Robert A Scheidt

List of Publications by Year
in descending order

60 papers	2,636 citations	279798 23 h-index	206112 48 g-index
65 all docs	65 docs citations	65 times ranked	1851 citing authors

#	Article	IF	Citations
1	Persistence of Motor Adaptation During Constrained, Multi-Joint, Arm Movements. Journal of Neurophysiology, 2000, 84, 853-862.	1.8	361
2	Learning to Move Amid Uncertainty. Journal of Neurophysiology, 2001, 86, 971-985.	1.8	361
3	Interaction of Visual and Proprioceptive Feedback During Adaptation of Human Reaching Movements. Journal of Neurophysiology, 2005, 93, 3200-3213.	1.8	192
4	Impedance Control and Internal Model Formation When Reaching in a Randomly Varying Dynamical Environment. Journal of Neurophysiology, 2001, 86, 1047-1051.	1.8	175
5	Separate Adaptive Mechanisms for Controlling Trajectory and Final Position in Reaching. Journal of Neurophysiology, 2007, 98, 3600-3613.	1.8	132
6	A physiologically based clinical measure for spastic reflexes in spinal cord injury. Archives of Physical Medicine and Rehabilitation, 2005, 86, 52-59.	0.9	118
7	Remapping Hand Movements in a Novel Geometrical Environment. Journal of Neurophysiology, 2005, 94, 4362-4372.	1.8	115
8	Reach Adaptation and Final Position Control Amid Environmental Uncertainty After Stroke. Journal of Neurophysiology, 2007, 97, 2824-2836.	1.8	91
9	Different Learned Coordinate Frames for Planning Trajectories and Final Positions in Reaching. Journal of Neurophysiology, 2007, 98, 3614-3626.	1.8	70
10	Visuomotor Learning Enhanced by Augmenting Instantaneous Trajectory Error Feedback during Reaching. PLoS ONE, 2013, 8, e46466.	2.5	68
11	Reorganization of Finger Coordination Patterns During Adaptation to Rotation and Scaling of a Newly Learned Sensorimotor Transformation. Journal of Neurophysiology, 2011, 105, 454-473.	1.8	57
12	Learning Redundant Motor Tasks with and without Overlapping Dimensions: Facilitation and Interference Effects. Journal of Neuroscience, 2014, 34, 8289-8299.	3.6	52
13	Effects of Wrist Tendon Vibration on Targeted Upper-Arm Movements in Poststroke Hemiparesis. Neurorehabilitation and Neural Repair, 2011, 25, 61-70.	2.9	46
14	Neural and Electromyographic Correlates of Wrist Posture Control. Journal of Neurophysiology, 2007, 97, 1527-1545.	1.8	42
15	A robotic test of proprioception within the hemiparetic arm post-stroke. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 77.	4.6	42
16	Contributions of Online Visual Feedback to the Learning and Generalization of Novel Finger Coordination Patterns. Journal of Neurophysiology, 2008, 99, 2546-2557.	1.8	39
17	Electroencephalogram Coherence in Children With and Without Autism Spectrum Disorders: Decreased Interhemispheric Connectivity in Autism. Autism Research, 2014, 7, 334-343.	3.8	38
18	Remembering forward: Neural correlates of memory and prediction in human motor adaptation. NeuroImage, 2012, 59, 582-600.	4.2	35

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19	Supplemental vibrotactile feedback control of stabilization and reaching actions of the arm using limb state and position error encodings. Journal of NeuroEngineering and Rehabilitation, 2017, 14, 36.	4.6	35
20	Effects of wrist tendon vibration on arm tracking in people poststroke. Journal of Neurophysiology, 2011, 106, 1480-1488.	1.8	32
21	Brief Report: Visuo-spatial Guidance of Movement during Gesture Imitation and Mirror Drawing in Children with Autism Spectrum Disorders. Journal of Autism and Developmental Disorders, 2013, 43, 985-995.	2.7	31
22	Sensory motor remapping of space in humanâ€“machine interfaces. Progress in Brain Research, 2011, 191, 45-64.	1.4	28
23	Elastic, Viscous, and Mass Load Effects on Poststroke Muscle Recruitment and Co-contraction During Reaching: A Pilot Study. Physical Therapy, 2009, 89, 665-678.	2.4	27
24	Control Strategies for the Transition From Multijoint to Single-Joint Arm Movements Studied Using a Simple Mechanical Constraint. Journal of Neurophysiology, 2000, 83, 1-12.	1.8	23
25	Design and validation of a MR-compatible pneumatic manipulandum. Journal of Neuroscience Methods, 2007, 163, 255-266.	2.5	23
26	Patterns of hypermetria and terminal cocontraction during point-to-point movements demonstrate independent action of trajectory and postural controllers. Journal of Neurophysiology, 2011, 106, 2368-2382.	1.8	23
27	Spatial and temporal influences on discrimination of vibrotactile stimuli on the arm. Experimental Brain Research, 2019, 237, 2075-2086.	1.5	23
28	Visual, motor and attentional influences on proprioceptive contributions to perception of hand path rectilinearity during reaching. Experimental Brain Research, 2010, 204, 239-254.	1.5	22
29	Visuo-proprioceptive interactions during adaptation of the human reach. Journal of Neurophysiology, 2014, 111, 868-887.	1.8	21
30	Tactile proprioceptive input in robotic rehabilitation after stroke. , 2015, , .		21
31	Computerized biofeedback knee goniometer: acceptance and effect on exercise behavior in post-total knee arthroplasty rehabilitation. Archives of Physical Medicine and Rehabilitation, 2004, 85, 1026-1030.	0.9	19
32	Inter-Joint Coordination Deficits Revealed in the Decomposition of Endpoint Jerk During Goal-Directed Arm Movement After Stroke. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 798-810.	4.9	18
33	A Real-Time Haptic/Graphic Demonstration of how Error Augmentation can Enhance Learning. , 0, , .		17
34	Supplemental vibrotactile feedback of real-time limb position enhances precision of goal-directed reaching. Journal of Neurophysiology, 2019, 122, 22-38.	1.8	17
35	Somatosensory deafferentation reveals lateralized roles of proprioception in feedback and adaptive feedforward control of movement and posture. Current Opinion in Physiology, 2021, 19, 141-147.	1.8	17
36	Effect of Tendon Vibration on Hemiparetic Arm Stability in Unstable Workspaces. PLoS ONE, 2015, 10, e0144377.	2.5	17

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37	Augmenting sensorimotor control using â€œgoal-awareâ€•vibrotactile stimulation during reaching and manipulation behaviors. Experimental Brain Research, 2016, 234, 2403-2414.	1.5	16
38	A quantitative and standardized robotic method for the evaluation of arm proprioception after stroke. , 2011, 2011, 8227-30.		15
39	Tactile-STAR: A Novel Tactile STimulator And Recorder System for Evaluating and Improving Tactile Perception. Frontiers in Neurorobotics, 2018, 12, 12.	2.8	14
40	Optimal Schedules in Multitask Motor Learning. Neural Computation, 2016, 28, 667-685.	2.2	13
41	The neural foundations of handedness: insights from a rare case of deafferentation. Journal of Neurophysiology, 2020, 124, 259-267.	1.8	13
42	Dataglove measurement of joint angles in sign language handshapes. Sign Language and Linguistics (Online), 2012, 15, 39-72.	0.5	12
43	Vibration Propagation on the Skin of the Arm. Applied Sciences (Switzerland), 2019, 9, 4329.	2.5	12
44	Intention tremor and deficits of sensory feedback control in multiple sclerosis: a pilot study. Journal of NeuroEngineering and Rehabilitation, 2014, 11, 170.	4.6	11
45	The Arm Movement Detection (AMD) test: a fast robotic test of proprioceptive acuity in the arm. Journal of NeuroEngineering and Rehabilitation, 2017, 14, 64.	4.6	8
46	Effect of Dual Tasking on Vibrotactile Feedback Guided Reaching â€“ A Pilot Study. Lecture Notes in Computer Science, 2018, 10893, 3-14.	1.3	8
47	Organizing and Reorganizing Coordination Patterns. Advances in Experimental Medicine and Biology, 2016, 957, 327-349.	1.6	7
48	A two alternative forced choice method for assessing vibrotactile discrimination thresholds in the lower limb. Somatosensory & Motor Research, 2019, 36, 162-170.	0.9	6
49	Visual and proprioceptive contributions to compensatory and pursuit tracking movements in humans. , 2011, 2011, 7356-9.		5
50	Effect of Short-Term Exposure to Supplemental Vibrotactile Kinesthetic Feedback on Goal-Directed Movements after Stroke: A Proof of Concept Case Series. Sensors, 2021, 21, 1519.	3.8	4
51	The arm motion detection (AMD) test. , 2014, 2014, 5349-52.		3
52	Contributions of implicit and explicit memories to sensorimotor adaptation of movement extent during goal-directed reaching. Experimental Brain Research, 2021, 239, 2445-2459.	1.5	3
53	Neural Control of Stopping and Stabilizing the Arm. Frontiers in Integrative Neuroscience, 2022, 16, 835852.	2.1	3
54	Neural Correlates of Multisensory Integration for Feedback Stabilization of the Wrist. Frontiers in Integrative Neuroscience, 2022, 16, .	2.1	3

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55	Temporal and spatial aspects of sensory interactions during human fusional response. Vision Research, 1993, 33, 1259-1270.	1.4	2
56	Vibrotactile Perception for Sensorimotor Augmentation: Perceptual Discrimination of Vibrotactile Stimuli Induced by Low-Cost Eccentric Rotating Mass Motors at Different Body Locations in Young, Middle-Aged, and Older Adults. Frontiers in Rehabilitation Sciences, 0, 3, .	1.2	2
57	Age-related differentiation of sensorimotor control strategies during pursuit and compensatory tracking. , 2014, 2014, 3562-5.		1
58	Robotic techniques for the assessment of proprioceptive deficits and for proprioceptive training. , 2018, , 289-303.		1
59	Feedback Regulation of Limb Position Characterized Using FMRI. , 0, , .		0
60	Limb stabilization in older adults and chronic stroke survivors: A pilot study. , 2017, , .		0