

Karl M Newell

List of Publications by Year in descending order

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Version: 2024-02-01

111
papers

2,714
citations

218677

26
h-index

223800

46
g-index

116
all docs

116
docs citations

116
times ranked

2096
citing authors

#	ARTICLE	IF	CITATIONS
1	Noise, information transmission, and force variability.. Journal of Experimental Psychology: Human Perception and Performance, 1999, 25, 837-851.	0.9	258
2	Dimensional change in motor learning. Human Movement Science, 2001, 20, 695-715.	1.4	226
3	Modulation of cortical activity in 2D versus 3D virtual reality environments: An EEG study. International Journal of Psychophysiology, 2015, 95, 254-260.	1.0	136
4	Is Variability in Human Performance a Reflection of System Noise?. Current Directions in Psychological Science, 1998, 7, 170-177.	5.3	126
5	Motor redundancy during maximal voluntary contraction in four-finger tasks. Experimental Brain Research, 1998, 122, 71-78.	1.5	107
6	Intermittency in the visual control of force in Parkinson's disease. Experimental Brain Research, 2001, 138, 118-127.	1.5	94
7	Task goals and change in dynamical degrees of freedom with motor learning.. Journal of Experimental Psychology: Human Perception and Performance, 2003, 29, 379-387.	0.9	84
8	The scaling of human grip configurations.. Journal of Experimental Psychology: Human Perception and Performance, 1999, 25, 927-935.	0.9	78
9	Search Strategies in the Perceptual-Motor Workspace and the Acquisition of Coordination, Control, and Skill. Frontiers in Psychology, 2019, 10, 1874.	2.1	60
10	Adaptation and learning: Characteristic time scales of performance dynamics. Human Movement Science, 2009, 28, 655-687.	1.4	53
11	Force and Timing Variability in Rhythmic Unimanual Tapping. Journal of Motor Behavior, 2000, 32, 249-267.	0.9	52
12	Models of Postural Control: Shared Variance in Joint and COM Motions. PLoS ONE, 2015, 10, e0126379.	2.5	49
13	Body-scaled transitions in human grip configurations.. Journal of Experimental Psychology: Human Perception and Performance, 2000, 26, 1657-1668.	0.9	46
14	Kinesiology: Challenges of Multiple Agendas. Quest, 2007, 59, 5-24.	1.2	44
15	Physical Growth, Body Scale, and Perceptual-Motor Development. Advances in Child Development and Behavior, 2018, 55, 205-243.	1.3	43
16	Movement Science: Therapeutic Intervention as a Constraint in Learning and Relearning Movement Skills. Scandinavian Journal of Occupational Therapy, 1998, 5, 51-57.	1.7	41
17	Aging and the complexity of center of pressure in static and dynamic postural tasks. Neuroscience Letters, 2016, 610, 104-109.	2.1	37
18	Aging, time scales, and sensorimotor variability.. Psychology and Aging, 2009, 24, 809-818.	1.6	35

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19	Transfer as a function of exploration and stabilization in original practice. <i>Human Movement Science</i> , 2015, 44, 258-269.	1.4	35
20	Coordination and control of posture and ball release in basketball free-throw shooting. <i>Human Movement Science</i> , 2016, 49, 216-224.	1.4	34
21	Schema Theory (1975): Retrospectives and Prospectives. <i>Research Quarterly for Exercise and Sport</i> , 2003, 74, 383-388.	1.4	32
22	Repetition Without Repetition: Challenges in Understanding Behavioral Flexibility in Motor Skill. <i>Frontiers in Psychology</i> , 2020, 11, 2018.	2.1	30
23	Coordination of Grip Configurations as a Function of Force Output. <i>Journal of Motor Behavior</i> , 2000, 32, 73-82.	0.9	29
24	Transfer of a learned coordination function: Specific, individual and generalizable. <i>Human Movement Science</i> , 2018, 59, 66-80.	1.4	29
25	The Degrees of Freedom Problem in Human Standing Posture: Collective and Component Dynamics. <i>PLoS ONE</i> , 2014, 9, e85414.	2.5	29
26	Intra-individual gait patterns across different time-scales as revealed by means of a supervised learning model using kernel-based discriminant regression. <i>PLoS ONE</i> , 2017, 12, e0179738.	2.5	29
27	Postural Instability Detection: Aging and the Complexity of Spatial-Temporal Distributional Patterns for Virtually Contacting the Stability Boundary in Human Stance. <i>PLoS ONE</i> , 2014, 9, e108905.	2.5	28
28	Visual information and multi-joint coordination patterns in one-leg stance. <i>Gait and Posture</i> , 2014, 39, 909-914.	1.4	27
29	Assessing the Temporal Organization of Walking Variability: A Systematic Review and Consensus Guidelines on Detrended Fluctuation Analysis. <i>Frontiers in Physiology</i> , 2020, 11, 562.	2.8	27
30	Coordination as a function of skill level in the gymnastics longswing. <i>Journal of Sports Sciences</i> , 2016, 34, 429-439.	2.0	25
31	Physiological tremor (8–12Hz component) in isometric force control. <i>Neuroscience Letters</i> , 2017, 641, 87-93.	2.1	25
32	Body scaling of grip configurations in children aged 6-12 years. , 2000, 36, 301-310.		24
33	Further Evidence on the Dynamics of Self-Injurious Behaviors: Impact Forces and Limb Motions. <i>American Journal on Intellectual and Developmental Disabilities</i> , 2002, 107, 60.	2.4	24
34	Learning a specific, individual and generalizable coordination function: evaluating the variability of practice hypothesis in motor learning. <i>Experimental Brain Research</i> , 2018, 236, 3307-3318.	1.5	24
35	Transition of COM–COP relative phase in a dynamic balance task. <i>Human Movement Science</i> , 2014, 38, 1-14.	1.4	23
36	Search Strategies in Practice: Movement Variability Affords Perception of Task Dynamics. <i>Ecological Psychology</i> , 2017, 29, 243-258.	1.1	23

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37	Inter-foot coordination dynamics of quiet standing postures. <i>Neuroscience and Biobehavioral Reviews</i> , 2014, 47, 194-202.	6.1	22
38	Unifying practice schedules in the timescales of motor learning and performance. <i>Human Movement Science</i> , 2018, 59, 153-169.	1.4	22
39	Skill level changes the coordination and variability of standing posture and movement in a pistol-aiming task. <i>Journal of Sports Sciences</i> , 2018, 36, 809-816.	2.0	21
40	Individuality of movements in music – Finger and body movements during playing of the flute. <i>Human Movement Science</i> , 2014, 35, 131-144.	1.4	20
41	Vestibulo-ocular reflex function in children with high-functioning autism spectrum disorders. <i>Autism Research</i> , 2017, 10, 251-266.	3.8	20
42	Visual feedback during motor performance is associated with increased complexity and adaptability of motor and neural output. <i>Behavioural Brain Research</i> , 2019, 376, 112214.	2.2	19
43	The Sequential Structure of Movement Outcome in Learning a Discrete Timing Task. <i>Journal of Motor Behavior</i> , 1997, 29, 366-382.	0.9	18
44	Search strategies in practice: Influence of information and task constraints. <i>Acta Psychologica</i> , 2018, 182, 9-20.	1.5	18
45	Collective Variables and Task Constraints in Movement Coordination, Control and Skill. <i>Journal of Motor Behavior</i> , 2020, 53, 1-27.	0.9	18
46	Skill level constrains the coordination of posture and upper-limb movement in a pistol-aiming task. <i>Human Movement Science</i> , 2017, 55, 255-263.	1.4	17
47	The precision demands of viewing distance modulate postural coordination and control. <i>Human Movement Science</i> , 2019, 66, 425-439.	1.4	17
48	MODELING THE CONTROL OF ISOMETRIC FORCE PRODUCTION WITH PIECE-WISE LINEAR, STOCHASTIC MAPS OF MULTIPLE TIME-SCALES. <i>Fluctuation and Noise Letters</i> , 2003, 03, L23-L29.	1.5	16
49	Multifractal roots of suprapostural dexterity. <i>Human Movement Science</i> , 2021, 76, 102771.	1.4	16
50	Augmented feedback of COM and COP modulates the regulation of quiet human standing relative to the stability boundary. <i>Gait and Posture</i> , 2016, 47, 18-23.	1.4	15
51	Constraints specific influences of vision, touch and surface compliance in postural dynamics. <i>Gait and Posture</i> , 2018, 59, 117-121.	1.4	15
52	On Learning to Move Randomly. <i>Journal of Motor Behavior</i> , 2000, 32, 314-320.	0.9	14
53	Aging and the recovery of postural stability from taking a step. <i>Gait and Posture</i> , 2014, 40, 701-706.	1.4	14
54	Movement rehabilitation: are the principles of re-learning in the recovery of function the same as those of original learning?. <i>Disability and Rehabilitation</i> , 2017, 39, 121-126.	1.8	14

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55	Visual effort moderates postural cascade dynamics. <i>Neuroscience Letters</i> , 2021, 742, 135511.	2.1	14
56	Some Contemporary Issues in Motor Learning. <i>Advances in Experimental Medicine and Biology</i> , 2009, 629, 395-404.	1.6	14
57	Time Scales, Difficulty/Skill Duality, and the Dynamics of Motor Learning. <i>Advances in Experimental Medicine and Biology</i> , 2009, 629, 457-476.	1.6	14
58	S-Shaped motor learning and nonequilibrium phase transitions.. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 2015, 41, 403-414.	0.9	13
59	Entropy of spaceâ€‘time outcome in a movement speedâ€‘accuracy task. <i>Human Movement Science</i> , 2015, 44, 201-210.	1.4	13
60	Maintenance of postural stability as a function of tilted base of support. <i>Human Movement Science</i> , 2016, 48, 91-101.	1.4	13
61	Perception of the length of an object through dynamic touch is invariant across changes in the medium. <i>Attention, Perception, and Psychophysics</i> , 2017, 79, 2499-2509.	1.3	13
62	Bimanual coordination and the intermittency of visual information in isometric force tracking. <i>Experimental Brain Research</i> , 2016, 234, 2025-2034.	1.5	11
63	Transitions of postural coordination as a function of frequency of the moving support platform. <i>Human Movement Science</i> , 2017, 52, 24-35.	1.4	11
64	Differences in postural tremor dynamics with age and neurological disease. <i>Experimental Brain Research</i> , 2017, 235, 1719-1729.	1.5	11
65	Adapting relative phase of bimanual isometric force coordination through scaling visual information intermittency. <i>Human Movement Science</i> , 2016, 47, 186-196.	1.4	10
66	Search Strategies in Practice: Testing the Effect of Inherent Variability on Search Patterns. <i>Ecological Psychology</i> , 2020, 32, 115-138.	1.1	10
67	Limit cycle dynamics of the gymnastics longswing. <i>Human Movement Science</i> , 2018, 57, 217-226.	1.4	9
68	Temperature influences perception of the length of a wielded object via effortful touch. <i>Experimental Brain Research</i> , 2018, 236, 505-516.	1.5	9
69	Mapping collective variable and synergy dynamics to task outcome in a perceptual-motor skill. <i>PLoS ONE</i> , 2019, 14, e0215460.	2.5	9
70	Exploration of the Specificity of Motor Skills Hypothesis in 7â€‘8 Year Old Primary School Children: Exploring the Relationship Between 12 Different Motor Skills From Two Different Motor Competence Test Batteries. <i>Frontiers in Psychology</i> , 2021, 12, 631175.	2.1	9
71	Onset of Dyskinesia and Changes in Postural Task Performance During the Course of Neuroleptic Withdrawal. <i>American Journal on Intellectual and Developmental Disabilities</i> , 2002, 107, 270.	2.4	8
72	Real-time visual feedback of COM and COP motion properties differentially modifies postural control structures. <i>Experimental Brain Research</i> , 2017, 235, 109-120.	1.5	8

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73	Scaling oscillatory platform frequency reveals recurrence of intermittent postural attractor states. <i>Scientific Reports</i> , 2018, 8, 11580.	3.3	8
74	Physical Education of and Through Fitness and Skill. <i>Quest</i> , 2011, 63, 46-54.	1.2	7
75	Recurrence dynamics reveals differential control strategies to maintain balance on sloped surfaces. <i>Gait and Posture</i> , 2019, 69, 169-175.	1.4	7
76	Teaching Children's Motor Skills for Team Games Through Guided Discovery: How Constraints Enhance Learning. <i>Frontiers in Psychology</i> , 2021, 12, 724848.	2.1	6
77	Differential time scales of change to learning frequency structures of isometric force tracking.. <i>Journal of Experimental Psychology: Human Perception and Performance</i> , 2014, 40, 1629-1640.	0.9	5
78	Stone-Tool Use in Wild Monkeys: Implications for the Study of the Body-Plus-Tool System. <i>Ecological Psychology</i> , 2017, 29, 300-316.	1.1	5
79	Qualitative and quantitative change in the kinematics of learning a non-dominant overarm throw. <i>Human Movement Science</i> , 2018, 62, 134-142.	1.4	5
80	Center-of-pressure dynamics of upright standing as a function of sloped surfaces and vision. <i>Neuroscience Letters</i> , 2020, 737, 135334.	2.1	5
81	Bidirectional causal control in the dynamics of handstand balance. <i>Scientific Reports</i> , 2021, 11, 405.	3.3	5
82	Landscape Dynamics of Motor Learning and Development. <i>Critical Reviews in Biomedical Engineering</i> , 2012, 40, 519-534.	0.9	5
83	Perceptual Learning of Tooling Affordances of a Jointed Object via Dynamic Touch. <i>Ecological Psychology</i> , 2019, 31, 14-29.	1.1	4
84	Postural coordination and control to the precision demands of light finger touch. <i>Experimental Brain Research</i> , 2019, 237, 1339-1346.	1.5	4
85	Task specificity and the timing of discrete aiming movements. <i>Human Movement Science</i> , 2019, 64, 240-251.	1.4	4
86	Intraindividual Variability of Neuromotor Function Predicts Falls Risk in Older Adults and those with Type 2 Diabetes. <i>Journal of Motor Behavior</i> , 2019, 51, 151-160.	0.9	4
87	Movement Speed and Accuracy in Space and Time: The Complementarity of Error Distributions. <i>Journal of Motor Behavior</i> , 2019, 51, 100-112.	0.9	4
88	Movement form of the overarm throw for children at 6, 10 and 14 years of age. <i>European Journal of Sport Science</i> , 2021, 21, 1254-1262.	2.7	4
89	Frames of reference and normal movement. <i>Behavioral and Brain Sciences</i> , 1996, 19, 83-84.	0.7	3
90	Compensatory mechanisms of balance to the scaling of arm-swing frequency. <i>Journal of Biomechanics</i> , 2015, 48, 3825-3829.	2.1	3

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91	A test of fixed and moving reference point control in posture. <i>Gait and Posture</i> , 2017, 51, 52-57.	1.4	3
92	Attractor dynamics of elite performance: the high bar longswing. <i>Sports Biomechanics</i> , 2021, , 1-14.	1.6	3
93	Force-Time Entropy of Isometric Impulse. <i>Journal of Motor Behavior</i> , 2016, 48, 227-239.	0.9	2
94	Location of a grasped object's effector influences perception of the length of that object via dynamic touch. <i>Experimental Brain Research</i> , 2018, 236, 2107-2121.	1.5	2
95	Task and Informational Constraints on Search Strategies: Testing the Idea of Convergence to Tolerant Regions. <i>Journal of Motor Behavior</i> , 2021, , 1-16.	0.9	2
96	Are Sub-Movements Induced Visually in Discrete Aiming Tasks?. <i>Journal of Motor Behavior</i> , 2022, 54, 173-185.	0.9	2
97	Atypical neural processing during the execution of complex sensorimotor behavior in autism. <i>Behavioural Brain Research</i> , 2021, 409, 113337.	2.2	2
98	Practice and transfer of the frequency structures of continuous isometric force. <i>Human Movement Science</i> , 2014, 34, 28-40.	1.4	1
99	Load-induced changes in older individual's hand-finger tremor are ameliorated with targeting. <i>Journal of the Neurological Sciences</i> , 2014, 339, 69-74.	0.6	1
100	Selective visual scaling of time-scale processes facilitates broadband learning of isometric force frequency tracking. <i>Attention, Perception, and Psychophysics</i> , 2015, 77, 2507-2518.	1.3	1
101	Cross-limb dynamics of postural tremor due to limb loading to fatigue: neural overflow but not coupling. <i>Journal of Neurophysiology</i> , 2019, 122, 572-584.	1.8	1
102	Multidimensional joint coupling: a case study visualisation approach to movement coordination and variability. <i>Sports Biomechanics</i> , 2020, 19, 322-332.	1.6	1
103	Learning the High Bar Longswing:I. Task Dynamics and Emergence of the Coordination Pattern. <i>Journal of Sports Sciences</i> , 2021, 39, 2683-2697.	2.0	1
104	Learning the high bar longswing:II. energetics and the emergence of the coordination pattern. <i>Journal of Sports Sciences</i> , 2021, 39, 2698-2705.	2.0	1
105	Task and Skill Level Constraints on the Generality of the Proximal-Distal Principle for Within-Limb Movement Coordination. <i>Journal of Motor Learning and Development</i> , 2021, , 1-20.	0.4	1
106	Modeling movement variability in space and time. <i>Behavioral and Brain Sciences</i> , 1997, 20, 322-322.	0.7	0
107	Skill level and the free moment during a pistol aiming task. <i>Sports Biomechanics</i> , 2021, , 1-10.	1.6	0
108	Establishing Task-Relevant MVC Protocols for Modelling Sustained Isometric Force Variability: A Manual Control Study. <i>Journal of Functional Morphology and Kinesiology</i> , 2021, 6, 94.	2.4	0

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109	NCS Assessments of the Motor, Sensory, and Physical Health Domains. <i>Frontiers in Pediatrics</i> , 2021, 9, 622542.	1.9	0
110	Instructions on Task Constraints Mediate Perceptual-Motor Search and How Movement Variability Relates to Performance Outcome. <i>Journal of Motor Behavior</i> , 2022, , 1-17.	0.9	0
111	A Nonlinear System Model of Isometric Force. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0