

# Chris Baber

## List of Publications by Year in descending order

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165  
papers

3,566  
citations

147801

31  
h-index

175258

52  
g-index

186  
all docs

186  
docs citations

186  
times ranked

2303  
citing authors

#	ARTICLE	IF	CITATIONS
1	The risks associated with Artificial General Intelligence: A systematic review. Journal of Experimental and Theoretical Artificial Intelligence, 2023, 35, 649-663.	2.8	34
2	Making ergonomics accountable: Reliability, validity and utility in ergonomics methods. Applied Ergonomics, 2022, 98, 103583.	3.1	9
3	Formalizing Distributed Situation Awareness in Multi-Agent Networks. IEEE Transactions on Human-Machine Systems, 2022, 52, 1166-1175.	3.5	4
4	Purposeful tool use in early lithic technologies. Adaptive Behavior, 2021, 29, 169-180.	1.9	2
5	The look of writing in reading. Graphetic empathy in making and perceiving graphic traces. Language Sciences, 2021, 84, 101363.	1.0	1
6	Visualising alignment to support students' judgment of confidence in open learner models. User Modeling and User-Adapted Interaction, 2020, 30, 159-194.	3.8	1
7	The effect of known decision support reliability on outcome quality and visual information foraging in joint decision making. Applied Ergonomics, 2020, 86, 103102.	3.1	6
8	Using the Toulmin Model of Argumentation to Explore the Differences in Human and Automated Hiring Decisions. , 2020, , .		0
9	Human-agents Interactions in Multi-Agent Systems: A Case Study of Human-UAVs Team for Forest Fire Lookouts. , 2020, , .		1
10	Conflicts Resolution and Situation Awareness in Heterogeneous Multi-agent Missions using Publish-subscribe Technique and Inferential Reasoning. , 2020, , .		1
11	Handling Uncertainties in Distributed Constraint Optimization Problems using Bayesian Inferential Reasoning. , 2020, , .		0
12	What the Jeweller's Hand Tells the Jeweller's Brain: Tool Use, Creativity and Embodied Cognition. Philosophy and Technology, 2019, 32, 283-302.	4.3	24
13	Drilling Into Dashboards: Responding to Computer Recommendation in Fraud Analysis. IEEE Transactions on Human-Machine Systems, 2019, 49, 633-641.	3.5	4
14	Ecological Interface Design, the Proximity Compatibility Principle, and Automation Reliability in Road Traffic Management. IEEE Transactions on Human-Machine Systems, 2019, 49, 241-249.	3.5	12
15	Editorial: The cybernetic return in Human Factors and Ergonomics. Applied Ergonomics, 2019, 79, 86-90.	3.1	6
16	The Cybernetic Return in Human Factors/Ergonomics (HFE). Proceedings of the Human Factors and Ergonomics Society, 2019, 63, 894-898.	0.3	1
17	Thinking with Hands, Acting with Minds: Embodied Cognition and Creative Practice. Advances in Intelligent Systems and Computing, 2019, , 225-234.	0.6	2
18	The effect of four user interface concepts on visual scan pattern similarity and information foraging in a complex decision making task. Applied Ergonomics, 2018, 70, 6-17.	3.1	16

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19	Automation Reliability and Decision Strategy: A Sequential Decision Making Model for Automation Interaction. Proceedings of the Human Factors and Ergonomics Society, 2018, 62, 144-148.	0.3	7
20	A resources model for distributed sensemaking. Cognition, Technology and Work, 2018, 20, 651-664.	3.0	5
21	Designing Smart Objects to Support Affording Situations: Exploiting Affordance Through an Understanding of Forms of Engagement. Frontiers in Psychology, 2018, 9, 292.	2.1	6
22	EAST in Energy Distribution Operations. , 2018, , 65-81.		0
23	EAST in Railway Maintenance. , 2018, , 109-133.		0
24	EAST in Air Traffic Control. , 2018, , 19-38.		0
25	EAST in Military Command and Control. , 2018, , 39-63.		0
26	Workflows and individual differences during visually guided routine tasks in a road traffic management control room. Applied Ergonomics, 2017, 61, 79-89.	3.1	8
27	A Cognitive Model of How People Make Decisions Through Interaction with Visual Displays. , 2017, , .		25
28	A Prototype for Credit Card Fraud Management. , 2017, , .		17
29	Intelligent Adaptive Systems: an interaction-centred design perspective. Ergonomics, 2017, 60, 1458-1459.	2.1	6
30	The Impact of Cervical Musculoskeletal Disorders on UK Consultant Plastic Surgeons. Annals of Plastic Surgery, 2017, 78, 602-610.	0.9	17
31	After phrenology: neural reuse and the interactive brain. Ergonomics, 2017, 60, 1173-1174.	2.1	0
32	Joint Human-Automation Decision Making in Road Traffic Management. Proceedings of the Human Factors and Ergonomics Society, 2017, 61, 385-389.	0.3	2
33	Towards the Quantification of Human-Robot Imitation Using Wearable Inertial Sensors. , 2017, , .		1
34	Demonstration of a Prototype for Credit Card Fraud Management. , 2017, , .		0
35	Predicting upper limb discomfort for plastic surgeons wearing loupes based on multi-objective optimization. Cogent Engineering, 2017, 4, 1398702.	2.2	4
36	Coaching through smart objects. , 2017, , .		1

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37	Towards the Analysis of Movement Variability in Human-Humanoid Imitation Activities. , 2017, , .		0
38	Creating Affording Situations: Coaching through Animate Objects. Sensors, 2017, 17, 2308.	3.8	7
39	Spontaneous bimanual independence during parallel tapping and sawing. PLoS ONE, 2017, 12, e0178188.	2.5	3
40	The Dynamics of Distributed Situation Awareness. Proceedings of the Human Factors and Ergonomics Society, 2017, 61, 277-281.	0.3	4
41	Distributed Cognition at the Crime Scene. , 2017, , 43-59.		1
42	Evaluating the Effect of Uncertainty Visualisation in Open Learner Models on Students's™ Metacognitive Skills. Lecture Notes in Computer Science, 2017, , 15-27.	1.3	11
43	Movement consistency during repetitive tool use action. PLoS ONE, 2017, 12, e0173281.	2.5	3
44	Student Preferences for Visualising Uncertainty in Open Learner Models. Lecture Notes in Computer Science, 2017, , 445-449.	1.3	1
45	Predicting transaction time for dual-tasks using critical path. , 2017, , 223-230.		0
46	Human Factors Methods Integration: A Case Study in the Railway Industry. , 2017, , 521-542.		0
47	Macrocognition in Day-To-Day Police Incident Response. Frontiers in Psychology, 2016, 7, 293.	2.1	1
48	A Systematic Approach for Developing Decision Aids: From Cognitive Work Analysis to Prototype Design and Development. Systems Engineering, 2016, 19, 79-100.	2.7	13
49	Collaborative sense-making during simulated Intelligence Analysis Exercises. International Journal of Human Computer Studies, 2016, 86, 94-108.	5.6	10
50	A comparison of shared and distributed situation awareness in teams through the use of agent-based modelling. Theoretical Issues in Ergonomics Science, 2016, 17, 8-41.	1.8	9
51	Understanding movement variability of simplistic gestures using an inertial sensor. , 2016, , .		0
52	Thinking Through Tools: What Can Tool-Use Tell Us About Distributed Cognition?. Studies in Logic, Grammar and Rhetoric, 2015, 41, 25-40.	0.1	4
53	Missing Key Information. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 200-204.	0.3	0
54	Using 1/f Scaling to Study Variability and Dexterity in Simple Tool using Tasks. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 431-435.	0.3	3

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55	Combining network analysis with Cognitive Work Analysis: insights into social organisational and cooperation analysis. <i>Ergonomics</i> , 2015, 58, 434-449.	2.1	20
56	Objective classification of performance in the use of a piercing saw in jewellery making. <i>Applied Ergonomics</i> , 2015, 51, 211-221.	3.1	7
57	Modelling elderly cardiac patients decision making using Cognitive Work Analysis: Identifying requirements for patient decision aids. <i>International Journal of Medical Informatics</i> , 2015, 84, 430-443.	3.3	11
58	The application of SHERPA (Systematic Human Error Reduction and Prediction Approach) in the development of compensatory cognitive rehabilitation strategies for stroke patients with left and right brain damage. <i>Ergonomics</i> , 2015, 58, 75-95.	2.1	30
59	Rule and theme discovery in human interactions with an 'internet of things'. , 2015, , .		4
60	Tool use as distributed cognition: how tools help, hinder and define manual skill. <i>Frontiers in Psychology</i> , 2014, 5, 116.	2.1	27
61	Scalable Proactive Event-Driven Decision Making. <i>IEEE Technology and Society Magazine</i> , 2014, 33, 35-41.	0.8	25
62	Intelligent Assistive System Using Real-Time Action Recognition for Stroke Survivors. , 2014, , .		12
63	Visualizing interactive narratives. , 2014, , .		12
64	Designing visual analytics for collaborative activity. , 2014, , 327-334.		3
65	Elderly Cardiac Patients' Medication Management: Patient Day-to-Day Needs and Review of Medication Management System. , 2013, , .		8
66	Using social network analysis and agent-based modelling to explore information flow using common operational pictures for maritime search and rescue operations. <i>Ergonomics</i> , 2013, 56, 889-905.	2.1	61
67	Distributed Cognition at the Crime Scene. , 2013, , 131-146.		2
68	Application of Human Error Identification (HEI) Techniques to Cognitive Rehabilitation in Stroke Patients with Limb Apraxia. <i>Lecture Notes in Computer Science</i> , 2013, , 463-471.	1.3	9
69	Expertise in Crime Scene Examination. <i>Human Factors</i> , 2012, 54, 413-424.	3.5	27
70	Patient-centred cardio vascular disease management – user perceptions. <i>Journal of Assistive Technologies</i> , 2012, 6, 105-122.	0.8	4
71	Creating and using interactive narratives. , 2012, , .		13
72	Multi-agency operations: Cooperation during flooding. <i>Applied Ergonomics</i> , 2012, 43, 38-47.	3.1	78

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73	End-User Perception Towards Pervasive Cardiac Healthcare Services: Benefits, Acceptance, Adoption, Risks, Security, Privacy and Trust. , 2011, , .		14
74	An evaluation of multimodal interactions with technology while learning science concepts. British Journal of Educational Technology, 2011, 42, 266-290.	6.3	43
75	Multimodal control of sensors on multiple simulated unmanned vehicles. Ergonomics, 2011, 54, 792-805.	2.1	12
76	A Human Factors Study of Technology Acceptance of a Prototype Mobile Augmented Reality System for Science Education. Advanced Science Letters, 2011, 4, 3342-3352.	0.2	18
77	An approach to designing interactive decision aid for cardiac patients. , 2011, , .		2
78	Distributed cognition at the crime scene. AI and Society, 2010, 25, 423-432.	4.6	15
79	From ethnography to the EAST method: A tractable approach for representing distributed cognition in Air Traffic Control. Ergonomics, 2010, 53, 184-197.	2.1	67
80	Supporting Naturalistic Decision Making Through Location-Based Photography: A Study of Simulated Military Reconnaissance. International Journal of Human-Computer Interaction, 2010, 26, 147-172.	4.8	6
81	Mobile technology for crime scene examination. International Journal of Human Computer Studies, 2009, 67, 464-474.	5.6	17
82	Using an integrated methods approach to analyse the emergent properties of military command and control. Applied Ergonomics, 2009, 40, 636-647.	3.1	27
83	The Use of Narrative in the Prototyping of Serious Games for Criminal Investigation. , 2009, , .		0
84	Distributed situation awareness in an Airborne Warning and Control System: application of novel ergonomics methodology. Cognition, Technology and Work, 2008, 10, 221-229.	3.0	48
85	Development of a generic activities model of command and control. Cognition, Technology and Work, 2008, 10, 209-220.	3.0	9
86	WESTT (workload, error, situational awareness, time and teamwork): an analytical prototyping system for command and control. Cognition, Technology and Work, 2008, 10, 199-207.	3.0	20
87	What really is going on? Review of situation awareness models for individuals and teams. Theoretical Issues in Ergonomics Science, 2008, 9, 297-323.	1.8	271
88	A mobile health device to help people with severe allergies. , 2008, , .		7
89	Measuring team skills in crime scene investigation: exploring ad hoc teams. Ergonomics, 2008, 51, 1463-1488.	2.1	19
90	Representing situation awareness in collaborative systems: A case study in the energy distribution domain. Ergonomics, 2008, 51, 367-384.	2.1	82

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91	Modelling of human alarm handling response times: a case study of the Ladbroke Grove rail accident in the UK. Ergonomics, 2008, 51, 423-440.	2.1	34
92	Effect of Head-Mounted Displays on Posture. Human Factors, 2007, 49, 797-807.	3.5	45
93	Multi-Platform Crime Scene Investigation Field Tool. , 2007, , .		2
94	Assessing the physical loading of wearable computers. Applied Ergonomics, 2007, 38, 237-247.	3.1	18
95	Uses of accelerometer data collected from a wearable system. Personal and Ubiquitous Computing, 2007, 11, 117-132.	2.8	48
96	Supporting Crime Scene Investigation. , 2007, , 103-116.		2
97	Event analysis of systemic teamwork (EAST): a novel integration of ergonomics methods to analyse C4i activity. Ergonomics, 2006, 49, 1345-1369.	2.1	101
98	Assessing the Wearability of Wearable Computers. Proceedings International Symposium on Wearable Computers, 2006, , .	0.0	37
99	Distributed situation awareness in dynamic systems: theoretical development and application of an ergonomics methodology. Ergonomics, 2006, 49, 1288-1311.	2.1	370
100	Command and control in emergency services operations: a social network analysis. Ergonomics, 2006, 49, 1204-1225.	2.1	130
101	The ergonomics of command and control. Ergonomics, 2006, 49, 1131-1138.	2.1	21
102	Crime scene investigation as distributed cognition. Pragmatics and Cognition, 2006, 14, 357-385.	0.4	37
103	Cognitive aspects of tool use. Applied Ergonomics, 2006, 37, 3-15.	3.1	35
104	Analyzing the Role of Communications Technology in C4i Scenarios: A Distributed Cognition Approach. Journal of Intelligent Systems, 2006, 15, .	1.6	3
105	The design of the SensVest. Personal and Ubiquitous Computing, 2005, 9, 6-19.	2.8	40
106	MsSAM: Methods to Support Shared Analysis for Mobile Investigators. A Task Analysis to Support the Integration of Wearable Computer Technology into Crime Scene Investigation. Measurement and Control, 2005, 38, 83-87.	1.8	3
107	A Tool to Assess the Comfort of Wearable Computers. Human Factors, 2005, 47, 77-91.	3.5	111
108	Validating task analysis for error identification: reliability and validity of a human error prediction technique. Ergonomics, 2005, 48, 1097-1113.	2.1	41

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109	Evaluation in human-computer interaction. , 2005, , 357-387.		8
110	A Novel Integration of Human Factors Methods to Analyse C4i Activity; A Chemical Incident Case Study Carried Out with the UK Fire Service. Proceedings of the Human Factors and Ergonomics Society, 2004, 48, 518-522.	0.3	0
111	Defining and evaluating context for wearable computing. International Journal of Human Computer Studies, 2004, 60, 798-819.	5.6	19
112	Integrated digital communities: combining web-based interaction with text messaging to develop a system for encouraging group communication and competition. Interacting With Computers, 2004, 16, 93-113.	1.5	25
113	Social Networks and Mobile Games: The Use of Bluetooth for a Multiplayer Card Game. Lecture Notes in Computer Science, 2004, , 98-107.	1.3	10
114	Neck muscle activity and perceived pain and discomfort due to variations of head load and posture. Aviation, Space, and Environmental Medicine, 2004, 75, 123-31.	0.5	16
115	On the cost-effectiveness of ergonomics. Applied Ergonomics, 2003, 34, 407-411.	3.1	14
116	Objective Metrics for the Evaluation of Simple Surgical Skills in Real and Virtual Domains. Presence: Teleoperators and Virtual Environments, 2003, 12, 207-221.	0.6	16
117	Subjective evaluation of usability. Ergonomics, 2002, 45, 1021-1025.	2.1	15
118	Task analysis for error identification: Theory, method and validation. Theoretical Issues in Ergonomics Science, 2002, 3, 212-227.	1.8	29
119	Error by design: methods for predicting device usability. Design Studies, 2002, 23, 363-384.	3.1	60
120	Embedded human computer interaction. Applied Ergonomics, 2002, 33, 273-287.	3.1	12
121	Wearable Computers: A Human Factors Review. International Journal of Human-Computer Interaction, 2001, 13, 123-145.	4.8	35
122	Ubiquitous digital imaging systems. , 2001, 4306, 425.		1
123	Using critical path analysis to model multimodal human-computer interaction. International Journal of Human Computer Studies, 2001, 54, 613-636.	5.6	39
124	Designing habitable dialogues for speech-based interaction with computers. International Journal of Human Computer Studies, 2001, 54, 637-662.	5.6	25
125	Can support systems adversely affect cell performance?. International Journal of Production Economics, 2000, 65, 43-54.	8.9	1
126	Virtual Reality: A Tool for Assembly?. Presence: Teleoperators and Virtual Environments, 2000, 9, 486-496.	0.6	35



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127	Automatic Speech Recognition, Noise and Workload. Proceedings of the Human Factors and Ergonomics Society, 2000, 44, 762-765.	0.3	6
128	Ergonomics of wearable computers. Mobile Networks and Applications, 1999, 4, 15-21.	3.3	52
129	Virtual risks: Rich domain risk and technology transfer failure as design criteria in the Sheffield Knee Arthroscopy Trainer (SKATS). Virtual Reality, 1999, 4, 192-202.	6.1	1
130	Modelling the effects of constraint upon speech-based human-computer interaction. International Journal of Human Computer Studies, 1999, 50, 85-107.	5.6	11
131	Contrasting paradigms for the development of wearable computers. IBM Systems Journal, 1999, 38, 551-565.	3.0	38
132	Wearable Information Appliances for the Emergency Services: HotHelmet. Lecture Notes in Computer Science, 1999, , 314-316.	1.3	1
133	Human Factors of Multi-modal Ubiquitous Computing. Lecture Notes in Computer Science, 1999, , 346-348.	1.3	1
134	Designing for consumers: editorial. Applied Ergonomics, 1998, 29, 1-3.	3.1	9
135	From public technology to ubiquitous computing: implications for ergonomics Editorial. Ergonomics, 1998, 41, 921-926.	2.1	9
136	Speech technology for automatic teller machines: an investigation of user attitude and performance. Ergonomics, 1998, 41, 962-981.	2.1	34
137	Preliminary Investigations into the Use of Wearable Computers. , 1998, , 313-325.		8
138	Comparing speech versus text displays for alarm handling. Ergonomics, 1997, 40, 1240-1254.	2.1	10
139	Factors affecting users' choice of words in speech-based interaction with public technology. International Journal of Speech Technology, 1997, 2, 45-59.	2.2	14
140	Human Error, Engineering Psychology and System Safety. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 1255-1260.	0.4	0
141	Automatic Speech Recognition in Adverse Environments. Human Factors, 1996, 38, 142-155.	3.5	33
142	Human error identification techniques applied to public technology: predictions compared with observed use. Applied Ergonomics, 1996, 27, 119-131.	3.1	98
143	A systems approach to human error identification. Safety Science, 1996, 22, 215-228.	4.9	37
144	Towards a definition and working model of stress and its effects on speech. Speech Communication, 1996, 20, 3-12.	2.8	54

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145	Workload and the use of automatic speech recognition: The effects of time and resource demands. <i>Speech Communication</i> , 1996, 20, 37-53.	2.8	43
146	Alarm-initiated activities: an analysis of alarm handling by operators using text-based alarm systems in supervisory control systems. <i>Ergonomics</i> , 1995, 38, 2414-2431.	2.1	22
147	Task analysis for error identification: a methodology for designing error-tolerant consumer products. <i>Ergonomics</i> , 1994, 37, 1923-1941.	2.1	72
148	Modelling error recovery and repair in automatic speech recognition. <i>International Journal of Man-Machine Studies</i> , 1993, 39, 495-515.	0.7	34
149	Comparison of GUIs and CUIs: appropriate ranges of actions and ease of use. <i>Displays</i> , 1993, 14, 207-215.	3.7	2
150	Identification, classification and management of errors in automated component assembly tasks. <i>International Journal of Production Research</i> , 1993, 31, 1853-1863.	7.5	10
151	Can speech be used for alarm displays in "process control" type tasks?. <i>Behaviour and Information Technology</i> , 1992, 11, 216-226.	4.0	9
152	Usability and EC Directive. <i>Displays</i> , 1992, 13, 151-160.	3.7	9
153	Feedback requirements for automatic speech recognition in the process control room. <i>International Journal of Man-Machine Studies</i> , 1992, 37, 703-719.	0.7	11
154	An experimental comparison of test and symbols for in-car reconfigurable displays. <i>Applied Ergonomics</i> , 1992, 23, 255-262.	3.1	23
155	Methods and tools in user centred design for information technology. <i>Applied Ergonomics</i> , 1992, 23, 359-360.	3.1	0
156	Instructions and demonstration as media for training new users of Automatic Speech Recognition Devices. <i>Behaviour and Information Technology</i> , 1990, 9, 371-379.	4.0	6
157	The comfort assessment of wearable computers. , 0, , .		54
158	Evaluating contextual information for wearable computing. , 0, , .		13
159	Using gestures to learn about graphs: the contribution of multimodal technology. , 0, , .		1
160	User evaluation of augmented reality systems. , 0, , .		23
161	Design of a Minimal Interface for two-way strategic information flow for urban operations. , 0, , .		3
162	Wearable Technology for Crime Scene Investigation. , 0, , .		6

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163	Tool Use as Gesture: new challenges for maintenance and rehabilitation. , 0, , .		3
164	Towards the definition of a modelling framework for meaningful Human-IoT Interactions. , 0, , .		3
165	Tackling the Zombie Apocalypse: sensemaking in simulated disaster management. , 0, , .		0