Peter Gerjets

List of Publications by Year in descending order

96 papers	4,663 citations	87723 38 h-index	110170 64 g-index
104 all docs	104 docs citations	104 times ranked	2834 citing authors

#	Article	IF	Citations
1	Explaining the split-attention effect: Is the reduction of extraneous cognitive load accompanied by an increase in germane cognitive load?. Computers in Human Behavior, 2009, 25, 315-324.	5.1	293
2	In the eyes of the beholder: How experts and novices interpret dynamic stimuli. Learning and Instruction, 2010, 20, 146-154.	1.9	288
3	Learner Control in Hypermedia Environments. Educational Psychology Review, 2007, 19, 285-307.	5.1	252
4	Learning to see: Guiding students' attention via a Model's eye movements fosters learning. Learning and Instruction, 2013, 25, 62-70.	1.9	165
5	Attention guidance during example study via the modelâ€™s eye movements. Computers in Human Behavior, 2009, 25, 785-791.	5.1	164
6	Designing Instructional Examples to Reduce Intrinsic Cognitive Load: Molar versus Modular Presentation of Solution Procedures. Instructional Science, 2004, 32, 33-58.	1.1	162
7	Measuring spontaneous and instructed evaluation processes during Web search: Integrating concurrent thinking-aloud protocols and eye-tracking data. Learning and Instruction, 2011, 21, 220-231.	1.9	142
8	Goal Configurations and Processing Strategies as Moderators Between Instructional Design and Cognitive Load: Evidence From Hypertext-Based Instruction. Educational Psychologist, 2003, 38, 33-41.	4.7	129
9	Conveying clinical reasoning based on visual observation via eye-movement modelling examples. Instructional Science, 2012, 40, 813-827.	1.1	127
10	Can learning from molar and modular worked examples be enhanced by providing instructional explanations and prompting self-explanations?. Learning and Instruction, 2006, 16, 104-121.	1.9	124
11	The effects of realism in learning with dynamic visualizations. Learning and Instruction, 2009, 19, 481-494.	1.9	119
12	Comparison of the Working Memory Load in N-Back and Working Memory Span Tasks by Means of EEG Frequency Band Power and P300 Amplitude. Frontiers in Human Neuroscience, 2017, 11, 6.	1.0	104
13	When flanker meets the nâ€back: What EEG and pupil dilation data reveal about the interplay between the two centralâ€executive working memory functions inhibition and updating. Psychophysiology, 2015, 52, 1293-1304.	1.2	99
14	The role of Internet-specific epistemic beliefs in laypersonsâ€™ source evaluations and decisions during Web search on a medical issue. Computers in Human Behavior, 2013, 29, 1193-1203.	5.1	96
15	The Scientific Value of Cognitive Load Theory: A Research Agenda Based on the Structuralist View of Theories. Educational Psychology Review, 2009, 21, 43-54.	5.1	93
16	Cognitive state monitoring and the design of adaptive instruction in digital environments: lessons learned from cognitive workload assessment using a passive brain-computer interface approach. Frontiers in Neuroscience, 2014, 8, 385.	1.4	90
17	Effects of search interface and Internet-specific epistemic beliefs on source evaluations during Web search for medical information: an eye-tracking study. Behaviour and Information Technology, 2012, 31, 83-97.	2.5	87
18	Learning with hypermedia: The influence of representational formats and different levels of learner control on performance and learning behavior. Computers in Human Behavior, 2009, 25, 360-370.	5.1	85

#	Article	IF	Citations
19	The Role of Search Result Position and Source Trustworthiness in the Selection of Web Search Results When Using a List or a Grid Interface. International Journal of Human-Computer Interaction, 2014, 30, 177-191.	3.3	82
20	Attentive or Not? Toward a Machine Learning Approach to Assessing Studentsâ€™ Visible Engagement in Classroom Instruction. Educational Psychology Review, 2021, 33, 27-49.	5.1	79
21	Can differences in learning strategies explain the benefits of learning from static and dynamic visualizations?. Computers and Education, 2011, 56, 176-187.	5.1	78
22	The influence of text modality on learning with static and dynamic visualizations. Computers in Human Behavior, 2011, 27, 29-35.	5.1	68
23	When adults without university education search the Internet for health information: The roles of Internet-specific epistemic beliefs and a source evaluation intervention. Computers in Human Behavior, 2015, 48, 297-309.	5.1	68
24	Making the abstract concrete: Visualizing mathematical solution procedures. Computers in Human Behavior, 2006, 22, 9-25.	5.1	67
25	Pupil Dilation and EEG Alpha Frequency Band Power Reveal Load on Executive Functions for Link-Selection Processes during Text Reading. PLoS ONE, 2015, 10, e0130608.	1.1	66
26	The impact of learner characteristics on information utilization strategies, cognitive load experienced, and performance in hypermedia learning. Learning and Instruction, 2009, 19, 387-401.	1.9	65
27	Learning with dynamic and static visualizations: Realistic details only benefit learners with high visuospatial abilities. Computers in Human Behavior, 2014, 36, 330-339.	5.1	60
28	Information comparisons in example-based hypermedia environments: supporting learners with processing prompts and an interactive comparison tool. Educational Technology Research and Development, 2008, 56, 73-92.	2.0	57
29	Is spoken text always better? Investigating the modality and redundancy effect with longer text presentation. Computers in Human Behavior, 2013, 29, 1590-1601.	5.1	56
30	Disfluency Meets Cognitive Load in Multimedia Learning: Does Harderâ€toâ€Read Mean Betterâ€toâ€Understand?. Applied Cognitive Psychology, 2014, 28, 488-501.	0.9	56
31	Is This Information Source Commercially Biased? How Contradictions Between Web Pages Stimulate the Consideration of Source Information. Discourse Processes, 2016, 53, 430-456.	1.1	55
32	Implementation intentions during multimedia learning: Using if-then plans to facilitate cognitive processing. Learning and Instruction, 2015, 35, 1-15.	1.9	50
33	Watching corresponding gestures facilitates learning with animations by activating human mirror-neurons: An fNIRS study. Learning and Instruction, 2015, 36, 27-37.	1.9	48
34	EEG-based prediction of cognitive workload induced by arithmetic: a step towards online adaptation in numerical learning. ZDM - International Journal on Mathematics Education, 2016, 48, 267-278.	1.3	45
35	Explaining the modality effect in multimedia learning: Is it due to a lack of temporal contiguity with written text and pictures?. Learning and Instruction, 2012, 22, 92-102.	1.9	44
36	How temporal and spatial aspects of presenting visualizations affect learning about locomotion patterns. Learning and Instruction, 2012, 22, 193-205.	1.9	43

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37	Online EEG-Based Workload Adaptation of an Arithmetic Learning Environment. Frontiers in Human Neuroscience, 2017, 11, 286.	1.0	43
38	Electroencephalography Based Analysis of Working Memory Load and Affective Valence in an N-back Task with Emotional Stimuli. Frontiers in Human Neuroscience, 2017, 11, 616.	1.0	43
39	The acquisition of problem-solving skills in mathematics: How animations can aid understanding of structural problem features and solution procedures. Instructional Science, 2010, 38, 487-502.	1.1	42
40	Competent information search in the World Wide Web: Development and evaluation of a web training for pupils. Computers in Human Behavior, 2008, 24, 693-715.	5.1	41
41	Extending multimedia research: How do prerequisite knowledge and reading comprehension affect learning from text and pictures. Computers in Human Behavior, 2014, 31, 73-84.	5.1	41
42	Learning about locomotion patterns from visualizations: Effects of presentation format and realism. Computers and Education, 2011, 57, 1961-1970.	5.1	40
43	Instructional support for enhancing studentsâ€™ information problem solving ability. Computers in Human Behavior, 2008, 24, 615-622.	5.1	33
44	The speaker/gender effect: does the speakerâ€™s gender matter when presenting auditory text in multimedia messages?. Instructional Science, 2010, 38, 503-521.	1.1	32
45	Situated learning in the mobile age: mobile devices on a field trip to the sea. Research in Learning Technology, 2009, 17, 187-199.	0.5	28
46	Cross-subject workload classification using pupil-related measures. , 2018, , .		28
47	Learning about locomotion patterns: Effective use of multiple pictures and motion-indicating arrows. Computers and Education, 2013, 65, 45-55.	5.1	26
48	Predicting Cognitive Load in an Emergency Simulation Based on Behavioral and Physiological Measures. , 2019, , .		26
49	How the interface design influences users' spontaneous trustworthiness evaluations of web search results. , 2010, , .		26
50	Instructional design for effective and enjoyable computer-supported learning. Computers in Human Behavior, 2006, 22, 1-8.	5.1	25
51	Using eye-tracking and EEG to study the mental processing demands during learning of text-picture combinations. International Journal of Psychophysiology, 2020, 158, 201-214.	0.5	25
52	Chapter 10 How Search Engine Users Evaluate and Select Web Search Results: The Impact of the Search Engine Interface on Credibility Assessments. Library and Information Science, 2012, , 251-279.	0.2	23
53	What characterizes children nominated as gifted by teachers? A closer consideration of working memory and intelligence. High Ability Studies, 2015, 26, 75-92.	1.0	22
54	How children navigate a multiperspective hypermedia environment: The role of spatial working memory capacity. Computers in Human Behavior, 2016, 55, 145-158.	5.1	22

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55	Distraction during learning with hypermedia: difficult tasks help to keep task goals on track. Frontiers in Psychology, 2014, 5, 268.	1.1	20
56	The influence of a waiting intention on action performance: Efficiency impairment and volitional protection in tasks of varying difficulty. Acta Psychologica, 1997, 97, 167-182.	0.7	19
57	Brain-Computer Interfaces for Educational Applications. , 2017, , 177-201.		18
58	Lernen mit Multimedia. Psychologische Rundschau, 2008, 59, 98-107.	0.6	18
59	The two-component model of memory development, and its potential implications for educational settings. Developmental Cognitive Neuroscience, 2012, 2, S67-S77.	1.9	17
60	Toward neuroadaptive support technologies for improving digital reading: a passive BCI-based assessment of mental workload imposed by text difficulty and presentation speed during reading. User Modeling and User-Adapted Interaction, 2021, 31, 75-104.	2.9	17
61	Does a Strategy Training Foster Studentsâ€™ Ability to Learn From Multimedia?. Journal of Experimental Education, 2015, 83, 266-289.	1.6	16
62	A Call for an Unbiased Search for Moderators in Disfluency Research: Reply to Oppenheimer and Alter (2014). Applied Cognitive Psychology, 2014, 28, 805-806.	0.9	15
63	How Body Orientation Affects Concepts of Space, Time and Valence: Functional Relevance of Integrating Sensorimotor Experiences during Word Processing. PLoS ONE, 2016, 11, e0165795.	1.1	13
64	Readersâ€™ Processing and Use of Source Information as a Function of Its Usefulness to Explain Conflicting Scientific Claims. Discourse Processes, 2019, 56, 429-446.	1.1	12
65	Learning from Multimedia and Hypermedia. , 2009, , 251-272.		12
66	Verbal descriptions of spatial information can interfere with picture processing. Memory, 2012, 20, 682-699.	0.9	11
67	Context Sensitivity of EEG-based Workload Classification under different Affective Valence. IEEE Transactions on Affective Computing, 2017, , 1-1.	5.7	11
68	The role of beliefs regarding the uncertainty of knowledge and mental effort as indicated by pupil dilation in evaluating scientific controversies. International Journal of Science Education, 2020, 42, 350-371.	1.0	11
69	Altering emotions near the hand: Approachâ€“avoidance swipe interactions modulate the perceived valence of emotional pictures.. Emotion, 2021, 21, 220-225.	1.5	11
70	Measuring Cognitive Load Using In-Game Metrics of a Serious Simulation Game. Frontiers in Psychology, 2021, 12, 572437.	1.1	11
71	Cross-task and Cross-participant Classification of Cognitive Load in an Emergency Simulation Game. IEEE Transactions on Affective Computing, 2021, , 1-1.	5.7	10
72	Distribution of attention in a gallery segment on the National Socialistsâ€™ FÃ¼hrer cult: diving deeper into visitorsâ€™ cognitive exhibition experiences using mobile eye tracking. Museum Management and Curatorship, 2020, 35, 71-88.	0.8	9

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73	The influence of gestures and visuospatial ability during learning about movements with dynamic visualizations â€“ An fNIRS study. Computers in Human Behavior, 2022, 129, 107151.	5.1	8
74	Cognitive and socio-motivational aspects in learning with animations: there is more to it than â€˜do they aid learning or notâ€™. Instructional Science, 2010, 38, 435-440.	1.1	7
75	Simultaneous Presentation of Multiple Documents and Text-Highlighting: Online Integrative Processes and Offline Integrated Understanding. Scientific Studies of Reading, 2021, 25, 179-192.	1.3	7
76	Designing Visual-Arts Education Programs for Transfer Effects: Development and Experimental Evaluation of (Digital) Drawing Courses in the Art Museum Designed to Promote Adolescentsâ€™ Socio-Emotional Skills. Frontiers in Psychology, 2020, 11, 603984.	1.1	7
77	TÃ¼EyeQ, a rich IQ test performance data set with eye movement, educational and socio-demographic information. Scientific Data, 2021, 8, 154.	2.4	7
78	Touching digital objects directly on multi-touch devices fosters learning about visual contents. Computers in Human Behavior, 2021, 119, 106708.	5.1	7
79	Hypermedia exploration stimulates multiperspective reasoning in elementary school children with high working memory capacity: A tablet computer study. Learning and Individual Differences, 2016, 51, 273-283.	1.5	6
80	Affective Aspects of Perceived Loss of Control and Potential Implications for Brain-Computer Interfaces. Frontiers in Human Neuroscience, 2017, 11, 370.	1.0	6
81	Decision confidence: EEG correlates of confidence in different phases of an old/new recognition task. Brain-Computer Interfaces, 2019, 6, 162-177.	0.9	6
82	How laypersons consider differences in sourcesâ€™ trustworthiness and expertise in their regulation and resolution of scientific conflicts. International Journal of Science Education, Part B: Communication and Public Engagement, 2020, 10, 335-354.	0.9	6
83	Do your eye movements reveal your performance on an IQ test? A study linking eye movements and socio-demographic information to fluid intelligence. PLoS ONE, 2022, 17, e0264316.	1.1	6
84	Investigating professed and enacted epistemic beliefs about the uncertainty of scientific knowledge when students evaluate scientific controversies. European Journal of Psychology of Education, 2021, 36, 125-146.	1.3	5
85	Learning and Problem-Solving with Hypermedia in the Twenty-First Century: From Hypertext to Multiple Web Sources and Multimodal Adaptivity. , 2017, , 61-88.		5
86	Hypermedia and Self-Regulation: An Interplay in Both Directions. Springer International Handbooks of Education, 2013, , 129-141.	0.1	4
87	Unity and diversity in working memory load: Evidence for the separability of the executive functions updating and inhibition using machine learning. Biological Psychology, 2018, 139, 163-172.	1.1	4
88	Fixation-Related EEG Frequency Band Power Analysis: A Promising Neuro-Cognitive Methodology to Evaluate the Matching-Quality of Web Search Results?. Communications in Computer and Information Science, 2016, , 245-250.	0.4	4
89	Priming effects between spatial meaning of verbs and numbers are modulated by time intervals: Early interference and late facilitation.. Canadian Journal of Experimental Psychology, 2016, 70, 295-300.	0.7	4
90	Coding valence in touchscreen interactions: hand dominance and lateral movement influence valence appraisals of emotional pictures. Psychological Research, 2020, 84, 23-31.	1.0	3

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91	The intention was good: How promoting strategy use does not improve multimedia learning for secondary students. British Journal of Educational Psychology, 2021, 91, 1291-1309.	1.6	3
92	Valence-space associations in touchscreen interactions: Valence match between emotional pictures and their vertical touch location leads to pictures' positive evaluation. PLoS ONE, 2018, 13, e0199972.	1.1	2
93	Moved by Emotions: Affective Concepts Representing Personal Life Events Induce Freely Performed Steps in Line With Combined Sagittal and Lateral Space-Valence Associations. Frontiers in Psychology, 2019, 10, 2787.	1.1	2
94	Does Grammatical Number Influence the Semantic Priming Between Number Cues and Words Related to Vertical Space? An Investigation Using Virtual Reality. Frontiers in Psychology, 2018, 9, 573.	1.1	1
95	Diagnostik von Handlungsphasen in tutoriellen Lernsystemen. Informatik Aktuell, 1995, , 330-337.	0.4	1
96	Investigating the Roles of Document Presentation and Reading Interactions on Different Aspects of Multiple Document Comprehension. International Journal of Human-Computer Interaction, 0, , 1-14.	3.3	0