

Yves Perriard

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8306307/yves-perriard-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

123
papers

1,437
citations

20
h-index

34
g-index

154
ext. papers

1,857
ext. citations

4
avg, IF

4.88
L-index

#	Paper	IF	Citations
123	Evaluation of dielectric elastomers to develop materials suitable for actuation. <i>Soft Matter</i> , 2021 ,	3.6	3
122	An untethered mechanically-intelligent inchworm robot powered by a shape memory alloy oscillator. <i>Sensors and Actuators A: Physical</i> , 2021 , 332, 113115	3.9	2
121	Shape Optimization of Soft Magnetic Composites Using Level-Set Method. <i>IEEE Transactions on Magnetics</i> , 2021 , 57, 1-8	2	1
120	LOD Homogenization of Multiscale Eddy Current Problem in Time Domain. <i>IEEE Transactions on Magnetics</i> , 2021 , 57, 1-4	2	
119	Characterization and Verification of Eddy-Current Position Sensing for Magnetic Levitation. <i>IEEE Transactions on Industry Applications</i> , 2021 , 1-1	4.3	3
118	Feasibility of a Dielectric Elastomer Augmented Aorta. <i>Advanced Science</i> , 2021 , 8, 2001974	13.6	6
117	. <i>IEEE Transactions on Industry Applications</i> , 2021 , 57, 5145-5156	4.3	0
116	Novel Generalised Notch Filter for Harmonic Vibration Suppression in Magnetic Bearing Systems. <i>IEEE Transactions on Industry Applications</i> , 2021 , 1-1	4.3	2
115	Efficiency Optimisation of Slotless Magnetic Bearing Machines. <i>IEEE Transactions on Industry Applications</i> , 2021 , 1-1	4.3	4
114	Ultrahigh-Voltage Switch for Bidirectional DCDC Converter Driving Dielectric Elastomer Actuator. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 13172-13181	7.2	1
113	Towards the material limit and field concentration smoothing in multilayer dielectric elastomer actuators. <i>Smart Materials and Structures</i> , 2020 , 29, 045044	3.4	3
112	Integrated, Eddy-Current-Based Sensing of Rotor Position for Magnetic Levitation 2020 ,		1
111	Novel Optimized Shape and Topology for Slotless Windings in BLDC Machines. <i>IEEE Transactions on Industry Applications</i> , 2020 , 56, 1275-1283	4.3	3
110	Untethered Feel-Through Haptics Using 18- μ m Thick Dielectric Elastomer Actuators. <i>Advanced Functional Materials</i> , 2020 , 31, 2006639	15.6	34
109	Design of Compact Bearingless Disc Drive Systems. <i>IEEE Transactions on Industry Applications</i> , 2020 , 56, 4870-4881	4.3	5
108	General Sensorless Method with Parameter Identification and Double Kalman Filter Applied to a Bistable Fast Linear Switched Reluctance Actuator for Textile Machine. <i>IEEJ Journal of Industry Applications</i> , 2019 , 8, 33-40	0.7	1
107	An optimized self-sensing piezoelectric cantilever for micro-robotic applications. <i>Journal of Micro-Bio Robotics</i> , 2019 , 15, 91-103	1.4	2

106	Critical Parasitic Elements of Coupled Inductors for Ultra-High Voltage Flyback Converters Used to Drive Capacitive Actuators 2019 ,		1
105	Very-High-Speed Miniaturized Permanent Magnet Motors: Design and Optimization 2019 ,		3
104	Very-High-Speed Miniaturized Permanent Magnet Motors: Modeling and Experimental Validation 2019 ,		6
103	An autonomous untethered fast soft robotic insect driven by low-voltage dielectric elastomer actuators. <i>Science Robotics</i> , 2019 , 4,	18.6	135
102	Current Control Strategy for Dynamic Winding Reconfiguration of Slotless Brushless DC Motors. <i>IEEE Transactions on Industry Applications</i> , 2019 , 55, 417-425	4.3	6
101	Passive, Active and Loss Tradeoffs in High-Speed Bearingless Motors 2018 ,		2
100	Optimization of Shape and Topology for Slotless Windings in BLDC Machines 2018 ,		5
99	Balanced Metal Detector Based on Optimized Frequencies and Spatial Phase Profile Responses to Differentiate Metal Rods. <i>IEEE Magnetics Letters</i> , 2017 , 8, 1-5	1.6	3
98	Very-high-speed permanent magnet motors: Mechanical rotor stresses analytical model 2017 ,		9
97	Validation by measurements of a windage losses model for very-high-speed machines 2017 ,		5
96	Battery Charger for Electric Vehicle Based on a Wireless Power Transmission 2016 ,		1
95	Closed-loop magnetic bearing and angular velocity control of a reaction sphere actuator. <i>Mechatronics</i> , 2015 , 30, 214-224	3	20
94	Design and characterization of a soft magneto-rheological miniature shock absorber for a controllable variable stiffness sole. <i>Archives of Electrical Engineering</i> , 2015 , 64, 547-558		1
93	3-Coil resonance structure wireless power transfer for 5kV implantable device 2015 ,		1
92	Quality factor and vibration amplitude estimation of a piezoelectric-actuated system using impedance measurements 2015 ,		1
91	Validity Tests of Superposition Principle Based on Forward Model for Electromagnetic Induction Scattering. <i>IEEE Transactions on Magnetics</i> , 2015 , 51, 1-4	2	6
90	. <i>IEEE Transactions on Industry Applications</i> , 2014 , 50, 1706-1716	4.3	32
89	Theoretical and Experimental Investigation of Flex-PCB Air-Gap Windings in Slotless BLDC Machines. <i>IEEE Transactions on Industry Applications</i> , 2014 , 50, 3153-3160	4.3	12

88	Back-EMF and rotor angular velocity estimation for a reaction sphere actuator 2014 ,		4
87	Design considerations for a contactless battery charger 2014 ,		4
86	Equivalent piezoelectric actuator circuits and comparison 2014 ,		3
85	Empirical Modeling of a Squeeze Film Haptic Actuator. <i>IEEE Transactions on Industry Applications</i> , 2014 , 50, 1809-1816	4-3	2
84	Optimisation of the mover kinetic energy of a miniature linear actuator 2014 ,		1
83	Modeling and characterization of a MEMS synchronous generator 2014 ,		1
82	Modelling and design of complex geometry parts vibratory conveying 2014 ,		1
81	Analysis of a new topology of flexible PCB winding for slotless BLDC machines 2014 ,		2
80	Modeling and Compensation of Thermal Effects on an Ironless Inductive Position Sensor. <i>IEEE Transactions on Industry Applications</i> , 2014 , 50, 375-382	4-3	9
79	Erratum to Electromagnetic Analysis and Validation of an Ironless Inductive Position Sensor [May 13 1267-1275]. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2013 , 62, 2356-2356	5-2	
78	. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2013 , 62, 1267-1275	5-2	24
77	Modeling of High-Frequency Electromagnetic Effects on an Ironless Inductive Position Sensor. <i>IEEE Sensors Journal</i> , 2013 , 13, 4663-4670	4	10
76	Force and Torque Analytical Models of a Reaction Sphere Actuator Based on Spherical Harmonic Rotation and Decomposition. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013 , 18, 1006-1018	5-5	43
75	Optimal design of a squeeze film actuator for friction feedback 2013 ,		5
74	Hybrid FEM-analytical force and torque models of a reaction sphere actuator 2013 ,		6
73	Characterization of Magnetic Immunity of an Ironless Inductive Position Sensor. <i>IEEE Sensors Journal</i> , 2013 , 13, 941-948	4	22
72	About tuning capacitors in inductive coupled power transfer systems 2013 ,		10
71	Design and Optimization of A Blood Pump for A Wearable Artificial Kidney Device. <i>IEEE Transactions on Industry Applications</i> , 2013 , 49, 2053-2060	4-3	13

70	Design of a Miniature Short-Stroke Constant-Force Linear Actuator. <i>Applied Mechanics and Materials</i> , 2013 , 416-417, 109-114	0.3	2
69	Robust and efficient 3D model of an electromagnetic induction (EMI) sensor 2013 ,		1
68	First-Pulse Technique for Brushless DC Motor Standstill Position Detection Based on Iron B-H Hysteresis. <i>IEEE Transactions on Industrial Electronics</i> , 2012 , 59, 2319-2328	8.9	12
67	Empirical modeling of a squeeze film haptic actuator 2012 ,		3
66	Thermal modeling of a BLDC motor for a kick scooter 2012 ,		2
65	Modelling and compensation of thermal effects on an Ironless Inductive Position Sensor 2012 ,		1
64	Electromagnetic model of an ironless inductive position sensor 2012 ,		8
63	2012 ,		1
62	Self-sensing of linear short-stroke actuators for multi-finger haptic interfaces using induced high frequency oscillations 2012 ,		3
61	Development of a Hybrid MEMS BLDC Micromotor. <i>IEEE Transactions on Industry Applications</i> , 2011 , 47, 3-11	4.3	20
60	Design of a Contactless Energy-Transfer System for Desktop Peripherals. <i>IEEE Transactions on Industry Applications</i> , 2011 , 47, 1643-1651	4.3	32
59	Miniature Short-Stroke Linear Actuator. <i>IEEE Industry Applications Magazine</i> , 2011 , 17, 14-19	0.6	2
58	Design of a semi-implantable hearing device for direct acoustic cochlear stimulation. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 420-8	5	34
57	Slotless Permanent-Magnet Machines: General Analytical Magnetic Field Calculation. <i>IEEE Transactions on Magnetics</i> , 2011 , 47, 1739-1752	2	64
56	Extension of the local observability down to zero speed of BLDC motor state-space models using iron B-H local hysteresis 2011 ,		2
55	Analytical and experimental investigation on the force and torque of a Reaction Sphere for satellite attitude control 2011 ,		7
54	Kalman filter to measure position and speed of a linear actuator 2011 ,		3
53	Skin and proximity effects for coreless transformers 2011 ,		4

52	An analytical solution for the torque and power of a solid-rotor induction motor 2011 ,		9
51	Ironless position sensor with intrinsic immunity to external magnetic fields 2011 ,		10
50	Towards multi-finger haptic devices: A computer keyboard with adjustable force feedback 2011 ,		4
49	Conception of a piezoelectric linear motor for the generation of high linear forces 2011 ,		2
48	An open-loop control strategy of a reaction sphere for satellite attitude control 2011 ,		7
47	Indirect rotor position detection method based on angular admittance modulation of optimally designed piezoelectric ultrasonic motors 2010 ,		3
46	Design of a contactless energy transfer system for desktop peripherals 2010 ,		3
45	Optimal design and sensorless position control of a piezoelectric motor integrated into a mechatronic cylinder lock 2010 ,		2
44	Analysis of BLDC motor with zigzag and rhombic winding 2010 ,		4
43	Optimal design of an in-wheel BLDC motor for a kick scooter 2010 ,		2
42	Modeling and design of a hybrid MEMS motor 2010 ,		2
41	Study of a miniature magnetorheological fluid actuator for haptic devices 2010 ,		6
40	Analytical Determination of the Phase Inductances of a Brushless DC Motor With Faulhaber Winding. <i>IEEE Transactions on Industry Applications</i> , 2010 , 46, 1360-1366	4-3	9
39	Very-High-Speed Slotless Permanent-Magnet Motors: Analytical Modeling, Optimization, Design, and Torque Measurement Methods. <i>IEEE Transactions on Industrial Electronics</i> , 2010 , 57, 296-303	8.9	132
38	Modelling and design of a contactless energy transfer system for a notebook battery charger 2010 ,		1
37	Torque measurement methods for very high-speed motors. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2010 , 29, 1172-1183	0.7	3
36	Finite element method based design and optimisation methodology for piezoelectric ultrasonic motors. <i>Mathematics and Computers in Simulation</i> , 2010 , 81, 446-459	3.3	2
35	Exploitation of iron B-H local hysteresis for the rotor position detection of a PM motor 2009 ,		6

34	Optimization design of a linear actuator using a genetic algorithm 2009 ,		4
33	A miniature short stroke linear actuator and its position control for a haptic key 2009 ,		1
32	Optimization Design of a Segmented Halbach Permanent-Magnet Motor Using an Analytical Model. <i>IEEE Transactions on Magnetics</i> , 2009 , 45, 2955-2960	2	73
31	PM motor sensorless position detection based on iron B-H local hysteresis 2009 ,		15
30	An analytical solution for the rotor eddy current losses in a slotless PM motor: the case of current layer excitation 2009 ,		5
29	Sensorless position detection of a linear actuator using the resonance frequency 2009 ,		8
28	An analytical determination of the torque-speed and efficiency-speed characteristics of a BLDC motor 2009 ,		3
27	Eddy current power losses in a toroidal laminated core with rectangular cross section 2009 ,		3
26	Analytical Solution for Rotor Eddy-Current Losses in a Slotless Permanent-Magnet Motor: The Case of Current Sheet Excitation. <i>IEEE Transactions on Magnetics</i> , 2008 , 44, 386-393	2	51
25	Analytical Force Determination in an Electromagnetic Actuator. <i>IEEE Transactions on Magnetics</i> , 2008 , 44, 2181-2185	2	4
24	A new electrically assist scooter 2008 ,		1
23	Optimization of a new type of ultrasonic linear motor. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2008 , 55, 659-67	3-2	7
22	Torque measurement methods for very high speed synchronous motors 2008 ,		2
21	Contactless system dedicated to colic stimulation 2008 ,		2
20	Development of Planar Microcoils for an Electromagnetic Linear Actuator Fabricated in Batch-Type Wafer Technology 2008 ,		2
19	Adaptive control of ultrasonic motors using the maximum power point tracking method 2008 ,		5
18	Study of a hollow ultrasonic rotary motor 2008 ,		1
17	Genetic Algorithm optimization for a surgical ultrasonic transducer 2008 ,		2

16	Brushless DC Motor for a Solar Airplane Application: Comparison between Simulations and Measurements 2008 ,		4
15	A New Standstill Position Detection Technique for Nonsalient Permanent-Magnet Synchronous Motors Using the Magnetic Anisotropy Method. <i>IEEE Transactions on Magnetics</i> , 2007 , 43, 554-560	2	17
14	Design optimization of a BLDC motor: a comparative analysis 2007 ,		9
13	An Analytical Determination of Eddy-Current Losses in a Configuration With a Rotating Permanent Magnet. <i>IEEE Transactions on Magnetics</i> , 2007 , 43, 3380-3386	2	34
12	Analysis and Modeling of Electrostatic Discharge in a Tactile Glass Featured Watch. <i>IEEE Transactions on Industry Applications</i> , 2007 , 43, 1091-1098	4-3	
11	An analytical formula for the back emf of a slotted BLDC motor 2007 ,		2
10	A square magnetic circuit analysis using Schwarz-Christoffel mapping. <i>Mathematics and Computers in Simulation</i> , 2006 , 71, 460-465	3-3	1
9	Simplified Design Methodology for a Slotless Brushless DC Motor. <i>IEEE Transactions on Magnetics</i> , 2006 , 42, 3842-3846	2	27
8	Determination of the Thermal Convection Coefficient for a Small Electric Motor. <i>Conference Record - IAS Annual Meeting (IEEE Industry Applications Society)</i> , 2006 ,		19
7	New implantable hearing device based on a micro-actuator that is directly coupled to the inner ear fluid. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2006 , 2006, 3162-5		7
6	Sensitivity analysis and optimization of a standing wave ultrasonic linear motor. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2006 , 53, 1352-61	3-2	19
5	Optimization of electric motor for a solar airplane application. <i>IEEE Transactions on Industry Applications</i> , 2006 , 42, 1053-1061	4-3	30
4	Brushless DC Motor Optimization Process - Choice between Standard or Straight Tooth Shape. <i>Conference Record - IAS Annual Meeting (IEEE Industry Applications Society)</i> , 2006 ,		8
3	Determination of tooth cogging force in a hard-disk brushless DC motor. <i>IEEE Transactions on Magnetics</i> , 2005 , 41, 4421-4426	2	25
2	Reducing the cogging torque in brushless DC motors by using conformal mappings. <i>IEEE Transactions on Magnetics</i> , 2004 , 40, 451-455	2	64
1	. <i>IEEE Transactions on Industry Applications</i> , 2002 , 38, 1266-1272	4-3	79