

# Vincent Duchaine

## List of Publications by Year in descending order

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31  
papers

1,240  
citations

1163117

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1125743

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docs citations

31  
times ranked

1493  
citing authors

#	ARTICLE	IF	CITATIONS
1	Capacitive Tactile Sensor Using Mutual Capacitance Sensing Method for Increased Resolution. , 2022, ,		4
2	Determining Object Properties from Tactile Events During Grasp Failure. , 2019, ,		3
3	Improving the Generalizability of Robot Assembly Tasks Learned from Demonstration via CNN-based Segmentation. , 2019, ,		3
4	Improving Industrial Grippers With Adhesion-Controlled Friction. IEEE Robotics and Automation Letters, 2018, 3, 1041-1048.	5.1	37
5	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
6	An Extrinsic Dexterity Approach to the IROS 2018 Fan Robotic Challenge. , 2018, , ,		0
7	The Impact of Simultaneously Applying Normal Stress and Vibrotactile Stimulation for Feedback of Exteroceptive Information. Journal of Biomechanical Engineering, 2017, 139, .	1.3	9
8	Texture roughness estimation using dynamic tactile sensing. , 2017, , ,		4
9	Textures recognition through tactile exploration for robotic applications. , 2017, , ,		0
10	A comparative study of the optimal control design using evolutionary algorithms: Application on a close-loop system. , 2017, , ,		1
11	Grasp stability assessment through the fusion of proprioception and tactile signals using convolutional neural networks. , 2017, , ,		34
12	Grasp stability assessment through unsupervised feature learning of tactile images. , 2017, , ,		29
13	A highly sensitive multimodal capacitive tactile sensor. , 2017, , ,		32
14	MCOA: mutated and self-adaptive cuckoo optimization algorithm. Evolutionary Intelligence, 2016, 9, 21-36.	3.6	4
15	An Improved Soft Dielectric for a Highly Sensitive Capacitive Tactile Sensor. IEEE Sensors Journal, 2016, 16, 7853-7863.	4.7	57
16	Unsupervised feature learning for classifying dynamic tactile events using sparse coding. , 2016, , ,		23
17	Soft Tactile Skin Using an Embedded Ionic Liquid and Tomographic Imaging. Journal of Mechanisms and Robotics, 2015, 7, .	2.2	86
18	Wearable soft artificial skin for hand motion detection with embedded microfluidic strain sensing. , 2015, , ,		82

#	ARTICLE	IF	CITATIONS
19	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
20	STRUCTURAL OPTIMISATION OF A FORCE-TORQUE SENSOR THROUGH ITS INPUT-OUTPUT RELATIONSHIP. Transactions of the Canadian Society for Mechanical Engineering, 2014, 38, 199-212.	0.8	4
21	Miniature capacitive three-axis force sensor. , 2014, , .		7
22	A Soft Strain Sensor Based on Ionic and Metal Liquids. IEEE Sensors Journal, 2013, 13, 3405-3414.	4.7	288
23	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
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	Characterization of the electrical resistance of carbon-black-filled silicone: Application to a flexible and stretchable robot skin. , 2010, , .		41
26	Safe, Stable and Intuitive Control for Physical Human-Robot Interaction. , 2009, , .		73
27	A flexible robot skin for safe physical human robot interaction. , 2009, , .		64
28	Investigation of human-robot interaction stability using Lyapunov theory. , 2008, , .		50
29	Computationally Efficient Predictive Robot Control. IEEE/ASME Transactions on Mechatronics, 2007, 12, 570-578.	5.8	59
30	Parallel Mechanisms of the Multipterion Family: Kinematic Architectures and Benchmarking. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	46
31	General Model of Human-Robot Cooperation Using a Novel Velocity Based Variable Impedance Control. , 2007, , .		139