Udo Ausserlechner

List of Publications by Year
in descending order

35	473	759233 12	839539 18
papers	citations	h-index	g-index

35	35	35	298
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Simple Proofs of Upper and Lower Envelopes of Van Der Pauwâ€™s Equation for Hall-Plates with an Insulated Hole and Four Peripheral Point-Contacts. Journal of Applied Mathematics and Physics, 2022, 10, 960-999.	0.4	2
2	Drift of the sensitive direction of Hall-effect devices in (1 0 0)-silicon caused by mechanical shear stress. Solid-State Electronics, 2020, 174, 107918.	1.4	4
3	Low Offset and Noise in High Biased GaN 2DEG Hall-Effect Plates Investigated With Infrared Microscopy. Journal of Microelectromechanical Systems, 2020, 29, 669-676.	2.5	9
4	Sensitivity of 2DEG-based Hall-effect sensors at high temperatures. Review of Scientific Instruments, 2020, 91, 025003.	1.3	23
5	Micro-Tesla Offset in Thermally Stable AlGaN/GaN 2DEG Hall Plates Using Current Spinning. , 2019, 3, 1-4.		16
6	Effect of Geometry on Sensitivity and Offset of AlGaN/GaN and InAlN/GaN Hall-Effect Sensors. IEEE Sensors Journal, 2019, 19, 3640-3646.	4.7	24
7	A Statistical Investigation into Assembly Tolerances of Gradient Field Magnetic Angle Sensors with Hall Plates. Mathematics, 2019, 7, 968.	2.2	1
8	The Classical Hall Effect in Multiply-Connected Plane Regions Part I: Topologies with Stream Function. Journal of Applied Mathematics and Physics, 2019, 07, 1968-1996.	0.4	12
9	An Analytical Theory of Piezoresistive Effects in Hall Plates with Large Contacts. Advances in Condensed Matter Physics, 2018, 2018, 1-24.	1.1	7
10	THE EFFECT OF BIAS CONDITIONS ON AlGaN/GaN 2DEG HALL PLATES. , 2018, , .		5
11	Van-der-Pauw measurement on devices with four contacts and two orthogonal mirror symmetries. Solid-State Electronics, 2017, 133, 53-63.	1.4	13
12	The signal-to-noise ratio and a hidden symmetry of Hall plates. Solid-State Electronics, 2017, 135, 14-23.	1.4	20
13	Electrical Compensation of Mechanical Stress Drift in Precision Analog Circuits. , 2017, , 297-326.		10
14	Hall Effect Devices with Three Terminals: Their Magnetic Sensitivity and Offset Cancellation Scheme. Journal of Sensors, 2016, 2016, 1-16.	1.1	22
15	Closed form expressions for sheet resistance and mobility from Van-der-Pauw measurement on 90Â° symmetric devices with four arbitrary contacts. Solid-State Electronics, 2016, 116, 46-55.	1.4	26
16	A method to compute the Hall-geometry factor at weak magnetic field in closed analytical form. Electrical Engineering, 2016, 98, 189-206.	2.0	18
17	Macroscopic simulation of isotropic permanent magnets. Journal of Magnetism and Magnetic Materials, 2016, 401, 875-879.	2.3	6
18	Compensation of Assembly Tolerances in Magnetic Current Sensors with External Conductor. Periodica Polytechnica Electrical Engineering and Computer Science, 2016, 60, 163-170.	1.0	5

#	Article	IF	Citations
19	Compensation of Mechanical Stress-Induced Drift of Bandgap References With On-Chip Stress Sensor. IEEE Sensors Journal, 2015, 15, 5115-5121.	4.7	16
20	A THEORY OF MAGNETIC ANGLE SENSORS WITH HALL PLATES AND WITHOUT FLUXGUIDES. Progress in Electromagnetics Research B, 2013, 49, 77-106.	1.0	6
21	Array of 12 coils to measure the position, alignment, and sensitivity of magnetic sensors over temperature. Journal of Applied Physics, 2012, 111, 07E501.	2.5	3
22	Measurement of a multi-pole encoder with a magnetic and coordinate measuring machine. , 2012, , .		3
23	A miniature digital current sensor with differential Hall probes using enhanced chopping techniques and mechanical stress compensation. , 2012, , .		44
24	INACCURACIES OF ANISOTROPIC MAGNETO-RESISTANCE ANGLE SENSORS DUE TO ASSEMBLY TOLERANCES. Progress in Electromagnetics Research B, 2012, 40, 79-99.	1.0	5
25	CLOSED ANALYTICAL FORMULAE FOR MULTI-POLE MAGNETIC RINGS. Progress in Electromagnetics Research B, 2012, 38, 71-105.	1.0	12
26	THE MAXIMUM TORQUE OF SYNCHRONOUS AXIAL PERMANENT MAGNETIC COUPLINGS. Progress in Electromagnetics Research B, 2012, 40, 1-29.	1.0	3
27	In-Situ Analysis of Deformation and Mechanical Stress of Packaged Silicon Dies With an Array of Hall Plates. IEEE Sensors Journal, 2011, 11, 2993-3000.	4.7	21
28	In-situ measurement of curvature and mechanical stress of packaged silicon. , 2010, , .		6
29	Precise Alignment of a Magnetic Sensor in a Coordinate Measuring Machine. IEEE Sensors Journal, 2010, 10, 984-990.	4.7	10
30	The Optimum Layout for Giant Magneto-Resistive Angle Sensors. IEEE Sensors Journal, 2010, 10, 1571-1582.	4.7	25
31	Inaccuracies of Giant Magneto-Resistive Angle Sensors Due to Assembly Tolerances. IEEE Transactions on Magnetics, 2009, 45, 2165-2174.	2.1	20
32	Compensation of the Piezo-Hall Effect in Integrated Hall Sensors on (100)-Si. IEEE Sensors Journal, 2007, 7, 1475-1482.	4.7	32
33	An Integrated Hall Sensor Platform Design for Position, Angle and Current Sensing. , 2006, , .		5
34	Pick-up systems for vibrating sample magnetometers-a theoretical discussion based on magnetic multipole expansions. Measurement Science and Technology, 1994, 5, 213-225.	2.6	9
35	Limits of offset cancellation by the principle of spinning current hall probe. , 0, , .		30