Yi Lu

List of Publications by Year
in descending order

65	522	759233	794594
papers	citations	12 h-index	19 g-index

65	65	65	298
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Kinematic and Stiffness Modeling of a Novel 3-DOF RPU+UPU+SPU Parallel Manipulator. IEEE Access, 2022, 10, 6304-6318.	4.2	3
2	Dynamics of moving-object grasped by a hybrid hand. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2022, 236, 182-201.	0.8	0
3	Design and dynamics of a novel parallel coaxial twin rotor of helicopter. Aerospace Science and Technology, 2022, 127, 107654.	4.8	2
4	Development of Novel Hybrid Hand Formed by a Parallel Wrist and Three Soft-flexible Fingers. Journal of Bionic Engineering, 2022, 19, 1349-1358.	5.0	2
5	Development and kinematics/statics analysis of rigid-flexible-soft hybrid finger mechanism with standard force sensor. Robotics and Computer-Integrated Manufacturing, 2021, 67, 101978.	9.9	11
6	Derivation of General Acceleration and Hessian Matrix of Kinematic Limbs in Parallel Manipulator by Extended Skew-Symmetric Matrixes. Archives of Computational Methods in Engineering, 2021, 28, 3035-3047.	10.2	7
7	Development and dynamics of a 2SPU+UPU+SP parallel rotor of helicopter. Aerospace Science and Technology, 2021, 118, 107066.	4.8	5
8	Stiffness and Elastic Deformation of 4-DoF Parallel Manipulator with Three Asymmetrical Legs for Supporting Helicopter Rotor. Journal of Robotics, 2020, 2020, 1-11.	0.9	2
9	Precise Stiffness and Elastic Deformations of Serialâ€“Parallel Manipulators by Considering Inertial Wrench of Moving Links. Robotica, 2020, 38, 2204-2220.	1.9	0
10	Kinematically Identical Manipulators Derivation for the 2-RPU + UPR Parallel Manipulator and Their Constraint Performance Comparison. Journal of Mechanisms and Robotics, 2020, 12, .	2.2	10
11	Type synthesis and kinematics analysis of parallel manipulators with equivalent composite universal joints. Journal of Mechanical Science and Technology, 2019, 33, 5473-5482.	1.5	1
12	A novel parallel sensor with six rigid compliant limbs for measuring six- component force/torque. Journal of Mechanical Science and Technology, 2019, 33, 2883-2892.	1.5	5
13	Dynamics analysis of novel parallel manipulator with one central rotational actuator and four translational actuators. Journal of Mechanical Science and Technology, 2019, 33, 2893-2902.	1.5	3
14	Kinematics/dynamics analysis of novel 3UPURÂ $${+}$$ + ÂSP-type hybrid hand with three flexible fingers. Nonlinear Dynamics, 2018, 91, 1127-1144.	5.2	4
15	Type Synthesis of 5-DoF Parallel Mechanisms with Different Submechanisms. Mathematical Problems in Engineering, 2018, 2018, 1-13.	1.1	1
16	Dynamics analysis of a novel 5-DoF parallel manipulator with couple-constrained wrench. Robotica, 2018, 36, 1421-1435.	1.9	9
17	New kinematics Hessian matrixes of manipulators based on Skew-symmetric matrixes theory. Applied Mathematical Modelling, 2018, 63, 55-67.	4.2	4
18	Dynamics analysis and workspace of a novel 4-DoF parallel manipulator with multi-couple constrained wrenches. Journal of Mechanical Science and Technology, 2018, 32, 3857-3867.	1.5	4

#	Article	IF	Citations
19	Stiffness analysis of parallel manipulators with linear limbs by considering inertial wrench of moving links and constrained wrench. Robotics and Computer-Integrated Manufacturing, 2017, 46, 58-67.	9.9	16
20	Type synthesis of spatial 3-DoF parallel mechanisms with planar sub-chains using revised digital topological graphs and arrays. Robotica, 2017, 35, 370-383.	1.9	5
21	Auto-establishing simulation parallel manipulators with linear legs and auto-solving their workspaces by utilizing CAD variation geometry. International Journal of Computers and Applications, 2017, 39, 220-233.	1.3	1
22	Design and kinemics/dynamics analysis of a novel climbing robot with tri-planar limbs for remanufacturing. Journal of Mechanical Science and Technology, 2017, 31, 1427-1436.	1.5	5
23	Analysis of coordinated grasping kinematics and optimization of grasping force of a parallel hybrid hand. International Journal of Advanced Robotic Systems, 2017, 14, 172988141771681.	2.1	4
24	Unified recursive derivation and analysis of complex associated linkages with various links and type synthesis of complex robot mechanisms. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2017, 39, 4091-4106.	1.6	1
25	Dynamics analysis of novel hybrid robotic arm with three fingers. Robotica, 2016, 34, 2759-2775.	1.9	2
26	Analysis of kinematics and statics for a novel 6-DoF parallel mechanism with three planar mechanism limbs. Robotica, 2016, 34, 957-972.	1.9	6
27	Dynamics analysis of a novel 5-DoF 3SPU+2SPRR type parallel manipulator. Advanced Robotics, 2016, 30, 595-607.	1.8	4
28	Dynamics model of redundant hybrid manipulators connected in series by three or more different parallel manipulators with linear active legs. Mechanism and Machine Theory, 2016, 103, 222-235.	4.5	24
29	Kinematics and dynamics of a novel hybrid manipulator. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 1644-1657.	2.1	6
30	Dynamics analysis of 3-leg 6-DoF parallel manipulator with multi different-DoF finger mechanisms. Journal of Mechanical Science and Technology, 2016, 30, 1333-1342.	1.5	2
31	Derivation of contracted graphs with ternary/quaternary links for type synthesis of parallel mechanisms by characteristic strings. Robotica, 2015, 33, 548-562.	1.9	2
32	Kinematics/statics analysis of a novel serial-parallel robotic arm with hand. Journal of Mechanical Science and Technology, 2015, 29, 4407-4416.	1.5	11
33	Signal processing and defect analysis of pipeline inspection applying magnetic flux leakage methods. Intelligent Service Robotics, 2014, 7, 203-209.	2.6	22
34	Type synthesis of four-degree-of-freedom parallel mechanisms using valid arrays and topological graphs with digits. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2014, 228, 3039-3053.	2.1	7
35	Solving elastic deformation of some parallel manipulators with linear active legs using computer-aided design variation geometry. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2013, 227, 2810-2824.	2.1	2
36	Kinematics/statics and workspace analysis of a 3-leg 5-DoF parallel manipulator with a UPU-type composite active constrained leg. Robotica, 2013, 31, 183-191.	1.9	4

#	Article	IF	Citations
37	Computational derivation of valid kinematic limbs of spatial 3-DOF parallel mechanisms without redundant constraint. Robotica, 2012, 30, 559-569.	1.9	3
38	Unified analysis of statics of some limited-DOF parallel manipulators. Robotica, 2012, 30, 333-342.	1.9	3
39	Statics and Stiffness Model of Serial-Parallel Manipulator Formed by k Parallel Manipulators Connected in Series. Journal of Mechanisms and Robotics, 2012, 4, .	2.2	37
40	Solving inertial wrench of parallel manipulators using CAD variation geometry. Journal of Mechanical Science and Technology, 2012, 26, 2695-2703.	1.5	2
41	Using characteristic strings to derive valid contracted graphs with hexagonal links plus other links for type synthesis of closed mechanisms. Journal of Mechanical Science and Technology, 2012, 26, 1539-1546.	1.5	6
42	Derivation and isomorphism identification of valid topological graphs for 1-, 2-DOF planar closed mechanisms by characteristic strings. Journal of Mechanical Science and Technology, 2011, 25, 255-263.	1.5	5
43	Solving stiffness and deformation of a 3-UPU parallel manipulator with one translation and two rotations. Robotica, 2011, 29, 815-822.	1.9	22
44	Kinematics Analysis of Some Linear Legs With Different Structures for Limited-DOF Parallel Manipulators. Journal of Mechanisms and Robotics, 2011, 3, .	2.2	7
45	Solving Stiffness and Elastic Deformation of Two Limited-Degree-of-Freedom Parallel Manipulators with a Constrained Leg Based on Active/Constrained Wrench. Advanced Robotics, 2011, 25, 1331-1348.	1.8	0
46	Derivation of Topological Graphs of Some Planar 4DOF Redundant Closed Mechanisms by Contracted Graphs and Arrays. Journal of Mechanisms and Robotics, 2010, 2, .	2.2	8
47	Simulation of pre-solving active forces of a 4SPS+SPR parallel machine tool in normal machining a 3D free-form surface. International Journal of Advanced Manufacturing Technology, 2010, 46, 21-29.	3.0	3
48	Autoderivation of Topological Graphs for Type Synthesis of Planar 3DOF Parallel Mechanisms. Journal of Mechanisms and Robotics, 2010, 2, .	2.2	18
49	Determination of singularities of some 4-DOF parallel manipulators by translational/rotational Jacobian matrices. Robotica, 2010, 28, 811-819.	1.9	8
50	Dynamics Analysis of Some Limited-Degree-of-Freedom Parallel Manipulators with n UPS Active Legs and a Passive Constraining Leg. Advanced Robotics, 2010, 24, 1003-1016.	1.8	3
51	Kinematics and statics analysis of a novel 4-dof 2SPS+2SPR parallel manipulator and solving its workspace. Robotica, 2009, 27, 771.	1.9	9
52	Analyzing kinematics and solving active/constrained forces of a 4-dof 3SPS+SP parallel manipulator. Robotica, 2009, 27, 29-36.	1.9	5
53	Kinematic analysis of limited-dof parallel manipulators based on translational/rotational Jacobian and Hessian matrices. Robotica, 2009, 27, 971-980.	1.9	7
54	Analyses of velocity, acceleration, statics, and workspace of a 2(3-SPR) serial-parallel manipulator. Robotica, 2009, 27, 529-538.	1.9	24

#	Article	IF	Citations
55	Analysis of kinematics/statics and workspace ofÂaÂ2(SP+SPR+SPU) serialâ€“parallel manipulator. Multibody System Dynamics, 2009, 21, 361-374.	2.7	32
56	Simulation solving/modifying velocity and acceleration of a 4UPS+SPR type parallel machine tool during normal machining of a 3D free-form surface. International Journal of Advanced Manufacturing Technology, 2009, 42, 804-812.	3.0	10
57	Kinematics analysis and solution of the active/passive forces of a 4SPS+SPR parallel machine tool. International Journal of Advanced Manufacturing Technology, 2008, 36, 178-187.	3.0	12
58	Using CAD Geometric Variation Approach for Lettering Complicated Letter on 3D Free-Form Surface by a 3-DOF Parallel Machine Tool. , 2007, , .		0
59	Unified Solving Jacobianâˆ•Hessian Matrices of Some Parallel Manipulators With n SPS Active Legs and a Passive Constrained Leg. Journal of Mechanical Design, Transactions of the ASME, 2007, 129, 1161-1169.	2.9	24
60	A Unified Approach to Solving Driving Forces in Spatial Parallel Manipulators With Less Than Six DOFs. Journal of Mechanical Design, Transactions of the ASME, 2007, 129, 1153-1160.	2.9	7
61	Computer simulation machining a 3D free surface by using a 3-RPRU parallel machine tool. International Journal of Advanced Manufacturing Technology, 2007, 33, 782-792.	3.0	7
62	Simulation of machining 3D free-form surface in normal direction using 6-SSP and 4SPS+UPU parallel machine tools. International Journal of Advanced Manufacturing Technology, 2007, 33, 1180-1188.	3.0	5
63	Kinematics and dynamics analyses of a parallel manipulator with three active legs and one passive leg by a virtual serial mechanism. Multibody System Dynamics, 2007, 17, 229-241.	2.7	20
64	Kinematics analysis and statics of aÂ2SPS+UPR parallel manipulator. Multibody System Dynamics, 2007, 18, 619-636.	2.7	8
65	Using CAD Variation Geometry for Solving Velocity and Acceleration of Parallel Manipulators With 3-, 4-, 5-Linearly Driving Limbs. Journal of Mechanical Design, Transactions of the ASME, 2006, 128, 738-746.	2.9	30