

In Gwun Jang

List of Publications by Year in descending order

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56
papers

1,090
citations

430754

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56
docs citations

56
times ranked

859
citing authors

#	ARTICLE	IF	CITATIONS
1	Topology Optimization for the Manufacturable and Structurally Safe Synchronous Reluctance Motors With Multiple Iron Webs and Bridges. IEEE Transactions on Industrial Electronics, 2023, 70, 678-687.	5.2	11
2	Adaptive Equivalent Consumption Minimization Strategy (A-ECMS) for the HEVs With a Near-Optimal Equivalent Factor Considering Driving Conditions. IEEE Transactions on Vehicular Technology, 2022, 71, 2538-2549.	3.9	17
3	Integrated topology and shape optimization of the five-spoke steel wheel to improve the natural frequency. Structural and Multidisciplinary Optimization, 2022, 65, 1.	1.7	8
4	Determination of the Optimal Resonant Condition for Multireceiver Wireless Power Transfer Systems Considering the Transfer Efficiency and Different Rated Powers With Altered Coupling Effects. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 2384-2393.	3.7	10
5	Site-Specific Quality Assessment of Trabecular Bone Using Highly Nonlinear Solitary Waves. Lecture Notes in Civil Engineering, 2021, , 893-901.	0.3	6
6	Evaluating the Maximum Directional Kinematic Capability of a Redundant Manipulator Based on Allowable Velocity and Force. IEEE Access, 2021, 9, 88085-88097.	2.6	5
7	Determination of the representative static loads for cyclically repeated dynamic loads: a case study of bone remodeling simulation with gait loads. Computer Methods and Programs in Biomedicine, 2021, 200, 105924.	2.6	6
8	Shape optimization-based design investigation of the switched reluctance motors regarding the target torque and current limitation. Structural and Multidisciplinary Optimization, 2021, 64, 859.	1.7	7
9	Predictions of the elastic modulus of trabecular bone in the femoral head and the intertrochanter: a solitary wave-based approach. Biomechanics and Modeling in Mechanobiology, 2021, 20, 1733-1749.	1.4	10
10	Topology optimization of multiple-barrier synchronous reluctance motors with initial random hollow circles. Structural and Multidisciplinary Optimization, 2021, 64, 2213-2224.	1.7	15
11	Model-Predictive-Control-Based Time-Optimal Trajectory Planning of the Distributed Actuation Mechanism Augmented by the Maximum Performance Evaluation. Applied Sciences (Switzerland), 2021, 11, 7513.	1.3	3
12	Multi-resolution topology optimization using adaptive isosurface variable grouping (MTOP-aIVG) for enhanced computational efficiency. Structural and Multidisciplinary Optimization, 2021, 63, 1743-1766.	1.7	8
13	Unit Module-Based Convergence Acceleration for Topology Optimization Using the Spatiotemporal Deep Neural Network. IEEE Access, 2021, 9, 149766-149779.	2.6	5
14	Coil Layout Optimization for Maximizing the Power Transfer Efficiency of Wireless Power Transfer Systems With Multiple Transmitter Coils. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 2672-2681.	3.7	12
15	Optimization-Based Investigation of Bioinspired Variable Gearing of the Distributed Actuation Mechanism to Maximize Velocity and Force. IEEE Robotics and Automation Letters, 2020, 5, 6326-6333.	3.3	2
16	Numerical predictions of the interaction between highly nonlinear solitary waves and the microstructure of trabecular bone in the femoral head. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 109, 103805.	1.5	20
17	Patient-Specific Phantomless Estimation of Bone Mineral Density and Its Effects on Finite Element Analysis Results: A Feasibility Study. Computational and Mathematical Methods in Medicine, 2019, 2019, 1-10.	0.7	17
18	Determination of the Optimal Resonant Condition for Multi-Receiver Wireless Power Transfer Systems. , 2019, , .		0

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19	Deep learning for determining a near-optimal topological design without any iteration. Structural and Multidisciplinary Optimization, 2019, 59, 787-799.	1.7	199
20	Deep learning for determining a near-optimal topological design without any iteration. , 2019, 59, 787.		1
21	Computational study of estimating 3D trabecular bone microstructure for the volume of interest from CT scan data. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2950.	1.0	17
22	Fully automated segmentation of a hip joint using the patient-specific optimal thresholding and watershed algorithm. Computer Methods and Programs in Biomedicine, 2018, 154, 161-171.	2.6	28
23	Lightweight Design of the Stub Axle Using Topology Optimization. Journal of the Korean Society for Precision Engineering, 2018, 35, 695-700.	0.1	3
24	Simulation-Based Feasibility Study on the Wireless Charging Railway System With a Ferriteless Primary Module. IEEE Transactions on Vehicular Technology, 2017, 66, 1004-1010.	3.9	26
25	Precise Determination of the Optimal Coil for Wireless Power Transfer Systems Through Postprocessing in the Smooth Boundary Representation. IEEE Transactions on Magnetics, 2017, 53, 1-4.	1.2	8
26	Layout Optimization of the Receiver Coils for Multitransmitter Wireless Power Transfer Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 1311-1321.	3.7	18
27	Lightweight Design of a Bulk Trailer Using Topology Optimization. Transactions of the Korean Society of Automotive Engineers, 2017, 25, 548-554.	0.1	5
28	Estimation of Local Bone Loads for the Volume of Interest. Journal of Biomechanical Engineering, 2016, 138, .	0.6	8
29	Image resolution enhancement for healthy weight-bearing bones based on topology optimization. Journal of Biomechanics, 2016, 49, 3035-3040.	0.9	20
30	Multidimensional Scaling Analysis of Inter-regional Public Transit Services: Focusing on Inter-regional Railways. Journal of the Korean Society for Railway, 2016, 19, 243-250.	0.1	2
31	Traffic Signal Optimization for Oversaturated Urban Networks: Queue Growth Equalization. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 2121-2128.	4.7	34
32	Homeostasis-based aging model for trabecular changes and its correlation with age-matched bone mineral densities and radiographs. European Journal of Radiology, 2015, 84, 2261-2268.	1.2	16
33	Development of the Optimization Framework for Low-Power Wireless Power Transfer Systems. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 813-820.	2.9	17
34	Layout optimization of the secondary coils for wireless power transfer systems. , 2015, , .		6
35	Design improvement of the three-beam detector towards a precise long-range 6-degree of freedom motion sensor system. Review of Scientific Instruments, 2014, 85, 015004.	0.6	7
36	Development of the optimization framework for wireless power transfer systems. , 2014, , .		2

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37	An advanced cargo handling system operating at sea. International Journal of Control, Automation and Systems, 2014, 12, 852-860.	1.6	4
38	Structural Optimization of a Novel 6-DOF Pose Sensor System for Enhancing Noise Robustness at a Long Distance. IEEE Transactions on Industrial Electronics, 2014, 61, 5622-5631.	5.2	11
39	Conceptual and basic designs of the Mobile Harbor crane based on topology and shape optimization. Structural and Multidisciplinary Optimization, 2014, 50, 505-515.	1.7	23
40	Topology optimization for a frequency response and its application to a violin bridge. Structural and Multidisciplinary Optimization, 2013, 48, 627-636.	1.7	24
41	Auto-positioning of sliding planes based on virtual force. International Journal of Control, Automation and Systems, 2013, 11, 798-804.	1.6	4
42	Topology optimization for a frequency response and its application to a violin bridge. , 2013, 48, 627.		1
43	Pattern design of a non-pneumatic tyre for stiffness using topology optimization. Engineering Optimization, 2012, 44, 119-131.	1.5	40
44	Optimal Layout of an Offshore Crane Using Topology Optimization. , 2012, , .		0
45	Developing Accurate Long Distance 6-DOF Motion Detection with 1-D Laser Sensors: Three-Beam Detection System. IEEE Transactions on Industrial Electronics, 2012, , 1-1.	5.2	21
46	Computational simulation of simultaneous cortical and trabecular bone change in human proximal femur during bone remodeling. Journal of Biomechanics, 2010, 43, 294-301.	0.9	55
47	Computational study on the effect of loading alteration caused by disc degeneration on the trabecular architecture in human lumbar spine. Journal of Biomechanics, 2010, 43, 492-499.	0.9	19
48	Nodal line optimization and its application to violin top plate design. Journal of Sound and Vibration, 2010, 329, 4785-4796.	2.1	16
49	Application of design space optimization to bone remodeling simulation of trabecular architecture in human proximal femur for higher computational efficiency. Finite Elements in Analysis and Design, 2010, 46, 311-319.	1.7	33
50	1C14 Development of an auto-positioning spreader for Mobile Harbor. The Proceedings of the Symposium on the Motion and Vibration Control, 2010, 2010, _1C14-1_-_1C14-7_.	0.0	0
51	Analogy of Strain Energy Density Based Bone-Remodeling Algorithm and Structural Topology Optimization. Journal of Biomechanical Engineering, 2009, 131, 011012.	0.6	48
52	Computational simulation of trabecular adaptation progress in human proximal femur during growth. Journal of Biomechanics, 2009, 42, 573-580.	0.9	32
53	Computational study of Wolff's law with trabecular architecture in the human proximal femur using topology optimization. Journal of Biomechanics, 2008, 41, 2353-2361.	0.9	124
54	Computational Simulation for Trabecular Adaptation in Human Proximal Femur Using Design Space Optimization. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
55	Design space optimization using design space adjustment and refinement. Structural and Multidisciplinary Optimization, 2007, 35, 41-54.	1.7	20
56	Evolutionary topology optimization using design space adjustment based on fixed grid. International Journal for Numerical Methods in Engineering, 2006, 66, 1817-1840.	1.5	36