Burcin Becerik-Gerber

List of Publications by Year
in descending order

130 papers	7,452 citations	50276 46 h-index	58581 82 g-index
132 all docs	132 docs citations	132 times ranked	5162 citing authors

#	Article	IF	Citations
1	Occupant health in buildings: Impact of the COVID-19 pandemic on the opinions of building professionals and implications on research. Building and Environment, 2022, 207, 108440.	6.9	60
2	The impact of security countermeasures on human behavior during active shooter incidents. Scientific Reports, 2022, 12, 929.	3.3	8
3	Impact of VR-Based Training on Humanâ€“Robot Interaction for Remote Operating Construction Robots. Journal of Computing in Civil Engineering, 2022, 36, .	4.7	29
4	Modeling the Impact of Visual Access and Crowd Flow on Human Indoor Emergency Wayfinding: From Empirical Investigations to Simulations. , 2022, , .		0
5	Ten questions concerning occupant health in buildings during normal operations and extreme events including the COVID-19 pandemic. Building and Environment, 2021, 188, 107480.	6.9	130
6	Human-Building Interaction (HBI). , 2021, , 913-917.		0
7	An integrated emotional and physiological assessment for VR-based active shooter incident experiments. Advanced Engineering Informatics, 2021, 47, 101227.	8.0	24
8	Worker Perspectives on Incorporating Artificial Intelligence into Office Workspaces: Implications for the Future of Office Work. International Journal of Environmental Research and Public Health, 2021, 18, 1690.	2.6	19
9	Intelligent Agents to Improve Thermal Satisfaction by Controlling Personal Comfort Systems Under Different Levels of Automation. IEEE Internet of Things Journal, 2021, 8, 7089-7100.	8.7	26
10	Authorsâ€™ Response to â€œWork From Home (WFH) During COVID-19: Is Virtual Reality (VR) a New Solution to New Problems?â€• Journal of Occupational and Environmental Medicine, 2021, 63, e757-e758.	1.7	1
11	Working from home during the COVID-19 pandemic: Impact on office worker productivity and work experience. Work, 2021, 69, 1171-1189.	1.1	86
12	Impacts of Working From Home During COVID-19 Pandemic on Physical and Mental Well-Being of Office Workstation Users. Journal of Occupational and Environmental Medicine, 2021, 63, 181-190.	1.7	372
13	Effectiveness of VR-based training on improving construction workersâ€™ knowledge, skills, and safety behavior in robotic teleoperation. Advanced Engineering Informatics, 2021, 50, 101431.	8.0	69
14	Associations Among Home Indoor Environmental Quality Factors and Worker Health While Working From Home During COVID-19 Pandemic. ASME Journal of Engineering for Sustainable Buildings and Cities, 2021, 2, .	0.9	8
15	How occupants respond to building emergencies: A systematic review of behavioral characteristics and behavioral theories. Safety Science, 2020, 122, 104540.	4.9	59
16	Thermal comfort modeling when personalized comfort systems are in use: Comparison of sensing and learning methods. Building and Environment, 2020, 185, 107316.	6.9	61
17	Human-building-emergency interactions and their impact on emergency response performance: A review of the state of the art. Safety Science, 2020, 127, 104691.	4.9	46
18	Do people follow the crowd in building emergency evacuation? A cross-cultural immersive virtual reality-based study. Advanced Engineering Informatics, 2020, 43, 101040.	8.0	92

#	Article	IF	Citations
19	Influence of architectural visual access on emergency wayfinding: A cross-cultural study in China, United Kingdom and United States. Fire Safety Journal, 2020, 113, 102963.	3.1	33
20	Building preparedness in response to active shooter incidents: Results of focus group interviews. International Journal of Disaster Risk Reduction, 2020, 48, 101617.	3.9	22
21	Human-Building Interaction (HBI). , 2020, , 1-5.		0
22	An Immersive Virtual Learning Environment for Worker-Robot Collaboration on Construction Sites. , 2020, , .		6
23	Understanding the influence of orientation, time-of-day and blind use on userâ€™s lighting choices and energy consumption using immersive virtual environments. Advances in Building Energy Research, 2019, , 1-27.	2.3	8
24	Information Requirements for Virtual Environments to Study Human-Building Interactions during Active Shooter Incidents. , 2019, , .		2
25	Influencing occupant's choices by using spatiotemporal information visualization in Immersive Virtual Environments. Building and Environment, 2019, 150, 330-338.	6.9	17
26	A comparative study of predicting individual thermal sensation and satisfaction using wrist-worn temperature sensor, thermal camera and ambient temperature sensor. Building and Environment, 2019, 160, 106223.	6.9	89
27	Smart Desks to Promote Comfort, Health, and Productivity in Offices: A Vision for Future Workplaces. Frontiers in Built Environment, 2019, 5, .	2.3	23
28	Intelligent adaptive automation: A framework for an activity-driven and user-centered building automation. Energy and Buildings, 2019, 188-189, 184-199.	6.7	26
29	A Novel Method for Monitoring Air Speed in Offices Using Low Cost Sensors. , 2019, , .		0
30	Understanding human-building interactions under multimodal discomfort. Building and Environment, 2019, 151, 280-290.	6.9	28
31	Establishing Social Dialog between Buildings and Their Users. International Journal of Human-Computer Interaction, 2019, 35, 1545-1556.	4.8	10
32	Skin Temperature Extraction Using Facial Landmark Detection and Thermal Imaging for Comfort Assessment. , 2019, , .		23
33	Benchmarking thermoception in virtual environments to physical environments for understanding human-building interactions. Advanced Engineering Informatics, 2018, 36, 254-263.	8.0	26
34	Real-time activity recognition for energy efficiency in buildings. Applied Energy, 2018, 211, 146-160.	10.1	74
35	Towards unsupervised learning of thermal comfort using infrared thermography. Applied Energy, 2018, 211, 41-49.	10.1	125
36	Smart IoT desk for personalizing indoor environmental conditions. , 2018, , .		14

#	Article	IF	Citations
37	Energy trade off analysis of optimized daily temperature setpoints. Journal of Building Engineering, 2018, 19, 584-591.	3.4	22
38	EMBED. , 2018, , .		23
39	Energy consequences of Comfort-driven temperature setpoints in office buildings. Energy and Buildings, 2018, 177, 33-46.	6.7	52
40	One size does not fit all: Understanding user preferences for building automation systems. Energy and Buildings, 2017, 145, 163-173.	6.7	40
41	Towards user centered building design: Identifying end-user lighting preferences via immersive virtual environments. Automation in Construction, 2017, 81, 56-66.	9.8	86
42	Buildings with persona: Towards effective building-occupant communication. Computers in Human Behavior, 2017, 75, 607-618.	8.5	22
43	Monitoring fatigue in construction workers using physiological measurements. Automation in Construction, 2017, 82, 154-165.	9.8	225
44	Use of immersive virtual environments for occupant behaviour monitoring and data collection. Journal of Building Performance Simulation, 2017, 10, 484-498.	2.0	40
45	HVAC system energy optimization using an adaptive hybrid metaheuristic. Energy and Buildings, 2017, 152, 149-161.	6.7	62
46	Automated Recognition of Building FaÃ§ades for Creation of As-Is Mock-Up 3D Models. Journal of Computing in Civil Engineering, 2017, 31, .	4.7	12
47	Assessing the impacts of real-time occupancy state transitions on building heating/cooling loads. Energy and Buildings, 2017, 135, 201-211.	6.7	15
48	Defining Lighting Settings to Accommodate End-User Preferences While Reducing Energy Consumption in Buildings. , 2016, , .		1
49	A framework for allocating personalized appliance-level disaggregated electricity consumption to daily activities. Energy and Buildings, 2016, 111, 337-350.	6.7	34
50	Inexpensive Multimodal Sensor Fusion System for Autonomous Data Acquisition of Road Surface Conditions. IEEE Sensors Journal, 2016, 16, 7731-7743.	4.7	45
51	How Does Building Occupancy Influence Energy Efficiency of HVAC Systems?. Energy Procedia, 2016, 88, 775-780.	1.8	19
52	Infrared thermography of human face for monitoring thermoregulation performance and estimating personal thermal comfort. Building and Environment, 2016, 109, 1-11.	6.9	175
53	Lights, building, action: Impact of default lighting settings on occupant behaviour. Journal of Environmental Psychology, 2016, 48, 212-223.	5.1	56
54	Building occupancy diversity and HVAC (heating, ventilation, and air conditioning) system energy efficiency. Energy, 2016, 109, 641-649.	8.8	85

#	Article	IF	Citations
55	Automated measurement of highway retaining wall displacements using terrestrial laser scanners. Automation in Construction, 2016, 65, 86-101.	9.8	62
56	Exploring the effectiveness of social messages on promoting energy conservation behavior in buildings. Building and Environment, 2016, 102, 83-94.	6.9	31
57	Energy savings from temperature setpoints and deadband: Quantifying the influence of building and system properties on savings. Applied Energy, 2016, 165, 930-942.	10.1	145
58	A Data Quality-Driven Framework for Asset Condition Assessment Using LiDAR and Image Data. , 2015, , .		2
59	Quantifying the influence of temperature setpoints, building and system features on energy consumption. , 2015, , .		6
60	Iterative reassignment algorithm: Leveraging occupancy based hvac control for improved energy efficiency. , 2015, , .		0
61	Effects of Variant Occupancy Transitions on the Energy Implications of Setpoint/Setback Control Policies. , 2015, , .		1
62	A Study of Time-Dependent Variations in Personal Thermal Comfort via a Dynamic Bayesian Network. , 2015, , .		6
63	Towards Understanding End-User Lighting Preferences in Office Spaces by Using Immersive Virtual Environments. , 2015, , .		5
64	Iterative Maximum Likelihood Estimation Algorithm: Leveraging Building Information and Sensing Infrastructure for Localization during Emergencies. Journal of Computing in Civil Engineering, 2015, 29, .	4.7	11
65	Cross-Space Building Occupancy Modeling by Contextual Information Based Learning. , 2015, , .		10
66	Use of Immersive Virtual Environments to Understand Human-Building Interactions and Improve Building Design. Communications in Computer and Information Science, 2015, , 180-184.	0.5	3
67	Comparative assessment of an indoor localization framework for building emergency response. Automation in Construction, 2015, 57, 42-54.	9.8	19
68	Immersive virtual environments, understanding the impact of design features and occupant choice upon lighting for building performance. Building and Environment, 2015, 89, 217-228.	6.9	109
69	A model calibration framework for simultaneous multi-level building energy simulation. Applied Energy, 2015, 149, 415-431.	10.1	111
70	An online learning approach for quantifying personalized thermal comfort via adaptive stochastic modeling. Building and Environment, 2015, 92, 86-96.	6.9	146
71	Immersive virtual environments versus physical built environments: A benchmarking study for building design and user-built environment explorations. Automation in Construction, 2015, 54, 116-126.	9.8	242
72	Influence of LEED branding on building occupants' pro-environmental behavior. Building and Environment, 2015, 94, 477-488.	6.9	41

#	Article	IF	Citations
73	Special Issue on the 2013 International Workshop on Computing in Civil Engineering. Journal of Computing in Civil Engineering, 2015, 29, .	4.7	0
74	Why is the reliability of building simulation limited as a tool for evaluating energy conservation measures?. Applied Energy, 2015, 159, 196-205.	10.1	57
75	Exploration of Building-Occupant Communication Methods for Reducing Energy Consumption in Buildings. Communications in Computer and Information Science, 2015, , 558-563.	0.5	1
76	Impact of Building Occupancy on Assessing the Effectiveness of Energy Conservation Measures. , 2015, , .		0
77	Default Conditions: A Reason for Design to Integrate Human Factors. , 2015, , .		0
78	A knowledge based approach for selecting energy-aware and comfort-driven HVAC temperature set points. Energy and Buildings, 2014, 85, 536-548.	6.7	148
79	Automated Cleaning of Point Clouds for Highway Retaining Wall Condition Assessment. , 2014, , .		2
80	Civil Engineering Grand Challenges: Opportunities for Data Sensing, Information Analysis, and Knowledge Discovery. Journal of Computing in Civil Engineering, 2014, 28, .	4.7	51
81	Coupling occupancy information with HVAC energy simulation: A systematic review of simulation programs. , 2014, , .		6
82	Human-Building Interaction Framework for Personalized Thermal Comfort-Driven Systems in Office Buildings. Journal of Computing in Civil Engineering, 2014, 28, 2-16.	4.7	140
83	A systematic approach to occupancy modeling in ambient sensor-rich buildings. Simulation, 2014, 90, 960-977.	1.8	134
84	Spatiotemporal lighting load disaggregation using light intensity signal. Energy and Buildings, 2014, 69, 572-583.	6.7	23
85	A BIM centered indoor localization algorithm to support building fire emergency response operations. Automation in Construction, 2014, 42, 78-89.	9.8	158
86	TESLA: an extended study of an energy-saving agent that leverages schedule flexibility. Autonomous Agents and Multi-Agent Systems, 2014, 28, 605-636.	2.1	12
87	Situational awareness for supporting building fire emergency response: Information needs, information sources, and implementation requirements. Fire Safety Journal, 2014, 63, 17-28.	3.1	50
88	User-led decentralized thermal comfort driven HVAC operations for improved efficiency in office buildings. Energy and Buildings, 2014, 70, 398-410.	6.7	170
89	An unsupervised hierarchical clustering based heuristic algorithm for facilitated training of electricity consumption disaggregation systems. Advanced Engineering Informatics, 2014, 28, 311-326.	8.0	38
90	Smart Building Technology [TC Spotlight]. IEEE Robotics and Automation Magazine, 2014, 21, 18-20.	2.0	15

#	Article	IF	Citations
91	The coupled effects of personalized occupancy profile based HVAC schedules and room reassignment on building energy use. Energy and Buildings, 2014, 78, 113-122.	6.7	114
92	Modeling personalized occupancy profiles for representing long term patterns by using ambient context. Building and Environment, 2014, 78, 23-35.	6.9	63
93	Towards Measuring the Impact of Personal Control on Energy Use through the Use of Immersive Virtual Environments. , 2014, , .		5
94	A study on student perceptions of higher education classrooms: Impact of classroom attributes on student satisfaction and performance. Building and Environment, 2013, 70, 171-188.	6.9	127
95	A thermal preference scale for personalized comfort profile identification via participatory sensing. Building and Environment, 2013, 68, 140-149.	6.9	62
96	Improving In-Building Asset Localization by Offset Vector and Convergence Calibration Methods. Journal of Computing in Civil Engineering, 2013, 27, 337-344.	4.7	8
97	Personalized Thermal Comfort-Driven Control in HVAC-Operated Office Buildings. , 2013, , .		28
98	Online Learning for Personalized Room-Level Thermal Control. , 2013, , .		7
99	An Environment-Aware Sequence-Based Localization Algorithm for Supporting Building Emergency Response Operations. , 2013, , .		4
100	Analysis of the variability of RSSI values for active RFID-based indoor applications. Turkish Journal of Engineering and Environmental Sciences, 2013, 37, 186-211.	0.1	15
101	Unsupervised Approach for Autonomous Pavement-Defect Detection and Quantification Using an Inexpensive Depth Sensor. Journal of Computing in Civil Engineering, 2013, 27, 743-754.	4.7	118
102	Integrated Project Delivery and Building Information Modeling: Redefining the Relationship between Education and Practice. International Journal of Design Education, 2013, 6, 47-56.	0.1	11
103	Predicting HVAC Energy Consumption in Commercial Buildings Using Multiagent Systems. , 2013, , .		7
104	BIM-Enabled Virtual and Collaborative Construction Engineering and Management. Journal of Professional Issues in Engineering Education and Practice, 2012, 138, 234-245.	0.9	91
105	Application Areas and Data Requirements for BIM-Enabled Facilities Management. Journal of Construction Engineering and Management - ASCE, 2012, 138, 431-442.	3.8	601
106	Toward adaptive comfort management in office buildings using participatory sensing for end user driven control. , 2012, , .		23
107	Human-Building Interaction for Energy Conservation in Office Buildings. , 2012, , .		13
108	A novel system for road surface monitoring using an inexpensive infrared laser sensor. , 2012, , .		6

#	Article	IF	Citations
109	A Non-Intrusive Occupancy Monitoring System for Demand Driven HVAC Operations. , 2012, , .		20
110	Deployment Strategies and Performance Evaluation of a Virtual-Tag-Enabled Indoor Location Sensing Approach. Journal of Computing in Civil Engineering, 2012, 26, 574-583.	4.7	15
111	Imaged-based verification of as-built documentation of operational buildings. Automation in Construction, 2012, 21, 161-171.	9.8	160
112	Coordinating occupant behavior for building energy and comfort management using multi-agent systems. Automation in Construction, 2012, 22, 525-536.	9.8	278
113	Measuring and monitoring occupancy with an RFID based system for demand-driven HVAC operations. Automation in Construction, 2012, 24, 89-99.	9.8	249
114	Life-Cycle Approach for Implementing RFID Technology in Construction: Learning from Academic and Industry Use Cases. Journal of Construction Engineering and Management - ASCE, 2011, 137, 1089-1098.	3.8	39
115	Effects of Color, Distance, and Incident Angle on Quality of 3D Point Clouds. , 2011, , .		6
116	Continuous Sensing of Occupant Perception of Indoor Ambient Factors. , 2011, , .		25
117	Performance-based evaluation of RFID-based indoor location sensing solutions for the built environment. Advanced Engineering Informatics, 2011, 25, 535-546.	8.0	182
118	Assessment of target types and layouts in 3D laser scanning for registration accuracy. Automation in Construction, 2011, 20, 649-658.	9.8	65
119	Comparison of Image-Based and Manual Field Survey Methods for Indoor As-Built Documentation Assessment. , 2011, , .		3
120	Assessment of WSN and RFID Technologies for Real-Time Occupancy Information. , 2011, , .		8
121	Towards Optimization of Building Energy and Occupant Comfort Using Multi-Agent Simulation. , 2011, , .		11
122	RFID-Based Occupancy Detection Solution for Optimizing HVAC Energy Consumption. , 2011, , .		7
123	'Designing in' Complex System Interaction: Multi-Agent Based Systems for Early Design Decision Making. , 2011, , .		4
124	Building Information Modeling in Architecture, Engineering, and Construction: Emerging Research Directions and Trends. Journal of Professional Issues in Engineering Education and Practice, 2010, 136, 139-147.	0.9	129
125	Understanding Construction Industry Experience and Attitudes toward Integrated Project Delivery. Journal of Construction Engineering and Management - ASCE, 2010, 136, 815-825.	3.8	291
126	Scan to BIM: Factors Affecting Operational and Computational Errors and Productivity Loss. , 2010, , .		23

#	Article	IF	Citations
127	A Research Outlook for Real-Time Project Information Management by Integrating Advanced Field Data Acquisition Systems and Building Information Modeling. , 2009, , .		28
128	Promise and Barriers to Technology Enabled and Open Project Team Collaboration. Journal of Professional Issues in Engineering Education and Practice, 2005, 131, 301-311.	0.9	17
129	Impact of Immersive and Interactive Information Visualization on Occupantâ€™s Lighting Choices. , 0, , .		1
130	Can Immersive Virtual Environments Be Used for Understanding Occupant-System Interactions Under Thermal Stimuli?. , 0, , .		2