

Catherine M. Burns

List of Publications by Year in descending order

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Version: 2024-02-01

142
papers

2,626
citations

331670

21
h-index

302126

39
g-index

163
all docs

163
docs citations

163
times ranked

2002
citing authors

#	ARTICLE	IF	CITATIONS
1	Exploring the Experiences of Family Caregivers of Children With Special Health Care Needs to Inform the Design of Digital Health Systems: Formative Qualitative Study. JMIR Formative Research, 2022, 6, e28895.	1.4	7
2	The effects of domain knowledge on trust in explainable AI and task performance: A case of peer-to-peer lending. International Journal of Human Computer Studies, 2022, 162, 102792.	5.6	23
3	Caregiver Expectations of Interfacing With Voice Assistants to Support Complex Home Care: Mixed Methods Study. JMIR Human Factors, 2022, 9, e37688.	2.0	4
4	Prescribers' perspectives on including reason for use information on prescriptions and medication labels: a qualitative thematic analysis. BMC Health Services Research, 2021, 21, 89.	2.2	4
5	Including the Reason for Use on Prescriptions Sent to Pharmacists: Scoping Review. JMIR Human Factors, 2021, 8, e22325.	2.0	4
6	Transforming primary care for older Canadians living with frailty: mixed methods study protocol for a complex primary care intervention. BMJ Open, 2021, 11, e042911.	1.9	1
7	My pharmacist: Creating and maintaining relationship between physicians and pharmacists in primary care settings. Research in Social and Administrative Pharmacy, 2020, 16, 102-107.	3.0	20
8	Addressing Human Factor Challenges in Paediatric Home Care: Development and Evaluation of a Mobile Home Care Communication App. Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare, 2020, 9, 37-39.	0.3	4
9	How do I keep myself safe? Patient perspectives on including reason for use information on prescriptions and medication labels: a qualitative thematic analysis. Journal of Pharmaceutical Policy and Practice, 2020, 13, 63.	2.4	2
10	The Burden of Communication: Effects of Automation Support and Automation Transparency on Team Performance. , 2020, , .		1
11	Contributions from cognitive engineering to requirements specifications for complex sociotechnical systems: A case study in the context of healthcare in Brazil. Human Factors and Ergonomics in Manufacturing, 2019, 29, 63-77.	2.7	3
12	Effects of Urban Violence on Primary Healthcare: The Challenges of Community Health Workers in Performing House Calls in Dangerous Areas. Journal of Community Health, 2019, 44, 569-576.	3.8	10
13	Exploring the role of teams and technology in patients' medication decision making. Journal of the American Pharmacists Association: JAPhA, 2019, 59, S35-S43.e1.	1.5	5
14	Multisensory Cues for Encoding Urgency of System Hazards: Effect of Operator Experience on Perceived Urgency. International Journal of Aerospace Psychology, 2019, 29, 98-114.	0.9	3
15	Health Behavior Nudging Through Health Information Exposure and Information Search. Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare, 2019, 8, 126-126.	0.3	0
16	Can Message-Tailoring Based on Regulatory Fit Theory Improve the Efficacy of Persuasive Physical Activity Systems?. Information (Switzerland), 2019, 10, 347.	2.9	1
17	Information Technology Systems at the sharp end of medication therapy management. Proceedings of the Human Factors and Ergonomics Society, 2019, 63, 698-702.	0.3	4
18	Understanding, Supporting, and Redesigning Cognitive Work. Communications in Computer and Information Science, 2019, , 3-12.	0.5	1

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19	Reason for Use: An Opportunity to Improve Patient Safety. <i>Studies in Health Technology and Informatics</i> , 2019, 257, 47-52.	0.3	4
20	Supporting decision-making in patient risk assessment using a hierarchical fuzzy model. <i>Cognition, Technology and Work</i> , 2018, 20, 477-488.	3.0	5
21	Design and evaluation of a safety-centered user interface for radiation therapy. <i>Practical Radiation Oncology</i> , 2018, 8, e346-e354.	2.1	3
22	Clinician-Driven Design of VitalPAD: An Intelligent Monitoring and Communication Device to Improve Patient Safety in the Intensive Care Unit. <i>IEEE Journal of Translational Engineering in Health and Medicine</i> , 2018, 6, 1-14.	3.7	31
23	Automation and the Human Factors Race to Catch Up. <i>Journal of Cognitive Engineering and Decision Making</i> , 2018, 12, 83-85.	2.3	6
24	Using cognitive work analysis to compare complex system domains. <i>Theoretical Issues in Ergonomics Science</i> , 2018, 19, 553-577.	1.8	5
25	Improved Monitoring Performance of Financial Trading Algorithms Using a Graphical Display. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2018, 62, 187-191.	0.3	2
26	To Cross or Not to Cross. , 2018, , .		53
27	Does Predictability Play a Role in Task Management? An Experimental Study With a Financial Trading Simulation. <i>IEEE Transactions on Human-Machine Systems</i> , 2018, 48, 702-711.	3.5	0
28	Effect of a Mobile Phone Intervention on Quitting Smoking in a Young Adult Population of Smokers: Randomized Controlled Trial. <i>JMIR MHealth and UHealth</i> , 2018, 6, e10893.	3.7	57
29	Physician and Pharmacist Medication Decision-Making in the Time of Electronic Health Records: Mixed-Methods Study. <i>JMIR Human Factors</i> , 2018, 5, e24.	2.0	18
30	Understanding the Context for Health Behavior Change with Cognitive Work Analysis and Persuasive Design. , 2018, , .		2
31	Applying Persuasive Design Techniques to Influence Data-Entry Behaviors in Primary Care: Repeated Measures Evaluation Using Statistical Process Control. <i>JMIR Human Factors</i> , 2018, 5, e28.	2.0	0
32	An Exploratory Case Study to Understand Primary Care Users and Their Data Quality Tradeoffs. <i>Journal of Data and Information Quality</i> , 2017, 8, 1-24.	2.1	6
33	Modeling Automation With Cognitive Work Analysis to Support Human-Automation Coordination. <i>Journal of Cognitive Engineering and Decision Making</i> , 2017, 11, 299-322.	2.3	18
34	Rasmussen and the boundaries of empirical evaluation. <i>Applied Ergonomics</i> , 2017, 59, 649-656.	3.1	11
35	Understanding safe performance in rapidly evolving systems: a risk management analysis of the 2010 US financial market Flash Crash with Rasmussen's risk management framework. <i>Theoretical Issues in Ergonomics Science</i> , 2017, 18, 608-630.	1.8	4
36	Trust in autonomous vehicles: The case of Tesla Autopilot and Summon. , 2017, , .		82

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37	Ecological interface design for financial trading: Trading performance and risk preference effects. , 2017, , .		3
38	Real-time flight simulator construction with a network for training pilots using mechatronics and cyber-physical system approaches. , 2017, , .		7
39	Modeling Patient Treatment With Medical Records: An Abstraction Hierarchy to Understand User Competencies and Needs. JMIR Human Factors, 2017, 4, e16.	2.0	12
40	Protocol for Usability Testing and Validation of the ISO Draft International Standard 19223 for Lung Ventilators. JMIR Research Protocols, 2017, 6, e166.	1.0	3
41	Cognitive Work Analysis: Lens on Work. , 2017, , 197-206.		0
42	Autonomous Driving in the Real World. , 2016, , .		85
43	Representing Stages and Levels of Automation on a Decision Ladder. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 328-332.	0.3	3
44	Engaging nanotechnology: ethnography of lab-on-a-chip technology in small-scale fluidics research. Cognition, Technology and Work, 2016, 18, 33-52.	3.0	5
45	Prioritization. Journal of Cognitive Engineering and Decision Making, 2016, 10, 105-108.	2.3	2
46	Designing for patient risk assessment in primary health care: a case study for ergonomic work analysis. Cognition, Technology and Work, 2016, 18, 215-231.	3.0	15
47	Behavior Change Techniques Present in Wearable Activity Trackers: A Critical Analysis. JMIR MHealth and UHealth, 2016, 4, e40.	3.7	254
48	Designing for Risk Assessment Systems for Patient Triage in Primary Health Care: A Literature Review. JMIR Human Factors, 2016, 3, e21.	2.0	1
49	Understanding Automated Financial Trading Using Work Domain Analysis. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 165-169.	0.3	7
50	Guidelines and Caveats for Manipulating Expectancies in Experiments Involving Human Participants. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 1778-1782.	0.3	0
51	Using Comparative Cognitive Work Analysis to Identify Design Priorities in Complex Socio-Technical Systems. Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare, 2015, 4, 118-123.	0.3	3
52	Sustained Attention in Auditory and Visual Monitoring Tasks. Human Factors, 2015, 57, 1403-1416.	3.5	35
53	Using a Collaborative Research Approach to Develop an Interdisciplinary Research Agenda for the Study of Mobile Health Interventions for Older Adults. JMIR MHealth and UHealth, 2015, 3, e11.	3.7	14
54	Effect of a Mobile Phone Intervention on Quitting Smoking in a Young Adult Population of Smokers: Randomized Controlled Trial Study Protocol. JMIR Research Protocols, 2015, 4, e10.	1.0	50

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55	Using team cognitive work analysis to reveal healthcare team interactions in a birthing unit. <i>Ergonomics</i> , 2014, 57, 973-986.	2.1	46
56	Improving Social Connection Through a Communities-of-Practice-Inspired Cognitive Work Analysis Approach. <i>Human Factors</i> , 2014, 56, 361-383.	3.5	14
57	Ecological Interface Design for Knee and Hip Automatic Physiotherapy Assistant and Rehabilitation System. <i>Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare</i> , 2014, 3, 1-7.	0.3	7
58	Understanding "interpersonal trust"™ from a human factors perspective: insights from situation awareness and the lens model. <i>Theoretical Issues in Ergonomics Science</i> , 2014, 15, 88-110.	1.8	11
59	User Perception of Data and Medical Record Personalities. <i>Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare</i> , 2014, 3, 15-22.	0.3	3
60	Using Cognitive Work Analysis and a Persuasive Design Approach to Create Effective Blood Pressure Management Systems. <i>Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare</i> , 2014, 3, 36-43.	0.3	12
61	Trust tokens in team development. <i>Team Performance Management</i> , 2014, 20, 39-64.	1.3	18
62	Cognitive Engineering for Better Health Care Systems. , 2014, , 1-6.		3
63	Team Cognitive Work Analysis as an Approach for Understanding Teamwork in Health Care. , 2014, , 27-42.		0
64	Pathway to Innovation. <i>Industrial Biotechnology</i> , 2013, 9, 258-259.	0.8	1
65	Team Cognitive Work Analysis. <i>Journal of Cognitive Engineering and Decision Making</i> , 2013, 7, 123-140.	2.3	42
66	Music as an Auditory Display. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2013, 57, 1149-1153.	0.3	0
67	Perceived Urgency of Tactile Warnings. , 2013, , .		1
68	Designing for Interpersonal Trust " The Power of Trust Tokens. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2013, 57, 339-343.	0.3	2
69	Mobile Patient Monitoring for the Pediatric Intensive Care Unit Work Domain Analysis and Rapid Prototyping Results. , 2013, , .		10
70	Cognitive Engineering Across Domains. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2013, 57, 139-143.	0.3	1
71	Focused Learning. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2013, 57, 472-476.	0.3	1
72	Multimodal Displays for Enhancing Performance in a Supervisory Monitoring Task. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2013, 57, 1164-1168.	0.3	2

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73	Visualization of Control Structure in Human-Automation System Based on Cognitive Work Analysis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 423-430.	0.4	7
74	Bridging the Gap between Cognitive Systems Engineering Analysis, Design and Practice. Proceedings of the Human Factors and Ergonomics Society, 2013, 57, 334-338.	0.3	0
75	Ecological Interfaces. , 2013, , .		3
76	A personal assistant for dementia to stay at home safe at reduced cost. Gerontechnology, 2013, 11, .	0.1	21
77	Where did that sound come from? Comparing the ability to localise using audification and audition. Disability and Rehabilitation: Assistive Technology, 2012, 7, 130-138.	2.2	0
78	Designing for Social Engagement in Online Social Networks Using Communities-of-Practice Theory and Cognitive Work Analysis. Journal of Cognitive Engineering and Decision Making, 2012, 6, 194-213.	2.3	15
79	Sonification Discriminability and Perceived Urgency. Proceedings of the Human Factors and Ergonomics Society, 2012, 56, 1298-1302.	0.3	2
80	Current State of Human Factors in Systems Design. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 267-271.	0.3	4
81	Control Task Analysis in Action: Collaboration in the Operating Room. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 272-276.	0.3	5
82	Perceptions of Temporal Synchrony in Multimodal Displays. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 1165-1169.	0.3	1
83	Effects of Vibrotactile Stimulation for Sustaining Performance in a Vigilance Task: A Pilot Study. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 1160-1164.	0.3	3
84	What's that sound? Distance determination and aperture passage from ultrasound echoes. Disability and Rehabilitation: Assistive Technology, 2011, 6, 500-510.	2.2	5
85	Mapping Ecologically to Modalities. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 335-339.	0.3	5
86	Situation awareness and risk management understanding the notification issues. Studies in Health Technology and Informatics, 2011, 164, 372-6.	0.3	3
87	Reinventing the Wheel: Control Task Analysis for Collaboration. Proceedings of the Human Factors and Ergonomics Society, 2010, 54, 274-278.	0.3	9
88	Work Domain Analysis for Establishing Collaborative Work Requirements. Proceedings of the Human Factors and Ergonomics Society, 2009, 53, 314-318.	0.3	12
89	Work Domain Analysis for Establishing Collaborative Work Requirements. Proceedings of the Human Factors and Ergonomics Society, 2009, 53, 314-318.	0.3	4
90	How far is that wall? Judging distance with audification. Proceedings of the Human Factors and Ergonomics Society, 2009, 53, 1091-1095.	0.3	0

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91	Ecological Interface Design in the Nuclear Domain: An Empirical Evaluation of Ecological Displays for the Secondary Subsystems of a Boiling Water Reactor Plant Simulator. IEEE Transactions on Nuclear Science, 2008, 55, 3597-3610.	2.0	36
92	Enhancing Operator Task Performance during Monitoring for Unanticipated Events through Ecological Interface Design. Proceedings of the Human Factors and Ergonomics Society, 2008, 52, 448-452.	0.3	4
93	Ecological Interface Design in the Nuclear Domain: An Application to the Secondary Subsystems of a Boiling Water Reactor Plant Simulator. IEEE Transactions on Nuclear Science, 2008, 55, 3579-3596.	2.0	28
94	Evaluation of Ecological Interface Design for Nuclear Process Control: Situation Awareness Effects. Human Factors, 2008, 50, 663-679.	3.5	120
95	Using Human Factors Methods to Evaluate the Labelling of Injectable Drugs. Healthcare Quarterly, 2008, 11, 122-128.	0.7	10
96	Advances in the Application of Cognitive Work Analysis. , 2008, , 1-14.		19
97	A Cognitive Work Analysis of Cardiac Care Nurses Performing Telerriage. , 2008, , 149-174.		15
98	Supporting Situation Awareness Through Ecological Interface Design. Proceedings of the Human Factors and Ergonomics Society, 2007, 51, 205-209.	0.3	9
99	Mobility interfaces for the visually impaired. , 2007, , .		6
100	Challenges with applying FMEA to the process for reading labels on injectable drug containers. Proceedings of the Human Factors and Ergonomics Society, 2007, 51, 735-739.	0.3	3
101	Visual sensitivities of dynamic graphical displays. International Journal of Human Computer Studies, 2007, 65, 206-222.	5.6	9
102	Using personal digital assistants and patient care algorithms to improve access to cardiac care best practices. Studies in Health Technology and Informatics, 2007, 129, 117-21.	0.3	4
103	Non-situated vibrotactile force feedback and laparoscopy performance. , 2006, , .		2
104	Towards proactive monitoring in the petrochemical industry. Safety Science, 2006, 44, 27-36.	4.9	24
105	Effects of Visualization Tools on Cardiac Telephone Consultation Processes. Proceedings of the Human Factors and Ergonomics Society, 2006, 50, 1044-1048.	0.3	3
106	Using ecological interface design to develop an auditory interface for visually impaired travellers. , 2006, , .		8
107	Operator support for ageing nuclear critical infrastructure systems: integrating ecological interface design with prospect theory. International Journal of Critical Infrastructures, 2005, 1, 299.	0.2	2
108	Boundary, Purpose, and Values in Work-Domain Models: Models of Naval Command and Control. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2005, 35, 603-616.	2.9	43

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109	Collaboration with Ecological Interface Design. Proceedings of the Human Factors and Ergonomics Society, 2004, 48, 543-546.	0.3	3
110	Strategies for Bridging the Gap between Analysis and Design for Ecological Interface Design. Proceedings of the Human Factors and Ergonomics Society, 2004, 48, 479-483.	0.3	12
111	Lessons From a Comparison of Work Domain Models: Representational Choices and Their Implications. Human Factors, 2004, 46, 711-727.	3.5	50
112	Applications of ecological interface design in supporting the nursing process. Journal of Healthcare Information Management: JHIM, 2004, 18, 74-82.	0.1	3
113	Ecological interface design: a new approach for visualizing network management. Computer Networks, 2003, 43, 369-388.	5.1	33
114	A Work Domain Analysis for Diabetes Management. Proceedings of the Human Factors and Ergonomics Society, 2003, 47, 1516-1520.	0.3	7
115	From Analysis to Design: Wda for the Petrochemical Industry. Proceedings of the Human Factors and Ergonomics Society, 2003, 47, 258-262.	0.3	7
116	Ecological Interface Design in Aviation Domains: Work Domain Analysis of Automated Collision Detection and Avoidance. Proceedings of the Human Factors and Ergonomics Society, 2003, 47, 119-123.	0.3	16
117	Mental Models and Ecological Interface Design: An Experimental Investigation. Proceedings of the Human Factors and Ergonomics Society, 2002, 46, 270-274.	0.3	5
118	Mental Workload and the Display of Abstraction Hierarchy Information. Proceedings of the Human Factors and Ergonomics Society, 2002, 46, 235-239.	0.3	3
119	Influencing Social Problems with Interface Design. Ergonomics in Design, 2002, 10, 12-16.	0.7	4
120	Modeling a medical environment: an ontology for integrated medical informatics design. International Journal of Medical Informatics, 2001, 62, 79-99.	3.3	85
121	Scenario Mapping with Work Domain Analysis. Proceedings of the Human Factors and Ergonomics Society, 2001, 45, 424-428.	0.3	16
122	Mental Models and the Abstraction Hierarchy: Assessing Ecological Compatibility. Proceedings of the Human Factors and Ergonomics Society, 2001, 45, 297-301.	0.3	1
123	Model-Based Approaches for Analyzing Cognitive Work: A Comparison of Abstraction Hierarchy, Multilevel Flow Modeling, and Decision Ladder Modeling. International Journal of Cognitive Ergonomics, 2001, 5, 357-366.	0.2	23
124	Putting It All Together: Improving Display Integration in Ecological Displays. Human Factors, 2000, 42, 226-241.	3.5	87
125	There Is More to Monitoring a Nuclear Power Plant than Meets the Eye. Human Factors, 2000, 42, 36-55.	3.5	178
126	Navigation strategies with ecological displays. International Journal of Human Computer Studies, 2000, 52, 111-129.	5.6	44

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127	A participant-observer study of ergonomics in engineering design. Applied Ergonomics, 2000, 31, 73-82.	3.1	53
128	A Work Domain Analysis for Network Management. Proceedings of the Human Factors and Ergonomics Society, 2000, 44, 469-472.	0.3	9
129	Errors in Searching for Abstraction Hierarchy Information. Proceedings of the Human Factors and Ergonomics Society, 2000, 44, 270-273.	0.3	3
130	Work Domain Analysis for Intentional Systems. Proceedings of the Human Factors and Ergonomics Society, 1999, 43, 333-337.	0.3	22
131	Scanning Patterns with Ecological Displays when Abstraction Levels are Separated. Proceedings of the Human Factors and Ergonomics Society, 1999, 43, 163-167.	0.3	2
132	Better Handbooks, Better Design. Ergonomics in Design, 1998, 6, 21-27.	0.7	8
133	A Work Domain Analysis of Patient Monitoring in the Operating Room. Proceedings of the Human Factors and Ergonomics Society, 1998, 42, 1038-1042.	0.3	17
134	Muddling Through Wicked Design Problems. Ergonomics in Design, 1997, 5, 25-30.	0.7	9
135	Towards viable, useful and usable human factors design guidance. Applied Ergonomics, 1997, 28, 311-322.	3.1	33
136	Judgements about the value and cost of human factors information in design. Information Processing and Management, 1996, 32, 259-271.	8.6	13
137	Evidence for Direct Perception From Cognition in the Wild. Ecological Psychology, 1996, 8, 269-280.	1.1	17
138	A framework for describing and understanding interdisciplinary interactions in design. , 1995, , .		11
139	Increasing social connection through a community-of-practice-inspired design. , 0, , 185-204.		0
140	Ecological Interface Design. , 0, , .		290
141	Computer Algebra Systems and Their Effect on Cognitive Load. , 0, , .		3
142	Work Domain Analysis for Designing a Radiotherapy System Control Interface. , 0, , .		5