

# Vincent Duchaine

## List of Publications by Year in descending order

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Version: 2024-02-01

31  
papers

1,240  
citations

1163117

8  
h-index

1125743

13  
g-index

31  
all docs

31  
docs citations

31  
times ranked

1493  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Soft Strain Sensor Based on Ionic and Metal Liquids. IEEE Sensors Journal, 2013, 13, 3405-3414.	4.7	288
2	General Model of Human-Robot Cooperation Using a Novel Velocity Based Variable Impedance Control. , 2007, , .		139
3	Soft Tactile Skin Using an Embedded Ionic Liquid and Tomographic Imaging. Journal of Mechanisms and Robotics, 2015, 7, .	2.2	86
4	Wearable soft artificial skin for hand motion detection with embedded microfluidic strain sensing. , 2015, , .		82
5	Safe, Stable and Intuitive Control for Physical Human-Robot Interaction. , 2009, , .		73
6	A flexible robot skin for safe physical human robot interaction. , 2009, , .		64
7	Computationally Efficient Predictive Robot Control. IEEE/ASME Transactions on Mechatronics, 2007, 12, 570-578.	5.8	59
8	An Improved Soft Dielectric for a Highly Sensitive Capacitive Tactile Sensor. IEEE Sensors Journal, 2016, 16, 7853-7863.	4.7	57
9	Investigation of human-robot interaction stability using Lyapunov theory. , 2008, , .		50
10	A Friendly Beast of Burden: A Human-Assistive Robot for Handling Large Payloads. IEEE Robotics and Automation Magazine, 2013, 20, 139-147.	2.0	50
11	Parallel Mechanisms of the Multipteran Family: Kinematic Architectures and Benchmarking. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	46
12	Characterization of the electrical resistance of carbon-black-filled silicone: Application to a flexible and stretchable robot skin. , 2010, , .		41
13	Improving Industrial Grippers With Adhesion-Controlled Friction. IEEE Robotics and Automation Letters, 2018, 3, 1041-1048.	5.1	37
14	Grasp stability assessment through the fusion of proprioception and tactile signals using convolutional neural networks. , 2017, , .		34
15	A highly sensitive multimodal capacitive tactile sensor. , 2017, , .		32
16	Grasp stability assessment through unsupervised feature learning of tactile images. , 2017, , .		29
17	Unsupervised feature learning for classifying dynamic tactile events using sparse coding. , 2016, , .		23
18	The Impact of Simultaneously Applying Normal Stress and Vibrotactile Stimulation for Feedback of Exteroceptive Information. Journal of Biomechanical Engineering, 2017, 139, .	1.3	9

#	ARTICLE	IF	CITATIONS
19	Miniature capacitive three-axis force sensor. , 2014, , .		7
20	A Wearable Haptic Device Based on Twisting Wire Actuators for Feedback of Tactile Pressure Information. Journal of Robotics and Mechatronics, 2015, 27, 419-429.	1.0	5
21	STRUCTURAL OPTIMISATION OF A FORCE-TORQUE SENSOR THROUGH ITS INPLUT-OUTPUT RELATIONSHIP. Transactions of the Canadian Society for Mechanical Engineering, 2014, 38, 199-212.	0.8	4
22	MCOA: mutated and self-adaptive cuckoo optimization algorithm. Evolutionary Intelligence, 2016, 9, 21-36.	3.6	4
23	Texture roughness estimation using dynamic tactile sensing. , 2017, , .		4
24	Unified Robot Control Scheme for Cooperative Motion, Autonomous Motion and Contact Reaction. Journal of Robotics and Mechatronics, 2011, 23, 557-566.	1.0	4
25	Capacitive Tactile Sensor Using Mutual Capacitance Sensing Method for Increased Resolution. , 2022, , .		4
26	Determining Object Properties from Tactile Events During Grasp Failure. , 2019, , .		3
27	Improving the Generalizability of Robot Assembly Tasks Learned from Demonstration via CNN-based Segmentation. , 2019, , .		3
28	The Programmable Permanent Magnet Actuator: A Paradigm Shift in Efficiency for Low-Speed Torque-Holding Robotic Applications. IEEE Robotics and Automation Letters, 2018, 3, 1751-1758.	5.1	2
29	A comparative study of the optimal control design using evolutionary algorithms: Application on a close-loop system. , 2017, , .		1
30	Textures recognition through tactile exploration for robotic applications. , 2017, , .		0
31	An Extrinsic Dexterity Approach to the IROS 2018 Fan Robotic Challenge. , 2018, , .		0