Tobias Nef

List of Publications by Year
in descending order

123 papers	4,617 citations	186265 28 h-index	128289 60 g-index
134 all docs	134 docs citations	134 times ranked	4538 citing authors

#	Article	IF	Citations
1	Three-dimensional, task-specific robot therapy of the arm after stroke: a multicentre, parallel-group randomised trial. Lancet Neurology, The, 2014, 13, 159-166.	10.2	473
2	ARMin: a robot for patient-cooperative arm therapy. Medical and Biological Engineering and Computing, 2007, 45, 887-900.	2.8	373
3	ARMin III â€" arm therapy exoskeleton with an ergonomic shoulder actuation. Applied Bionics and Biomechanics, 2009, 6, 127-142.	1.1	303
4	ARMin III â€" Arm Therapy Exoskeleton with an Ergonomic Shoulder Actuation. Applied Bionics and Biomechanics, 2009, 6, 127-142.	1.1	240
5	A robotic system to train activities of daily living in a virtual environment. Medical and Biological Engineering and Computing, 2011, 49, 1213-1223.	2.8	151
6	Effects of intensive arm training with the rehabilitation robot ARMin II in chronic stroke patients: four single-cases. Journal of NeuroEngineering and Rehabilitation, 2009, 6, 46.	4.6	140
7	ARMin II - 7 DoF rehabilitation robot: mechanics and kinematics. , 2007, , .		137
8	Social networking sites and older users â€" a systematic review. International Psychogeriatrics, 2013, 25, 1041-1053.	1.0	131
9	Ecological Validity of Virtual Reality Daily Living Activities Screening for Early Dementia: Longitudinal Study. JMIR Serious Games, 2013, 1, e1.	3.1	129
10	ARMin - Exoskeleton for Arm Therapy in Stroke Patients. , 2007, , .		126
11	Visuo-acoustic stimulation that helps you to relax: A virtual reality setup for patients in the intensive care unit. Scientific Reports, 2017, 7, 13228.	3.3	105
12	Cognitive impairment categorized in community-dwelling older adults with and without dementia using in-home sensors that recognise activities of daily living. Scientific Reports, 2017, 7, 42084.	3.3	90
13	A novel paradigm for patient-cooperative control of upper-limb rehabilitation robots. Advanced Robotics, 2007, 21, 843-867.	1.8	89
14	Evaluation of Three State-of-the-Art Classifiers for Recognition of Activities of Daily Living from Smart Home Ambient Data. Sensors, 2015, 15, 11725-11740.	3.8	75
15	Visual complaints and visual hallucinations in Parkinson's disease. Parkinsonism and Related Disorders, 2014, 20, 318-322.	2.2	73
16	Theta burst stimulation in neglect after stroke: functional outcome and response variability origins. Brain, 2019, 142, 992-1008.	7.6	69
17	What Older People Like to Play: Genre Preferences and Acceptance of Casual Games. JMIR Serious Games, 2017, 5, e8.	3.1	64
18	A Web-Based Non-Intrusive Ambient System to Measure and Classify Activities of Daily Living. Journal of Medical Internet Research, 2014, 16, e175.	4.3	64

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19	Can a novel computerized cognitive screening test provide additional information for early detection of Alzheimer's disease?. , 2014, 10, 790-798.		62
20	Improving backdrivability in geared rehabilitation robots. Medical and Biological Engineering and Computing, 2009, 47, 441-447.	2.8	57
21	Vision and Night Driving Abilities of Elderly Drivers. Traffic Injury Prevention, 2013, 14, 477-485.	1.4	57
22	Consensus-Based Core Set of Outcome Measures for Clinical Motor Rehabilitation After Stroke—A Delphi Study. Frontiers in Neurology, 2020, 11, 875.	2.4	54
23	Non-Invasive Brain Stimulation in Neglect Rehabilitation: An Update. Frontiers in Human Neuroscience, 2013, 7, 248.	2.0	53
24	Evaluation of a novel Serious Game based assessment tool for patients with Alzheimer's disease. PLoS ONE, 2017, 12, e0175999.	2.5	51
25	Home based training for dexterity in Parkinson's disease: A randomized controlled trial. Parkinsonism and Related Disorders, 2017, 41, 92-98.	2.2	44
26	Effects of Arm Training with the Robotic Device ARMin I in Chronic Stroke: Three Single Cases. Neurodegenerative Diseases, 2009, 6, 240-251.	1.4	42
27	Shoulder actuation mechanisms for arm rehabilitation exoskeletons. , 2008, , .		41
28	ARMin - Exoskeleton Robot for Stroke Rehabilitation. IFMBE Proceedings, 2009, , 127-130.	0.3	40
29	Cathodal HD-tDCS on the right V5 improves motion perception in humans. Frontiers in Behavioral Neuroscience, 2015, 9, 257.	2.0	40
30	Long-Term Home-Monitoring Sensor Technology in Patients with Parkinson's Disease—Acceptance and Adherence. Sensors, 2019, 19, 5169.	3.8	40
31	Retraining of interjoint arm coordination after stroke using robot-assisted time-independent functional training. Journal of Rehabilitation Research and Development, 2011, 48, 299.	1.6	38
32	Eyetracking during free visual exploration detects neglect more reliably than paper-pencil tests. Cortex, 2020, 129, 223-235.	2.4	34
33	Wearables in the home-based assessment of abnormal movements in Parkinson's disease: a systematic review of the literature. Journal of Neurology, 2022, 269, 100-110.	3.6	32
34	Enhancing treatment effects by combining continuous theta burst stimulation with smooth pursuit training. Neuropsychologia, 2015, 74, 145-151.	1.6	30
35	Behavioral Differences in the Upper and Lower Visual Hemifields in Shape and Motion Perception. Frontiers in Behavioral Neuroscience, 2016, 10, 128.	2.0	29
36	Cognition and driving in older persons. Swiss Medical Weekly, 2011, 140, w13136.	1.6	28

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37	Immersive 3D Virtual Reality Cancellation Task for Visual Neglect Assessment: A Pilot Study. Frontiers in Human Neuroscience, 2020, 14, 180.	2.0	28
38	Validation of a purpose‐built chewing gum and smartphone application to evaluate chewing efficiency. Journal of Oral Rehabilitation, 2018, 45, 845-853.	3.0	27
39	Evaluation of a new serious game based multitasking assessment tool for cognition and activities of daily living: Comparison with a real cooking task. Computers in Human Behavior, 2017, 70, 500-506.	8.5	26
40	Perception and Performance on a Virtual Reality Cognitive Stimulation for Use in the Intensive Care Unit: A Non-randomized Trial in Critically Ill Patients. Frontiers in Medicine, 2019, 6, 287.	2.6	26
41	Therapist-Guided Tablet-Based Telerehabilitation for Patients With Aphasia: Proof-of-Concept and Usability Study. JMIR Rehabilitation and Assistive Technologies, 2019, 6, e13163.	2.2	26
42	On the Comparison of a Novel Serious Game and Electroencephalography Biomarkers for Early Dementia Screening. Advances in Experimental Medicine and Biology, 2015, 821, 63-77.	1.6	25
43	The Responsiveness of the Lucerne ICF-Based Multidisciplinary Observation Scale: A Comparison with the Functional Independence Measure and the Barthel Index. Frontiers in Neurology, 2016, 7, 152.	2.4	25
44	Validity of pervasive computing based continuous physical activity assessment in community-dwelling old and oldest-old. Scientific Reports, 2019, 9, 9662.	3.3	25
45	Evaluation of 1-Year in-Home Monitoring Technology by Home-Dwelling Older Adults, Family Caregivers, and Nurses. Frontiers in Public Health, 2020, 8, 518957.	2.7	25
46	Reliability and validity of a new dexterity questionnaire (DextQ-24) in Parkinson's disease. Parkinsonism and Related Disorders, 2016, 33, 78-83.	2.2	23
47	Anterior insula and inferior frontal gyrus: where ventral and dorsal visual attention systems meet. Brain Communications, 2021, 3, fcaa220.	3.3	23
48	Transferring ARMin to the Clinics and Industry. Topics in Spinal Cord Injury Rehabilitation, 2011, 17, 54-59.	1.8	23
49	Re‐fixation and perseveration patterns in neglect patients during free visual exploration. European Journal of Neuroscience, 2019, 49, 1244-1253.	2.6	22
50	Comparing the Relaxing Effects of Different Virtual Reality Environments in the Intensive Care Unit: Observational Study. JMIR Perioperative Medicine, 2019, 2, e15579.	1.0	22
51	Recognition of activities of daily living in healthy subjects using two ad-hoc classifiers. BioMedical Engineering OnLine, 2015, 14, 54.	2.7	21
52	Visual Hallucinations in Eye Disease and Lewy Body Disease. American Journal of Geriatric Psychiatry, 2016, 24, 350-358.	1.2	21
53	Contactless Sleep Monitoring for Early Detection of Health Deteriorations in Community-Dwelling Older Adults: Exploratory Study. JMIR MHealth and UHealth, 2021, 9, e24666.	3.7	21
54	Multimodal Communication in Aphasia: Perception and Production of Co-speech Gestures During Face-to-Face Conversation. Frontiers in Human Neuroscience, 2018, 12, 200.	2.0	20

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55	Potential of Ambient Sensor Systems for Early Detection of Health Problems in Older Adults. Frontiers in Cardiovascular Medicine, 2020, 7, 110.	2.4	19
56	Age-dependent visual exploration during simulated day- and night driving on a motorway: a cross-sectional study. BMC Geriatrics, 2015, 15, 18.	2.7	18
57	Effects of Alzheimerâ€™s Disease on Visual Target Detection: A â€œPeripheral Biasâ€. Frontiers in Aging Neuroscience, 2016, 8, 200.	3.4	18
58	Effects of age and eccentricity on visual target detection. Frontiers in Aging Neuroscience, 2014, 5, 101.	3.4	17
59	Development and Evaluation of Maze-Like Puzzle Games to Assess Cognitive and Motor Function in Aging and Neurodegenerative Diseases. Frontiers in Aging Neuroscience, 2020, 12, 87.	3.4	17
60	Three-Dimensional Multi-Degree-of-Freedom Arm Therapy Robot (ARMin). , 2012, , 141-157.		16
61	Estimating the patientï¿½s contribution during robot-assisted therapy. Journal of Rehabilitation Research and Development, 2013, 50, 379.	1.6	16
62	The role of the right frontal eye field in overt visual attention deployment as assessed by free visual exploration. Neuropsychologia, 2015, 74, 37-41.	1.6	16
63	Visual Exploration Area in Neglect: A New Analysis Method for Video-Oculography Data Based on Foveal Vision. Frontiers in Neuroscience, 2019, 13, 1412.	2.8	16
64	Development of a Search Task Using Immersive Virtual Reality: Proof-of-Concept Study. JMIR Serious Games, 2021, 9, e29182.	3.1	16
65	Cue Recognition and Integration â€“ Eye Tracking Evidence of Processing Differences in Sentence Comprehension in Aphasia. PLoS ONE, 2015, 10, e0142853.	2.5	16
66	Search and Match Task: Development of a Taskified Match-3 Puzzle Game to Assess and Practice Visual Search. JMIR Serious Games, 2019, 7, e13620.	3.1	16
67	Effects of intensive care unit ambient sounds on healthcare professionals: results of an online survey and noise exposure in an experimental setting. Intensive Care Medicine Experimental, 2020, 8, 34.	1.9	15
68	ARMin â€“ Roboter fÃ¼r die Bewegungstherapie der oberen ExtremitÃ¤ten (ARMin â€“ Robot for Movement) Tj ETQq0 0 0 rgBT /Overloc	0.8	12
69	Comfort of two shoulder actuation mechanisms for arm therapy exoskeletons: a comparative study in healthy subjects. Medical and Biological Engineering and Computing, 2013, 51, 781-789.	2.8	12
70	The influence of naturalistic, directionally non-specific motion on the spatial deployment of visual attention in right-hemispheric stroke. Neuropsychologia, 2016, 92, 181-189.	1.6	12
71	Comparison of Peak Cardiopulmonary Performance Parameters on a Robotics-Assisted Tilt Table, a Cycle and a Treadmill. PLoS ONE, 2015, 10, e0122767.	2.5	11
72	Adapting a Driving Simulator to Study Pedestriansâ€™ Street-Crossing Decisions: A Feasibility Study. Assistive Technology, 2015, 27, 1-8.	2.0	11

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73	Time Independent Functional Task Training: A case study on the effect of inter-joint coordination driven haptic guidance in stroke therapy. , 2011, 2011, 5975501.		10
74	Combining qualitative and quantitative methods to analyze serious games outcomes: A pilot study for a new cognitive screening tool. , 2015, 2015, 1327-30.		10
75	The Influence of Alertness on the Spatial Deployment of Visual Attention is Mediated by the Excitability of the Posterior Parietal Cortices. Cerebral Cortex, 2017, 27, 233-243.	2.9	10
76	Optimization and Technical Validation of the AIDE-MOI Fall Detection Algorithm in a Real-Life Setting with Older Adults. Sensors, 2019, 19, 1357.	3.8	10
77	<p>Isometric Strength Measures are Superior to the Timed Up and Go Test for Fall Prediction in Older Adults: Results from a Prospective Cohort Study</p>. Clinical Interventions in Aging, 2020, Volume 15, 2001-2008.	2.9	10
78	NeuroTec Sitem-Insel Bern: Closing the Last Mile in Neurology. Clinical and Translational Neuroscience, 2021, 5, 13.	0.9	10
79	Congruency of Information Rather Than Body Ownership Enhances Motor Performance in Highly Embodied Virtual Reality. Frontiers in Neuroscience, 2021, 15, 678909.	2.8	10
80	Patient-cooperative control strategies for coordinated functional arm movements. , 2007, , .		9
81	A novel computer test to assess driving-relevant cognitive functions – a pilot study. International Psychogeriatrics, 2014, 26, 229-238.	1.0	9
82	Feasibility of cardiopulmonary exercise testing and training using a robotics-assisted tilt table in dependent-ambulatory stroke patients. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 88.	4.6	9
83	The asymmetrical influence of increasing time-on-task on attentional disengagement. Neuropsychologia, 2016, 92, 107-114.	1.6	9
84	Case Report: Ambient Sensor Signals as Digital Biomarkers for Early Signs of Heart Failure Decompensation. Frontiers in Cardiovascular Medicine, 2021, 8, 617682.	2.4	9
85	Virtual reality stimulation to reduce the incidence of delirium in critically ill patients: study protocol for a randomized clinical trial. Trials, 2021, 22, 174.	1.6	9
86	Three-Dimensional Multi-degree-of-Freedom Arm Therapy Robot (ARMin). , 2016, , 351-374.		9
87	Feasibility of a Home-Based Tablet App for Dexterity Training in Multiple Sclerosis: Usability Study. JMIR MHealth and UHealth, 2020, 8, e18204.	3.7	9
88	Test-retest reliability and four-week changes in cardiopulmonary fitness in stroke patients: evaluation using a robotics-assisted tilt table. BMC Neurology, 2016, 16, 163.	1.8	8
89	Contralesional Trunk Rotation Dissociates Real vs. Pseudo-Visual Field Defects due to Visual Neglect in Stroke Patients. Frontiers in Neurology, 2017, 8, 411.	2.4	8
90	A Sensor-Driven Visit Detection System in Older Adults' Homes: Towards Digital Late-Life Depression Marker Extraction. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 1560-1569.	6.3	8

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91	Neglect and Motion Stimuli â€" Insights from a Touchscreen-Based Cancellation Task. PLoS ONE, 2015, 10, e0132025.	2.5	8
92	Non-Illness-Related Factors Contributing to Traffic Safety in Older Drivers: A Literature Review. Experimental Aging Research, 2015, 41, 325-360.	1.2	7
93	Patient and Informant Views on Visual Hallucinations in Parkinson Disease. American Journal of Geriatric Psychiatry, 2015, 23, 970-976.	1.2	7
94	Contact-free sensor signals as a new digital biomarker for cardiovascular disease: chances and challenges. European Heart Journal Digital Health, 2020, 1, 30-39.	1.7	7
95	Theta burst stimulation over premotor cortex in Parkinsonâ€™s disease: an explorative study on manual dexterity. Journal of Neural Transmission, 2016, 123, 1387-1393.	2.8	6
96	Advances in Sensor Monitoring Effectiveness and Applicability: A Systematic Review and Update. Gerontologist, The, 2020, 60, e299-e308.	3.9	6
97	Investigating a new tablet-based telerehabilitation app in patients with aphasia: a randomised, controlled, evaluator-blinded, multicentre trial protocol. BMJ Open, 2020, 10, e037702.	1.9	6
98	Test-Retest-Reliability of Video-Oculography During Free Visual Exploration in Right-Hemispheric Stroke Patients With Neglect. Frontiers in Neuroscience, 2020, 14, 731.	2.8	6
99	Application of Eye Tracking in Puzzle Games for Adjunct Cognitive Markers: Pilot Observational Study in Older Adults. JMIR Serious Games, 2021, 9, e24151.	3.1	6
100	Patient-tracking for an over-ground gait training system. , 2009, , .		5
101	Investigation of cardiopulmonary exercise testing using a dynamic leg press and comparison with a cycle ergometer. BMC Sports Science, Medicine and Rehabilitation, 2018, 10, 5.	1.7	5
102	The Impact of Cognitive Load on the Spatial Deployment of Visual Attention: Testing the Role of Interhemispheric Balance With Biparietal Transcranial Direct Current Stimulation. Frontiers in Neuroscience, 2019, 13, 1391.	2.8	5
103	Can a Novel Web-Based Computer Test Predict Poor Simulated Driving Performance? A Pilot Study With Healthy and Cognitive-Impaired Participants. Journal of Medical Internet Research, 2013, 15, e232.	4.3	5
104	Visual Neglect after PICA Strokeâ€"A Case Study. Brain Sciences, 2022, 12, 290.	2.3	5
105	A new method to measure higher visual functions in an immersive environment. BioMedical Engineering OnLine, 2014, 13, 104.	2.7	4
106	Submaximal cardiopulmonary thresholds on a robotics-assisted tilt table, a cycle and a treadmill: a comparative analysis. BioMedical Engineering OnLine, 2015, 14, 104.	2.7	4
107	Development of a novel driving behavior adaptations questionnaire. International Psychogeriatrics, 2015, 27, 1017-1027.	1.0	4
108	Video-Oculography During Free Visual Exploration to Detect Right Spatial Neglect in Left-Hemispheric Stroke Patients With Aphasia: A Feasibility Study. Frontiers in Neuroscience, 2021, 15, 640049.	2.8	4

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109	Attentional reorienting triggers spatial asymmetries in a search task with cross-modal spatial cueing. PLoS ONE, 2018, 13, e0190677.	2.5	4
110	Methods for Measuring and Identifying Sounds in the Intensive Care Unit. Frontiers in Medicine, 0, 9, .	2.6	4
111	P4-365: SERIOUS GAMING ENHANCES COGNITIVE FUNCTION IN MCI DUE TO ALZHEIMER'S DISEASE. , 2014, 10, P922-P922.		3
112	A method for predicting peak work rate for cycle ergometer and treadmill ramp tests. Clinical Physiology and Functional Imaging, 2017, 37, 610-614.	1.2	3
113	Tablet app-based dexterity-training in patients with Parkinson's disease: Pilot feasibility study. Annals of Physical and Rehabilitation Medicine, 2021, 64, 101419.	2.3	3
114	Contactless Gait Assessment in Home-like Environments. Sensors, 2021, 21, 6205.	3.8	3
115	An Instrumented Apartment to Monitor Human Behavior: A Pilot Case Study in the NeuroTec Loft. Sensors, 2022, 22, 1657.	3.8	3
116	Effects of Virtual Realityâ€"Based Multimodal Audio-Tactile Cueing in Patients With Spatial Attention Deficits: Pilot Usability Study. JMIR Serious Games, 2022, 10, e34884.	3.1	3
117	Higher visual functions in the upper and lower visual fields: A pilot study in healthy subjects. , 2015, 2015, 2522-5.		2
118	Wearable Based Calibration of Contactless In-home Motion Sensors for Physical Activity Monitoring in Community-Dwelling Older Adults. Frontiers in Digital Health, 2020, 2, 566595.	2.8	2
119	Influence of noise manipulation on retention in a simulated ICU ward round: an experimental pilot study. Intensive Care Medicine Experimental, 2022, 10, 3.	1.9	2
120	Technical feasibility of constant-load and high-intensity interval training for cardiopulmonary conditioning using a re-engineered dynamic leg press. BMC Biomedical Engineering, 2019, 1, 26.	2.6	1
121	Usability evaluation of an interactive leg press training robot for children with neuromuscular impairments. Technology and Health Care, 2022, 30, 1183-1197.	1.2	1
122	Eigenbehaviour as an Indicator of Cognitive Abilities. Sensors, 2022, 22, 2769.	3.8	1
123	P1â€"046: PUZZLING THE MIND: EVALUATING THE DIFFICULTY OF GENERATED PUZZLE GAME LEVELS FOR A PUZZLE GAME INTERVENTION â€" PRELIMINARY RESULTS. Alzheimer's and Dementia, 2018, 14, P284.	0.8	0