Patrick M Pilarski

List of Publications by Year
in descending order

71	1,626	471509 17	361022 35
papers	citations	h-index	g-index

76	76	76	2009
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recurrent Convolutional Neural Networks as an Approach to Position-Aware Myoelectric Prosthesis Control. IEEE Transactions on Biomedical Engineering, 2022, 69, 2243-2255.	4.2	12
2	Preliminary testing of eye gaze interfaces for controlling a haptic system intended to support play in children with physical impairments: Attentive versus explicit interfaces. Journal of Rehabilitation and Assistive Technologies Engineering, 2022, 9, 205566832210796.	0.9	0
3	Prediction, Knowledge, and Explainability: Examining the Use of General Value Functions in Machine Knowledge. Frontiers in Artificial Intelligence, 2022, 5, 826724.	3.4	0
4	Embodied Cooperation to Promote Forgiving Interactions With Autonomous Machines. Frontiers in Neurorobotics, 2021, 15, 661603.	2.8	5
5	Sub-centimeter 3D gaze vector accuracy on real-world tasks: an investigation of eye and motion capture calibration routines. , 2021, , .		0
6	Myoelectric prosthesis users and non-disabled individuals wearing a simulated prosthesis exhibit similar compensatory movement strategies. Journal of NeuroEngineering and Rehabilitation, 2021, 18, 72.	4.6	14
7	Machine Learning for the Control of Prosthetic Arms: Using Electromyographic Signals for Improved Performance. IEEE Signal Processing Magazine, 2021, 38, 46-53.	5.6	12
8	Comparison of a Miniaturized Cassette PCR System with a Commercially Available Platform for Detecting Escherichia coli in Beef Carcass Swabs. Micromachines, 2021, 12, 959.	2.9	0
9	Compensatory strategies of body-powered prosthesis users reveal primary reliance on trunk motion and relation to skill level. Clinical Biomechanics, 2020, 72, 122-129.	1.2	13
10	Examining the Use of Temporal-Difference Incremental Delta-Bar-Delta for Real-World Predictive Knowledge Architectures. Frontiers in Robotics and AI, 2020, 7, 34.	3.2	3
11	Gamma-Nets: Generalizing Value Estimation over Timescale. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 5717-5725.	4.9	2
12	Interpretable PID parameter tuning for control engineering using general dynamic neural networks: An extensive comparison. PLoS ONE, 2020, 15, e0243320.	2.5	8
13	Detection of pathogenic Escherichia coli on potentially contaminated beef carcasses using cassette PCR and conventional PCR. BMC Microbiology, 2019, 19, 175.	3.3	9
14	Hand Function Kinematics when using a Simulated Myoelectric Prosthesis. , 2019, 2019, 169-174.		9
15	The Effect of an Automatically Levelling Wrist Control System. , 2019, 2019, 816-823.		3
16	Exploring the Impact of Machine-Learned Predictions on Feedback from an Artificial Limb. , 2019, 2019, 1239-1246.		4
17	Quantitative Eye Gaze and Movement Differences in Visuomotor Adaptations to Varying Task Demands Among Upper-Extremity Prosthesis Users. JAMA Network Open, 2019, 2, e1911197.	5.9	26
18	Characterization of normative angular joint kinematics during two functional upper limb tasks. Gait and Posture, 2019, 69, 176-186.	1.4	27

#	Article	IF	Citations
19	Supporting Play by Applying Haptic Guidance Along a Surface Learnt from Single Motion Trajectories. , 2019, 2019, 175-180.		0
20	Gaze and Movement Assessment (GaMA): Inter-site validation of a visuomotor upper limb functional protocol. PLoS ONE, 2019, 14, e0219333.	2.5	14
21	Comparison of Attentive and Explicit Eye Gaze Interfaces for Controlling Haptic Guidance of a Robotic Controller. Journal of Medical Robotics Research, 2019, 04, 1950005.	1.2	0
22	Cluster-based upper body marker models for three-dimensional kinematic analysis: Comparison with an anatomical model and reliability analysis. Journal of Biomechanics, 2018, 72, 228-234.	2.1	29
23	Accelerating Learning in Constructive Predictive Frameworks with the Successor Representation. , 2018, , .		6
24	Initial Investigation of a Self-Adjusting Wrist Control System to Maintain Prosthesis Terminal Device Orientation Relative to the Ground Reference Frame. , 2018, , .		3
25	Using synchronized eye and motion tracking to determine high-precision eye-movement patterns during object-interaction tasks. Journal of Vision, 2018, 18, 18.	0.3	33
26	Monitoring food pathogens: Novel instrumentation for cassette PCR testing. PLoS ONE, 2018, 13, e0197100.	2.5	4
27	Preliminary Testing of a Telerobotic Haptic System and Analysis of Visual Attention During a Playful Activity. , 2018, , .		5
28	Context-Aware Learning from Demonstration: Using Camera Data to Support the Synergistic Control of a Multi-Joint Prosthetic Arm. , 2018, , .		1
29	Characterization of normative hand movements during two functional upper limb tasks. PLoS ONE, 2018, 13, e0199549.	2.5	44
30	Reactive Reinforcement Learning in Asynchronous Environments. Frontiers in Robotics and AI, 2018, 5, 79.	3.2	13
31	Learning from demonstration: Teaching a myoelectric prosthesis with an intact limb via reinforcement learning. , 2017, 2017, 1457-1464.		20
32	Representing high-dimensional data to intelligent prostheses and other wearable assistive robots: A first comparison of tile coding and selective Kanerva coding. , 2017, 2017, 1443-1450.		12
33	Editorial: Peripheral Nervous System-Machine Interfaces (PNS-MI). Frontiers in Neurorobotics, 2017, 11, 54.	2.8	0
34	4. Upper and Lower Limb Robotic Prostheses. Rehabilitation Science in Practice Series, 2017, , 99-144.	0.0	2
35	Assessment of feature selection and classification methods for recognizing motor imagery tasks from electroencephalographic signals. Artificial Intelligence Research, 2016, 6, .	0.3	15
36	Steps toward knowledgeable neuroprostheses. , 2016, , .		3

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37	Machine learning and unlearning to autonomously switch between the functions of a myoelectric arm. , 2016, , .		10
38	Application of real-time machine learning to myoelectric prosthesis control. Prosthetics and Orthotics International, 2016, 40, 573-581.	1.0	49
39	Intelligent laser welding through representation, prediction, and control learning: An architecture with deep neural networks and reinforcement learning. Mechatronics, 2016, 34, 1-11.	3.3	120
40	Introspective Agents: Confidence Measures for General Value Functions. Lecture Notes in Computer Science, 2016, , 258-261.	1.3	8
41	A Collaborative Approach to the Simultaneous Multi-joint Control of a Prosthetic Arm. , 2015, , .		13
42	Abstract 3972: MicroRNAs as potential therapeutic agents for AML: Targeting the AML1-ETO Oncogene by pre-miR-520 and -373. , 2015, , .		0
43	A Genome-Wide Aberrant RNA Splicing in Patients with Acute Myeloid Leukemia Identifies Novel Potential Disease Markers and Therapeutic Targets. Clinical Cancer Research, 2014, 20, 1135-1145.	7.0	85
44	First Steps Towards an Intelligent Laser Welding Architecture Using Deep Neural Networks and Reinforcement Learning. Procedia Technology, 2014, 15, 474-483.	1.1	203
45	NOTCH2 and FLT3 gene mis-splicings are common events in patients with acute myeloid leukemia (AML): new potential targets in AML. Blood, 2014, 123, 2816-2825.	1.4	36
46	Real-time prediction learning for the simultaneous actuation of multiple prosthetic joints. , 2013, 2013, 6650435.		16
47	Adaptive artificial limbs: a real-time approach to prediction and anticipation. IEEE Robotics and Automation Magazine, 2013, 20, 53-64.	2.0	43
48	Nanotechnology and medical devices: Risk, regulation and â€˜metaâ€™ registration. World Journal of Engineering, 2013, 10, 191-198.	1.6	8
49	Aberrant Splicing, Hyaluronan Synthases and Intracellular Hyaluronan as Drivers of Oncogenesis and Potential Drug Targets. Current Cancer Drug Targets, 2013, 13, 347-361.	1.6	25
50	Alternative Splicing in Chronic Myeloid Leukemia (CML): A Novel Therapeutic Target?. Current Cancer Drug Targets, 2013, 13, 735-748.	1.6	10
51	Aberrant Splicing In Patients With AML Is Associated With Over- Expression Of Specific Splicing Factors. Blood, 2013, 122, 3749-3749.	1.4	3
52	Acquiring a broad range of empirical knowledge in real time by temporal-difference learning. , 2012, , .		4
53	Model-Free reinforcement learning with continuous action in practice. , 2012, , .		99
54	Tuning-free step-size adaptation. , 2012, , .		27

#	Article	IF	Citations
55	Dynamic switching and real-time machine learning for improved human control of assistive biomedical robots. , 2012, , .		29
56	Online human training of a myoelectric prosthesis controller via actor-critic reinforcement learning. , 2011, 2011, 5975338.		85
57	Towards robust cellular image classification: theoretical foundations for wide-angle â€¨scattering pattern analysis. Biomedical Optics Express, 2010, 1, 1225.	2.9	1
58	Multiple myeloma may include microvessel endothelial cells of malignant origin. Leukemia and Lymphoma, 2010, 51, 592-597.	1.3	4
59	Genetic Abnormalities in WaldenstrÃ¶m's Macroglobulinemia. Clinical Lymphoma and Myeloma, 2009, 9, 30-32.	1.4	3
60	Computational analysis of mitochondrial placement and aggregation effects on wide-angle cell scattering patterns. Proceedings of SPIE, 2009, , .	0.8	2
61	Rapid simulation of wide-angle scattering from mitochondria in single cells. Optics Express, 2008, 16, 12819.	3.4	4
62	Inherited and acquired variations in the hyaluronan synthase 1 (HAS1) gene may contribute to disease progression in multiple myeloma and Waldenstrom macroglobulinemia. Blood, 2008, 112, 5111-5121.	1.4	30
63	Multiple Myeloma Includes Phenotypically Defined Subsets of Clonotypic CD20+ B Cells that Persist during Treatment with Rituximab. Clinical Medicine Oncology, 2008, 2, CMO.S615.	0.3	17
64	FISH and chips: chromosomal analysis on microfluidic platforms. IET Nanobiotechnology, 2007, 1, 27.	3.8	55
65	Germline and Somatic Mutations in the Hyaluronan Synthaseâ€“1 (HAS1) Gene May Contribute to Oncogenesis in Multiple Myeloma (MM) and Waldenstromâ€™s Macroglobulinemia (WM).. Blood, 2007, 110, 2488-2488.	1.4	0
66	A method for cytometric image parameterization. Optics Express, 2006, 14, 12720.	3.4	8
67	Small volume PCR in PDMS biochips with integrated fluid control and vapour barrier. Sensors and Actuators B: Chemical, 2006, 113, 398-409.	7.8	83
68	Accumulation of Inherited and Acquired Mutations in Hyaluronan Synthase1 Gene May Contribute Oncogenesis in Multiple Myeloma and Waldenstromâ€™s Macroglobulinemia.. Blood, 2006, 108, 3432-3432.	1.4	0
69	FISH and Chips: Novel, Point of Care Technology To Detect Chromosomal Abnormalities.. Blood, 2006, 108, 3402-3402.	1.4	0
70	An adaptable microvalving system for on-chip polymerase chain reactions. Journal of Immunological Methods, 2005, 305, 48-58.	1.4	30
71	Whatâ€™s a good prediction? Challenges in evaluating an agentâ€™s knowledge. Adaptive Behavior, 0, , 105971232210958.	1.9	0