

Giampiero Rm Mastinu

List of Publications by Year in descending order

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95
papers

1,253
citations

430874

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g-index

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all docs

96
docs citations

96
times ranked

710
citing authors

#	ARTICLE	IF	CITATIONS
1	ANALYTICAL DESCRIPTION AND OPTIMIZATION OF THE DYNAMIC BEHAVIOUR OF PASSIVELY SUSPENDED ROAD VEHICLES. <i>Journal of Sound and Vibration</i> , 2001, 245, 457-481.	3.9	139
2	Brake comfort – a review. <i>Vehicle System Dynamics</i> , 2009, 47, 901-947.	3.7	74
3	Multi-objective stochastic optimisation of the suspension system of road vehicles. <i>Journal of Sound and Vibration</i> , 2006, 298, 1055-1072.	3.9	70
4	A method for measuring the inertia properties of rigid bodies. <i>Mechanical Systems and Signal Processing</i> , 2011, 25, 305-318.	8.0	61
5	Bifurcation analysis of an automobile model negotiating a curve. <i>Vehicle System Dynamics</i> , 2012, 50, 1539-1562.	3.7	53
6	A New Six-axis Load Cell. Part I: Design. <i>Experimental Mechanics</i> , 2011, 51, 373-388.	2.0	50
7	Optimising a Car Chassis. <i>Vehicle System Dynamics</i> , 1999, 32, 149-170.	3.7	39
8	A New Six-Axis Load Cell. Part II: Error Analysis, Construction and Experimental Assessment of Performances. <i>Experimental Mechanics</i> , 2011, 51, 389-399.	2.0	38
9	Optimal Sizing of Traction Motors Using Scalable Electric Machine Model. <i>IEEE Transactions on Transportation Electrification</i> , 2018, 4, 314-321.	7.8	36
10	Advances in Force and Moments Measurements by an Innovative Six-axis Load Cell. <i>Experimental Mechanics</i> , 2014, 54, 571-592.	2.0	32
11	Comparative analysis of various methods for modelling surface permanent magnet machines. <i>IET Electric Power Applications</i> , 2017, 11, 540-547.	1.8	32
12	Improved method for field analysis of surface permanent magnet machines using Schwarz–Christoffel transformation. <i>IET Electric Power Applications</i> , 2017, 11, 1067-1075.	1.8	32
13	Optimization and integration of ground vehicle systems. <i>Vehicle System Dynamics</i> , 2005, 43, 437-453.	3.7	30
14	Bifurcation analysis of a car and driver model. <i>Vehicle System Dynamics</i> , 2014, 52, 142-156.	3.7	26
15	On the Optimal Design of Composite Material Tubular Helical Springs. <i>Meccanica</i> , 2001, 36, 525-553.	2.0	23
16	An application of multi-objective stochastic optimisation to structural design. <i>Structural and Multidisciplinary Optimization</i> , 2005, 29, 272-284.	3.5	22
17	Measurement of the forces and moments acting on farm tractor pneumatic tyres. <i>Vehicle System Dynamics</i> , 2005, 43, 412-433.	3.7	22
18	Optimal & Robust Design of a Road Vehicle Suspension System. <i>Vehicle System Dynamics</i> , 1999, 33, 3-22.	3.7	20

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19	Farm tractor models for research and development purposes. <i>Vehicle System Dynamics</i> , 2007, 45, 37-60.	3.7	20
20	Mathematical models for farm tractor rollover prediction. <i>International Journal of Vehicle Design</i> , 2014, 64, 280.	0.3	19
21	On the Testing of Vibration Performances of Road Vehicle Suspensions. <i>Experimental Mechanics</i> , 2007, 47, 485-495.	2.0	18
22	Analysis of the lateral dynamics of a vehicle and driver model running straight ahead. <i>Nonlinear Dynamics</i> , 2018, 92, 97-106.	5.2	18
23	Thermal Management of Electrified Vehicles – A Review. <i>Energies</i> , 2022, 15, 1326.	3.1	18
24	Improving the active safety of road vehicles by sensing forces and moments at the wheels. <i>Vehicle System Dynamics</i> , 2008, 46, 957-968.	3.7	16
25	A dummy for the objective ride comfort evaluation of ground vehicles. <i>Vehicle System Dynamics</i> , 2009, 47, 343-362.	3.7	16
26	On the analytical derivation of the Pareto-optimal set with applications to structural design. <i>Structural and Multidisciplinary Optimization</i> , 2015, 51, 645-657.	3.5	16
27	Analysis of an unusual McPherson suspension failure. <i>Engineering Failure Analysis</i> , 2009, 16, 1000-1010.	4.0	14
28	Parameter Sensitivity Analysis of a Passenger/Seat Model for Ride Comfort Assessment. <i>Experimental Mechanics</i> , 2011, 51, 1237-1249.	2.0	14
29	Straight ahead running of a nonlinear car and driver model – new nonlinear behaviours highlighted. <i>Vehicle System Dynamics</i> , 2018, 56, 753-768.	3.7	14
30	An Ultra-Efficient Lightweight Electric Vehicle – Power Demand Analysis to Enable Lightweight Construction. <i>Energies</i> , 2021, 14, 766.	3.1	14
31	The effect of mass properties on road accident reconstruction. <i>International Journal of Crashworthiness</i> , 2014, 19, 71-88.	1.9	13
32	Indoor testing of road vehicle suspensions. <i>Meccanica</i> , 2008, 43, 173-184.	2.0	12
33	Farm tractors with suspended front axle: Anti-dive and anti-lift characteristics. <i>Journal of Terramechanics</i> , 2014, 56, 157-172.	3.1	12
34	Bifurcation Analysis of a Car Model Running on an Even Surface - A Fundamental Study for Addressing Autonomous Vehicle Dynamics. <i>SAE International Journal of Vehicle Dynamics, Stability, and NVH</i> , 0, 1, 326-337.	0.5	12
35	Straight running stability of automobiles: experiments with a driving simulator. <i>Nonlinear Dynamics</i> , 2020, 99, 2801-2818.	5.2	12
36	Symbolic multi-objective optimisation of the dynamic behaviour of actively suspended road vehicles. <i>International Journal of Vehicle Design</i> , 2002, 28, 189.	0.3	11

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37	Method for the Measurement of the Inertia Properties of Bodies with Aerofoils. Journal of Aircraft, 2012, 49, 444-452.	2.4	11
38	Tire-Rim Interaction, a Semi-Analytical Tire Model. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	2.9	11
39	A Critical Review of Optimization Methods for Road Vehicles Design. , 2006, , .		9
40	Multidisciplinary Design of Electric Vehicles Based on Hierarchical Multi-Objective Optimization. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	2.9	9
41	Multi-Objective Optimization of the Handling Performances of a Road Vehicle: A Fundamental Study on Tire Selection. Journal of Mechanical Design, Transactions of the ASME, 2004, 126, 687-702.	2.9	8
42	Refined Design of a Measuring Wheel. , 2011, , .		7
43	Race Motorcycle Smart Wheel. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 8, 119-127.	0.4	7
44	An instrumented steering wheel for driver model development. Mechatronics, 2019, 64, 102285.	3.3	7
45	Straight-ahead running of road vehicles " analytical formulae including full tyre characteristics. Vehicle System Dynamics, 2019, 57, 1745-1774.	3.7	7
46	Nonlinear Dynamics of a Road Vehicle Running into a Curve. Understanding Complex Systems, 2012, , 125-153.	0.6	7
47	Stochastic Multi-Objective Optimisation of a Gearbox Synchroniser and Selector Mechanism. , 2003, , 113.		6
48	Global chassis control by sensing forces/moments at the wheels. International Journal of Vehicle Autonomous Systems, 2009, 7, 221.	0.2	6
49	Multi-objective optimization of in-wheel motor powertrain and validation using vehicle simulator. , 2015, , .		6
50	Theoretical/Experimental Study on the Vibrations of a Car Engine. SAE International Journal of Passenger Cars - Mechanical Systems, 2008, 1, 896-908.	0.4	5
51	On the Optimisation of a Double Cone Synchroniser for Improved Manual Transmission Shiftability. , 2002, , 21.		4
52	Test Rig for Characterization of Automotive Suspension Systems. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 1, 568-576.	0.4	4
53	6-Axis Measuring Wheels for Trucks or Heavy Vehicles. SAE International Journal of Commercial Vehicles, 0, 7, 141-149.	0.4	4
54	Instrumented Steering Wheel for Accurate ADAS Development. , 0, , .		4

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55	A New Test Rig for Measuring the Inertia Properties of Vehicles and Their Subsystems. , 2004, , 849.		3
56	Numericalâ€œexperimental analysis of metal bars undergoing intermediate strain rate impacts. Computational Mechanics, 2009, 43, 191-205.	4.0	3
57	A Method for Vibration and Harshness Analysis Based on Indoor Testing of Automotive Suspension Systems. SAE International Journal of Materials and Manufacturing, 2010, 3, 290-304.	0.3	3
58	Influence of Vehicle Inertia Tensor and Center of Gravity Location on Road Accident Reconstruction. , 2011, , .		3
59	Lightweight Design of a Brake Caliper. , 2013, , .		3
60	A Method for the Assessment of the Dynamic Performance of Neck Protection Devices. , 2013, , .		3
61	A comparison study of modelling techniques for permanent magnet machines. , 2016, , .		3
62	Study on the Driver/Steering Wheel Interaction in Emergency Situations. Applied Sciences (Switzerland), 2020, 10, 7055.	2.5	3
63	Multi-Disciplinary Optimisation of Road Vehicle Chassis Subsystems. Energies, 2022, 15, 2172.	3.1	3
64	A Railway Wheelset Optimally Designed for Cold Press Fitting. JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2004, 47, 502-507.	0.3	2
65	Friction Coefficient on Snowy and Icy Surfaces of Pneumatic Tires Fitted with or without Anti-Skid Devices. , 0, , .		2
66	Objective Ride Comfort Measurement. , 2007, , 1125.		2
67	Developing a 'no-whiplash' headrest. International Journal of Vehicle Systems Modelling and Testing, 2009, 4, 201.	0.1	2
68	Multi-objective-reliability-based optimisation of a farm tractor front axle suspension. International Journal of Heavy Vehicle Systems, 2011, 18, 257.	0.2	2
69	The Effect of Mandrel Speed upon the Residual Stress Distribution around Cold Expanded Hole. Procedia Engineering, 2011, 10, 2178-2183.	1.2	2
70	Experimental Assessment of the Ride Comfort of Farm Tractors. , 2013, , .		2
71	Inertia Tensor and Other Mass Properties Measurement for Automotive Applications. SAE International Journal of Passenger Cars - Mechanical Systems, 2014, 7, 505-513.	0.4	2
72	A Race Motorcycle Frame: Advanced Design. , 2014, , .		2

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73	Analytical multi-physics methodology for fast acoustic noise prediction of an external rotor SPMSM. , 2017, , .		2
74	Motorcycle Structural Fatigue Monitoring Using Smart Wheels. Vehicles, 2020, 2, 648-674.	3.1	2
75	Optimal Lightweight Construction Principles. , 2021, , .		2
76	Uncertainty Bounds of Inertia Properties Required for Vehicle Dynamic Analyses. , 2007, , .		2
77	Further understanding of steering feedback and driver behavior through the application of an instrumented steering wheel. Proceedings, 2020, , 481-502.	0.3	2
78	Electric and biomethane-fuelled urban buses: comparison of environmental performance of different powertrains. International Journal of Life Cycle Assessment, 2022, 27, 238-254.	4.7	2
79	Stability of Controlled Road Vehicles: A Preliminary Fundamental Study. , 2015, , .		1
80	Multi-Objective Optimization of Road Vehicle Passive Suspensions With Inerter. , 2016, , .		1
81	On the Pareto Optimality of Ashby's Selection Method for Beams Under Bending. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	2.9	1
82	Measurement data obtained by an instrumented steering wheel for driver model development. Data in Brief, 2020, 30, 105485.	1.0	1
83	A Dummy for Reproducing the Human Whole Body Vibration. , 2007, , 689.		0
84	Optimal Robust Design Optimization with Application to a Piezoelectric Brake. SAE International Journal of Passenger Cars - Mechanical Systems, 2008, 1, 1208-1216.	0.4	0
85	Failure Analysis of the Upper Mount of a Car Suspension. Procedia Engineering, 2011, 10, 3567-3574.	1.2	0
86	A Method for the Optimal Design of Automotive Rubber Components. , 2012, , .		0
87	A New Electric Powertrain for Light Trucks: Indoor Testing and Advanced Simulation. , 2014, , .		0
88	InTenso+ System: Measured Centre of Gravity Locations and Inertia Tensors of Road Vehicles. , 2014, , .		0
89	Lightweight Seat Design and Crash Simulations. , 0, , .		0
90	Countersteering to Recover Straight Ahead Running After a Disturbance. , 2016, , .		0

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91	Hydro-Pneumatic Suspension for a 6x6 All-Terrain Amphibious Vehicle: Design and Testing. , 2018, , .		0
92	Motorcycle Accidents â€™ A New Head and Neck Safety Device for Riders. International Journal of Automotive Technology, 2019, 20, 25-36.	1.4	0
93	D403 A RAILWAY WHEELSET OPTIMALLY DESIGNED FOR COLD PRESS FITTING. The Proceedings of International Symposium on Seed-up and Service Technology for Railway and Maglev Systems STECH, 2003, 2003, 425-430.	0.0	0
94	C801 FEASIBILITY STUDY OF A PEOPLE MOVER. The Proceedings of International Symposium on Seed-up and Service Technology for Railway and Maglev Systems STECH, 2003, 2003, 561-564.	0.0	0
95	Straight running â€™ stability analysis with a driving simulator. Proceedings, 2020, , 551-568.	0.3	0