Jonathan Z Bird

List of Publications by Year
in descending order

69	1,086	394421	526287
papers	citations	19 h-index	27 g-index

70	70	70	347
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Review of Electric Aircraft Drivetrain Motor Technology. IEEE Transactions on Magnetics, 2022, 58, 1-8.	2.1	25
2	Pole and Segment Combination in Concentric Magnetic Gears: Vibrations and Acoustic Signature. IEEE Transactions on Energy Conversion, 2022, , 1-1.	5.2	9
3	Structural modeling and validation of laminated stacks in magnetic gearing applications. International Journal of Mechanical Sciences, 2021, 192, 106133.	6.7	4
4	Electromagnetic Performance Analysis and Experimental Verification Considering the End Effect of Linear Magnetic Gears Using Subdomain-Based Analytical Method. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	2
5	An Adjustable Stiffness Torsional Magnetic Spring with a Linear Stroke Length. , 2021, , .		2
6	Performance Potential of High Gear Ratio Coaxial Magnetic Gears. , 2021, , .		2
7	Analysis and Experimental Testing of a New Type of Variable Stiffness Magnetic Spring with a Linear Stroke Length. , 2021, , .		6
8	An Axial Flux Focusing Magnetically Geared Generator for Low Input Speed Applications. IEEE Transactions on Industry Applications, 2020, 56, 138-147.	4.9	16
9	An Axial Cycloidal Magnetic Gear That Minimizes the Unbalanced Radial Force. IEEE Transactions on Magnetics, 2020, 56, 1-10.	2.1	16
10	Convective heat transfer analysis of a laminated flux focusing magnetic gearbox. Thermal Science and Engineering Progress, 2020, 18, 100552.	2.7	3
11	Designing a Magnetic Gear for an Electric Aircraft Drivetrain. , 2020, , .		12
12	Performance of Halbach Cycloidal Magnetic Gears with Respect to Torque Density and Gear Ratio. , 2019, , .		11
13	A Review of Integrated Propulsion, Suspension and Guidance Passive Guideway Maglev Technologies. , 2019, , .		11
14	Electromagnetic analysis of a wind turbine magnetic gearbox. Journal of Engineering, 2019, 2019, 4101-4105.	1.1	1
15	A High Torque Density Halbach Rotor Coaxial Magnetic Gear. , 2019, , .		20
16	Electromagnetic Analysis and Experimental Testing of a Flux Focusing Wind Turbine Magnetic Gearbox. IEEE Transactions on Energy Conversion, 2019, 34, 1512-1521.	5.2	30
17	Designing and Experimentally Testing a Magnetic Gearbox for a Wind Turbine Demonstrator. IEEE Transactions on Industry Applications, 2019, 55, 3522-3533.	4.9	28
18	Investigating the Performance of a Variable Stiffness Magnetic Spring for Resonant Ocean Power Generation. , 2019, , .		4

#	Article	IF	Citations
19	Magnetically Geared Rotary Generators for Marine Hydrokinetic Power Take-Off â€“ A Status Update. , 2019, , .		1
20	Designing and experimentally testing a fluxâ€focusing axial flux magnetic gear for an ocean generator application. IET Electric Power Applications, 2019, 13, 1212-1218.	1.8	16
21	Electromagnetic Design and Assembly Analysis of a Halbach Rotor Magnetic Gear for a Marine Hydrokinetic Application. , 2019, , .		6
22	A Magnetic Gearbox With an Active Region Torque Density of 239 NÂ·m/L. IEEE Transactions on Industry Applications, 2018, 54, 1331-1338.	4.9	40
23	INVESTIGATING THE PERFORMANCE OF A FULLY LAMINATED FLUX-FOCUSING MAGNETIC GEARBOX. Progress in Electromagnetics Research C, 2018, 87, 51-62.	0.9	7
24	A Review of the Volumetric Torque Density of Rotary Magnetic Gear Designs. , 2018, , .		31
25	Electromagnetic and Mechanical Design of a Hermetically Sealed Magnetic Gear for a Marine Hydrokinetic Generator. , 2018, , .		12
26	A Magnetically Geared Lead Screw Without Translator Skewing. , 2018, , .		7
27	Vibration Analysis of the First Stage of a Multi-stage Coaxial Magnetic Gearbox. , 2018, , .		3
28	Analytic Damping and Stiffness Analysis for a 4-DOF Electrodynamic Wheel Maglev Vehicle. , 2018, , .		9
29	Comparative Analysis of a Coaxial Magnetic Gear With a Flux Concentration Rotor and Consequent Pole Rotor Typology. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	5
30	Designing and Experimentally Testing a Magnetically Geared Lead Screw. IEEE Transactions on Industry Applications, 2018, 54, 5736-5747.	4.9	19
31	Ideal Radial Permanent Magnet Coupling Torque Density Analysis. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	10
32	Analysis and Testing of a Coaxial Magnetic Gearbox With Flux Concentration Halbach Rotors. IEEE Transactions on Magnetics, 2017, 53, 1-6.	2.1	30
33	Electrodynamic Wheel Magnetic Rolling Resistance. IEEE Transactions on Magnetics, 2017, 53, 1-7.	2.1	8
34	Designing the first stage of a series connected multistage coaxial magnetic gearbox for a wind turbine demonstrator. , 2017, , .		19
35	An axial flux-focusing magnetically geared motor. , 2017, , .		4
36	Analysis of a magnetically geared lead screw. , 2016, , .		13

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37	Torque density comparison of axial and radial Halbach couplings. , 2016, , .		0
38	A low assembly cost coaxial magnetic gearbox. , 2016, , .		5
39	A 3-D analytical model of a Halbach axial magnetic coupling. , 2016, , .		8
40	Improved analytic model for eddy current force considering edge-effect of a conductive plate. , 2016, , .		7
41	A 3-D Analytic-Based Model of a Null-Flux Halbach Array Electrodynamic Suspension Device. IEEE Transactions on Magnetics, 2015, 51, 1-5.	2.1	21
42	A 3-D analytical model for a double Halbach linear array electrodynamic suspension system. , 2015, , .		1
43	A flux focusing cycloidal magnetic gearbox. , 2015, , .		1
44	A Flux-Focusing Cycloidal Magnetic Gearbox. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	21
45	Magnetic gear scaling analysis using magnetomechanical deflection analysis. International Journal of Applied Electromagnetics and Mechanics, 2014, 45, 565-571.	0.6	5
46	A magnetic gearbox with an active region torque density of 239Nm/L. , 2014, , .		19
47	Experimental Evaluation of Low-Speed Flux-Focusing Magnetic Gearboxes. IEEE Transactions on Industry Applications, 2014, 50, 3637-3643.	4.9	47
48	3-D Steady-State Eddy-Current Damping and Stiffness Terms for a Finite Thickness Conductive Plate. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	18
49	An Iterative Magnetomechanical Deflection Model for a Magnetic Gear. IEEE Transactions on Magnetics, 2014, 50, 245-248.	2.1	31
50	Dynamic electromechanical eddy current force modeling. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2014, 33, 2101-2120.	0.9	4
51	3-D Eddy Current Torque Modeling. IEEE Transactions on Magnetics, 2014, 50, 905-908.	2.1	22
52	The Performance of a Transverse Flux Magnetic Gear. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	36
53	Analytic 3-D eddy current model of a finite width conductive plate including edge-effects. International Journal of Applied Electromagnetics and Mechanics, 2014, 45, 535-542.	0.6	8
54	A Flux Focusing Axial Magnetic Gear. IEEE Transactions on Magnetics, 2013, 49, 4092-4095.	2.1	59

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55	A continuously variable magnetic gear. , 2013, , .		14
56	A 3-D analytic eddy current model for a finite width conductive plate. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 33, 688-706.	0.9	16
57	Construction of a low speed flux focusing magnetic gear. , 2013, , .		16
58	MODELING THE DYNAMIC ELECTROMECHANICAL SUSPENSION BEHAVIOR OF AN ELECTRODYNAMIC EDDY CURRENT MAGLEV DEVICE. Progress in Electromagnetics Research B, 2013, 49, 1-30.	1.0	11
59	Source Field Modeling in Air Using Magnetic Charge Sheets. IEEE Transactions on Magnetics, 2012, 48, 3879-3882.	2.1	25
60	Performance of a magnetic gear using ferrite magnets for low speed ocean power generation. , 2012, , .		45
61	Ocean energy power take-off using oscillating paddle. , 2012, , .		18
62	General 2-D Steady-State Force and Power Equations for a Traveling Time-Varying Magnetic Source Above a Conductive Plate. IEEE Transactions on Magnetics, 2012, 48, 95-100.	2.1	31
63	Modeling the dynamic suspension behavior of an eddy current device. , 2011, , .		4
64	Three dimensional transient modeling of a halbach rotor moving above a conductive guideway using fictitious magnetic charge. , 2010, , .		0
65	Modeling the 3-D Rotational and Translational Motion of a Halbach Rotor Above a Split-Sheet Guideway. IEEE Transactions on Magnetics, 2009, 45, 3233-3242.	2.1	35
66	A 3-D Magnetic Charge Finite-Element Model of an Electrodynamic Wheel. IEEE Transactions on Magnetics, 2008, 44, 253-265.	2.1	41
67	Calculating the Forces Created by an Electrodynamic Wheel Using a 2-D Steady-State Finite-Element Method. IEEE Transactions on Magnetics, 2008, 44, 365-372.	2.1	32
68	Characteristics of an Electrodynamic Wheel Using a 2-D Steady-State Model. IEEE Transactions on Magnetics, 2007, 43, 3395-3405.	2.1	23
69	An electrodynamic wheel: an integrated propulsion and levitation machine. , 0, , .		19