

# Peter Eberhard

## List of Publications by Citations

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309  
papers

3,543  
citations

28  
h-index

49  
g-index

329  
ext. papers

4,145  
ext. citations

1.8  
avg, IF

5.92  
L-index

#	Paper	IF	Citations
309	Dynamic analysis of flexible manipulators, a literature review. <i>Mechanism and Machine Theory</i> , <b>2006</b> , 41, 749-777	4	568
308	A bonded-particle model for cemented sand. <i>Computers and Geotechnics</i> , <b>2013</b> , 49, 299-313	4.4	101
307	Computational Dynamics of Multibody Systems: History, Formalisms, and Applications. <i>Journal of Computational and Nonlinear Dynamics</i> , <b>2006</b> , 1, 3	1.4	101
306	Using augmented Lagrangian particle swarm optimization for constrained problems in engineering. <i>Structural and Multidisciplinary Optimization</i> , <b>2006</b> , 32, 277-286	3.6	89
305	Numerical and experimental evaluation of the coefficient of restitution for repeated impacts. <i>International Journal of Impact Engineering</i> , <b>2005</b> , 32, 508-524	4	86
304	Analyzing and Optimizing Multibody Systems. <i>Mechanics Based Design of Structures and Machines</i> , <b>1992</b> , 20, 67-92		81
303	Prediction of draft forces in cohesionless soil with the Discrete Element Method. <i>Journal of Terramechanics</i> , <b>2011</b> , 48, 347-358	2.2	63
302	A discrete element model to describe failure of strong rock in uniaxial compression. <i>Granular Matter</i> , <b>2011</b> , 13, 341-364	2.6	60
301	Applications of the discrete element method in mechanical engineering. <i>Multibody System Dynamics</i> , <b>2007</b> , 18, 81-94	2.8	59
300	Simulation process of flexible multibody systems with non-modal model order reduction techniques. <i>Multibody System Dynamics</i> , <b>2011</b> , 25, 313-334	2.8	58
299	Rigid-elastic modeling of meshing gear wheels in multibody systems. <i>Multibody System Dynamics</i> , <b>2006</b> , 16, 55-71	2.8	56
298	From Neweul to Neweul-M2: symbolical equations of motion for multibody system analysis and synthesis. <i>Multibody System Dynamics</i> , <b>2010</b> , 24, 25-41	2.8	54
297	A two-step approach for model reduction in flexible multibody dynamics. <i>Multibody System Dynamics</i> , <b>2007</b> , 17, 157-176	2.8	49
296	A discrete element model predicting the strength of ballast stones. <i>Computers and Structures</i> , <b>2012</b> , 108-109, 3-13	4.5	45
295	Technische Dynamik <b>2004</b> ,		40
294	Elastoplastic phenomena in multibody impact dynamics. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2006</b> , 195, 6874-6890	5.7	39
293	A discrete element model and its experimental validation for the prediction of draft forces in cohesive soil. <i>Journal of Terramechanics</i> , <b>2014</b> , 53, 93-104	2.2	37

292	Model Order Reduction in Elastic Multibody Systems using the Floating Frame of Reference Formulation. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2012</b> , 45, 40-48		34
291	Simulative and experimental investigation of impacts on gear wheels. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2008</b> , 197, 4653-4662	5-7	34
290	Automatic differentiation of numerical integration algorithms. <i>Mathematics of Computation</i> , <b>1999</b> , 68, 717-732	1.6	34
289	Parallel load-balanced simulation for short-range interaction particle methods with hierarchical particle grouping based on orthogonal recursive bisection. <i>International Journal for Numerical Methods in Engineering</i> , <b>2008</b> , 74, 531-553	2.4	33
288	Improving the computational efficiency and accuracy of the semi-discretization method for periodic delay-differential equations. <i>European Journal of Mechanics, A/Solids</i> , <b>2008</b> , 27, 975-985	3-7	33
287	Comparison of Analytical and Experimental Results for Longitudinal Impacts on Elastic Rods. <i>JVC/Journal of Vibration and Control</i> , <b>2003</b> , 9, 157-174	2	33
286	Flexible Multibody Systems with Large Deformations and Nonlinear Structural Damping Using Absolute Nodal Coordinates. <i>Nonlinear Dynamics</i> , <b>2003</b> , 34, 31-52	5	32
285	Parallel Evolutionary Optimization of Multibody Systems with Application to Railway Dynamics. <i>Multibody System Dynamics</i> , <b>2003</b> , 9, 143-164	2.8	31
284	SVD-based improvements for component mode synthesis in elastic multibody systems. <i>European Journal of Mechanics, A/Solids</i> , <b>2015</b> , 49, 408-418	3-7	30
283	On the use of moment-matching to build reduced order models in flexible multibody dynamics. <i>Multibody System Dynamics</i> , <b>2006</b> , 16, 191-211	2.8	30
282	Some advantages of stochastic methods in multicriteria optimization of multibody systems. <i>Archive of Applied Mechanics</i> , <b>1999</b> , 69, 543-554	2.2	29
281	Numerical and Experimental Investigation of Radial Impacts on a Half-Circular Plate. <i>Multibody System Dynamics</i> , <b>2003</b> , 9, 265-281	2.8	27
280	Simulation of cutting processes using mesh-free Lagrangian particle methods. <i>Computational Mechanics</i> , <b>2013</b> , 51, 261-278	4	26
279	Nonlinear modelling of the middle ear as an elastic multibody system [Applying model order reduction to acousto-structural coupled systems. <i>Journal of Computational and Applied Mathematics</i> , <b>2013</b> , 246, 18-26	2.4	26
278	Error-Controlled Model Reduction in Flexible Multibody Dynamics. <i>Journal of Computational and Nonlinear Dynamics</i> , <b>2010</b> , 5,	1.4	25
277	Sensitivity analysis for dynamic mechanical systems with finite rotations. <i>International Journal for Numerical Methods in Engineering</i> , <b>2008</b> , 74, 1897-1927	2.4	25
276	Dynamic simulation of sloshing fluid and granular cargo in transport vehicles. <i>Vehicle System Dynamics</i> , <b>2010</b> , 48, 3-15	2.8	23
275	Simulation of impacts in geartrains using different approaches. <i>Archive of Applied Mechanics</i> , <b>2006</b> , 76, 537-548	2.2	23

274	Linear Viscoelastic Creep Model for the Contact of Nominal Flat Surfaces Based on Fractal Geometry: Standard Linear Solid (SLS) Material. <i>Journal of Tribology</i> , <b>2007</b> , 129, 461-466	1.8	22
273	A local adaptive discretization algorithm for Smoothed Particle Hydrodynamics. <i>Computational Particle Mechanics</i> , <b>2014</b> , 1, 131-145	3	21
272	Analysis of repeated impacts on a steel rod with visco-plastic material behavior. <i>European Journal of Mechanics, A/Solids</i> , <b>2011</b> , 30, 336-344	3.7	21
271	Identification of validated multibody vehicle models for crash analysis using a hybrid optimization procedure. <i>Structural and Multidisciplinary Optimization</i> , <b>2011</b> , 44, 85-97	3.6	20
270	A PSO-based algorithm designed for a swarm of mobile robots. <i>Structural and Multidisciplinary Optimization</i> , <b>2011</b> , 44, 483-498	3.6	20
269	Cooperative Motion of Swarm Mobile Robots Based on Particle Swarm Optimization and Multibody System Dynamics. <i>Mechanics Based Design of Structures and Machines</i> , <b>2011</b> , 39, 179-193	1.7	20
268	Adaptronic Vibration Damping for Machine Tools. <i>CIRP Annals - Manufacturing Technology</i> , <b>2007</b> , 56, 379-382	4.9	20
267	Optimization of Multibody Systems and Their Structural Components. <i>Computational Methods in Applied Sciences (Springer)</i> , <b>2011</b> , 49-68	0.4	20
266	Greedy-based approximation of frequency-weighted Gramian matrices for model reduction in multibody dynamics. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , <b>2013</b> , 93, 501-519	1	19
265	Sharing behavior of load transmission on gear pair systems actuated by parallel arrangements of multiple pinions. <i>Mechanism and Machine Theory</i> , <b>2013</b> , 65, 58-70	4	19
264	An approach for the coupled simulation of machining processes using multibody system and smoothed particle hydrodynamics algorithms. <i>Theoretical and Applied Mechanics Letters</i> , <b>2013</b> , 3, 013005 <sup>1.8</sup>		19
263	Experimental studies for verification of thermal effects in cutting. <i>Production Engineering</i> , <b>2011</b> , 5, 507-515		19
262	Topology Optimization of Large Motion Rigid Body Mechanisms With Nonlinear Kinematics. <i>Journal of Computational and Nonlinear Dynamics</i> , <b>2009</b> , 4,	1.4	19
261	Investigations for the Dynamical Analysis of Human Motion. <i>Multibody System Dynamics</i> , <b>1999</b> , 3, 1-20	2.8	19
260	Comparison of Analytical and Experimental Results for Longitudinal Impacts on Elastic Rods. <i>JVC/Journal of Vibration and Control</i> , <b>2003</b> , 9, 157-174	2	19
259	Simulation of laser welding using advanced particle methods. <i>GAMM Mitteilungen</i> , <b>2016</b> , 39, 149-169	1.8	18
258	Design and Programming for Cable-Driven Parallel Robots in the German Pavilion at the EXPO 2015. <i>Machines</i> , <b>2015</b> , 3, 223-241	2.9	18
257	Viscoplastic Effects Occurring in Impacts of Aluminum and Steel Bodies and Their Influence on the Coefficient of Restitution. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2010</b> , 77,	2.7	18

256	Static modes switching in gear contact simulation. <i>Mechanism and Machine Theory</i> , <b>2013</b> , 63, 89-106	4	17
255	Stress recovery with Krylov-subspaces in reduced elastic multibody systems. <i>Multibody System Dynamics</i> , <b>2011</b> , 25, 377-393	2.8	17
254	The role of the coefficient of restitution on impact problems in multi-body dynamics. <i>Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics</i> , <b>2010</b> , 224, 279-306	0.9	16
253	A Discrete Element Approach to Model Breakable Railway Ballast. <i>Journal of Computational and Nonlinear Dynamics</i> , <b>2012</b> , 7,	1.4	16
252	Comparison between two different mesh descriptions used for simulation of sieving processes. <i>Granular Matter</i> , <b>2008</b> , 10, 223-229	2.6	16
251	Frictional contact of flexible and rigid bodies. <i>Granular Matter</i> , <b>2002</b> , 4, 25-36	2.6	16
250	Fuzzy arithmetical stability analysis of uncertain machining systems. <i>Mechanical Systems and Signal Processing</i> , <b>2018</b> , 98, 534-547	7.8	15
249	Applied Dynamics <b>2014</b> ,		15
248	Linear model reduction of large scale industrial models in elastic multibody dynamics. <i>Multibody System Dynamics</i> , <b>2014</b> , 31, 27-46	2.8	15
247	Modeling and parameter identification of amplitude- and frequency-dependent rubber isolator. <i>Journal of Central South University</i> , <b>2011</b> , 18, 672-678	2.1	15
246	Hierarchical modeling in multibody dynamics. <i>Archive of Applied Mechanics</i> , <b>1998</b> , 68, 237-246	2.2	15
245	Augmented Lagrangian Particle Swarm Optimization in Mechanism Design. <i>Journal of System Design and Dynamics</i> , <b>2007</b> , 1, 410-421		15
244	Thermomechanically coupled conduction mode laser welding simulations using smoothed particle hydrodynamics. <i>Computational Particle Mechanics</i> , <b>2017</b> , 4, 473-486	3	14
243	An adaptronic approach to active vibration control of machine tools with parallel kinematics. <i>Production Engineering</i> , <b>2009</b> , 3, 207-215	1.9	14
242	Modeling and simulation of closed loop multibody systems with bodies-joints composite modules. <i>Multibody System Dynamics</i> , <b>2010</b> , 24, 389-411	2.8	14
241	Particle screening phenomena in an oblique multi-level tumbling reservoir: a numerical study using discrete element simulation. <i>Granular Matter</i> , <b>2007</b> , 9, 415-429	2.6	14
240	A linear complementarity formulation on position level for frictionless impact of planar deformable bodies. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , <b>2006</b> , 86, 807-817	1	14
239	Design and Experimental Validation of a Distributed Cooperative Transportation Scheme. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2021</b> , 18, 1157-1169	4.9	14

238	On the influence of model reduction techniques in topology optimization of flexible multibody systems using the floating frame of reference approach. <i>Structural and Multidisciplinary Optimization</i> , <b>2016</b> , 53, 67-80	3.6	13
237	Adaptive nonlinear model predictive control design of a flexible-link manipulator with uncertain parameters. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2017</b> , 33, 529-542	2	13
236	Interface Reduction for CMS Methods and Alternative Model Order Reduction. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 254-259	0.7	13
235	Modeling the motion of the cooling lubricant in drilling processes using the finite volume and the smoothed particle hydrodynamics methods. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2018</b> , 329, 369-395	5.7	13
234	Stability analysis of a thin-walled cylinder in turning operation using the semi-discretization method. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2014</b> , 30, 214-222	2	13
233	Flatness-Based Control of Parallel Kinematics using Multibody Systems Simulation and Experimental Results. <i>Archive of Applied Mechanics</i> , <b>2006</b> , 76, 181-197	2.2	13
232	A comparative look at two formation control approaches based on optimization and algebraic graph theory. <i>Robotics and Autonomous Systems</i> , <b>2021</b> , 136, 103686	3.5	13
231	Flexible multibody simulation of automotive systems with non-modal model reduction techniques. <i>Vehicle System Dynamics</i> , <b>2012</b> , 50, 1905-1922	2.8	12
230	Collision detection for complicated polyhedra using the fast multipole method or ray crossing. <i>Archive of Applied Mechanics</i> , <b>2007</b> , 77, 503-521	2.2	12
229	Analysis of Dynamic Stability for Milling Processes with Varying Workpiece Dynamics. <i>Proceedings in Applied Mathematics and Mechanics</i> , <b>2008</b> , 8, 10367-10368	0.2	12
228	SYMBOLICAL IMPACT ANALYSIS FOR A FALLING CONICAL ROD AGAINST THE RIGID GROUND. <i>Journal of Sound and Vibration</i> , <b>2001</b> , 240, 41-57	3.9	12
227	Experimental studies of control concepts for a parallel manipulator with flexible links. <i>Journal of Mechanical Science and Technology</i> , <b>2015</b> , 29, 2685-2691	1.6	11
226	Distributed model predictive formation control with discretization-free path planning for transporting a load. <i>Robotics and Autonomous Systems</i> , <b>2017</b> , 96, 211-223	3.5	11
225	Model reduction of an elastic crankshaft for elastic multibody simulations. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , <b>2013</b> , 93, 198-216	1	11
224	Modellreduktion in elastischen Mehrkörpersystemen (Model Reduction in Flexible Multibody Systems). <i>Automatisierungstechnik</i> , <b>2006</b> , 54, 170-177	0.8	11
223	Control and Parameter Optimization of Flexible Robots*. <i>Mechanics Based Design of Structures and Machines</i> , <b>2000</b> , 28, 137-168		11
222	Interface and model reduction for efficient explicit simulations - a case study with nonlinear vehicle crash models. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , <b>2016</b> , 22, 380-396	1	11
221	Application of parametric model reduction with matrix interpolation for simulation of moving loads in elastic multibody systems. <i>Advances in Computational Mathematics</i> , <b>2015</b> , 41, 1049-1072	1.6	10

220	Machining Process Simulations with Smoothed Particle Hydrodynamics. <i>Procedia CIRP</i> , <b>2015</b> , 31, 94-99	1.8	10
219	Dynamic Analysis of Cold-Rolling Process Using the Finite-Element Method. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2016</b> , 138,	3.3	10
218	Geometric element parameterization and parametric model order reduction in finite element based shape optimization. <i>Computational Mechanics</i> , <b>2019</b> , 63, 853-868	4	10
217	Parametric Flexible Multibody Model for Material Removal During Turning. <i>Journal of Computational and Nonlinear Dynamics</i> , <b>2014</b> , 9,	1.4	10
216	Flexible Multibody Systems With Large Deformations Using Absolute Nodal Coordinates for Isoparametric Solid Brick Elements <b>2003</b> , 1		10
215	Contact of Planar Flexible Multibody Systems Using a Linear Complementarity Formulation. <i>Proceedings in Applied Mathematics and Mechanics</i> , <b>2005</b> , 5, 197-198	0.2	10
214	A high-order full-discretization method using Hermite interpolation for periodic time-delayed differential equations. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2015</b> , 31, 406-415	2	9
213	Experimental investigation of the three dimensional vibration of a small lightweight object. <i>Journal of Sound and Vibration</i> , <b>2015</b> , 334, 108-119	3.9	9
212	Review on contact simulation of beveloid and cycloid gears and application of a modern approach to treat deformations. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , <b>2015</b> , 21, 359-388	1	9
211	Nonlinear Dynamic Analysis of a Parametrically Excited Cold Rolling Mill. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2014</b> , 136,	3.3	9
210	Sloshing cargo in silo vehicles. <i>Journal of Mechanical Science and Technology</i> , <b>2009</b> , 23, 968-973	1.6	9
209	Optimization of Nonlinear Mechanical Systems under Constraints with the Particle Swarm Method. <i>Proceedings in Applied Mathematics and Mechanics</i> , <b>2004</b> , 4, 169-170	0.2	9
208	Simulation of Moving Loads in Elastic Multibody Systems With Parametric Model Reduction Techniques. <i>Archive of Mechanical Engineering</i> , <b>2014</b> , 61, 209-226		9
207	Predicting abrasive wear with coupled Lagrangian methods. <i>Computational Particle Mechanics</i> , <b>2015</b> , 2, 51-62	3	8
206	Constraint mapping in a feedback linearization/MPC scheme for trajectory tracking of underactuated multibody systems. <i>IFAC-PapersOnLine</i> , <b>2015</b> , 48, 446-451	0.7	8
205	Symbolic computation of longitudinal impact waves. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2001</b> , 190, 4805-4815	5.7	8
204	Dynamic System Design via Multicriteria Optimization. <i>Lecture Notes in Economics and Mathematical Systems</i> , <b>1997</b> , 467-478	0.4	8
203	Static and Dynamic Modeling of the Electromagnets of the Maglev Vehicle Transrapid. <i>IEEE Transactions on Magnetics</i> , <b>2021</b> , 57, 1-15	2	8



202	Design of Feed-Forward Control for Underactuated Multibody Systems with Kinematic Redundancy <b>2009</b> , 275-284		8
201	Interpolation-based parametric model order reduction for material removal in elastic multibody systems. <i>Multibody System Dynamics</i> , <b>2017</b> , 39, 21-36	2.8	7
200	Dynamics in lithographic projection objectives. <i>Multibody System Dynamics</i> , <b>2013</b> , 30, 233-245	2.8	7
199	Mechanical PSO Aided by Extremum Seeking for Swarm Robots Cooperative Search. <i>Lecture Notes in Computer Science</i> , <b>2013</b> , 64-71	0.9	7
198	Simulation-Based Stability Analysis of a Thin-Walled Cylinder During Turning with Improvements Using an Adaptronic Turning Chisel. <i>Archive of Mechanical Engineering</i> , <b>2011</b> , 58,		7
197	Active Vibration Control for a Machine Tool With Parallel Kinematics and Adaptronic Actuator. <i>Journal of Computational and Nonlinear Dynamics</i> , <b>2009</b> , 4,	1.4	7
196	Optimization-Driven Control and Organization of a Robot Swarm for Cooperative Transportation. <i>IFAC-PapersOnLine</i> , <b>2019</b> , 52, 115-120	0.7	7
195	Stability analysis of milling processes with varying workpiece dynamics. <i>Multibody System Dynamics</i> , <b>2018</b> , 42, 383-396	2.8	7
194	Fundamental investigations on the spiking mechanism by means of laser beam welding of ice. <i>Journal of Laser Applications</i> , <b>2018</b> , 30, 012009	2.1	6
193	Experimental study on a nonlinear observer application for a very flexible parallel robot. <i>International Journal of Dynamics and Control</i> , <b>2019</b> , 7, 1046-1055	1.7	6
192	Controlling vibrations of a cutting process using predictive control. <i>Computational Mechanics</i> , <b>2014</b> , 54, 21-31	4	6
191	A-posteriori error estimation for second order mechanical systems. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2012</b> , 28, 854-862	2	6
190	Einfluss von Schnittstellenmodellierungen bei der Reduktion elastischer Mehrkörpersysteme. <i>Automatisierungstechnik</i> , <b>2011</b> , 59, 512-519	0.8	6
189	Simulation of material tests using meshfree Lagrangian particle methods. <i>Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics</i> , <b>2008</b> , 222, 327-338	0.9	6
188	Simulation of Longitudinal Impact Waves Using Time Delayed Systems. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , <b>2004</b> , 126, 644-649	1.6	6
187	A General Purpose Algorithm for Optimal Trajectory Planning of Closed Loop Multibody Systems. <i>Computational Methods in Applied Sciences (Springer)</i> , <b>2011</b> , 173-193	0.4	6
186	Investigating the dissipative effects of liquid-filled particle dampers using coupled DEMSPH methods. <i>Computational Particle Mechanics</i> , <b>2019</b> , 6, 257-269	3	6
185	Multi-scale dynamics of particle dampers using wavelets: Extracting particle activity metrics from ring down experiments. <i>Journal of Sound and Vibration</i> , <b>2019</b> , 454, 1-13	3.9	5



184	Stability Analysis of Multi-Discrete Delay Milling with Helix Effects Using a General Order Full-Discretization Method Updated with a Generalized Integral Quadrature. <i>Mathematics</i> , <b>2020</b> , 8, 1003 <sup>2-3</sup>	5
183	On the applicability of static modes switching in gear contact applications. <i>Multibody System Dynamics</i> , <b>2013</b> , 30, 209-219	2.8 5
182	Transient simulation of friction-induced vibrations using an elastic multibody approach. <i>Multibody System Dynamics</i> , <b>2017</b> , 39, 37-49	2.8 5
181	Transporting an elastic plate using a group of swarm mobile robots <b>2017</b> ,	5
180	Computation of stability diagrams for milling processes with parallel kinematic machine tools. <i>Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering</i> , <b>2009</b> , 223, 117-129	1 5
179	EFFECTS OF STRAIN RATE DEPENDENCY OF MATERIAL PROPERTIES IN LOW VELOCITY IMPACT. <i>International Journal of Modern Physics B</i> , <b>2008</b> , 22, 1165-1170	1.1 5
178	A New Curve Tracking Algorithm for Efficient Computation of Stability Boundaries of Cutting Processes. <i>Journal of Computational and Nonlinear Dynamics</i> , <b>2007</b> , 2, 360-365	1.4 5
177	Analysis of alternative front suspension systems for motorcycles. <i>Vehicle System Dynamics</i> , <b>2006</b> , 44, 679-689	2.8 5
176	Contact Simulation for Many Particles Considering Adhesion. <i>Mechanics Based Design of Structures and Machines</i> , <b>2003</b> , 31, 433-457	1.7 5
175	Dynamical Particle Simulation with Parallel Cache-Aware Domain Decomposition Strategies. <i>Proceedings in Applied Mathematics and Mechanics</i> , <b>2005</b> , 5, 657-658	0.2 5
174	CONTROL OPTIMIZATION F MULTIBODY SYSTEMS SING POINT- AND PIECEWISE EFINED OPTIMIZATION CRITERIA. <i>Engineering Optimization</i> , <b>2000</b> , 32, 417-438	2 5
173	Investigation of Gears Using an Elastic Multibody Model with Contact. <i>Computational Methods in Applied Sciences (Springer)</i> , <b>2011</b> , 309-327	0.4 5
172	Nonlinear Model Predictive Control for a Maglev Vehicle regarding Magnetic Saturation and Guideway Irregularities. <i>IFAC-PapersOnLine</i> , <b>2019</b> , 52, 145-150	0.7 5
171	Investigation of dynamic stress recovery in elastic gear simulations using different reduction techniques. <i>Computational Mechanics</i> , <b>2018</b> , 62, 439-456	4 5
170	Model Order Reduction for Parameter Dependent Substructured Systems using Krylov Subspaces. <i>IFAC-PapersOnLine</i> , <b>2018</b> , 51, 553-558	0.7 5
169	Transient Simulation of Cooling-Lubricant Flow for Deep-Hole Drilling-Processes. <i>Procedia CIRP</i> , <b>2018</b> , 77, 78-81	1.8 5
168	Data-Based Model of an Omnidirectional Mobile Robot Using Gaussian Processes. <i>IFAC-PapersOnLine</i> , <b>2021</b> , 54, 13-18	0.7 5
167	Musical instruments Sound synthesis of virtual idiophones. <i>Journal of Sound and Vibration</i> , <b>2017</b> , 395, 187-200	3.9 4

166	Tensor-Based Automatic Arbitrary Order Computation of the Full-Discretization Method for Milling Stability Analysis. <i>Advanced Structured Materials</i> , <b>2019</b> , 179-205	0.6	4
165	Moremba Model Order Reduction Package for Elastic Multibody Systems and Beyond <b>2018</b> , 141-166		4
164	A Comprehensive Fuzzy Uncertainty Analysis of a Controlled Nonlinear System With Unstable Internal Dynamics. <i>ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering</i> , <b>2015</b> , 1,	1.4	4
163	Relative observation for multi-robot collaborative localisation based on multi-source signals. <i>Journal of Experimental and Theoretical Artificial Intelligence</i> , <b>2014</b> , 26, 571-591	2	4
162	Aspects of Symbolic Formulations in Flexible Multibody Systems. <i>Journal of Computational and Nonlinear Dynamics</i> , <b>2014</b> , 9,	1.4	4
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