

Jan B F Van Erp

List of Publications by Year in descending order

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Version: 2024-02-01

147
papers

4,527
citations

117625

34
h-index

118850

62
g-index

155
all docs

155
docs citations

155
times ranked

3611
citing authors

#	ARTICLE	IF	CITATIONS
1	Waypoint navigation with a vibrotactile waist belt. ACM Transactions on Applied Perception, 2005, 2, 106-117.	1.9	371
2	Estimating workload using EEG spectral power and ERPs in the n-back task. Journal of Neural Engineering, 2012, 9, 045008.	3.5	279
3	Brain-Computer Interfaces: Beyond Medical Applications. Computer, 2012, 45, 26-34.	1.1	272
4	Vibrotactile in-vehicle navigation system. Transportation Research Part F: Traffic Psychology and Behaviour, 2004, 7, 247-256.	3.7	255
5	A tactile P300 brain-computer interface. Frontiers in Neuroscience, 2010, 4, 19.	2.8	204
6	Combining and comparing EEG, peripheral physiology and eye-related measures for the assessment of mental workload. Frontiers in Neuroscience, 2014, 8, 322.	2.8	186
7	Presenting directions with a vibrotactile torso display. Ergonomics, 2005, 48, 302-313.	2.1	168
8	Effects of Aging in Multisensory Integration: A Systematic Review. Frontiers in Aging Neuroscience, 2017, 9, 80.	3.4	117
9	Using neurophysiological signals that reflect cognitive or affective state: six recommendations to avoid common pitfalls. Frontiers in Neuroscience, 2015, 9, 136.	2.8	99
10	Social Touch in Human-Computer Interaction. Frontiers in Digital Humanities, 2015, 2, .	1.2	92
11	Field-Based Validation of a Tactile Navigation Device. IEEE Transactions on Haptics, 2010, 3, 78-87.	2.7	85
12	Emotional Responses to Multisensory Environmental Stimuli. SAGE Open, 2016, 6, 215824401663059.	1.7	83
13	Methods for Evaluating Emotions Evoked by Food Experiences: A Literature Review. Frontiers in Psychology, 2018, 9, 911.	2.1	83
14	Social Touch in Human-Robot Interaction: Robot-Initiated Touches can Induce Positive Responses without Extensive Prior Bonding. International Journal of Social Robotics, 2019, 11, 285-304.	4.6	70
15	Distinguishing between target and nontarget fixations in a visual search task using fixation-related potentials. Journal of Vision, 2013, 13, 17-17.	0.3	69
16	Evidence for effects of task difficulty but not learning on neurophysiological variables associated with effort. International Journal of Psychophysiology, 2014, 93, 242-252.	1.0	67
17	Image parameters for driving with indirect viewing systems. Ergonomics, 2003, 46, 1471-1499.	2.1	58
18	Improving target detection in visual search through the augmenting multi-sensory cues. Ergonomics, 2013, 56, 729-738.	2.1	56

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19	Perceiving blocks of emotional pictures and sounds: effects on physiological variables. <i>Frontiers in Human Neuroscience</i> , 2013, 7, 295.	2.0	55
20	Affective and Behavioral Responses to Robot-Initiated Social Touch: Toward Understanding the Opportunities and Limitations of Physical Contact in Human-Robot Interaction. <i>Frontiers in ICT</i> , 2017, 4, .	3.6	54
21	EmojiGrid: A 2D Pictorial Scale for the Assessment of Food Elicited Emotions. <i>Frontiers in Psychology</i> , 2018, 9, 2396.	2.1	51
22	A Tactile Seat for Direction Coding in Car Driving: Field Evaluation. <i>IEEE Transactions on Haptics</i> , 2009, 2, 181-188.	2.7	50
23	Tactile information presentation in the cockpit. <i>Lecture Notes in Computer Science</i> , 2001, , 174-181.	1.3	50
24	Touch down: The effect of artificial touch cues on orientation in microgravity. <i>Neuroscience Letters</i> , 2006, 404, 78-82.	2.1	49
25	Multimodal warnings to enhance risk communication and safety. <i>Safety Science</i> , 2014, 61, 29-35.	4.9	49
26	Multisensory temporal numerosity judgment. <i>Brain Research</i> , 2008, 1242, 116-125.	2.2	47
27	Brain-machine interfaces in space: Using spontaneous rather than intentionally generated brain signals. <i>Acta Astronautica</i> , 2010, 67, 1-11.	3.2	45
28	A Tactile Cockpit Instrument Supports the Control of Self-Motion During Spatial Disorientation. <i>Human Factors</i> , 2006, 48, 219-228.	3.5	44
29	Tactile navigation display. <i>Lecture Notes in Computer Science</i> , 2001, , 165-173.	1.3	42
30	The Perception of Visual Uncertainty Representation by Non-Experts. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2014, 20, 935-943.	4.4	41
31	CROCUFID: A Cross-Cultural Food Image Database for Research on Food Elicited Affective Responses. <i>Frontiers in Psychology</i> , 2019, 10, 58.	2.1	39
32	Vibro-Tactile and Visual Asynchronies: Sensitivity and Consistency. <i>Perception</i> , 2004, 33, 103-111.	1.2	36
33	Control-display mapping in brain-computer interfaces. <i>Ergonomics</i> , 2012, 55, 564-580.	2.1	36
34	How to Touch Humans: Guidelines for Social Agents and Robots That Can Touch. , 2013, , .		36
35	Toward Enhanced Teleoperation Through Embodiment. <i>Frontiers in Robotics and AI</i> , 2020, 7, 14.	3.2	36
36	Direction coding using a tactile chair. <i>Applied Ergonomics</i> , 2009, 40, 477-484.	3.1	35

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37	Uni-, bi- and tri-modal warning signals: Effects of temporal parameters and sensory modality on perceived urgency. <i>Safety Science</i> , 2015, 72, 1-8.	4.9	34
38	EmojiGrid: A 2D pictorial scale for cross-cultural emotion assessment of negatively and positively valenced food. <i>Food Research International</i> , 2019, 115, 541-551.	6.2	34
39	Neurophysiological responses during cooking food associated with different emotions. <i>Food Quality and Preference</i> , 2017, 62, 307-316.	4.6	33
40	Tactile Cueing Effects on Performance in Simulated Aerial Combat with High Acceleration. <i>Aviation, Space, and Environmental Medicine</i> , 2007, 78, 1128-1134.	0.5	32
41	Does bimodal stimulus presentation increase ERP components usable in BCIs?. <i>Journal of Neural Engineering</i> , 2012, 9, 045005.	3.5	31
42	Physiological synchrony in EEG, electrodermal activity and heart rate reflects shared selective auditory attention. <i>Journal of Neural Engineering</i> , 2020, 17, 046028.	3.5	31
43	Cross-modal visual and vibrotactile tracking. <i>Applied Ergonomics</i> , 2004, 35, 105-112.	3.1	30
44	Simulating Affective Touch: Using a Vibrotactile Array to Generate Pleasant Stroking Sensations. <i>Lecture Notes in Computer Science</i> , 2016, , 240-250.	1.3	30
45	Measuring workload using a combination of electroencephalography and near infrared spectroscopy. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2012, 56, 1822-1826.	0.3	29
46	Explicit and Implicit Responses to Tasting Drinks Associated with Different Tasting Experiences. <i>Sensors</i> , 2019, 19, 4397.	3.8	27
47	Setting the Standards for Haptic and Tactile Interactions: ISO's Work. <i>Lecture Notes in Computer Science</i> , 2010, , 353-358.	1.3	26
48	Counting visual and tactile events: The effect of attention on multisensory integration. <i>Attention, Perception, and Psychophysics</i> , 2009, 71, 1854-1861.	1.3	24
49	Physiological signals distinguish between reading emotional and non-emotional sections in a novel. <i>Brain-Computer Interfaces</i> , 2015, 2, 76-89.	1.8	24
50	Absolute localization of vibrotactile stimuli on the torso. <i>Perception & Psychophysics</i> , 2008, 70, 1016-1023.	2.3	23
51	Public Understanding of Visual Representations of Uncertainty in Temperature Forecasts. <i>Journal of Cognitive Engineering and Decision Making</i> , 2015, 9, 241-262.	2.3	21
52	Tactile, Visual, and Bimodal P300s: Could Bimodal P300s Boost BCI Performance?. <i>SRX Neuroscience</i> , 2010, 2010, 1-9.	0.5	21
53	Effects of mediated social touch on affective experiences and trust. <i>PeerJ</i> , 2015, 3, e1297.	2.0	21
54	Effects of Head-Slaved and Peripheral Displays on Lane-Keeping Performance and Spatial Orientation. <i>Human Factors</i> , 1999, 41, 453-466.	3.5	19

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55	Improving Real-Life Estimates of Emotion Based on Heart Rate: A Perspective on Taking Metabolic Heart Rate Into Account. <i>Frontiers in Human Neuroscience</i> , 2018, 12, 284.	2.0	19
56	The EmojiGrid as a Tool to Assess Experienced and Perceived Emotions. <i>Psych</i> , 2019, 1, 469-481.	1.6	19
57	Physiological Synchrony in EEG, Electrodermal Activity and Heart Rate Detects Attentionally Relevant Events in Time. <i>Frontiers in Neuroscience</i> , 2020, 14, 575521.	2.8	19
58	Validation of Principles for Tactile Navigation Displays. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2006, 50, 1687-1691.	0.3	18
59	Observers can reliably identify illusory flashes in the illusory flash paradigm. <i>Experimental Brain Research</i> , 2013, 226, 73-79.	1.5	18
60	Neuroticism, Extraversion, Conscientiousness and Stress: Physiological Correlates. <i>IEEE Transactions on Affective Computing</i> , 2015, 6, 109-117.	8.3	18
61	Error-related EEG patterns during tactile human-machine interaction. , 2009, , .		16
62	Controlling a Tactile ERPâ€“BCI in a Dual Task. <i>IEEE Transactions on Games</i> , 2013, 5, 129-140.	1.4	15
63	Navigating virtual mazes: The benefits of audiovisual landmarks. <i>Displays</i> , 2014, 35, 110-117.	3.7	15
64	Deep Physiological Arousal Detection in a Driving Simulator Using Wearable Sensors. , 2017, , .		15
65	Obstacle Detection Display for Visually Impaired: Coding of Direction, Distance, and Height on a Vibrotactile Waist Band. <i>Frontiers in ICT</i> , 2017, 4, .	3.6	15
66	Control Performance With Three Translational Degrees of Freedom. <i>Human Factors</i> , 2002, 44, 144-155.	3.5	14
67	Pre- and post-stimulus EEG patterns associated with the touch-induced illusory flash. <i>Neuroscience Letters</i> , 2014, 562, 79-84.	2.1	14
68	Tactile Cuing to Augment Multisensory Human-Machine Interaction. <i>Ergonomics in Design</i> , 2015, 23, 4-9.	0.7	13
69	Editorial: Using neurophysiological signals that reflect cognitive or affective state. <i>Frontiers in Neuroscience</i> , 2015, 9, 193.	2.8	13
70	Model Adaptation and Personalization for Physiological Stress Detection. , 2018, , .		13
71	Aging and Sensitivity to Illusory Target Motion WithÂorÂWithout Secondary Tasks. <i>Multisensory Research</i> , 2018, 31, 227-249.	1.1	13
72	The Relation Between Valence and Arousal in Subjective Odor Experience. <i>Chemosensory Perception</i> , 2020, 13, 141-151.	1.2	12

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73	Multimodal Interfaces: A Framework Based on Modality Appropriateness. Proceedings of the Human Factors and Ergonomics Society, 2006, 50, 1542-1546.	0.3	11
74	Vibrotactile and Visual Threat Cueing with High G Threat Intercept in Dynamic Flight Simulation. Proceedings of the Human Factors and Ergonomics Society, 2006, 50, 1547-1551.	0.3	11
75	Measuring cooking experience implicitly and explicitly: Physiology, facial expression and subjective ratings. Food Quality and Preference, 2019, 78, 103726.	4.6	11
76	EEG-Based Navigation from a Human Factors Perspective. Human-computer Interaction Series, 2010, , 71-86.	0.6	11
77	Driving with a Head-Slaved Camera System. Proceedings of the Human Factors and Ergonomics Society, 2001, 45, 1372-1376.	0.3	10
78	An Immersive Self-Report Tool for the Affective Appraisal of 360° VR Videos. Frontiers in Virtual Reality, 2020, 1, .	3.7	10
79	Observing Touch from Video: The Influence of Social Cues on Pleasantness Perceptions. Lecture Notes in Computer Science, 2016, , 196-205.	1.3	10
80	Communication via warm haptic interfaces does not increase social warmth. Journal on Multimodal User Interfaces, 2018, 12, 329-344.	2.9	9
81	Do food cinemagraphs evoke stronger appetitive responses than stills?. International Journal of Food Design, 2019, 4, 63-83.	0.8	9
82	The EmojiGrid as an Immersive Self-report Tool for the Affective Assessment of 360 VR Videos. Lecture Notes in Computer Science, 2019, , 330-335.	1.3	9
83	Inducing circular vection with tactile stimulation encircling the waist. Acta Psychologica, 2018, 182, 32-38.	1.5	8
84	Effortless Passive BCIs for Healthy Users. Lecture Notes in Computer Science, 2013, , 615-622.	1.3	8
85	Connected Through Mediated Social Touch: “Better Than a Like on Facebook.” A Longitudinal Explorative Field Study Among Geographically Separated Romantic Couples. Frontiers in Psychology, 2022, 13, 817787.	2.1	8
86	Gaze-independent ERP-BCIs: augmenting performance through location-congruent bimodal stimuli. Frontiers in Systems Neuroscience, 2014, 8, 143.	2.5	7
87	Effects of Likeness and Synchronicity on the Ownership Illusion over a Moving Virtual Robotic Arm and Hand. , 2019, , .		7
88	Time-Shrinking and the Design of Tactons. Lecture Notes in Computer Science, 2008, , 289-294.	1.3	7
89	Tactile Working Memory Capacity of Users Who Are Blind in an Electronic Travel Aid Application with a Vibration Belt. ACM Transactions on Accessible Computing, 2020, 13, 1-14.	2.4	7
90	Neuroticism, Extraversion and Stress: Physiological Correlates. , 2013, , .		6

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91	Touch-based Brain Computer Interfaces: State of the art. , 2014, , .		6
92	A network model of affective odor perception. PLoS ONE, 2020, 15, e0236468.	2.5	6
93	Haptic Feedback in a Teleoperated Box & Blocks Task. Lecture Notes in Computer Science, 2020, , 96-104.	1.3	6
94	Towards a multiscale QoE assessment of mediated social communication. Quality and User Experience, 2022, 7, .	3.9	6
95	Exploring the use of tactile feedback in an ERP-based auditory BCI. , 2012, 2012, 6707-10.		5
96	Warmth in affective mediated interaction: Exploring the effects of physical warmth on interpersonal warmth. , 2015, , .		5
97	Physiological correlates of mental effort as manipulated through lane width during simulated driving. , 2015, , .		5
98	Range-IT. , 2017, , .		5
99	Are food cinemagraphs more yummy than stills?. , 2017, , .		5
100	Cognitive task performance under (combined) conditions of a metabolic and sensory stressor. Cognition, Technology and Work, 2021, 23, 805-817.	3.0	5
101	Comparing Explicit and Implicit Measures for Assessing Cross-Cultural Food Experience. Frontiers in Neuroergonomics, 2021, 2, .	1.1	5
102	Sequential Effects in Odor Perception. Chemosensory Perception, 2022, 15, 19-25.	1.2	5
103	Tactile roughness perception in the presence of olfactory and trigeminal stimulants. PeerJ, 2015, 3, e955.	2.0	5
104	Serial Dependence of Emotion Within and Between Stimulus Sensory Modalities. Multisensory Research, 2021, 35, 151-172.	1.1	5
105	More than a feeling: bringing touch into astronautsâ€™ spatial orientation. Microgravity Science and Technology, 2007, 19, 108-112.	1.4	4
106	The EmojiGrid as a rating tool for the affective appraisal of touch. PLoS ONE, 2020, 15, e0237873.	2.5	4
107	Affective rating of audio and video clips using the EmojiGrid. F1000Research, 2020, 9, 970.	1.6	4
108	Toward physiological indices of emotional state driving future ebook interactivity. PeerJ Computer Science, 0, 2, e60.	4.5	4

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109	The relative contribution of five key perceptual cues and their interaction to the sense of embodiment.. Technology Mind and Behavior, 2022, 3, .	1.7	4
110	What Is Targeted When We Train Working Memory? Evidence From a Meta-Analysis of the Neural Correlates of Working Memory Training Using Activation Likelihood Estimation. Frontiers in Psychology, 2022, 13, 868001.	2.1	4
111	Multisensory Effects Differ for Counting Small and Large Pulse Numbers. Seeing and Perceiving, 2011, 24, 565-578.	0.3	3
112	A Simple Target Interception Task as Test for Activities of Daily Life Performance in Older Adults. Frontiers in Neuroscience, 2019, 13, 524.	2.8	3
113	Graphical uncertainty representations for ensemble predictions. Information Visualization, 2019, 18, 373-383.	1.9	3
114	Estimating Affective Taste Experience Using Combined Implicit Behavioral and Neurophysiological Measures. IEEE Transactions on Affective Computing, 2023, 14, 849-856.	8.3	3
115	The Relative Importance of Social Cues in Immersive Mediated Communication. Lecture Notes in Networks and Systems, 2022, , 491-498.	0.7	3
116	Towards a Test Battery to Benchmark Dexterous Performance in Teleoperated Systems. Lecture Notes in Computer Science, 2018, , 440-451.	1.3	3
117	BCIs in Multimodal Interaction and Multitask Environments: Theoretical Issues and Initial Guidelines. Lecture Notes in Computer Science, 2011, , 610-619.	1.3	3
118	Interpersonal EEG Synchrony While Listening to a Story Recorded Using Consumer-Grade EEG Devices. Lecture Notes in Information Systems and Organisation, 2020, , 253-259.	0.6	3
119	Integrating Cognitive Developmental Neuroscience in Society: Lessons Learned From a Multidisciplinary Research Project on Education and Social Safety of Youth. Frontiers in Integrative Neuroscience, 2021, 15, 756640.	2.1	3
120	Unsupervised Clustering of Individuals Sharing Selective Attentional Focus Using Physiological Synchrony. Frontiers in Neuroergonomics, 2022, 2, .	1.1	3
121	Toward Standard Guidelines to Design the Sense of Embodiment in Teleoperation Applications: A Review and Toolbox. Human-Computer Interaction, 2023, 38, 322-351.	4.4	3
122	Emotional State During Tasting Affects Emotional Experience Differently and Robustly for Novel and Familiar Foods. Frontiers in Psychology, 2020, 11, 558172.	2.1	2
123	Affective rating of audio and video clips using the EmojiGrid. F1000Research, 2020, 9, 970.	1.6	2
124	Holistic Quality Assessment of Mediated Immersive Multisensory Social Communication. Lecture Notes in Computer Science, 2020, , 209-215.	1.3	2
125	Subjective User Experience and Performance with Active Tangibles on a Tabletop Interface. Lecture Notes in Computer Science, 2015, , 212-223.	1.3	2
126	The Cross-modal Congruency Effect as an Objective Measure of Embodiment. , 2020, , .		2

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127	Vestibulo-tactile interactions regarding motion perception and eye movements in yaw. Journal of Vestibular Research: Equilibrium and Orientation, 2005, 15, 149-60.	2.0	2
128	Linking Categorical and Dimensional Approaches to Assess Food-Related Emotions. Foods, 2022, 11, 972.	4.3	2
129	Grasping Temperature: Thermal Feedback in VR Robot Teleoperation. , 2022, , .		2
130	Head Movements While Steering around Bends. Perceptual and Motor Skills, 2012, 114, 85-95.	1.3	1
131	Closeness with Robots as Social Partners. , 2019, , .		1
132	A novel, simple and objective method to detect movement artefacts in electrodermal activity. , 2019, , .		1
133	Is the Touch-Induced Illusory Flash Distinguishable from a Real Flash?. Lecture Notes in Computer Science, 2010, , 406-411.	1.3	1
134	Sequential dependency for affective appraisal of food images. Humanities and Social Sciences Communications, 2021, 8, .	2.9	1
135	Experiencing Touch by Technology. Lecture Notes in Computer Science, 2022, , 110-118.	1.3	1
136	Tactile Displays in the Cockpit: Developments in the Netherlands. , 2008, , .		0
137	Framework for BCIs in Multimodal Interaction and Multitask Environments. Biological and Medical Physics Series, 2012, , 239-250.	0.4	0
138	Multimodal perception and simulation.. , 0, , 227-242.		0
139	Quality control of geological voxel models using experts' gaze. Computers and Geosciences, 2015, 76, 50-58.	4.2	0
140	Navigation with a passive brain based interface. , 2009, , .		0
141	Multisensory Memory for Object Identity and Location. Lecture Notes in Computer Science, 2014, , 169-176.	1.3	0
142	Nakama. , 2015, , .		0
143	Effects of aging on illusory target motion in a hitting task.. Journal of Vision, 2017, 17, 815.	0.3	0
144	Improving real-life, heart rate based estimates of emotion by taking metabolic heart rate into account â€” a perspective and an example in cooking. Frontiers in Human Neuroscience, 0, 12, .	2.0	0

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145	Brainâ€“Computer Interfaces and Haptics. , 2018, , 253-266.		0
146	Sensitivity to Illusory Target Motion in Elderly and Association with Problems in the Activities of Daily Life. Journal of Vision, 2018, 18, 841.	0.3	0
147	The EmojiGrid as a Rating Tool for the Affective Appraisal of Touch. Lecture Notes in Computer Science, 2020, , 3-11.	1.3	0