

Catalin Alexandru

List of Publications by Year in descending order

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all docs

54
docs citations

54
times ranked

170
citing authors

#	ARTICLE	IF	CITATIONS
1	A Method for Finding the Static Equilibrium of the Non-Steered Wheel Suspension Systems Used in Passenger Cars. Applied Sciences (Switzerland), 2022, 12, 7122.	1.3	1
2	Multi-Criteria Optimization of an Innovative Suspension System for Race Cars. Applied Sciences (Switzerland), 2021, 11, 4167.	1.3	4
3	Optimization of the Bi-Axial Tracking System for a Photovoltaic Platform. Energies, 2021, 14, 535.	1.6	8
4	Performance of Diaphragm Elastic Elements in ABS. Applied Mechanics and Materials, 2020, 896, 241-248.	0.2	2
5	A STUDY ON THE SEMI-ACTIVE SUSPENSION SYSTEMS USED FOR MOTOR VEHICLES. Journal of Research and Innovation for Sustainable Society, 2020, 2, 16-25.	0.1	3
6	ANALYTICAL METHOD FOR THE KINEMATICS OF THE MULTI-LINK GUIDING MECHANISMS USED FOR VEHICLE REAR AXLE SUSPENSION. Journal of Research and Innovation for Sustainable Society, 2020, 2, 13-20.	0.1	0
7	Optimal design of the dual-axis tracking system used for a PV string platform. Journal of Renewable and Sustainable Energy, 2019, 11, .	0.8	11
8	Method for the quasi-static analysis of beam axle suspension systems used for road vehicles. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2019, 233, 1818-1833.	1.1	2
9	A REVIEW ON THE SUN TRACKING MECHANISMS FOR PV STRINGS. Journal of Research and Innovation for Sustainable Society, 2019, 1, 5-14.	0.1	0
10	Aspects regarding the experimental research of the stressors of the human pregnancy in case of road events. MATEC Web of Conferences, 2018, 184, 01006.	0.1	0
11	Optimizing the mechanical device of a mono-axial sun tracking mechanism. MATEC Web of Conferences, 2018, 184, 01001.	0.1	1
12	Optimizing the control system of a single-axis sun tracking mechanism. MATEC Web of Conferences, 2018, 184, 01002.	0.1	2
13	Numerical Method for the Kinematic Analysis of the Spatial Multi-Link Mechanisms. International Journal of Modeling and Optimization, 2018, 8, 101-105.	0.4	1
14	A mechanical integral steering system for increasing the stability and handling of motor vehicles. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2017, 231, 1465-1480.	1.1	5
15	Mono-Objective Optimization of a Photovoltaic Tracking System with LPF Controllers. Applied Mechanics and Materials, 2016, 823, 7-12.	0.2	0
16	Method for the multi-criteria optimization of car wheel suspension mechanisms. Ingenieria E Investigacion, 2016, 36, 60.	0.2	6
17	Dynamic Modeling and Simulation of a 4-Wheel Integral Steering Vehicle. Applied Mechanics and Materials, 2015, 811, 284-290.	0.2	0
18	A comparative analysis between the tracking solutions implemented on a photovoltaic string. Journal of Renewable and Sustainable Energy, 2014, 6, .	0.8	7

#	ARTICLE	IF	CITATIONS
19	Dynamic Optimization of a Single-Seater Car Suspension System. Applied Mechanics and Materials, 2014, 658, 147-152.	0.2	0
20	Dynamic Simulation of a Motor Vehicle in Virtual Prototyping Environment. Applied Mechanics and Materials, 2014, 555, 369-374.	0.2	0
21	Multi-Criteria Dynamic Optimization of a Front Wheels Suspension System. Applied Mechanics and Materials, 2014, 656, 129-136.	0.2	1
22	Modeling the angular capability of the ball joints in a complex mechanism with two degrees of mobility. Applied Mathematical Modelling, 2014, 38, 5456-5470.	2.2	12
23	Optimal Design of the Motion Law for a Pseudo-Azimuthal Tracking System. Mechanisms and Machine Science, 2014, , 135-143.	0.3	0
24	Optimal design of the solar tracker used for a photovoltaic string. Journal of Renewable and Sustainable Energy, 2013, 5, 023133.	0.8	31
25	Modeling and Simulation in Virtual Prototyping Environment of a Photovoltaic Tracking System. Applied Mechanics and Materials, 2013, 436, 100-107.	0.2	0
26	A Novel Open-Loop Tracking Strategy for Photovoltaic Systems. Scientific World Journal, The, 2013, 2013, 1-12.	0.8	34
27	Design and Optimization of a Monoaxial Tracking System for Photovoltaic Modules. Journal of Solar Energy, 2013, 2013, 1-6.	0.8	4
28	Study Concerning the Effect of the Bushings' Deformability on the Static Behavior of the Rear Axle Guiding Linkages. Applied Mechanics and Materials, 2012, 245, 132-137.	0.2	5
29	Dynamic optimization of the tracking system for a pseudo-azimuthal photovoltaic platform. Journal of Renewable and Sustainable Energy, 2012, 4, .	0.8	15
30	Optimal algorithm for spray pyrolysis deposition of TiO2 films by using an industrial robot. Journal of Renewable and Sustainable Energy, 2012, 4, .	0.8	5
31	Design and simulation of a steering gearbox with variable transmission ratio. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2012, 226, 2538-2548.	1.1	19
32	Modeling and simulation of the tracking mechanism for a PV string. , 2012, , .		1
33	Parametric optimization of a tracking system for the photovoltaic modules. , 2012, , .		0
34	A gear with translational wheel for a variable transmission ratio and applications to steering box. Mechanism and Machine Theory, 2012, 52, 267-276.	2.7	20
35	VIRTUAL PROTOTYPING OF A SPRAYING ROBOTIC SYSTEM. Environmental Engineering and Management Journal, 2011, 10, 1197-1205.	0.2	3
36	DESIGN AND SIMULATION OF A PHOTOVOLTAIC STRING WITH TRACKING MECHANISM. Environmental Engineering and Management Journal, 2011, 10, 1363-1370.	0.2	3

#	ARTICLE	IF	CITATIONS
37	The design and optimization of a photovoltaic tracking mechanism. , 2009, , .		13
38	Virtual prototype of a dual-axis tracking system used for photovoltaic panels. , 2008, , .		9
39	The energy balance of the photovoltaic tracking systems using virtual prototyping platform. , 2008, , .		15
40	Optimal Design of the Mechanical Systems Using Parametric Technique & MBS (Multi-Body Systems) Software. Advanced Materials Research, 0, 463-464, 1129-1132.	0.3	6
41	Modeling and Simulation of A 6 Dof Robot. Advanced Materials Research, 0, 463-464, 1116-1119.	0.3	11
42	Optimal Design of the Mechanical Device for a Photovoltaic Tracking Mechanism. Applied Mechanics and Materials, 0, 186, 114-123.	0.2	4
43	Designing the Tracking System for a String of Photovoltaic Modules. Advanced Materials Research, 0, 463-464, 1589-1592.	0.3	0
44	Control System Design for a Mechatronic Solar Tracker. Applied Mechanics and Materials, 0, 332, 248-253.	0.2	1
45	Multi-Criteria Kinematic Optimization of a Front Multi-Link Suspension Mechanism Using DOE Screening and Regression Model. Applied Mechanics and Materials, 0, 332, 351-356.	0.2	7
46	Design of the User Interface for a Robotic Spray Pyrolysis System to Deposit Thin Films. Applied Mechanics and Materials, 0, 332, 194-199.	0.2	1
47	Design and Simulation of a Single DOF Human-Like Leg Mechanism. Applied Mechanics and Materials, 0, 332, 491-496.	0.2	16
48	Dynamic Simulation in Mechatronic Concept of a Photovoltaic String Equipped with Solar Tracker. Applied Mechanics and Materials, 0, 555, 425-433.	0.2	0
49	Analytical Algorithm for the Optimal Kinematic Design of the Wheel Suspension Mechanisms. Applied Mechanics and Materials, 0, 772, 96-102.	0.2	2
50	Simulation of a Mechatronic Dual-Axis Tracking System for PV Panels. Applied Mechanics and Materials, 0, 859, 81-87.	0.2	1
51	Analytical Method for Determining the Static Equilibrium Position of the Rear Axles Guiding Mechanisms of the Motor Vehicles. Applied Mechanics and Materials, 0, 841, 59-64.	0.2	3
52	Design and Analysis in Virtual Prototyping Environment of an Innovative Integral Steering System for 2-Axle Cars. Applied Mechanics and Materials, 0, 880, 213-219.	0.2	0
53	Virtual Prototyping Platform for Designing Mechanical and Mechatronic Systems. , 0, , .		3