Michael C Dorneich

List of Publications by Year
in descending order

143 papers	1,104 citations	567281 15 h-index	610901 24 g-index
157 all docs	157 docs citations	157 times ranked	738 citing authors

#	Article	IF	Citations
1	Toward a Characterization of Adaptive Systems. Human Factors, 2012, 54, 1008-1024.	3.5	157
2	GLOBAL OPTIMIZATION ALGORITHMS FOR CHIP LAYOUT AND COMPACTION. Engineering Optimization, 1995, 25, 131-154.	2.6	56
3	Considering Etiquette in the Design of an Adaptive System. Journal of Cognitive Engineering and Decision Making, 2012, 6, 243-265.	2.3	41
4	An agent-based approach to modeling zero energy communities. Solar Energy, 2019, 191, 193-204.	6.1	31
5	A playbook interface for mixed initiative control of multiple unmanned vehicle teams. , 0, , .		24
6	Rapid image analysis using neural signals. , 2008, , .		24
7	The Emotional, Cognitive, Physiological, and Performance Effects of Variable Time Delay in Robotic Teleoperation. International Journal of Social Robotics, 2017, 9, 491-508.	4.6	24
8	Supporting Real-Time Cognitive State Classification on a Mobile Individual. Journal of Cognitive Engineering and Decision Making, 2007, 1, 240-270.	2.3	23
9	Virtual operator modeling method for excavator trenching. Automation in Construction, 2016, 70, 14-25.	9.8	22
10	Interaction of Automation Visibility and Information Quality in Flight Deck Information Automation. IEEE Transactions on Human-Machine Systems, 2017, 47, 915-926.	3.5	22
11	An agent-based approach to designing residential renewable energy systems. Renewable and Sustainable Energy Reviews, 2019, 112, 1008-1020.	16.4	22
12	An Evaluation of Cognitive Skill Degradation in Information Automation. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 191-195.	0.3	20
13	Politeness in Machine-Human and Human-Human Interaction. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 279-283.	0.3	20
14	Human Performance Risks and Benefits of Adaptive Systems on the Flight Deck. The International Journal of Aviation Psychology, 2016, 26, 15-35.	0.7	18
15	Creating a Team Tutor Using GIFT. International Journal of Artificial Intelligence in Education, 2018, 28, 286-313.	5.5	18
16	Evaluating the Effectiveness of Graduated Stress Exposure in Virtual Spaceflight Hazard Training. Journal of Cognitive Engineering and Decision Making, 2018, 12, 248-268.	2.3	18
17	A system design framework-driven implementation of a learning collaboratory. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2002, 32, 200-213.	2.9	17
18	The Effect of Time Delay on Emotion, Arousal, and Satisfaction in Human-Robot Interaction. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 443-447.	0.3	17

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19	Analysis of Food Hub Commerce and Participation Using Agent-Based Modeling. Human Factors, 2016, 58, 58-79.	3.5	16
20	Shoulder Muscular Fatigue From Static Posture Concurrently Reduces Cognitive Attentional Resources. Human Factors, 2020, 62, 589-602.	3.5	16
21	Evaluation of Playbook Delegation Approach in Human-Autonomy Teaming for Single Pilot Operations. International Journal of Human-Computer Interaction, 2021, 37, 703-716.	4.8	13
22	Evaluation of Design Feedback Modality in Design for Manufacturability. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	12
23	Mitigating cognitive bottlenecks via an augmented cognition adaptive system. , 0, , .		11
24	Iowa Urban FEWS: Integrating Social and Biophysical Models for Exploration of Urban Food, Energy, and Water Systems. Frontiers in Big Data, 2021, 4, 662186.	2.9	11
25	Visually Induced Motion Sickness Susceptibility and Recovery Based on Four Mitigation Techniques. Frontiers in Virtual Reality, 2020, 1, .	3.7	11
26	Cognitive State Estimation Based on EEG for Augmented Cognition. , 0, , .		10
27	The Challenges of Building Intelligent Tutoring Systems for Teams. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 1981-1985.	0.3	10
28	Affect-Aware Adaptive Tutoring Based on Human–Automation Etiquette Strategies. Human Factors, 2018, 60, 510-526.	3.5	10
29	Activity representation and management for crisis action planning. , 0, , .		9
30	The UIUC Virtual Spectrometer: A Java-Based Collaborative Learning Environment. Journal of Engineering Education, 2001, 90, 713-720.	3.0	9
31	Neurophysiologically driven image triage. , 2006, , .		9
32	Mitigating Visually Induced Motion Sickness. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 1839-1843.	0.3	9
33	Best Practices for Engaging Underserved Populations. Proceedings of the Human Factors and Ergonomics Society, 2017, 61, 130-134.	0.3	9
34	Human Factors and Ergonomics in Diversity, Inclusion and Social Justice Research. Proceedings of the Human Factors and Ergonomics Society, 2018, 62, 447-449.	0.3	9
35	Evaluation of an intelligent team tutoring system for a collaborative two-person problem: Surveillance. Computers in Human Behavior, 2020, 104, 105873.	8.5	9
36	Evaluation of Cognitive Skill Degradation in Flight Planning. Journal of Cognitive Engineering and Decision Making, 2020, 14, 263-287.	2.3	9

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37	The design and implementation of a learning collaboratory. , 0, , .		8
38	Modeling expertise and adaptability in virtual operator models. Automation in Construction, 2018, 90, 223-234.	9.8	8
39	Manipulating Stress Responses during Spaceflight Training with Virtual Stressors. Applied Sciences (Switzerland), 2022, 12, 2289.	2.5	8
40	Design and evaluation of an integrated avionics alerting system. , 0, , .		7
41	Providing appropriate situation awareness within a mixed-initiative control system. , 0, , .		7
42	A Superior Tool for Airline Operations. Ergonomics in Design, 2004, 12, 18-23.	0.7	7
43	Closing the Loop of an Adaptive System with Cognitive State. Proceedings of the Human Factors and Ergonomics Society, 2004, 48, 590-594.	0.3	7
44	Evaluation of a Tactile Navigation Cueing System and Real-Time Assessment of Cognitive State. Proceedings of the Human Factors and Ergonomics Society, 2006, 50, 2600-2604.	0.3	7
45	Improving Coalition Planning by Making Plans Alive. IEEE Intelligent Systems, 2013, 28, 17-25.	4.0	7
46	A User-Centered Approach to User-Building Interactions. Proceedings of the Human Factors and Ergonomics Society, 2014, 58, 2008-2012.	0.3	7
47	Development of Design Requirements for a Cognitive Assistant in Space Missions Beyond Low Earth Orbit. Journal of Cognitive Engineering and Decision Making, 2018, 12, 131-152.	2.3	7
48	The Interaction Between Physical and Psychosocial Stressors. Frontiers in Behavioral Neuroscience, 2020, 14, 63.	2.0	7
49	Individual Differences & Task Attention in Cybersickness: A Call for a Standardized Approach to Data Sharing. , 2021, , .		7
50	An urban modelling framework for climate resilience in low-resource neighbourhoods. Buildings and Cities, 2020, 1, 453-474.	2.3	7
51	Human-Centered Design of Decision-Support Systems. , 2012, , 589-621.		7
52	Neuro-Physiologically-Driven Adaptive Automation to Improve Decision Making Under Stress. Proceedings of the Human Factors and Ergonomics Society, 2006, 50, 410-414.	0.3	6
53	Analysis of the Characteristics of Adaptive Systems. , 2013, , .		6
54	The Team Multiple Errands Test. , 2015, , .		6

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55	Evaluation of Etiquette Strategies to Adapt Feedback In Affect-Aware Tutoring. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 393-397.	0.3	6
56	Developing Game-Based Learning Requirements to Increase Female Middle School Students Interest in Computer Science. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 380-384.	0.3	6
57	Evaluation of the Display of Cognitive State Feedback to Drive Adaptive Task Sharing. Frontiers in Neuroscience, 2017, 11, 144.	2.8	6
58	Assessing the validity of facilitated-volunteered geographic information: comparisons of expert and novice ratings. Geo Journal, 2018, 83, 477-488.	3.1	6
59	An Analysis of Video Games Using the Dimensions of Human-Agent Interaction. Proceedings of the Human Factors and Ergonomics Society, 2018, 62, 716-720.	0.3	6
60	Five Lenses on Team Tutor Challenges: A Multidisciplinary Approach. Research on Managing Groups and Teams, 2018, , 247-277.	0.6	6
61	Interaction Paradigms: from Human-Human Teaming to Human-Autonomy Teaming. , 2019, , .		6
62	Application exercise design for team€based learning in online courses. New Directions for Teaching and Learning, 2021, 2021, 41-52.	0.4	6
63	Toward Human€"Autonomy Teaming in Single-Pilot Operations: Domain Analysis and Requirements. Journal of Air Transportation, 2021, 29, 142-152.	1.5	6
64	Failure accommodating aircraft control. , 2002, , .		5
65	A Systematic Tool for Deriving Crew Console Layouts. Proceedings of the Human Factors and Ergonomics Society, 2008, 52, 124-128.	0.3	5
66	Characterization of Information Automation on the Flight Deck. Proceedings of the Human Factors and Ergonomics Society, 2014, 58, 295-299.	0.3	5
67	Stress Inducing Demands in Virtual Environments. Proceedings of the Human Factors and Ergonomics Society, 2018, 62, 2066-2070.	0.3	5
68	Designing Training Scenarios for Stressful Spaceflight Emergency Procedures. , 2020, , .		5
69	Human-Centered Design of Decision-Support Systems. Human Factors and Ergonomics, 2012, , 589-622.	0.0	4
70	Evaluation of information quality and automation visibility in Information automation on the flight deck. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 284-288.	0.3	4
71	Design and Evaluation of Designer Feedback System in Design for Manufacturability. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 1142-1146.	0.3	4
72	Development of a Functionality Matrix for a Cognitive Assistant on Long Distance Space Missions. Proceedings of the Human Factors and Ergonomics Society, 2017, 61, 247-251.	0.3	4

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73	Preliminary Guidelines for Human-Agent Teams in Space Operations Beyond Low-Earth Orbit. , 2018, , .		4
74	Analyzing residential weatherization decisions using hybrid simulation modeling. Building Simulation, 2019, 12, 517-534.	5.6	4
75	Designing Three-Dimensional Augmented Reality Weather Visualizations to Enhance General Aviation Weather Education. IEEE Transactions on Professional Communication, 2022, 65, 321-336.	0.8	4
76	An experimental evaluation of weather avoidance using route optimization as a decision aid. , 0, , .		3
77	The UIUC Virtual Spectrometer: a Java-based implementation of a learning environment. , 0, , .		3
78	Active Failure Management for Aircraft Control Recovery. , 2002, , .		3
79	Intelligent Astronaut Associate for Next Generation Space Systems. , 2005, , .		3
80	An Evaluation of Real-Time Cognitive State Classification in a Harsh Operational Environment. Proceedings of the Human Factors and Ergonomics Society, 2007, 51, 146-150.	0.3	3
81	The Crew Workload Manager: An Open-loop Adaptive System Design for Next Generation Flight Decks. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 16-20.	0.3	3
82	Analysis of the Risks and Benefits of Flight Deck Adaptive Systems. Proceedings of the Human Factors and Ergonomics Society, 2012, 56, 75-79.	0.3	3
83	A Process for Evaluating the Gender and Professionalism of Web Design Elements. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 750-754.	0.3	3
84	A hybrid simulation model for urban weatherization programs. , 2016, , .		3
85	Evaluating Human–Automation Etiquette Strategies to Mitigate User Frustration and Improve Learning in Affect-Aware Tutoring. Applied Sciences (Switzerland), 2018, 8, 895.	2.5	3
86	Development Approach of Playbook Interface for Human-Autonomy Teaming in Single Pilot Operations. Proceedings of the Human Factors and Ergonomics Society, 2019, 63, 357-361.	0.3	3
87	Mixed-Initiative Control of a Roadable Air Vehicle for Non-Pilots. Journal of Human-robot Interaction, 2015, 4, 38.	2.0	3
88	Processes Underlying Human Performance. , 2009, , 7-1-7-68.		3
89	The effectiveness of adaptive training for stress inoculation in a simulated astronaut task. Proceedings of the Human Factors and Ergonomics Society, 2021, 65, 1541-1545.	0.3	3
90	The Relationship Between Personality, Recalled Cybersickness Severity, and Recalled Cybersickness Recovery Time. Proceedings of the Human Factors and Ergonomics Society, 2021, 65, 206-210.	0.3	3

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91	Autonomy as a Teammate: Evaluation of Teammate-Likeness. Journal of Cognitive Engineering and Decision Making, 0, , 155534342211080.	2.3	3
92	Augmented Reality Enhanced Thunderstorm Learning Experiences for General Aviation. Journal of Air Transportation, 2022, 30, 113-124.	1.5	3
93	SPOT: using collaborative technologies for developing collaborative technologies. , 0, , .		2
94	The Apprenticeship Learning Object Toolkit: a generalized architecture for a family of computer tutoring systems. , 0, , .		2
95	The systematic application of the apprenticeship learning pedagogy to computer tutorial design. , 0, , .		2
96	Integration of weather information into the dispatcher pre-flight route selection process. , 0, , .		2
97	DOGMA: a diversion management decision-support system in airline operations. , 0, , .		2
98	Deriving Cursor Control Device Expectations for the Orion Crew Exploration Vehicle. Proceedings of the Human Factors and Ergonomics Society, 2010, 54, 1007-1011.	0.3	2
99	A task-based reach-zone analysis of the Orion Crew Exploration Vehicle controls. , 2011, , .		2
100	A Bayesian-Influence Model for Error Probability Analysis of Combine Operations in Harvesting. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 1414-1418.	0.3	2
101	Graduated Stress Exposure of Spaceflight Hazards in a Virtual Environment. , 2016, , .		2
102	Team Member Perceptions of Alternative Decision Analysis Approaches. EMJ - Engineering Management Journal, 2017, 29, 45-54.	2.3	2
103	Weatherization Adoption in A Multilayer Social Network. , 2017, , .		2
104	Energy Use and Weatherization Practices: Applications for Agent-Based Modeling to Support Vulnerable Populations. Proceedings of the Human Factors and Ergonomics Society, 2018, 62, 676-680.	0.3	2
105	Transdisciplinary Translational Science for Youth Health and Wellness: Introduction to a Special Issue. Child and Youth Care Forum, 2021, 50, 1-12.	1.6	2
106	Analysis of Communication, Team Situational Awareness, and Feedback in a Three-Person Intelligent Team Tutoring System. Frontiers in Psychology, 2021, 12, 553015.	2.1	2
107	Envisioned Concept of Operations for Beyond Low-Earth Orbit: The Collaborative Decision Making Between Human and Cognitive Assistant. , 2017, , .		2
108	Creating Metrics for Human-Agent Teams. Proceedings of the Human Factors and Ergonomics Society, 2020, 64, 349-353.	0.3	2

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109	Policy as an Interaction Method for Decision Support Systems. Proceedings of the Human Factors and Ergonomics Society, 2001, 45, 326-330.	0.3	1
110	Techniques for Interacting with Large Information Spaces on Small-Screen Displays. Proceedings of the Human Factors and Ergonomics Society, 2001, 45, 585-589.	0.3	1
111	Achieving Panacea: A Usability Evaluation of a System for Pilot Alerting and Notification of Adverse Conditions - Escape and Avoidance. Proceedings of the Human Factors and Ergonomics Society, 2001, 45, 135-139.	0.3	1
112	Characterization of Changes in Electrophysiological Activity in an Operational Environment. Proceedings of the Human Factors and Ergonomics Society, 2005, 49, 1177-1181.	0.3	1
113	Perceptual Grouping Effects on Cursor Movement Expectations. Human Factors, 2014, 56, 535-552.	3.5	1
114	Measuring the Effectiveness of Team-Based Leaning Outcomes in a Human Factors Course. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 337-341.	0.3	1
115	Comparing Systems Engineering and Project Success in Commercial-focused versus Government-focused Projects. Procedia Computer Science, 2015, 44, 266-274.	2.0	1
116	Using Human Factors to Establish Occupant Task Lists for Office Building Simulations. Proceedings of the Human Factors and Ergonomics Society, 2016, 60, 450-454.	0.3	1
117	Operationalizing the Câ€™s of Teamwork in an Intelligent Tutoring System. Proceedings of the Human Factors and Ergonomics Society, 2017, 61, 745-749.	0.3	1
118	Feedback Design Considerations for Intelligent Team Tutoring Systems. Proceedings of the Human Factors and Ergonomics Society, 2018, 62, 1977-1981.	0.3	1
119	Toward Strategic Training on Reading the Mind in the Eyes. Proceedings of the Human Factors and Ergonomics Society, 2018, 62, 1562-1566.	0.3	1
120	Human-system interfaces design. , 2018, , 355-428.		1
121	Development of a Learning Capability in Virtual Operator Models. SAE International Journal of Commercial Vehicles, 2019, 12, .	0.4	1
122	The Evaluation of a Playbook Interface for Human-Autonomy Teaming in Single Pilot Operations. , 2019, , .		1
123	- Etiquette-Based Sociotechnical Design. , 2010, , 344-371.		1
124	Assessing Values-based Sourcing Strategies in Regional Food Supply Networks: An Agent-based Approach. Journal on Policy and Complex Systems, 2016, 2, .	0.1	1
125	Evaluating the Effect of Poor Contrast Ratio in Simulated Sensor-Based Vision Systems on Performance. IEEE Transactions on Human-Machine Systems, 2021, 51, 632-640.	3.5	1
126	Assessing the Effect of Sensor Limitations in Enhanced Flight Vision Systems on Pilot Performance. Lecture Notes in Computer Science, 2019, , 449-465.	1.3	1

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127	Inclusive Decision-Making. , 2019, , 11-29.		1
128	CLINT: a prototype logistics collaboratory. , 0, , .		0
129	Aircrew Performance during Emergency Conditions: A Comparison between an Electronic and Traditional Paper Natops. Proceedings of the Human Factors and Ergonomics Society, 2001, 45, 11-15.	0.3	0
130	The Combat Causal Reasoner Approach to Robotic Control. Proceedings of the Human Factors and Ergonomics Society, 2010, 54, 2140-2144.	0.3	0
131	Human Differences in Navigational Approaches during Tele-Robotic Search. Proceedings of the Human Factors and Ergonomics Society, 2013, 57, 625-629.	0.3	0
132	Flight deck information automation: A human-in-the loop in-trail procedure simulation study. , 2015, , .		0
133	Operator-Centered Task Analysis. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 841-845.	0.3	0
134	Flight deck information automation: A human-in-the loop in-trail procedure simulation study. , 2015, , .		0
135	The Future of Adaptive Tutoring: Wrangling Complexity across Domains, Applications, and Platforms. Proceedings of the Human Factors and Ergonomics Society, 2017, 61, 1985-1989.	0.3	0
136	<i>Virtual Operator Models for Off-highway Machine Virtual Prototyping</i>. , 2017, , .		0
137	What Intelligent Team Tutoring Systems Can Learn from Human-Agent Teams. , 2018, , .		0
138	Innovative flight deck function allocation concepts for NextGen. , 2012, , 315-324.		0
139	Incorporation of Future Building Operating Conditions into the Modeling of Building–Microclimate Interaction: A Feasibility Approach. , 2015, , .		0
140	Implications for Using Mobile Ecological Momentary Assessment to Collect Climate Data from Vulnerable Urban Populations. Proceedings of the Human Factors and Ergonomics Society, 2020, 64, 273-277.	0.3	0
141	Evaluating Human Perception of Autonomous System Teammate-likeness. , 2021, , .		0
142	Development of a Survey Instrument to Measure Display Compellingness. , 2021, , .		0
143	An evaluation to determine if reading the mind in the eyes scores can be improved through training. PLoS ONE, 2022, 17, e0267579.	2.5	0