechanism of the pernicious Einstellung (set) effect. Cognition, 2008, 108, 652-661.	2.2	178
10	Inflexibility of expertsâ€"Reality or myth? Quantifying the Einstellung effect in chess masters. Cognitive Psychology, 2008, 56, 73-102.	2.2	170
11	The Roles of Recognition Processes and Look-Ahead Search in Time-Constrained Expert Problem Solving: Evidence From Grand-Master-Level Chess. Psychological Science, 1996, 7, 52-55.	3.3	160
12	Cognitive Training Does Not Enhance General Cognition. Trends in Cognitive Sciences, 2019, 23, 9-20.	7.8	159
13	Video game training does not enhance cognitive ability: A comprehensive meta-analytic investigation Psychological Bulletin, 2018, 144, 111-139.	6.1	150
14	Recall of random and distorted chess positions: Implications for the theory of expertise. Memory and Cognition, 1996, 24, 493-503.	1.6	136
15	When the music's over. Does music skill transfer to children's and young adolescents' cognitive and academic skills? A meta-analysis. Educational Research Review, 2017, 20, 55-67.	7.8	131
16	Chunking models of expertise: implications for education. Applied Cognitive Psychology, 2005, 19, 183-204.	1.6	128
17	Chunks in expert memory: Evidence for the magical number four … or is it two?. Memory, 2004, 12, 732-747.	1.7	126
18	Deliberate Practice. Current Directions in Psychological Science, 2011, 20, 280-285.	5 . 3	126

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19	The role of domain-specific practice, handedness, and starting age in chess Developmental Psychology, 2007, 43, 159-172.	1.6	120
20	How chunks, long-term working memory and templates offer a cognitive explanation for neuroimaging data on expertise acquisition: A two-stage framework. Brain and Cognition, 2012, 79, 221-244.	1.8	110
21	Near and Far Transfer in Cognitive Training: A Second-Order Meta-Analysis. Collabra: Psychology, 2019, 5, .	1.8	109
22	Towards an alternative to Benner's theory of expert intuition in nursing: A discussion paper. International Journal of Nursing Studies, 2008, 45, 129-139.	5.6	101
23	The impact of shared book reading on children's language skills: A meta-analysis. Educational Research Review, 2019, 28, 100290.	7.8	95
24	Does chess need intelligence? â€" A study with young chess players. Intelligence, 2007, 35, 457-470.	3.0	94
25	Modeling the Developmental Patterning of Finiteness Marking in English, Dutch, German, and Spanish Using MOSAIC. Cognitive Science, 2007, 31, 311-341.	1.7	94
26	The relationship between cognitive ability and chess skill: A comprehensive meta-analysis. Intelligence, 2016, 59, 72-83.	3.0	91
27	A Pattern-recognition Theory of Search in Expert Problem Solving. Thinking and Reasoning, 1997, 3, 291-313.	3.2	90
28	Do young children have adult-like syntactic categories? Zipf's law and the case of the determiner. Cognition, 2013, 127, 345-360.	2.2	90
29	Cognitive and academic benefits of music training with children: A multilevel meta-analysis. Memory and Cognition, 2020, 48, 1429-1441.	1.6	88
30	Do the benefits of chess instruction transfer to academic and cognitive skills? A meta-analysis. Educational Research Review, 2016, 18, 46-57.	7.8	86
31	The Mechanism of the Einstellung (Set) Effect. Current Directions in Psychological Science, 2010, 19, 111-115.	5.3	84
32	The impact of leisure activities on older adults' cognitive function, physical function, and mental health. PLoS ONE, 2019, 14, e0225006.	2.5	76
33	Linking working memory and longâ€ŧerm memory: a computational model of the learning of new words. Developmental Science, 2007, 10, 853-873.	2.4	73
34	Herbert Simon's Decision-Making Approach: Investigation of Cognitive Processes in Experts. Review of General Psychology, 2010, 14, 354-364.	3.2	71
35	Evolving Collective Behavior in an Artificial Ecology. Artificial Life, 2001, 7, 191-209.	1.3	70
36	Visuospatial abilities of chess players. British Journal of Psychology, 2002, 93, 557-565.	2.3	67

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37	BRAIN LOCALIZATION OF MEMORY CHUNKS IN CHESSPLAYERS. International Journal of Neuroscience, 2007, 117, 1641-1659.	1.6	64
38	Expertise and Intuition: A Tale of Three Theories. Minds and Machines, 2009, 19, 151-180.	4.8	63
39	Modeling the Development of Children's Use of Optional Infinitives in Dutch and English Using MOSAIC. Cognitive Science, 2006, 30, 277-310.	1.7	61
40	Explaining quantitative variation in the rate of Optional Infinitive errors across languages: A comparison of MOSAIC and the Variational Learning Model. Journal of Child Language, 2010, 37, 643-669.	1.2	59
41	The cognitive and academic benefits of Cogmed: A meta-analysis. Educational Research Review, 2019, 27, 229-243.	7.8	57
42	Perception and Memory in Chess. ICGA Journal, 1996, 19, 183-185.	0.3	54
43	Specialization Effect and Its Influence on Memory and Problem Solving in Expert Chess Players. Cognitive Science, 2009, 33, 1117-1143.	1.7	53
44	Working memory training in typically developing children: A multilevel meta-analysis. Psychonomic Bulletin and Review, 2020, 27, 423-434.	2.8	53
45	Expertise in Chess. , 2006, , 523-538.		52
46	Understanding the developmental dynamics of subject omission: the role of processing limitations in learning. Journal of Child Language, 2007, 34, 83-110.	1.2	52
47	Some shortcomings of long-term working memory. British Journal of Psychology, 2000, 91, 551-570.	2.3	49
48	The Role of Constraints in Expert Memory Journal of Experimental Psychology: Learning Memory and Cognition, 2003, 29, 1082-1094.	0.9	48
49	The role of practice in chess: A longitudinal study. Learning and Individual Differences, 2008, 18, 446-458.	2.7	48
50	Simulating the Referential Properties of Dutch, German, and English Root Infinitives in MOSAIC. Language Learning and Development, 2009, 5, 1-29.	1.4	44
51	Understanding Expertise. , 2016, , .		44
52	Lexicality and Frequency in Specific Language Impairment: Accuracy and Error Data from Two Nonword Repetition Tests. Journal of Speech, Language, and Hearing Research, 2010, 53, 1642-1655.	1.6	39
53	Why are (the best) women so good at chess? Participation rates and gender differences in intellectual domains. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 1161-1165.	2.6	38
54	Working memory training does not enhance older adults' cognitive skills: A comprehensive meta-analysis. Intelligence, 2019, 77, 101386.	3.0	38

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55	Accounting for expert performance: The devil is in the details. Intelligence, 2014, 45, 112-114.	3.0	36
56	A Hypothesis about the Biological Basis of Expert Intuition. Review of General Psychology, 2011, 15, 198-212.	3.2	35
57	Experts' memory superiority for domain-specific random material generalizes across fields of expertise: A meta-analysis. Memory and Cognition, 2017, 45, 183-193.	1.6	35
58	Expertise effects in memory recall: Comment on Vicente and Wang (1998) Psychological Review, 2000, 107, 593-600.	3.8	34
59	What's in a Name? The Multiple Meanings of "Chunk―and "Chunking― Frontiers in Psychology, 2016, 7 102.	' 2.1	33
60	The Emotional and Attitudinal Consequences of Religious Hypocrisy: Experimental Evidence Using a Cognitive Dissonance Paradigm. Journal of Social Psychology, 2013, 153, 667-686.	1.5	32
61	Structure and Stimulus Familiarity: A Study of Memory in Chess-Players with Functional Magnetic Resonance Imaging. Spanish Journal of Psychology, 2005, 8, 238-245.	2.1	31
62	Pattern recognition makes search possible: Comments on Holding (1992). Psychological Research, 1998, 61, 204-208.	1.7	30
63	Personality profiles of young chess players. Personality and Individual Differences, 2007, 42, 901-910.	2.9	29
64	Computer Simulations of Developmental Change: The Contributions of Working Memory Capacity and Longâ€Term Knowledge. Cognitive Science, 2008, 32, 1148-1176.	1.7	29
65	In search of templates. Cognitive Systems Research, 2002, 3, 35-44.	2.7	27
66	Checkmate to deliberate practice: the case of Magnus Carlsen. Frontiers in Psychology, 2014, 5, 878.	2.1	27
67	Checking the "Academic Selection―argument. Chess players outperform non-chess players in cognitive skills related to intelligence: A meta-analysis. Intelligence, 2017, 61, 130-139.	3.0	26
68	The neural correlates of theory of mind and their role during empathy and the game of chess: A functional magnetic resonance imaging study. Neuroscience, 2017, 355, 149-160.	2.3	26
69	Does chess instruction improve mathematical problem-solving ability? Two experimental studies with an active control group. Learning and Behavior, 2017, 45, 414-421.	1.0	26
70	Expertise, models of learning and computer-based tutoring. Computers and Education, 1999, 33, 189-207.	8.3	24
71	ADAPTIVE EXPERT DECISION MAKING: SKILLED CHESS PLAYERS SEARCH MORE AND DEEPER. ICGA Journal, 2004, 27, 209-216.	0.3	24
72	Expert and "novice―problem solving strategies in chess: Sixty years of citing de Groot (1946). Thinking and Reasoning, 2008, 14, 395-408.	3.2	24

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73	What is Counterintuitive? Religious Cognition and Natural Expectation. Review of Philosophy and Psychology, 2013, 4, 715-749.	1.8	24
74	Why computational models are better than verbal theories: the case of nonword repetition. Developmental Science, 2014, 17, 298-310.	2.4	23
75	Simulating the cross-linguistic pattern of Optional Infinitive errors in children's declaratives and Wh- questions. Cognition, 2015, 143, 61-76.	2.2	23
76	Mood, expertise, analogy, and ritual: an experiment using the five-disk Tower of Hanoi. Religion, Brain and Behavior, 2016, 6, 67-87.	0.7	22
77	Rise of human intelligence. Intelligence, 2002, 30, 303-311.	3.0	21
78	Measuring Chess Experts' Single-Use Sequence Knowledge: An Archival Study of Departure from â€~Theoretical' Openings. PLoS ONE, 2011, 6, e26692.	2.5	21
79	Levodopa medication improves incidental sequence learning in Parkinson's disease. Neuropsychologia, 2016, 93, 53-60.	1.6	21
80	How Artificial Intelligence Can Help Us Understand Human Creativity. Frontiers in Psychology, 2019, 10, 1401.	2.1	21
81	Automatic Generation of Cognitive Theories using Genetic Programming. Minds and Machines, 2007, 17, 287-309.	4.8	20
82	Functional cerebral reorganization: a signature of expertise? Reexamining Guida, Gobet, Tardieu, and Nicolas' (2012) two-stage framework. Frontiers in Human Neuroscience, 2013, 7, 590.	2.0	20
83	The mind's eye in blindfold chess. European Journal of Cognitive Psychology, 2005, 17, 23-45.	1.3	19
84	The Effects of Chess Instruction on Pupils' Cognitive and Academic Skills: State of the Art and Theoretical Challenges. Frontiers in Psychology, 2017, 8, 238.	2.1	19
85	Goals, Representations, and Strategies in a Concept Attainment Task: the EPAM Model. Psychology of Learning and Motivation - Advances in Research and Theory, 1997, 37, 265-290.	1.1	18
86	Retrieval structures and schemata: A brief reply to Ericsson and Kintsch. British Journal of Psychology, 2000, 91, 591-594.	2.3	18
87	\tilde{A} ¢â,¬Å"No level up! \tilde{A} ¢â,¬ \hat{A} • no effects of video game specialization and expertise on cognitive performance. Frontiers in Psychology, 2014, 5, 1337.	2.1	18
88	A theory-driven testing methodology for developing scientific software. Journal of Experimental and Theoretical Artificial Intelligence, 2012, 24, 421-456.	2.8	17
89	Still no evidence that exergames improve cognitive ability: A commentary on Stanmore et al. (2017). Neuroscience and Biobehavioral Reviews, 2021, 123, 352-353.	6.1	17
90	SEASON OF BIRTH AND CHESS EXPERTISE. Journal of Biosocial Science, 2008, 40, 313-316.	1.2	16

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91	LEFT LATERALIZATION IN AUTOBIOGRAPHICAL MEMORY: AN fMRI STUDY USING THE EXPERT ARCHIVAL PARADIGM. International Journal of Neuroscience, 2008, 118, 191-209.	1.6	16
92	<scp>ERP</scp> to chess stimuli reveal expertâ€novice differences in the amplitudes of <scp>N</scp> 2 and <scp>P</scp> 3 components. Psychophysiology, 2013, 50, 1023-1033.	2.4	16
93	Chunking Mechanisms and Learning. , 2012, , 541-544.		15
94	The CHREST Architecture of Cognition: The Role of Perception in General Intelligence. , 2010, , .		15
95	COMMUNITY STRUCTURE DETECTION IN THE EVOLUTION OF THE UNITED STATES AIRPORT NETWORK. International Journal of Modeling, Simulation, and Scientific Computing, 2013, 16, 1350003.	1.4	14
96	Five seconds or sixty? Presentation time in expert memory. Cognitive Science, 2000, 24, 651-682.	1.7	14
97	Magnitude-sensitivity: rethinking decision-making. Trends in Cognitive Sciences, 2022, 26, 66-80.	7.8	14
98	On the resolution of ambiguities in the extraction of syntactic categories through chunking. Cognitive Systems Research, 2005, 6, 17-25.	2.7	13
99	Mental imagery and chunks: Empirical and computational findings. Memory and Cognition, 2008, 36, 505-517.	1.6	13
100	Using Chunks to Categorise Chess Positions. , 2012, , 93-106.		13
101	Evolving Non-Dominated Parameter Sets for Computational Models from Multiple Experiments. Journal of Artificial General Intelligence, 2013, 4, 1-30.	0.6	13
102	Risk taking in adversarial situations: Civilization differences in chess experts. Cognition, 2015, 141, 36-40.	2.2	12
103	Developing reproducible and comprehensible computational models. Artificial Intelligence, 2003, 144, 251-263.	5.8	10
104	Using a Cognitive Architecture for Addressing the Question of Cognitive Universals in Cross-Cultural Psychology. Journal of Cross-Cultural Psychology, 2009, 40, 627-648.	1.6	10
105	Sinuosity and the Affect Grid: A Method for Adjusting Repeated Mood Scores. Perceptual and Motor Skills, 2012, 114, 125-136.	1.3	10
106	Facing facts about deliberate practice. Frontiers in Psychology, 2014, 5, 751.	2.1	10
107	The Relationship between Handedness and Mathematics Is Non-linear and Is Moderated by Gender, Age, and Type of Task. Frontiers in Psychology, 2017, 8, 948.	2.1	10
108	Computational Scientific Discovery. , 2017, , 719-734.		10

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109	Expertise in Chess. , 0, , 597-615.		9
110	What forms the chunks in a subject's performance? Lessons from the CHREST computational model of learning. Behavioral and Brain Sciences, 2001, 24, 128-129.	0.7	8
111	Perception in chess and beyond: Commentary on Linhares and Freitas (2010). New Ideas in Psychology, 2011, 29, 156-161.	1.9	8
112	Computational modelling of phonological acquisition: Simulating error patterns in nonword repetition tasks. Language and Cognitive Processes, 2012, 27, 901-946.	2.2	8
113	Concepts without intuition lose the game: commentary on Montero and Evans (2011). Phenomenology and the Cognitive Sciences, 2012, 11, 237-250.	1.8	8
114	Designing a ââ,¬Å"betterââ,¬Â•brain: insights from experts and savants. Frontiers in Psychology, 2014, 5, 470.	2.1	8
115	A Study of the Interplay between Intuition and Rationality in Valuation Decision Making. Journal of Property Research, 2019, 36, 387-418.	2.8	8
116	Simplification of genetic programs: a literature survey. Data Mining and Knowledge Discovery, 2022, 36, 1279-1300.	3.7	8
117	Neuro-cognitive model of move location in the game of Go. , 2012, , .		7
118	Chunks, Schemata, and Retrieval Structures: Past and Current Computational Models. Frontiers in Psychology, 2015, 6, 1785.	2.1	7
119	The CHREST Architecture for a Functioning Mind. , 0, , 204-224.		7
120	Visual Search in Ecological and Non-Ecological Displays: Evidence for a Non-Monotonic Effect of Complexity on Performance. PLoS ONE, 2013, 8, e53420.	2.5	6
121	Three Views on Expertise: Philosophical Implications for Rationality, Knowledge, Intuition and Education. Journal of Philosophy of Education, 2017, 51, 605-619.	0.8	6
122	Chunk hierarchies and retrieval structures: Comments on Saariluoma and Laine. Scandinavian Journal of Psychology, 2001, 42, 149-155.	1.5	5
123	The intermediate effect in clinical case recall is present in musculoskeletal physiotherapy. Manual Therapy, 2011, 16, 327-331.	1.6	5
124	Becoming an expert: Ontogeny of expertise as an example of neural reuse. Behavioral and Brain Sciences, 2016, 39, e123.	0.7	5
125	On-the-fly simplification of genetic programming models. , 2021, , .		5
126	Attention Mechanisms in the CHREST Cognitive Architecture. Lecture Notes in Computer Science, 2009, , 183-196.	1.3	5

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127	CHREST Models of Implicit Learning and Board Game Interpretation. Lecture Notes in Computer Science, 2012, , 148-157.	1.3	5
128	Evolving Structure-Function Mappings in Cognitive Neuroscience Using Genetic Programming. Swiss Journal of Psychology, 2005, 64, 231-239.	0.9	5
129	SIMULATIONS OF STAGEWISE DEVELOPMENT WITH A SYMBOLIC ARCHITECTURE. Studies of Nonlinear Phenomena in Life Science, 1999, , 143-156.	0.2	5
130	Computational Scientific Discovery and Cognitive Science Theories. Synthese Library, 2016, , 83-97.	0.2	4
131	Allen Newell's Program of Research: The Videoâ€Game Test. Topics in Cognitive Science, 2017, 9, 522-532.	1.9	4
132	Is attentional discounting in value-based decision making magnitude sensitive?. Journal of Cognitive Psychology, 2021, 33, 327-336.	0.9	4
133	Reply to Lassiter. Psychological Science, 2000, 11, 174-174.	3.3	3
134	Analysing Psychological Data by Evolving Computational Models. Studies in Classification, Data Analysis, and Knowledge Organization, 2016, , 587-597.	0.2	3
135	The effect of personal attitudes on information processing biases in religious individuals. Journal of Cognitive Psychology, 2016, 28, 366-373.	0.9	3
136	A protocol analysis of use of forward and backward reasoning during valuation problem solving. Property Management, 2019, 37, 638-661.	0.8	3
137	Bounded Rationality and Learning. , 2012, , 482-484.		3
138	The Effects of Bounding Rationality on the Performance and Learning of CHREST Agents in Tileworld. , 2014, , 149-162.		3
139	A Comparison between Cognitive and Al Models of Blackjack Strategy Learning. Lecture Notes in Computer Science, 2012, , 143-155.	1.3	3
140	Réseaux de discrimination en psychologie: L'exemple de CHREST1. Swiss Journal of Psychology, 2001, 60, 264-277.	0.9	3
141	Integration of Perceptual Input and Visual Imagery in Chess Players: Evidence From Eye Movements. Swiss Journal of Psychology, 2007, 66, 201-213.	0.9	3
142	Learned helplessness in chess players: The importance of task similarity and the role of skill. Psychological Research, 1992, 54, 38-43.	1.7	2
143	They Do What They Are Told to Do: The Influence of Instruction on (Chess) Expert Perceptionâ€"Commentary on Linhares and Brum (2007). Cognitive Science, 2009, 33, 743-747.	1.7	2
144	The Art of Balance - Problem-Solving vs. Pattern-Recognition. , 2015, , .		2

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145	Semi-Automatic Generation of Cognitive Science Theories. Synthese Library, 2019, , 155-171.	0.2	2
146	Modeling Value-Based Decision-Making Policies Using Genetic Programming. Swiss Journal of Psychology, 2020, 79, 113-121.	0.9	2
147	Understanding the cross-linguistic pattern of verb-marking error in typically developing children and children with Developmental Language Disorder. Trends in Language Acquisition Research, 2020, , 221-246.	0.3	2
148	Developing systemic theories requires formal methods. High Ability Studies, 2012, 23, 61-63.	1.9	1
149	SPACE-INDEPENDENT COMMUNITY STRUCTURE DETECTION IN UNITED STATES AIR TRANSPORTATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1-6.	0.4	1
150	Vocabulary Acquisition., 2015, , 226-231.		1
151	Early Specialization and Critical Periods in Acquiring Expertise: A Comparison of Traditional Versus Detection Talent Identification in Team GB Cycling at London 2012. Journal of Motor Learning and Development, 2021, 9, 296-312.	0.4	1
152	The effect of hyperarticulation on speech comprehension under adverse listening conditions. Psychological Research, 2022, 86, 1535-1546.	1.7	1
153	Deliberate Practice and Its Role in Expertise Development. , 2012, , 917-919.		1
154	A Question of Balance. Lecture Notes in Computer Science, 2015, , 224-258.	1.3	1
155	An Ordered Chaos: How Do Order Effects Arise in a Cognitive Model?. , 2007, , 107-118.		1
156	Learning in the CHREST Cognitive Architecture. , 2012, , 1920-1923.		1
157	From Bounded Rationality to Expertise. , 2016, , 151-166.		1
158	BRENT, M. R. (ed.). (1997). Computational approaches to language acquisition. Cambridge, MA: The MIT Press. Pp. 199. ISBN 0-262-52229-2 Journal of Child Language, 1999, 26, 187-215.	1.2	0
159	The CHREST model of active perception and its role in problem solving. Behavioral and Brain Sciences, 2001, 24, 892-893.	0.7	0
160	ADRIAAN DE GROOT: MARRIAGE OF TWO PASSIONS. ICGA Journal, 2006, 29, 236-243.	0.3	0
161	Modelling the Relationship between Visual Short-Term Memory Capacity and Recall Ability. , 2008, , .		0
162	A Methodology for Developing Computational Implementations of Scientific Theories. , 2008, , .		0

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163	The L/M-Opponent Channel Provides a Distinct and Time-Dependent Contribution towards Visual Recognition. Perception, 2010, 39, 1185-1198.	1.2	0
164	Cognitive Models of Gambling and Problem Gambling. , 0, , .		0
165	Cognitive Models of Gambling and Problem Gambling. , 2014, , 74-103.		0
166	The Beginning of a New Era. Swiss Psychology Open, 2021, 1, .	0.8	0
167	CHESS RESEARCH: RECENT TRENDS. Revista Mundi Engenharia Tecnologia E Gestão (ISSN 2525-4782), 2023, 6, .	0.0	0
168	Modelling Systematic Communication Differences between Law and Science., 2006, , 105-124.		0
169	Expertise in Contemporary Dance: The Roles of Cognition, Talent, and Deliberate Practice. Journal of Dance Education, 2024, 24, 21-34.	0.2	0