

Jorge Angeles

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267 papers	6,653 citations	36 h-index	73 g-index
288 ext. papers	7,649 ext. citations	3 avg, IF	6.23 L-index

#	Paper	IF	Citations
267	. <i>IEEE Transactions on Automation Science and Engineering</i> , 1990 , 6, 281-290		1071
266	A Global Performance Index for the Kinematic Optimization of Robotic Manipulators. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 1991 , 113, 220-226	3	632
265	The Optimum Kinematic Design of a Spherical Three-Degree-of-Freedom Parallel Manipulator. <i>Journal of Mechanisms, Transmissions, and Automation in Design</i> , 1989 , 111, 202-207		370
264	Kinematic Isotropy and the Conditioning Index of Serial Robotic Manipulators. <i>International Journal of Robotics Research</i> , 1992 , 11, 560-571	5.7	166
263	Kinematic Isotropy and the Optimum Design of Parallel Manipulators. <i>International Journal of Robotics Research</i> , 1997 , 16, 185-197	5.7	163
262	Fundamentals of Robotic Mechanical Systems. <i>Mechanical Engineering Series</i> , 2007 ,	0.3	132
261	The Qualitative Synthesis of Parallel Manipulators. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2004 , 126, 617-624	3	129
260	Generalized transmission index and transmission quality for spatial linkages. <i>Mechanism and Machine Theory</i> , 2007 , 42, 1225-1237	4	107
259	The Design of Isotropic Manipulator Architectures in the Presence of Redundancies. <i>International Journal of Robotics Research</i> , 1992 , 11, 196-201	5.7	96
258	On the Numerical Solution of the Inverse Kinematic Problem. <i>International Journal of Robotics Research</i> , 1985 , 4, 21-37	5.7	96
257	The Kinetostatic Optimization of Robotic Manipulators: The Inverse and the Direct Problems. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2006 , 128, 168-178	3	91
256	The Formulation of Dynamical Equations of Holonomic Mechanical Systems Using a Natural Orthogonal Complement. <i>Journal of Applied Mechanics, Transactions ASME</i> , 1988 , 55, 243-244	2.7	87
255	Singularity analysis of planar parallel manipulators. <i>Mechanism and Machine Theory</i> , 1995 , 30, 665-678	4	78
254	Fundamentals of Robotic Mechanical Systems. <i>Mechanical Engineering Series</i> , 2014 ,	0.3	72
253	Is there a characteristic length of a rigid-body displacement?. <i>Mechanism and Machine Theory</i> , 2006 , 41, 884-896	4	69
252	A robust forward-displacement analysis of spherical parallel robots. <i>Mechanism and Machine Theory</i> , 2009 , 44, 2204-2216	4	66
251	A New Family of Two-Wheeled Mobile Robots: Modeling and Controllability 2007 , 23, 169-173		66

250	Kinetostatic Design of an Innovative Schöflies-Motion Generator. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2006 , 220, 935-943	1.3	61
249	The stiffness matrix in elastically articulated rigid-body systems. <i>Multibody System Dynamics</i> , 2007 , 18, 169-184	2.8	58
248	The direct kinematics of parallel manipulators under joint-sensor redundancy. <i>IEEE Transactions on Automation Science and Engineering</i> , 2000 , 16, 12-19		58
247	An unconstrained nonlinear least-square method of optimization of RRRR planar path generators. <i>Mechanism and Machine Theory</i> , 1988 , 23, 343-353	4	58
246	Virtual-Power Flow and Mechanical Gear-Mesh Power Losses of Epicyclic Gear Trains. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2007 , 129, 107-113	3	56
245	Posture optimization in robot-assisted machining operations. <i>Mechanism and Machine Theory</i> , 2012 , 51, 74-86	4	50
244	The optimal gear-shifting for a multi-speed transmission system for electric vehicles. <i>Mechanism and Machine Theory</i> , 2017 , 116, 1-13	4	48
243	Kinematics and dynamics of a six-degree-of-freedom parallel manipulator with revolute legs. <i>Robotica</i> , 1997 , 15, 385-394	2.1	47
242	The control of linear time-periodic systems using Floquet-Lyapunov theory. <i>International Journal of Control</i> , 2004 , 77, 472-490	1.5	46
241	Dynamic Simulation of n-Axis Serial Robotic Manipulators Using a Natural Orthogonal Complement. <i>International Journal of Robotics Research</i> , 1988 , 7, 32-47	5.7	45
240	On the workspace determination of spherical serial and platform mechanisms. <i>Mechanism and Machine Theory</i> , 1999 , 34, 497-512	4	42
239	The mechanical design of a seven-axes manipulator with kinematic isotropy. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 1995 , 14, 21-41	2.9	42
238	The Jacobian condition number as a dexterity index in 6R machining robots. <i>Robotics and Computer-Integrated Manufacturing</i> , 2012 , 28, 694-699	9.2	40
237	A collision-avoidance scheme for redundant manipulators: Theory and experiments. <i>Journal of Field Robotics</i> , 2005 , 22, 737-757		39
236	Coupler-curve synthesis of four-bar linkages via a novel formulation. <i>Mechanism and Machine Theory</i> , 2015 , 94, 177-187	4	38
235	Nonholonomic Systems Revisited Within the Framework of Analytical Mechanics. <i>Applied Mechanics Reviews</i> , 1998 , 51, 415-433	8.6	38
234	Real-time direct kinematics of general six-degree-of-freedom parallel manipulators with minimum-sensor data. <i>Journal of Field Robotics</i> , 1995 , 12, 833-844		38
233	On the kinematic design of the 5R planar, symmetric manipulator. <i>Mechanism and Machine Theory</i> , 2001 , 36, 1301-1313	4	37

232	Optimization of Dynamic Forces in Mechanical Hands. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 1991 , 113, 167-173	3	37
231	The control of semi-autonomous two-wheeled robots undergoing large payload-variations 2004 ,		36
230	Computation of all optimum dyads in the approximate synthesis of planar linkages for rigid-body guidance. <i>Mechanism and Machine Theory</i> , 2000 , 35, 1065-1078	4	36
229	Singularity analysis of three-legged parallel robots based on passive-joint velocities. <i>IEEE Transactions on Automation Science and Engineering</i> , 2001 , 17, 413-422		36
228	Experimental Validation of an Underactuated Two-Wheeled Mobile Robot. <i>IEEE/ASME Transactions on Mechatronics</i> , 2009 , 14, 252-257	5.5	35
227	Unconstrained nonlinear least-square optimization of planar linkages for rigid-body guidance. <i>Mechanism and Machine Theory</i> , 1990 , 25, 97-118	4	35
226	The rule-based conceptual design of the architecture of serial Schöflies-motion generators. <i>Mechanism and Machine Theory</i> , 2010 , 45, 251-260	4	34
225	A unified input/output analysis of four-bar linkages. <i>Mechanism and Machine Theory</i> , 2008 , 43, 240-251	4	34
224	Nonlinear modeling and parameter identification of harmonic drive robotic transmissions		34
223	The robust design of parallel spherical robots. <i>Mechanism and Machine Theory</i> , 2011 , 46, 335-343	4	33
222	On the nonlinear controllability of a quasiholonomic mobile robot		32
221	Automatic Computation of the Screw Parameters of Rigid-Body Motions. Part I: Finitely-Separated Positions. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1986 , 108, 32-38	1.6	32
220	On the elastostatic analysis of mechanical systems. <i>Mechanism and Machine Theory</i> , 2012 , 58, 202-216	4	29
219	The Computation of All 4R Serial Spherical Wrists With an Isotropic Architecture. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2003 , 125, 275-280	3	29
218	Impact dynamics of flexible-joint robots. <i>Computers and Structures</i> , 2005 , 83, 25-33	4.5	29
217	A General Method of Four-Bar Linkage Mobility Analysis. <i>Journal of Mechanisms, Transmissions, and Automation in Design</i> , 1987 , 109, 197-203		29
216	Off-line programming of six-axis robots for optimum five-dimensional tasks. <i>Mechanism and Machine Theory</i> , 2016 , 100, 155-169	4	28
215	The design of kinematically isotropic rolling robots with omnidirectional wheels. <i>Mechanism and Machine Theory</i> , 1995 , 30, 1127-1137	4	27

214	Kinematic Inversion of Robotic Manipulators in the Presence of Redundancies. <i>International Journal of Robotics Research</i> , 1989 , 8, 80-97	5.7	26
213	A Novel Three-Loop Parallel Robot With Full Mobility: Kinematics, Singularity, Workspace, and Dexterity Analysis. <i>Journal of Mechanisms and Robotics</i> , 2017 , 9,	2.2	25
212	Synthesis of the Base Curves For N-Lobed Elliptical Gears. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2005 , 127, 997-1005	3	25
211	The Generation of Contact Surfaces of Indexing Cam MechanismsA Unified Approach. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 1994 , 116, 369-374	3	25
210	A two-phase control algorithm for gear-shifting in a novel multi-speed transmission for electric vehicles. <i>Mechanical Systems and Signal Processing</i> , 2018 , 104, 145-154	7.8	25
209	A review of spherical motion generation using either spherical parallel manipulators or spherical motors. <i>Mechanism and Machine Theory</i> , 2019 , 140, 377-388	4	23
208	Impacts in multibody systems: modeling and experiments. <i>Multibody System Dynamics</i> , 2008 , 20, 163-176	6.8	23
207	An algorithm for the inverse dynamics of n-axis general manipulators using Kane's equations. <i>Computers and Mathematics With Applications</i> , 1989 , 17, 1545-1561	2.7	23
206	Algorithms for Involute and Octoidal Bevel-Gear Generation. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2005 , 127, 664-672	3	22
205	Design, modelling and estimation of a novel modular multi-speed transmission system for electric vehicles. <i>Mechatronics</i> , 2017 , 45, 119-129	3	21
204	. <i>IEEE/ASME Transactions on Mechatronics</i> , 2005 , 10, 43-49	5.5	21
203	Synthesis of conjugate Geneva mechanisms with curved slots. <i>Mechanism and Machine Theory</i> , 2002 , 37, 1043-1061	4	21
202	Modular and Recursive Kinematics and Dynamics for Parallel Manipulators. <i>Multibody System Dynamics</i> , 2005 , 14, 419-455	2.8	21
201	Optimization of a Test Trajectory for SCARA Systems 2008 , 225-234		21
200	The dynamics of a parallel Schöflies-motion generator. <i>Mechanism and Machine Theory</i> , 2018 , 119, 119-129	1.9	20
199	WheelSoil Interaction Model for Rover Simulation and Analysis Using Elastoplasticity Theory. <i>IEEE Transactions on Robotics</i> , 2013 , 29, 1271-1288	6.5	20
198	A new look at the BallDisteli diagram and its relevance to spatial gearing. <i>Mechanism and Machine Theory</i> , 2007 , 42, 1362-1375	4	20
197	A novel family of linkages for advanced motion synthesis. <i>Mechanism and Machine Theory</i> , 2008 , 43, 882-890	4.9	20

196	A Distance Metric for Finite Sets of Rigid-Body Displacements via the Polar Decomposition. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2007 , 129, 883-886	3	20
195	Rigid-body pose and twist estimation using an accelerometer array. <i>Archive of Applied Mechanics</i> , 2004 , 74, 223-236	2.2	20
194	A novel manipulator architecture for the production of SCARA motions		20
193	Dynamic modeling and trajectory tracking control of unmanned tracked vehicles. <i>Robotics and Autonomous Systems</i> , 2018 , 110, 102-111	3.5	20
192	Synthesis of the Pitch Cones of N-Lobed Elliptical Bevel Gears. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2011 , 133,	3	19
191	. <i>IEEE/ASME Transactions on Mechatronics</i> , 2003 , 8, 469-475	5.5	19
190	Optimization of planar and spherical function generators as minimum-defect linkages. <i>Mechanism and Machine Theory</i> , 1989 , 24, 293-307	4	19
189	Automatic Computation of the Screw Parameters of Rigid-Body Motions. Part II: Infinitesimally-Separated Positions. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1986 , 108, 39-43	1.6	19
188	The Synthesis of the Axodes of RCCC Linkages. <i>Journal of Mechanisms and Robotics</i> , 2016 , 8,	2.2	19
187	The inverse kinematics of hyper-redundant manipulators using splines		18
186	On Twist and Wrench Generators and Annihilators 1994 , 379-411		18
185	DETERMINATION DU DEGRE DE LIBERTE DES CHAINES CINEMATIQUE. <i>Transactions of the Canadian Society for Mechanical Engineering</i> , 1988 , 12, 219-226	1.1	18
184	THE MODELLING OF HOLONOMIC MECHANICAL SYSTEMS USING A NATURAL ORTHOGONAL COMPLEMENT. <i>Transactions of the Canadian Society for Mechanical Engineering</i> , 1989 , 13, 81-89	1.1	18
183	Kinematic analysis and optimum design of a novel 2PUR-2RPU parallel robot. <i>Mechanism and Machine Theory</i> , 2019 , 139, 407-423	4	17
182	Dynamic Response of Linear Mechanical Systems. <i>Mechanical Engineering Series</i> , 2012 ,	0.3	17
181	Identification of error sources in a five-axis machine tool using FFT analysis. <i>International Journal of Advanced Manufacturing Technology</i> , 2015 , 76, 1353-1363	3.2	16
180	Mobility evaluation of wheeled robots on soft terrain: Effect of internal force distribution. <i>Mechanism and Machine Theory</i> , 2016 , 100, 259-282	4	16
179	The pure-rolling cam-equivalent of the Geneva mechanism. <i>Mechanism and Machine Theory</i> , 2006 , 41, 1320-1335	4	16

178	On the kinetostatic optimization of revolute-coupled planar manipulators. <i>Mechanism and Machine Theory</i> , 2002 , 37, 351-374	4	16
177	The optimum synthesis of an elastic torque-compensating cam mechanism. <i>Mechanism and Machine Theory</i> , 2001 , 36, 245-259	4	16
176	The Proportional-Damping Matrix of Arbitrarily Damped Linear Mechanical Systems. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2002 , 69, 649-656	2.7	16
175	The translating joint: Design and applications. <i>Mechanism and Machine Theory</i> , 2018 , 122, 361-370	4	15
174	Generalization of the Energetic Coefficient of Restitution for Contacts in Multibody Systems. <i>Journal of Computational and Nonlinear Dynamics</i> , 2008 , 3,	1.4	15
173	The mechanical design of a novel Schöflies-motion generator. <i>Robotics and Computer-Integrated Manufacturing</i> , 2007 , 23, 82-93	9.2	15
172	The Synthesis of the Pitch Surfaces of Internal and External Skew-Gears and Their Racks. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2006 , 128, 794-802	3	15
171	A Sequential-Quadratic-Programming Algorithm Using Orthogonal Decomposition With Gerschgorin Stabilization. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2001 , 123, 501-509	3	15
170	The angular-acceleration tensor of rigid-body kinematics and its properties. <i>Archive of Applied Mechanics</i> , 1999 , 69, 204-214	2.2	15
169	Synthesis of Contact Surfaces of Spherical Cam-Oscillating Roller-Follower Mechanisms: A General Approach. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 1994 , 116, 315-319	3	15
168	Iterative Kinematic Inversion of General Five-Axis Robot Manipulators. <i>International Journal of Robotics Research</i> , 1986 , 4, 59-70	5.7	15
167	Computation of Rigid-Body Angular Acceleration From Point-Acceleration Measurements. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1987 , 109, 124-127	1.6	15
166	. <i>IEEE Transactions on Systems, Man, and Cybernetics</i> , 1988 , 18, 173-178		15
165	Performance evaluation of path-generating planar, spherical and spatial four-bar linkages. <i>Mechanism and Machine Theory</i> , 1988 , 23, 257-268	4	15
164	Synthesis of plane curves with prescribed local geometric properties using periodic splines. <i>CAD Computer Aided Design</i> , 1983 , 15, 147-155	2.9	15
163	Kinetostatic and Inertial Conditioning of the McGill Schöflies-Motion Generator. <i>Advances in Mechanical Engineering</i> , 2010 , 2, 186203	1.2	15
162	Singularity-free path-planning of dexterous pointing tasks for a class of spherical parallel mechanisms. <i>Mechanism and Machine Theory</i> , 2018 , 128, 47-57	4	14
161	Design and optimization of a drivetrain with two-speed transmission for electric delivery step van 2014 ,		14

160	The size-minimization of planar cam mechanisms. <i>Mechanism and Machine Theory</i> , 2001 , 36, 371-386	4	14
159	A Mathematical Model of Multispeed Transmissions in Electric Vehicles in the Presence of Gear Shifting. <i>IEEE Transactions on Vehicular Technology</i> , 2018 , 67, 397-408	6.8	13
158	Viscoelastic modeling of the contact interaction between a tactile sensor and an atrial tissue. <i>IEEE Transactions on Biomedical Engineering</i> , 2012 , 59, 1727-38	5	13
157	The Role of the Orthogonal Helicoid in the Generation of the Tooth Flanks of Involute-Gear Pairs With Skew Axes. <i>Journal of Mechanisms and Robotics</i> , 2015 , 7,	2.2	13
156	On Martin Disteli's spatial cycloidal gearing. <i>Mechanism and Machine Theory</i> , 2013 , 60, 73-89	4	13
155	A Robust Solution of the Spatial Burmester Problem. <i>Journal of Mechanisms and Robotics</i> , 2012 , 4,	2.2	13
154	Estimating the angular velocity of a rigid body moving in the plane from tangential and centripetal acceleration measurements. <i>Multibody System Dynamics</i> , 2008 , 19, 383-406	2.8	13
153	. <i>IEEE Transactions on Automation Science and Engineering</i> , 2000 , 16, 720-731		13
152	The design of spherical multilobe-cam mechanisms. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2009 , 223, 473-482	1.3	12
151	On the kinematic conditioning of robotic manipulators		12
150	Optimal synthesis of cam mechanisms with oscillating flat-face followers. <i>Mechanism and Machine Theory</i> , 1988 , 23, 1-6	4	12
149	Synthesis of RCCC Linkages to Visit Four Given Poses. <i>Journal of Mechanisms and Robotics</i> , 2015 , 7,	2.2	11
148	Robot-assisted Rapid Prototyping for ice structures 2009 ,		11
147	The Isotropic Design of Two General Classes of Planar Parallel Manipulators. <i>Journal of Field Robotics</i> , 1995 , 12, 795-805		11
146	The Kinematic Inversion of Robot Manipulators in the Presence of Singularities. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1988 , 110, 246-254	1.6	11
145	Terrain modelling in simulation-based performance evaluation of rovers. <i>Canadian Aeronautics and Space Journal</i> , 2011 , 57, 24-33		11
144	Trajectory-Planning and Normalized-Variable Control for Parallel Pick-and-Place Robots. <i>Journal of Mechanisms and Robotics</i> , 2019 , 11,	2.2	10
143	The design of a 3-CPS parallel robot for maximum dexterity. <i>Mechanism and Machine Theory</i> , 2018 , 122, 279-291	4	10

142	Dual Cayley-Klein parameters and Möbius transform: Theory and applications. <i>Mechanism and Machine Theory</i> , 2016 , 106, 50-67	4	10
141	Design and validation of a spatial two-limb 3R1T parallel manipulator with remote center-of-motion. <i>Mechanism and Machine Theory</i> , 2020 , 149, 103807	4	9
140	The dynamics of parallel Schöflies motion generators: The case of a two-limb system. <i>Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering</i> , 2009 , 223, 29-52	1	9
139	The Degree of Freedom of Parallel Robots: A Group-Theoretic Approach		9
138			9
137	The Design of Cam Mechanisms With Translating Flat-Face Followers Under Curvature Constraints. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 1994 , 116, 306-310	3	9
136	The Global Least-Square Optimization of Function-Generating Linkages. <i>Journal of Mechanisms, Transmissions, and Automation in Design</i> , 1987 , 109, 204-209		9
135	Workspace Determination and Feedback Control of a Pick-and-Place Parallel Robot: Analysis and Experiments. <i>IEEE Robotics and Automation Letters</i> , 2020 , 5, 40-47	4.2	9
134	Gear-shifting in a novel modular multi-speed transmission for electric vehicles using linear quadratic integral control. <i>Mechanism and Machine Theory</i> , 2018 , 128, 359-367	4	9
133	A novel concept for analysis and performance evaluation of wheeled rovers. <i>Mechanism and Machine Theory</i> , 2015 , 83, 137-151	4	8
132	An innovative tooth root profile for spur gears and its effect on service life. <i>Meccanica</i> , 2017 , 52, 1825-1841	4.1	8
131	The development of an innovative two-DOF cylindrical drive: Design, analysis and preliminary tests 2014 ,		8
130	Simplectic Architectures for True Multi-axial Accelerometers: A Novel Application of Parallel Robots. <i>Proceedings - IEEE International Conference on Robotics and Automation</i> , 2007 ,		8
129	Energy Analysis and Decoupling in Three-Dimensional Impacts of Multibody Systems. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2007 , 74, 845-851	2.7	8
128	Management of parallel-manipulator singularities using joint-coupling. <i>Advanced Robotics</i> , 2007 , 21, 583-600	6.0	8
127	Pitfalls of a least-squares-equivalent controller for linear, time-periodic systems. <i>International Journal of Control</i> , 2001 , 74, 199-204	1.5	8
126	Pose-and-twist estimation of a rigid body using accelerometers		8
125	The Kinematics of the Swashplate Mechanism of a VTOL Unmanned Aerial Vehicle. <i>Multibody System Dynamics</i> , 1999 , 3, 333-365	2.8	8

124	The Design of a Novel Pure-Rolling Transmission to Convert Rotational into Translational Motion. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2003 , 125, 205-207	3	8
123	Full-mobility 3-CCC parallel-kinematics machines: Forward kinematics, singularity, workspace and dexterity analyses. <i>Mechanism and Machine Theory</i> , 2018 , 126, 312-328	4	7
122	A Spatial Version of Octoidal Gears Via the Generalized Camus Theorem. <i>Journal of Mechanisms and Robotics</i> , 2016 , 8,	2.2	7
121	Design, Analysis, and Optimization of a Multi-Speed Powertrain for Class-7 Electric Trucks. <i>SAE International Journal of Alternative Powertrains</i> , 2018 , 7, 27-42	2	7
120	. <i>Journal of Microelectromechanical Systems</i> , 2008 , 17, 948-961	2.5	7
119	Optimum Kinetimatics Design of Drives for Wheeled Mobile Robots Based on Cam-Roller Pairs. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2007 , 129, 7-16	3	7
118	A Formalism for the Analysis and Design of Modular Kinematic Structures. <i>International Journal of Robotics Research</i> , 1998 , 17, 720-730	5.7	7
117			7
116	Representation graphique de la region de mobilite des mecanismes plans et spheriques a barres articulees. <i>Mechanism and Machine Theory</i> , 1987 , 22, 557-562	4	7
115	A topology-change model of multi-speed transmissions in electric vehicles during gear-shifting. <i>Mechatronics</i> , 2018 , 55, 151-161	3	7
114	The virtual screw: Concept, design and applications. <i>Mechanism and Machine Theory</i> , 2018 , 128, 349-358	4	7
113	Contributions to the kinematics of pointing. <i>Mechanism and Machine Theory</i> , 2017 , 108, 97-109	4	6
112	The role of the rotation matrix in the teaching of planar kinematics. <i>Mechanism and Machine Theory</i> , 2015 , 89, 28-37	4	6
111	KINEMATICS AND SINGULARITY ANALYSIS OF A CRRHRRRC PARALLEL SCHNIFLIES MOTION GENERATOR. <i>Transactions of the Canadian Society for Mechanical Engineering</i> , 2014 , 38, 173-183	1.1	6
110	PATH PLANNING FOR ROBOT-ASSISTED RAPID PROTOTYPING OF ICE STRUCTURES. <i>Transactions of the Canadian Society for Mechanical Engineering</i> , 2009 , 33, 689-700	1.1	6
109	The Semigraphical Solution of the Direct Kinematics of General Platform-Type Parallel Manipulators. <i>Solid Mechanics and Its Applications</i> , 1993 , 165-173	0.4	6
108	Kinematic properties of planar and spherical logarithmic spirals: Applications to the synthesis of involute tooth profiles. <i>Mechanism and Machine Theory</i> , 2019 , 136, 14-26	4	6
107	A Multibody Dynamics Framework for Simulation of Rovers on Soft Terrain. <i>Journal of Computational and Nonlinear Dynamics</i> , 2015 , 10,	1.4	5

106	Isotropic Accelerometer Strapdowns and Related Algorithms for Rigid-Body Pose and Twist Estimation. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2014 , 81,	2.7	5
105	Constraint-wrench analysis of robotic manipulators. <i>Multibody System Dynamics</i> , 2013 , 29, 139-168	2.8	5
104	A Novel Paradigm for the Qualitative Synthesis of Simple Kinematic Chains Based on Complexity Measures. <i>Journal of Mechanisms and Robotics</i> , 2011 , 3,	2.2	5
103	The Synthesis of Dyads With One Prismatic Joint. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2008 , 130,	3	5
102	The kinematics of manipulators built from closed planar mechanisms 1999 ,		5
101	The analysis of arbitrarily-damped linear mechanical systems. <i>Archive of Applied Mechanics</i> , 1999 , 69, 529-541	2.2	5
100	Singularity analysis of a general class of planar parallel manipulators		5
99	The Kinematics of Spatial Double-Triangular Parallel Manipulators. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 1995 , 117, 658-661	3	5
98	Kinematic Analysis of the Planar Motion of Vehicles when Traveling Along Tractrix Curves. <i>Journal of Mechanisms and Robotics</i> , 2020 , 12,	2.2	5
97	The Dual Generalized Inverses and Their Applications in Kinematic Synthesis 2012 , 1-10		5
96	Mobility and singularity analyses of a symmetric multi-loop mechanism for space applications. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 095440622199555	1.3	5
95	Reflections Over the Dual Ring Applications to Kinematic Synthesis. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2019 , 141,	3	4
94	Elastodynamics of a two-limb Schöflies motion generator. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2015 , 229, 751-764	1.3	4
93	Posture Optimization of a Functionally Redundant Parallel Robot. <i>Springer Proceedings in Advanced Robotics</i> , 2018 , 101-108	0.6	4
92	Base curves of involute cylindrical gears via Aronhold's first theorem. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2016 , 230, 1233-1242	1.3	4
91	On the synthesis of spatial cycloidal gears. <i>Meccanica</i> , 2013 , 48, 1239-1249	2.1	4
90	Optimization of Tooth Root Profile of Spur Gears for Maximum Load-Carrying Capacity 2014 ,		4
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