Florian Ion Tiberiu Petrescu

List of Publications by Year
in descending order

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168 papers	1,363 citations	567281 15 h-index	552781 26 g-index
170 all docs	170 docs citations	170 times ranked	379 citing authors

#	Article	IF	Citations
1	Nano-Diamond Hybrid Materials for Structural Biomedical Application. American Journal of Biochemistry and Biotechnology, 2017, 13, 34-41.	0.4	122
2	Extended MTSN criterion for fracture analysis of soda lime glass. Engineering Fracture Mechanics, 2017, 178, 50-59.	4.3	59
3	One-Dimensional (1D) Nanostructured Materials for Energy Applications. Materials, 2021, 14, 2609.	2.9	47
4	Hydrogen for aircraft power and propulsion. International Journal of Hydrogen Energy, 2020, 45, 20740-20764.	7.1	43
5	Biomechanically Inspired Shape Memory Effect Machines Driven by Muscle like Acting NiTi Alloys. American Journal of Applied Sciences, 2016, 13, 1264-1271.	0.2	40
6	Biomimetic and Evolutionary Design Driven Innovation in Sustainable Products Development. American Journal of Engineering and Applied Sciences, 2016, 9, 1027-1036.	0.6	38
7	Environmental Protection through Nuclear Energy. American Journal of Applied Sciences, 2016, 13, 941-946.	0.2	36
8	Forces of a 3R Robot. Journal of Mechatronics and Robotics, 2017, 1, 1-14.	0.3	34
9	Direct Geometry and Cinematic to the MP-3R Systems. Journal of Mechatronics and Robotics, 2017, 1, 15-23.	0.3	33
10	Smart-Factory: Optimization and Process Control of Composite Centrifuged Pipes. American Journal of Applied Sciences, 2016, 13, 1330-1341.	0.2	28
11	The Inverse Kinematics of the Plane System 2-3 in a Mechatronic MP2R System, by a Trigonometric Method. Journal of Mechatronics and Robotics, 2017, 1, 75-87.	0.3	28
12	Current Stage in the Field of Mechanisms with Gears and Rods. Journal of Mechatronics and Robotics, 2017, 1, 47-57.	0.3	27
13	Kinematics and Forces to a New Model Forging Manipulator. American Journal of Applied Sciences, 2017, 14, 60-80.	0.2	25
14	Hybrid Ceramo-Polymeric Nanocomposite for Biomimetic Scaffolds Design and Preparation. American Journal of Engineering and Applied Sciences, 2016, 9, 1096-1105.	0.6	23
15	Physiologic Human Fluids and Swelling Behavior of Hydrophilic Biocompatible Hybrid Ceramo-Polymeric Materials. American Journal of Engineering and Applied Sciences, 2016, 9, 962-972.	0.6	23
16	Glassy Amorphous Metal Injection Molded Induced Morphological Defects. American Journal of Applied Sciences, 2016, 13, 1476-1482.	0.2	21
17	About Nano Fusion and Dynamic Fusion. American Journal of Applied Sciences, 2016, 13, 261-266.	0.2	19
18	Nuclear hydrogen structure and dimensions. International Journal of Hydrogen Energy, 2019, 44, 10833-10837.	7.1	19

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19	DIRECT AND INVERSE KINEMATICS TO THE ANTHROPOMORPHIC ROBOTS. Engevista, 2016, 18, 109.	0.1	19
20	Processability of Bulk Metallic Glasses. American Journal of Applied Sciences, 2017, 14, 294-301.	0.2	18
21	Something about the Balancing of Thermal Motors. American Journal of Engineering and Applied Sciences, 2017, 10, 200-217.	0.6	17
22	Something about the V Engines Design. American Journal of Applied Sciences, 2017, 14, 34-52.	0.2	17
23	About Helicopters. Journal of Aircraft and Spacecraft Technology, 2017, 1, 204-223.	0.6	17
24	About the Light Dimensions. American Journal of Applied Sciences, 2016, 13, 321-325.	0.2	16
25	Modern Propulsions for Aerospace-A Review. Journal of Aircraft and Spacecraft Technology, 2017, 1, 1-8.	0.6	16
26	CINEMATICS OF THE 3R DYAD. Engevista, 2013, 15, 118.	0.1	16
27	Modern Propulsions for Aerospace-Part II. Journal of Aircraft and Spacecraft Technology, 2017, 1, 9-17.	0.6	15
28	About the nuclear particlesâ€™ structure and dimensions. Computational Particle Mechanics, 2019, 6, 191-194.	3.0	15
29	Determining the Dynamic Efficiency of Cams. SSRN Electronic Journal, 2005, , .	0.4	14
30	Future Medicine Services Robotics. American Journal of Engineering and Applied Sciences, 2016, 9, 1062-1087.	0.6	14
31	Ecosphere Protection through Green Energy. American Journal of Applied Sciences, 2016, 13, 1027-1032.	0.2	14
32	Biomimetic Finite Element Analysis Bone Modeling for Customized Hybrid Biological Prostheses Development. American Journal of Applied Sciences, 2016, 13, 1060-1067.	0.2	14
33	A Simple Polypyrrole/Polyvinylidene Fluoride Membrane with Hydrophobic and Self-Floating Ability for Solar Water Evaporation. Nanomaterials, 2022, 12, 859.	4.1	14
34	Something about the Mechanical Moment of Inertia. American Journal of Applied Sciences, 2016, 13, 1085-1090.	0.2	13
35	Biofidel FEA Modeling of Customized Hybrid Biological Hip Joint Prostheses, Part I: Biomechanical Behavior of Implanted Femur. American Journal of Biochemistry and Biotechnology, 2016, 12, 270-276.	0.4	13
36	Some Special Aircraft. Journal of Aircraft and Spacecraft Technology, 2017, 1, 186-203.	0.6	13

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37	KINEMATICS OF THE PLANAR QUADRILATERAL MECHANISM. Engevista, 2012, 14, .	0.1	13
38	Photocatalytic Degradation of Fluoroquinolone Antibiotics in Solution by Au@ZnO-rGO-gC3N4 Composites. Catalysts, 2022, 12, 166.	3.5	13
39	Hydrogen Production and Degradation of Ciprofloxacin by Ag@TiO2-MoS2 Photocatalysts. Catalysts, 2022, 12, 267.	3.5	13
40	Photocatalytic Activity of Silver-Based Biomimetics Composites. Biomimetics, 2021, 6, 4.	3.3	12
41	Geometrical Synthesis of the Distribution Mechanisms. American Journal of Engineering and Applied Sciences, 2015, 8, 63-81.	0.6	11
42	Airlander. Journal of Aircraft and Spacecraft Technology, 2017, 1, 119-148.	0.6	11
43	The Quality of Transport and Environmental Protection, Part I. American Journal of Engineering and Applied Sciences, 2017, 10, 738-755.	0.6	11
44	Testing by Non-Destructive Control. American Journal of Engineering and Applied Sciences, 2017, 10, 568-583.	0.6	11
45	Machine Motion Equations at the Internal Combustion Heat Engines. American Journal of Engineering and Applied Sciences, 2015, 8, 127-137.	0.6	10
46	An Original Internal Combustion Engine. SSRN Electronic Journal, 2017, , .	0.4	10
47	Biomimetic Catalysts Based on Au@ZnOâ€“Graphene Composites for the Generation of Hydrogen by Water Splitting. Biomimetics, 2020, 5, 39.	3.3	10
48	The Cam Design for a Better Efficiency. SSRN Electronic Journal, 2005, , .	0.4	9
49	Biofidel FEA Modeling of Customized Hybrid Biological Hip Joint Design Part II: Flexible Stem Trabecular Prostheses. American Journal of Biochemistry and Biotechnology, 2016, 12, 277-285.	0.4	9
50	Something about Electron Dimension. American Journal of Applied Sciences, 2016, 13, 1272-1276.	0.2	9
51	Hybrid Ceramo-Polymeric Nano-Diamond Composites. American Journal of Engineering and Applied Sciences, 2018, 11, 766-782.	0.6	9
52	On the Use of Infrared Thermography and Acoustoâ€”Ultrasonics NDT Techniques for Ceramic-Coated Sandwich Structures. Energies, 2019, 12, 2537.	3.1	9
53	Cam Gears Dynamics in the Classic Distribution. Independent Journal of Management & Production, 2014, 5, .	0.4	9
54	Inverse Kinematics at the Anthropomorphic Robots, by a Trigonometric Method. American Journal of Engineering and Applied Sciences, 2017, 10, 394-411.	0.6	8

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55	DYNAMIC SYNTHESIS OF THE ROTARY CAM AND TRANSLATED TAPPET WITH ROLL. Engevista, 2013, 15, .	0.1	8
56	A Ternary Model for Particle Packing Optimization. Journal of Composites Science, 2022, 6, 113.	3.0	8
57	Some Basic Reactions in Nuclear Fusion. American Journal of Engineering and Applied Sciences, 2017, 10, 709-716.	0.6	7
58	NASA Satellites Help us to Quickly Detect Forest Fires. American Journal of Engineering and Applied Sciences, 2018, 11, 288-296.	0.6	7
59	Advanced Manufacturing for Novel Materials in Industrial Design Applications. American Journal of Engineering and Applied Sciences, 2018, 11, 932-972.	0.6	7
60	Modern Transportation and Photovoltaic Energy for Urban Ecotourism. Transylvanian Review of Administrative Sciences, 2017, , 5-20.	0.6	7
61	Assessment of Woodcrete Using Destructive and Non-Destructive Test Methods. Materials, 2022, 15, 3066.	2.9	7
62	Multiaxial Fatigue Strength to Notched specimens made of 40CrMoV13.9. American Journal of Engineering and Applied Sciences, 2016, 9, 1269-1291.	0.6	6
63	About the Gear Efficiency to a Simple Planetary Train. American Journal of Applied Sciences, 2016, 13, 1428-1436.	0.2	6
64	Anthropomorphic Solid Structures n-R Kinematics. American Journal of Engineering and Applied Sciences, 2017, 10, 279-291.	0.6	6
65	Some Proposed Solutions to Achieve Nuclear Fusion. American Journal of Engineering and Applied Sciences, 2017, 10, 703-708.	0.6	6
66	Velocities and Accelerations at the 3R Mechatronic Systems. American Journal of Engineering and Applied Sciences, 2017, 10, 252-263.	0.6	6
67	Biomechanically Inspired Machines, Driven by Muscle Like Acting NiTi Alloys. American Journal of Engineering and Applied Sciences, 2018, 11, 809-829.	0.6	6
68	Kinematics of a Mechanism with a Triad. American Journal of Engineering and Applied Sciences, 2018, 11, 297-308.	0.6	6
69	Cold Crystallization Behavior of a Zr₄₄-Ti₁₁-Cu₁₀-Ni₁₀-Be₂₅ Metal Glassy Alloy. American Journal of Engineering and Applied Sciences, 2018, 11, 1005-1022.	0.6	5
70	About the Triton Structure. American Journal of Engineering and Applied Sciences, 2018, 11, 1293-1297.	0.6	5
71	Biomechanically Tunable Nano-Silica/P-HEMA Structural Hydrogels for Bone Scaffolding. Bioengineering, 2021, 8, 45.	3.5	5
72	Dynamics of Mechanisms with Superior Couplings. Applied Sciences (Switzerland), 2021, 11, 8207.	2.5	5

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73	The structure, geometry, and kinematics of a universal joint. Independent Journal of Management & Production, 2019, 10, 1713.	0.4	5
74	Advanced Dynamics Processes Applied to an Articulated Robot. Processes, 2022, 10, 640.	2.8	5
75	Influence of Curing Light Type and Staining Medium on the Discoloring Stability of Dental Restorative Composite. American Journal of Biochemistry and Biotechnology, 2017, 13, 42-50.	0.4	4
76	Electron Dimensions. American Journal of Engineering and Applied Sciences, 2017, 10, 584-602.	0.6	4
77	Dynamic Synthesis of a Classic, Manual Gearbox. American Journal of Engineering and Applied Sciences, 2018, 11, 586-597.	0.6	4
78	About the Internal Structure of a Bone and its Functional Role. American Journal of Engineering and Applied Sciences, 2018, 11, 914-931.	0.6	4
79	Some Aspects of the Structure of Planar Mechanisms. American Journal of Engineering and Applied Sciences, 2018, 11, 245-259.	0.6	4
80	Elementary Structure of Matter can be Studied with New Quantum Computers. American Journal of Engineering and Applied Sciences, 2018, 11, 1062-1075.	0.6	4
81	A nanodiamond for structural biomimetic scaffolds. Engineering Review, 2019, 39, 81-89.	0.5	4
82	Effect of nano silica (SiO2) on the hydration kinetics of cement. Engineering Review, 2019, 39, 248-260.	0.5	4
83	Kinematics at the Main Mechanism of a Railbound Forging Manipulator. Independent Journal of Management & Production, 2015, 6, .	0.4	4
84	An Otto Engine Dynamic Model. Independent Journal of Management & Production, 2016, 7, .	0.4	4
85	Optimization of Fiber-Reinforced Polymer Bars for Reinforced Concrete Column Using Nonlinear Finite Element Algorithms. Algorithms, 2022, 15, 12.	2.1	4
86	Buses Running on Gas. American Journal of Engineering and Applied Sciences, 2018, 11, 186-201.	0.6	3
87	Contributions to the Stirling Engine Study. American Journal of Engineering and Applied Sciences, 2018, 11, 1258-1292.	0.6	3
88	The Forces of a Simple Carrier Manipulator. American Journal of Engineering and Applied Sciences, 2018, 11, 260-272.	0.6	3
89	The Dynamics of the Otto Engine. American Journal of Engineering and Applied Sciences, 2018, 11, 273-287.	0.6	3
90	High efficiency gears synthesis by avoid the interferences. Independent Journal of Management & Production, 2014, 5, .	0.4	3

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91	MACHINE MOTION EQUATIONS. Independent Journal of Management & Production, 2015, 6, .	0.4	3
92	Forces at the Main Mechanism of a Railbound Forging Manipulator. Independent Journal of Management & Production, 2015, 6, .	0.4	3
93	The current stage in aerospace at the end of 2020. Independent Journal of Management & Production, 2022, 13, 405-478.	0.4	3
94	Structural Dynamics of the Distribution Mechanism with Rocking Tappet with Roll. American Journal of Engineering and Applied Sciences, 2015, 8, 589-601.	0.6	2
95	Improving Medical Imaging and Blood Flow Measurement by using a New Doppler Effect Relationship. American Journal of Engineering and Applied Sciences, 2015, 8, 582-588.	0.6	2
96	Deuteron Dimensions. American Journal of Engineering and Applied Sciences, 2017, 10, 649-654.	0.6	2
97	Something about Robots Today. Journal of Mechatronics and Robotics, 2018, 2, 85-104.	0.3	2
98	NASA Started a Propeller set on Board Voyager 1 After 37 Years of Break. American Journal of Engineering and Applied Sciences, 2018, 11, 66-77.	0.6	2
99	Dynamic Synthesis of a Dual-Clutch Automatic Gearboxes. American Journal of Engineering and Applied Sciences, 2018, 11, 663-679.	0.6	2
100	Modern Propulsions for the Aerospace Industry. American Journal of Engineering and Applied Sciences, 2018, 11, 715-755.	0.6	2
101	Study of an Oscillating Sliding Mechanism. American Journal of Engineering and Applied Sciences, 2018, 11, 870-880.	0.6	2
102	Kinematic and Dynamic Analysis of a Classic, Three-Axis Manual Gearbox, Without a Direct Socket. American Journal of Engineering and Applied Sciences, 2020, 13, 269-282.	0.6	2
103	New natural antioxidants. Independent Journal of Management & Production, 2020, 11, 967.	0.4	2
104	An algorithm to determining the gear efficiency to a simple planetary train. Independent Journal of Management & Production, 2019, 10, 1392.	0.4	2
105	Somethings About Biological Prostheses. Independent Journal of Management & Production, 2022, 13, 507-547.	0.4	2
106	Nikola TESLA. American Journal of Engineering and Applied Sciences, 2017, 10, 868-877.	0.6	1
107	Presentation of the Mechanism in the Cross. American Journal of Engineering and Applied Sciences, 2018, 11, 881-890.	0.6	1
108	Geometric-Cinematic Synthesis of Planetary Mechanisms. American Journal of Engineering and Applied Sciences, 2018, 11, 1141-1153.	0.6	1

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109	Presentation of a Mechanism with a Maltese Cross (Geneva Driver). American Journal of Engineering and Applied Sciences, 2018, 11, 891-900.	0.6	1
110	An Analytical Method for Determining Forces within a Triad. American Journal of Engineering and Applied Sciences, 2018, 11, 901-913.	0.6	1
111	Face Recognition as a Biometric Application. SSRN Electronic Journal, 2019, , .	0.4	1
112	New About the Balancing of Thermal Motors. Journal of Mechatronics and Robotics, 2019, 3, 471-496.	0.3	1
113	Direct kinematics of a manipulator with three mobilities. Independent Journal of Management & Production, 2021, 12, 1875-1900.	0.4	1
114	Dynamics of the distribution mechanism with rocking tappet with roll. Independent Journal of Management & Production, 2019, 10, 951.	0.4	1
115	Biologically structured materials. Independent Journal of Management & Production, 2020, 11, 1119.	0.4	1
116	Free Particle Spin Speed. American Journal of Engineering and Applied Sciences, 2019, 12, 337-341.	0.6	1
117	Dynamic Models of Rigid Memory Mechanisms. SSRN Electronic Journal, 0, , .	0.4	1
118	About the internal combustion engines forces. Independent Journal of Management & Production, 2020, 11, 807.	0.4	1
119	Trabecular prostheses. Independent Journal of Management & Production, 2020, 11, 1223.	0.4	1
120	Micro-Nano Machining TiO2 Patterns without Residual Layer by Unconventional Imprinting. Applied Sciences (Switzerland), 2021, 11, 10097.	2.5	1
121	Kinetostatics of a 2T9R Robot Mechanism. American Journal of Engineering and Applied Sciences, 2022, 15, 59-80.	0.6	1
122	Stromatolites - A life form that has witnessed the entire evolution of our planet. Independent Journal of Management & Production, 2022, 13, 001-036.	0.4	1
123	Determining the Efficiency of Geared Transmissions. SSRN Electronic Journal, 0, , .	0.4	0
124	Determining the Dynamic Efficiency of Gears. SSRN Electronic Journal, 0, , .	0.4	0
125	Dynamic Models of Rigid Memory Mechanisms. American Journal of Engineering and Applied Sciences, 2018, 11, 1242-1257.	0.6	0
126	A New Exoplanet Reveals its Identity. Journal of Aircraft and Spacecraft Technology, 2018, 2, 85-96.	0.6	0

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127	Dynamics of Buses - Part II. American Journal of Engineering and Applied Sciences, 2018, 11, 514-524.	0.6	0
128	Dynamics of Buses - Part III. American Journal of Engineering and Applied Sciences, 2018, 11, 525-537.	0.6	0
129	New Researches Examines the Wing Shapes to Reduce Vortex and Wake. Journal of Aircraft and Spacecraft Technology, 2018, 2, 97-110.	0.6	0
130	Structural Analysis of Spatial Mechanisms. American Journal of Engineering and Applied Sciences, 2018, 11, 852-869.	0.6	0
131	Dynamics of Buses - Part I. American Journal of Engineering and Applied Sciences, 2018, 11, 501-513.	0.6	0
132	On Mars there was Water. American Journal of Engineering and Applied Sciences, 2018, 11, 696-714.	0.6	0
133	Hydrogen is a Friend, or an Enemy, of the Environment?. Energy Research Journal, 2018, 9, 88-95.	0.8	0
134	Some New Gears Aspects. American Journal of Engineering and Applied Sciences, 2018, 11, 1220-1241.	0.6	0
135	Machine Motion Equations Presented in a New General Format. Journal of Mechatronics and Robotics, 2019, 3, 344-377.	0.3	0
136	The Yield of the Thermal Engines. Journal of Mechatronics and Robotics, 2019, 3, 215-236.	0.3	0
137	Permanent Magnetic Fluids. American Journal of Engineering and Applied Sciences, 2019, 12, 402-412.	0.6	0
138	Structure of a Photovoltaic Electric Locomotive. American Journal of Engineering and Applied Sciences, 2019, 12, 503-507.	0.6	0
139	Energy Sources Today. Energy Research Journal, 2019, 10, 27-35.	0.8	0
140	Some Aspects of the Human Bodyâ€™s Hydraulics. OnLine Journal of Biological Sciences, 2019, 19, 159-185.	0.4	0
141	A Hypothesis Which Supports the Possibility of the Existence of Dark Matter with Negative Mass. American Journal of Applied Sciences, 2020, 17, 1-5.	0.2	0
142	Proper Management of Planetary Hydrocarbon Resources. American Journal of Applied Sciences, 2020, 17, 104-116.	0.2	0
143	Presents Some Aspects Related to the Atom and Atomic Electrons, Necessary in Understanding Chemical Bonds and Nanotechnologies. American Journal of Applied Sciences, 2020, 17, 95-103.	0.2	0
144	Presents the Dynamics at a Basic Anthropomorphic Robot. American Journal of Engineering and Applied Sciences, 2020, 13, 191-203.	0.6	0

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145	About Gateway. Journal of Aircraft and Spacecraft Technology, 2020, 4, 70-87.	0.6	0
146	Presents some Biologically Structured Materials. OnLine Journal of Biological Sciences, 2020, 20, 8-36.	0.4	0
147	What is Better for Fusion?. American Journal of Applied Sciences, 2020, 17, 83-87.	0.2	0
148	About Aircraft's New Power and Propulsion. American Journal of Engineering and Applied Sciences, 2020, 13, 111-123.	0.6	0
149	Elaboration of opportunity study necessary to provide public transport services on the administrative territory of the municipality TÃ®rgu-MureÅŸ. Independent Journal of Management & Production, 2021, 12, 1984-2006.	0.4	0
150	ABOUT THE ANTHROPOMORPHIC ROBOTS. Engevista, 2015, 17, 1.	0.1	0
151	Some New Gears Aspects. SSRN Electronic Journal, 0, , .	0.4	0
152	Structural-topological synthesis of space mechanisms with rods and wheels. Independent Journal of Management & Production, 2019, 10, 1446.	0.4	0
153	A new hypothesis about the nuclear hydrogen structure. Independent Journal of Management & Production, 2019, 10, 1749.	0.4	0
154	Biologically structured materials. Independent Journal of Management & Production, 2019, 10, 1772.	0.4	0
155	A method for pet mechanical properties enhancement. Independent Journal of Management & Production, 2019, 10, 1725.	0.4	0
156	Application to rigid memory mechanisms of a variable internal dynamic damping model. Independent Journal of Management & Production, 2019, 10, 1994-2022.	0.4	0
157	The human body's hydraulics. Independent Journal of Management & Production, 2019, 10, 1853-1881.	0.4	0
158	Some aspects related to the human body plant. Independent Journal of Management & Production, 2020, 11, 015.	0.4	0
159	An algorithm to solve the inverse kinematics to a stewart platform. Independent Journal of Management & Production, 2020, 11, 263.	0.4	0
160	Some dynamic models of rigid memory mechanisms. Independent Journal of Management & Production, 2020, 11, 486.	0.4	0
161	About biological hip joint prostheses and the biomechanical behavior of implanted femur. Independent Journal of Management & Production, 2021, 12, 2017-2044.	0.4	0
162	Two methods to create free energy. Independent Journal of Management & Production, 2020, 11, 1846.	0.4	0

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163	Bone modeling for customized hybrid biological prostheses development. Independent Journal of Management & Production, 2022, 13, 107-126.	0.4	0
164	Positional modeling of the 2T6R robot mechanism. Independent Journal of Management & Production, 2021, 12, s902-s921.	0.4	0
165	Inverse modeling of the stewart foot. Independent Journal of Management & Production, 2021, 12, s774-s793.	0.4	0
166	Study of forces in a 2T9R robot mechanism. Independent Journal of Management & Production, 2021, 12, s741-s773.	0.4	0
167	Healthy lungs maintain a young and energetic body. Independent Journal of Management & Production, 2021, 12, 2117-2139.	0.4	0
168	Kinematic and dynamic study of a manipulator 1T6R. Independent Journal of Management & Production, 2022, 13, 1066-1092.	0.4	0