Olivier

List of Publications by Year
in descending order

39 papers	1,056 citations	471509 17 h-index	454955 30 g-index
46 all docs	46 docs citations	46 times ranked	956 citing authors

#	Article	IF	Citations
1	Use-Dependent and Error-Based Learning of Motor Behaviors. Journal of Neuroscience, 2010, 30, 5159-5166.	3.6	296
2	The effects of a change in gravity on the dynamics of prehension. Experimental Brain Research, 2003, 148, 533-540.	1.5	71
3	Do novel gravitational environments alter the grip-force/load-force coupling at the fingertips?. Experimental Brain Research, 2005, 163, 324-334.	1.5	54
4	Towards human exploration of space: the THESEUS review series on cardiovascular, respiratory, and renal research priorities. Npj Microgravity, 2016, 2, 16031.	3.7	50
5	Responsibility Assignment in Redundant Systems. Current Biology, 2010, 20, 1290-1295.	3.9	44
6	Altered Gravity Highlights Central Pattern Generator Mechanisms. Journal of Neurophysiology, 2008, 100, 2819-2824.	1.8	40
7	The gravitational imprint on sensorimotor planning and control. Journal of Neurophysiology, 2020, 124, 4-19.	1.8	38
8	The Role of Left Supplementary Motor Area in Grip Force Scaling. PLoS ONE, 2013, 8, e83812.	2.5	37
9	Towards human exploration of space: the THESEUS review series on neurophysiology research priorities. Npj Microgravity, 2016, 2, 16023.	3.7	33
10	Grip force regulates hand impedance to optimize object stability in high impact loads. Neuroscience, 2011, 189, 269-276.	2.3	32
11	The Relation between Geometry and Time in Mental Actions. PLoS ONE, 2012, 7, e51191.	2.5	31
12	The brain adjusts grip forces differently according to gravity and inertia: a parabolic flight experiment. Frontiers in Integrative Neuroscience, 2015, 9, 7.	2.1	30
13	Human physiology adaptation to altered gravity environments. Acta Astronautica, 2021, 189, 216-221.	3.2	30
14	Hand Interactions in Rapid Grip Force Adjustments Are Independent of Object Dynamics. Journal of Neurophysiology, 2008, 100, 2738-2745.	1.8	26
15	Direction-dependent activation of the insular cortex during vertical and horizontal hand movements. Neuroscience, 2016, 325, 10-19.	2.3	24
16	The Promise of Stochastic Resonance in Falls Prevention. Frontiers in Physiology, 2018, 9, 1865.	2.8	23
17	Computation of gaze orientation under unrestrained head movements. Journal of Neuroscience Methods, 2007, 159, 158-169.	2.5	21
18	Fractal analyses reveal independent complexity and predictability of gait. PLoS ONE, 2017, 12, e0188711.	2.5	17

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19	Flexible Switching of Feedback Control Mechanisms Allows for Learning of Different Task Dynamics. PLoS ONE, 2013, 8, e54771.	2.5	16
20	Initial information prior to movement onset influences kinematics of upward arm pointing movements. Journal of Neurophysiology, 2016, 116, 1673-1683.	1.8	15
21	Active Collisions in Altered Gravity Reveal Eye-Hand Coordination Strategies. PLoS ONE, 2012, 7, e44291.	2.5	14
22	Higher-derivative harmonic oscillators: stability of classical dynamics and adiabatic invariants. European Physical Journal C, 2019, 79, 1.	3.9	14
23	Pupil Diameter May Reflect Motor Control and Learning. Journal of Motor Behavior, 2017, 49, 141-149.	0.9	13
24	Grip Force Adjustments Reflect Prediction of Dynamic Consequences in Varying Gravitoinertial Fields. Frontiers in Physiology, 2018, 9, 131.	2.8	13
25	Coherent Multimodal Sensory Information Allows Switching between Gravitoinertial Contexts. Frontiers in Physiology, 2017, 8, 290.	2.8	12
26	Editorial: Gravitational Physiology, Aging and Medicine. Frontiers in Physiology, 2019, 10, 1338.	2.8	9
27	Switching in Feedforward Control of Grip Force During Tool-Mediated Interaction With Elastic Force Fields. Frontiers in Neurorobotics, 2018, 12, 31.	2.8	7
28	Force field adaptation does not alter space representation. Scientific Reports, 2018, 8, 10982.	3.3	7
29	The effects of varying gravito-inertial stressors on grip strength and hemodynamic responses in men and women. European Journal of Applied Physiology, 2019, 119, 951-960.	2.5	7
30	Actual and Imagined Movements Reveal a Dual Role of the Insular Cortex for Motor Control. Cerebral Cortex, 2021, 31, 2586-2594.	2.9	7
31	Benefits of nonlinear analysis indices of walking stride interval in the evaluation of neurodegenerative diseases. Human Movement Science, 2021, 75, 102741.	1.4	5
32	Motor strategies and adiabatic invariants: The case of rhythmic motion in parabolic flights. Physical Review E, 2021, 104, 024403.	2.1	3
33	Motor imagery helps updating internal models during microgravity exposure. Journal of Neurophysiology, 2022, , .	1.8	3
34	Effects of Simulated Microgravity and Hypergravity Conditions on Arm Movements in Normogravity. Frontiers in Neural Circuits, 2021, 15, 750176.	2.8	3
35	Motor Control: From Joints to Objects and Back. Current Biology, 2008, 18, R532-R533.	3.9	2
36	A new device to measure the three dimensional forces and torques in precision grip. Journal of Medical Engineering and Technology, 2009, 33, 245-248.	1.4	2

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37	Adiabatic invariants drive rhythmic human motion in variable gravity. Physical Review E, 2020, 102, 062403.	2.1	2
38	Eye-hand coordination in controlled collisions in altered gravity. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 281-281.	1.6	0
39	Fine adaptive precision grip control without maximum pinch strength changes after upper limb neurodynamic mobilization. Scientific Reports, 2021, 11, 14009.	3.3	0