

# frederic Dehais

## List of Publications by Year in descending order

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Version: 2024-02-01

92  
papers

2,518  
citations

230014

27  
h-index

263392

45  
g-index

99  
all docs

99  
docs citations

99  
times ranked

2088  
citing authors

#	ARTICLE	IF	CITATIONS
1	Benchmarking cEEGrid and Solid Gel-Based Electrodes to Classify Inattentive Deafness in a Flight Simulator. <i>Frontiers in Neuroergonomics</i> , 2022, 2, .	0.6	7
2	Degraded States of Engagement in Air Traffic Control. <i>Safety</i> , 2022, 8, 19.	0.9	3
3	A New Interface to Cope With Unreliable Airspeed Indications. <i>Aviation Psychology and Applied Human Factors</i> , 2022, 12, 21-30.	0.3	0
4	Dual Passive Reactive Brain-Computer Interface: A Novel Approach to Human-Machine Symbiosis. <i>Frontiers in Neuroergonomics</i> , 2022, 3, .	0.6	9
5	Open EEG Datasets for Passive Brain-Computer Interface Applications: Lacks and Perspectives. , 2021, , .		2
6	Virtual Reality for Pilot Training: Study of Cardiac Activity. , 2021, , .		7
7	A Neuroergonomics Approach to Measure Pilot's Cognitive Incapacitation in the Real World with EEG. <i>Advances in Intelligent Systems and Computing</i> , 2021, , 111-117.	0.5	6
8	Predicting Human Operator's Decisions Based on Prospect Theory. <i>Interacting With Computers</i> , 2020, 32, 221-232.	1.0	4
9	Brain at Work and in Everyday Life as the Next Frontier: Grand Field Challenges for Neuroergonomics. <i>Frontiers in Neuroergonomics</i> , 2020, 1, .	0.6	42
10	How Can Physiological Computing Benefit Human-Robot Interaction?. <i>Robotics</i> , 2020, 9, 100.	2.1	25
11	Editorial: High Performance Cognition: Information-Processing in Complex Skills, Expert Performance, and Flow. <i>Frontiers in Psychology</i> , 2020, 11, 579950.	1.1	3
12	Physiological Synchrony Revealed by Delayed Coincidence Count: Application to a Cooperative Complex Environment. <i>IEEE Transactions on Human-Machine Systems</i> , 2020, 50, 395-404.	2.5	5
13	Towards Mixed-Initiative Human-Robot Interaction: Assessment of Discriminative Physiological and Behavioral Features for Performance Prediction. <i>Sensors</i> , 2020, 20, 296.	2.1	17
14	How role assignment impacts decision-making in high-risk environments: Evidence from eye-tracking in aviation. <i>Safety Science</i> , 2020, 127, 104738.	2.6	16
15	A Neuroergonomics Approach to Mental Workload, Engagement and Human Performance. <i>Frontiers in Neuroscience</i> , 2020, 14, 268.	1.4	94
16	Red Alert: A Cognitive Countermeasure to Mitigate Attentional Tunneling. , 2020, , .		11
17	Mixed-Initiative Human-Automated Agents Teaming: Towards a Flexible Cooperation Framework. <i>Lecture Notes in Computer Science</i> , 2020, , 117-133.	1.0	3
18	EEG Covariance-Based Estimation of Cooperative States in Teammates. <i>Lecture Notes in Computer Science</i> , 2020, , 383-393.	1.0	2

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19	Global difficulty modulates the prioritization strategy in multitasking situations. <i>Applied Ergonomics</i> , 2019, 80, 1-8.	1.7	5
20	Momentary lapse of control: A cognitive continuum approach to understanding and mitigating perseveration in human error. <i>Neuroscience and Biobehavioral Reviews</i> , 2019, 100, 252-262.	2.9	27
21	Monitoring Pilot's Mental Workload Using ERPs and Spectral Power with a Six-Dry-Electrode EEG System in Real Flight Conditions. <i>Sensors</i> , 2019, 19, 1324.	2.1	108
22	A pBCI to Predict Attentional Error Before it Happens in Real Flight Conditions. , 2019, , .		16
23	Spectral EEG-based classification for operator dyads' workload and cooperation level estimation. , 2019, , .		8
24	Inattentive deafness to auditory alarms: Inter-individual differences, electrophysiological signature and single trial classification. <i>Behavioural Brain Research</i> , 2019, 360, 51-59.	1.2	48
25	Progress and Direction in Neuroergonomics. , 2019, , 3-7.		4
26	Why is Eye Tracking an Essential Part of Neuroergonomics?. , 2019, , 27-30.		2
27	Neuroergonomics for Aviation. , 2019, , 55-58.		8
28	Tracking Mental Workload by Multimodal Measurements in the Operating Room. , 2019, , 99-103.		4
29	A Neuroergonomics Approach to Human Performance in Aviation. , 2019, , 123-141.		1
30	Disruption in neural phase synchrony is related to identification of inattentive deafness in real-world setting. <i>Human Brain Mapping</i> , 2018, 39, 2596-2608.	1.9	32
31	Are pilots prepared for a cyber-attack? A human factors approach to the experimental evaluation of pilots' behavior. <i>Journal of Air Transport Management</i> , 2018, 69, 26-37.	2.4	10
32	Monitoring Pilot's Cognitive Fatigue with Engagement Features in Simulated and Actual Flight Conditions Using an Hybrid fNIRS-EEG Passive BCI. , 2018, , .		62
33	Physiological Markers for UAV Operator Monitoring. , 2018, , 203-204.		0
34	Auditory Neglect in the Cockpit. , 2018, , 207-208.		1
35	Toward a Better Understanding of Human Prioritization. A Dual-Task Study. , 2018, , 211-212.		0
36	Assessing Working Memory Load in Real Flight Condition With Wireless fNIRS. , 2018, , 213-214.		2

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37	The Spatial Release of Cognitive Load in Multi-Talker Situation. , 2018, , 217.		1
38	EEG and FNIRS Connectivity Features for Mental Workload Assessment. , 2018, , 327-328.		1
39	The Neuroergonomics of Aircraft Cockpits: The Four Stages of Eye-Tracking Integration to Enhance Flight Safety. Safety, 2018, 4, 8.	0.9	34
40	Portable and Wearable Brain Technologies for Neuroenhancement and Neurorehabilitation. BioMed Research International, 2018, 2018, 1-2.	0.9	7
41	Assessment of Ocular and Physiological Metrics to Discriminate Flight Phases in Real Light Aircraft. Human Factors, 2018, 60, 922-935.	2.1	28
42	Detecting Pilot's Engagement Using fNIRS Connectivity Features in an Automated vs. Manual Landing Scenario. Frontiers in Human Neuroscience, 2018, 12, 6.	1.0	48
43	In silico vs. Over the Clouds: On-the-Fly Mental State Estimation of Aircraft Pilots, Using a Functional Near Infrared Spectroscopy Based Passive-BCI. Frontiers in Human Neuroscience, 2018, 12, 187.	1.0	84
44	Biocybernetic Adaptation Strategies: Machine Awareness of Human Engagement for Improved Operational Performance. Lecture Notes in Computer Science, 2018, , 89-98.	1.0	9
45	The impact of luminance on tonic and phasic pupillary responses to sustained cognitive load. International Journal of Psychophysiology, 2017, 112, 40-45.	0.5	50
46	Pilot Flying and Pilot Monitoring's Aircraft State Awareness During Go-Around Execution in Aviation: A Behavioral and Eye Tracking Study. International Journal of Aerospace Psychology, 2017, 27, 15-28.	1.1	63
47	Neural signature of inattentive deafness. Human Brain Mapping, 2017, 38, 5440-5455.	1.9	35
48	The Spatial Release of Cognitive Load in Cocktail Party Is Determined by the Relative Levels of the Talkers. JARO - Journal of the Association for Research in Otolaryngology, 2017, 18, 457-464.	0.9	16
49	Pre-stimulus antero-posterior EEG connectivity predicts performance in a UAV monitoring task. , 2017, , .		7
50	Why a Comprehensive Understanding of Mental Workload through the Measurement of Neurovascular Coupling Is a Key Issue for Neuroergonomics?. Frontiers in Human Neuroscience, 2016, 10, 250.	1.0	24
51	Operator Engagement During Prolonged Simulated UAV Operation. IFAC-PapersOnLine, 2016, 49, 171-176.	0.5	11
52	Considering human's non-deterministic behavior and his availability state when designing a collaborative human-robots system. , 2016, , .		13
53	Towards human-robot interaction: A framing effect experiment. , 2016, , .		7
54	N270 sensitivity to conflict strength and working memory: A combined ERP and sLORETA study. Behavioural Brain Research, 2016, 297, 231-240.	1.2	15

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55	Auditory Alarm Misperception in the Cockpit: An EEG Study of Inattentive Deafness. Lecture Notes in Computer Science, 2016, , 177-187.	1.0	13
56	Pilot flying vs. pilot monitoring during the approach phase. , 2016, , .		11
57	MOMDP-Based Target Search Mission Taking into Account the Human Operator's Cognitive State. , 2015, , .		9
58	Pupil Diameter as a Measure of Cognitive Load during Auditory-visual Interference in a Simple Piloting Task. Procedia Manufacturing, 2015, 3, 5199-5205.	1.9	20
59	Pupil Dilation and Eye Movements Can Reveal Upcoming Choice in Dynamic Decision-Making. Proceedings of the Human Factors and Ergonomics Society, 2015, 59, 210-214.	0.2	6
60	Characterization of mind wandering using fNIRS. Frontiers in Systems Neuroscience, 2015, 9, 45.	1.2	54
61	Frequency analysis of a task-evoked pupillary response: Luminance-independent measure of mental effort. International Journal of Psychophysiology, 2015, 97, 30-37.	0.5	72
62	"Automation Surprise" in Aviation. , 2015, , .		42
63	Processing Functional Near Infrared Spectroscopy Signal with a Kalman Filter to Assess Working Memory during Simulated Flight. Frontiers in Human Neuroscience, 2015, 9, 707.	1.0	28
64	Real-Time State Estimation in a Flight Simulator Using fNIRS. PLoS ONE, 2015, 10, e0121279.	1.1	120
65	Attentional costs and failures in air traffic control notifications. Ergonomics, 2014, 57, 1817-1832.	1.1	48
66	Petri net-based modelling of humanâ€“automation conflicts in aviation. Ergonomics, 2014, 57, 319-331.	1.1	16
67	Moving Average Convergence Divergence filter preprocessing for real-time event-related peak activity onset detection : Application to fNIRS signals. , 2014, 2014, 2107-10.		14
68	Formal Detection of Attentional Tunneling in Human Operatorâ€“Automation Interactions. IEEE Transactions on Human-Machine Systems, 2014, 44, 326-336.	2.5	82
69	Failure to Detect Critical Auditory Alerts in the Cockpit. Human Factors, 2014, 56, 631-644.	2.1	171
70	Using near infrared spectroscopy and heart rate variability to detect mental overload. Behavioural Brain Research, 2014, 259, 16-23.	1.2	208
71	The effects of emotion on pilot decision-making: A neuroergonomic approach to aviation safety. Transportation Research Part C: Emerging Technologies, 2013, 33, 272-281.	3.9	48
72	Modeling approach to multi-agent system of human and machine agents: Application in design of early experiments for novel aeronautics systems. , 2013, , .		1

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73	Effects of the audiovisual conflict on auditory early processes. <i>International Journal of Psychophysiology</i> , 2013, 89, 115-122.	0.5	15
74	Affective decision making under uncertainty during a plausible aviation task: An fMRI study. <i>NeuroImage</i> , 2013, 71, 19-29.	2.1	48
75	Evaluation of head-free eye tracking as an input device for air traffic control. <i>Ergonomics</i> , 2013, 56, 246-255.	1.1	24
76	Missing Critical Auditory Alarms in Aeronautics: Evidence for Inattentional Deafness?. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2012, 56, 1639-1643.	0.2	15
77	Cognitive conflict in human-robot automation interactions: A psychophysiological study. <i>Applied Ergonomics</i> , 2012, 43, 588-595.	1.7	68
78	Executive Functions and Pilot Characteristics Predict Flight Simulator Performance in General Aviation Pilots. <i>The International Journal of Aviation Psychology</i> , 2011, 21, 217-234.	0.7	49
79	Cognitive aging and flight performances in general aviation pilots. <i>Aging, Neuropsychology, and Cognition</i> , 2011, 18, 544-561.	0.7	30
80	Reward and Uncertainty Favor Risky Decision-Making in Pilots: Evidence from Cardiovascular and Oculometric Measurements. <i>Applied Psychophysiology Biofeedback</i> , 2011, 36, 231-242.	1.0	30
81	Physiological and subjective evaluation of a human-robot object hand-over task. <i>Applied Ergonomics</i> , 2011, 42, 785-791.	1.7	100
82	Mitigation of Conflicts with Automation. <i>Human Factors</i> , 2011, 53, 448-460.	2.1	49
83	Authority management in human-robot systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010, 43, 410-415.	0.4	2
84	The Perseveration Syndrome in the Pilot's Activity: Guidelines and Cognitive Countermeasures. <i>Lecture Notes in Computer Science</i> , 2010, , 68-80.	1.0	34
85	Détection et résolution de conflits d'autorité dans un système homme-robot. <i>Revue D'Intelligence Artificielle</i> , 2010, 24, 325-356.	0.5	1
86	Conflicts in Human Operator - Unmanned Vehicles Interactions. <i>Lecture Notes in Computer Science</i> , 2009, , 498-507.	1.0	7
87	Traffic Pattern Analysis in a Flight Simulator: Subjective and Physiological Mental Workload Assessment Techniques. <i>Frontiers in Human Neuroscience</i> , 0, 12, .	1.0	0
88	Testing The Sycopero System Using NeuroErgonomics: A New Operational Support System in Case of Speed Failure. <i>Frontiers in Human Neuroscience</i> , 0, 12, .	1.0	0
89	Performance Quantification in Human-Robotic Integrated Operations for Space Exploration Missions. <i>Frontiers in Human Neuroscience</i> , 0, 12, .	1.0	0
90	Assessment of Astronauts' Workload with Task-Irrelevant Auditory Probes In Manually Controlled Spacecraft Rendezvous and Docking. <i>Frontiers in Human Neuroscience</i> , 0, 12, .	1.0	0

#	ARTICLE	IF	CITATIONS
91	Giving A Hand To Pilots With Animated Alarms Based On Mirror System Functioning. Frontiers in Human Neuroscience, 0, 12, .	1.0	1
92	Expertise in Aviation. , 0, , 662-689.		5