

# Junghwan Chang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3639921/publications.pdf>

Version: 2024-02-01

40  
papers

371  
citations

759233

12  
h-index

839539

18  
g-index

40  
all docs

40  
docs citations

40  
times ranked

367  
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance of Urban Water-Pipeline Energy Harvester System Considering Electromagnetic-Mechanical Design. IEEE Transactions on Energy Conversion, 2022, 37, 389-402.	5.2	1
2	Influence of Structural and Physical Parameters on Working Harmonic of Flux-Modulated Linear Actuator for Energy Storage System Fire Hazard Detection Robot. IEEE Transactions on Energy Conversion, 2022, 37, 1715-1725.	5.2	2
3	Computationally Efficient Stator AC Winding Loss Analysis Model for Traction Motors Used in High-Speed Railway Electric Multiple Unit. IEEE Access, 2022, 10, 28725-28738.	4.2	5
4	Dynamic Analysis of Surface-Mounted Permanent Magnet Type Coaxial Magnetic Gear With Damper Bar Considering Magnetic Field Modulation Effect. IEEE Access, 2022, 10, 33616-33627.	4.2	3
5	Indirect Method to Measure of Initial Mover Position in Flux-Modulated Linear Actuator for Five-Axis Gantry Robot Using Low-Cost Current Sensors and Considering End Effect. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 6123-6134.	5.4	0
6	Determination of Design Parameters Considering Working Harmonic and Irreversible Demagnetization for Flux-Modulated Linear Actuator. IEEE/ASME Transactions on Mechatronics, 2022, 27, 5037-5048.	5.8	2
7	Model-based design of variable speed non-salient pole permanent magnet synchronous generator for urban water pipeline energy harvester. International Journal of Electrical Power and Energy Systems, 2021, 125, 106402.	5.5	5
8	Nonlinear modeling and performance testing of high-power electromagnetic energy harvesting system for self-powering transmission line vibration deicing robot. Mechanical Systems and Signal Processing, 2021, 151, 107369.	8.0	13
9	Development of Coursework on Studying Fugitive Dust From Construction Site Using Optical-Type Dust Sensor. IEEE Sensors Journal, 2021, 21, 17318-17326.	4.7	2
10	Practical Consideration and Testing of Superior High Force Electromechanical Actuator for Electrically Driven Lathe. Mechatronics, 2021, 79, 102664.	3.3	3
11	Design and Characteristics Analysis of Coaxial Magnetic Gear for Contra-Rotating Propeller in Yacht. IEEE Transactions on Industrial Electronics, 2020, 67, 7250-7259.	7.9	21
12	Design of a High-Force Electromechanical Actuator for Electrically Driven Lathe Machine. IEEE Transactions on Industrial Electronics, 2020, 67, 9526-9535.	7.9	8
13	Novel Core Airgap Profiles Design Scheme for Winding and Thermal Loss Reduction in High-Frequency Current Transformer Sensors. IEEE Sensors Journal, 2020, 20, 892-898.	4.7	3
14	Design and comparative survey of high torque coaxial permanent magnet coupling for tidal current generator. International Journal of Electrical Power and Energy Systems, 2020, 120, 105966.	5.5	11
15	Efficiency Improvement Strategy for Multiple Operating Points in Doubly Fed Magnetic Geared Motor. Applied Sciences (Switzerland), 2020, 10, 2456.	2.5	1
16	Design of novel electromagnetic energy harvester to power a deicing robot and monitoring sensors for transmission lines. Energy Conversion and Management, 2019, 197, 111868.	9.2	22
17	Investigation of Doubly Salient Structure for Permanent Magnet Vernier Machines Using Flux Modulation Effects. IEEE Transactions on Energy Conversion, 2019, 34, 2019-2028.	5.2	19
18	Comparative analysis of wave winding topologies and performance characteristics in ultra-thin printed circuit board axial-flux permanent magnet machine. IET Electric Power Applications, 2019, 13, 694-701.	1.8	11

#	ARTICLE	IF	CITATIONS
19	Design and Analysis of Surface-Mounted PM Vernier Machines Considering Harmonic Characteristics of Winding MMF. <i>Energies</i> , 2019, 12, 897.	3.1	2
20	Design of Linear Magnetic Position Sensor Used in Permanent Magnet Linear Machine With Consideration of Manufacturing Tolerances. <i>IEEE Sensors Journal</i> , 2019, 19, 5239-5248.	4.7	12
21	Design of a Novel Electromagnetic Energy Harvester With Dual Core for Deicing Device of Transmission Lines. <i>IEEE Transactions on Magnetics</i> , 2019, 55, 1-4.	2.1	24
22	Fast Numerical Analysis of Electric Motor Using Nonlinear Model Order Reduction. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-4.	2.1	8
23	Comparison of Radial Force at Modulating Pieces in Coaxial Magnetic Gear and Magnetic Geared Machine. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-4.	2.1	15
24	Parametric Design Analysis of Magnetic Sensor Based on Model Order Reduction and Reliability-Based Design Optimization. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-4.	2.1	6
25	Characteristics Analysis of Doubly Fed Magnetic Geared Motor Considering Winding Frequency Conditions. <i>Energies</i> , 2018, 11, 2564.	3.1	1
26	A Novel High-Resolution Optical Encoder With Axially Stacked Coded Disk for Modular Joints: Physical Modeling and Experimental Validation. <i>IEEE Sensors Journal</i> , 2018, 18, 6001-6008.	4.7	17
27	Effects of Flux Modulation Poles on the Radial Magnetic Forces in Surface-Mounted Permanent-Magnet Vernier Machines. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-4.	2.1	19
28	Precise Estimation of Initial Pole Position for Surface Permanent Magnet Synchronous Motor Based on Modified Reference Frame Method. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-9.	2.1	5
29	Analysis of the Vibration Characteristics of Coaxial Magnetic Gear. <i>IEEE Transactions on Magnetics</i> , 2017, 53, 1-4.	2.1	10
30	Influences of Winding MMF Harmonics on Torque Characteristics in Surface-Mounted Permanent Magnet Vernier Machines. <i>Energies</i> , 2017, 10, 580.	3.1	10
31	Design and Parametric Study of the Magnetic Sensor for Position Detection in Linear Motor Based on Nonlinear Parametric model order reduction. <i>Sensors</i> , 2017, 17, 1543.	3.8	6
32	Analysis of the vibration characteristics of coaxial magnetic gear. , 2016, , .		0
33	Comparison of the characteristics of coaxial magnetic gears with PM and AC excitation. , 2016, , .		0
34	Design of absolute encoder disk coding based on affine n digit N-ary gray code. , 2016, , .		10
35	Design of Electromagnetic Linear Actuator Using the Equivalent Magnetic Circuit Method. <i>IEEE Transactions on Magnetics</i> , 2016, 52, 1-4.	2.1	12
36	Analytical Magnetic Field Calculation of Coaxial Magnetic Gear With Flux Concentrating Rotor. <i>IEEE Transactions on Magnetics</i> , 2016, 52, 1-4.	2.1	7

#	ARTICLE	IF	CITATIONS
37	A New Approach to Detect Mover Position in Linear Motors Using Magnetic Sensors. Sensors, 2015, 15, 26694-26708.	3.8	18
38	Linear position detection method using magnetic sensors for transverse flux linear motor. , 2010, , .		2
39	Design procedures of transverse flux linear motor. , 2010, , .		0
40	A New Electromagnetic Linear Actuator for Quick Latching. IEEE Transactions on Magnetics, 2007, 43, 1849-1852.	2.1	55