

# Henrique Simas

## List of Publications by Year in descending order

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41  
papers

231  
citations

1307366

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1058333

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g-index

44  
all docs

44  
docs citations

44  
times ranked

122  
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficiency of gear trains determined using graph and screw theories. Mechanism and Machine Theory, 2012, 52, 296-325.	2.7	47
2	Force capability in general 3DoF planar mechanisms. Mechanism and Machine Theory, 2015, 91, 120-134.	2.7	24
3	A new method to solve robot inverse kinematics using Assur virtual chains. Robotica, 2009, 27, 1017-1026.	1.3	19
4	Geometric Error Effects on Manipulators' Positioning Precision: A General Analysis and Evaluation Method. Journal of Mechanisms and Robotics, 2016, 8, .	1.5	16
5	Wrench capability in redundant planar parallel manipulators with net degree of constraint equal to four, five or six. Mechanism and Machine Theory, 2016, 105, 58-79.	2.7	16
6	A Technique Based on Adaptive Extended Jacobians for Improving the Robustness of the Inverse Numerical Kinematics of Redundant Robots. Journal of Mechanisms and Robotics, 2019, 11, .	1.5	12
7	Triflex II: design and analysis of a self-aligning parallel mechanism with asymmetrical kinematic structure. Meccanica, 2017, 52, 2991-3002.	1.2	8
8	Machine efficiency determined using graph and screw theories with application in robotics. Mechanism and Machine Theory, 2020, 148, 103748.	2.7	7
9	A new kinetostatic model for humanoid robots using screw theory. Robotica, 2018, 36, 570-587.	1.3	6
10	Dimensional synthesis of the single-loop translational parallel manipulator PRRR-PRPU. Meccanica, 2018, 53, 481-495.	1.2	6
11	Position analysis, singularity loci and workspace of a novel 2<u>P</u>R<u>P</u>U Schoenflies-motion generator. Robotica, 2019, 37, 141-160.	1.3	6
12	Triflex: variable-configuration parallel manipulators with self-aligning. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2015, 37, 1129-1138.	0.8	5
13	Smooth transition for collision avoidance of redundant robots: An on-line polynomial approach. Robotics and Computer-Integrated Manufacturing, 2021, 72, 102087.	6.1	5
14	Analysis of Self-aligning Mechanisms by Means of Matroid Theory. Mechanisms and Machine Science, 2018, , 61-73.	0.3	5
15	TetraFLEX: Design and kinematic analysis of a novel self-aligning family of 3T1R parallel manipulators. Journal of Field Robotics, 2022, 39, 617-630.	3.2	5
16	Force Capability Polytope of a 4RRR Redundant Planar Parallel Manipulator. , 2014, , 87-94.		4
17	Performance-Based Design of the CRS-RRC Schoenflies-Motion Generator. Robotics, 2018, 7, 55.	2.1	4
18	A New Methodology for the Balancing of Mechanisms Using the Davies's™ Method. Mechanisms and Machine Science, 2018, , 203-212.	0.3	4

#	ARTICLE	IF	CITATIONS
19	Selecting Kinematic Structures of Parallel Manipulators Using Symmetry and Connectivity. , 2015, , .		3
20	Structural analysis, survey and classification of kinematic chains for Atkinson cycle engines. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	0.8	3
21	Smooth path planning for redundant robots on collision avoidance. Mechanisms and Machine Science, 2019, , 1869-1878.	0.3	3
22	Analysis of wrench capability for cooperative robotic systems.. , 0, , .		3
23	TRIFLEX U - Kinematic and Error Analysis of a Self-aligned Translational Parallel Manipulator PRRU. Mechanisms and Machine Science, 2019, , 2641-2650.	0.3	3
24	A General Technique to Evaluate the Effects of Manufacturing Errors on Positioning Precision During Design. , 2016, , .		2
25	Wrench distribution of a cooperative robotic system using a modified scaling factor method. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	0.8	2
26	Influence of the assembly mode on the force capability in parallel manipulators. , 0, , .		2
27	Development of an automated system for cavitation repairing in rotors of large hydroelectric plants. , 2012, , .		1
28	Kinematics of a Particular 3T1R Parallel Manipulator of Type 2PRPU. , 2017, , .		1
29	A Grasp Synthesis Method for a Three Finger Gripper. , 2018, , .		1
30	Adaptive Extended Jacobian Can Improve the Global Conditioning Index of Redundant Robots. , 2018, , .		1
31	Actuation scheme enumeration and optimal selection for parallel mechanisms based on matroid theory. Mechanism and Machine Theory, 2020, 151, 103891.	2.7	1
32	Analysis of a Proposal for a Self-aligning Mechanism for Cartesian Robot in Greenhouses. Mechanisms and Machine Science, 2022, , 37-45.	0.3	1
33	Kinematics Programming for Cooperating Robotic Systems. International Federation for Information Processing, 2012, , 189-198.	0.4	1
34	Contribution to the Design of Hospital Bed: Systematic for Surveying the Design Requirements and Functional Requirements for Synthesis of Mechanism. Advances in Intelligent Systems and Computing, 2018, , 652-662.	0.5	1
35	Maximum Isotropic Force Capability Maps in Planar Cooperative Systems: A Practical Case Study. Mechanisms and Machine Science, 2018, , 160-170.	0.3	1
36	Mobility Analysis and Self-alignment of a Novel Asymmetric 3T Parallel Manipulator. Mechanisms and Machine Science, 2021, , 94-101.	0.3	1

#	ARTICLE	IF	CITATIONS
37	Wriflex: Design and Kinematic Analysis of Self-aligning Parallel Wrist. Springer Proceedings in Advanced Robotics, 2022, , 340-347.	0.9	1
38	Simulation of Impedance-Based Haptic Feedback in Bilateral Teleoperated Robot System with Virtual Constraints. , 2018, , .		0
39	Assembly Sequence Planning for Shape Heterogeneous Modular Robot Systems. Mechanisms and Machine Science, 2018, , 128-137.	0.3	0
40	2D balance control of a self-balancing robot for power inspection in urban networks. Revista Principia, 0, , .	0.1	0
41	Kinetostatic analysis for compliant legged robots with ground contact forces evaluation. Meccanica, 0, , .	1.2	0