

Beat M Jeckelmann

List of Publications by Year in descending order

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63
papers

1,493
citations

304743

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315739

38
g-index

63
all docs

63
docs citations

63
times ranked

842
citing authors

#	ARTICLE	IF	CITATIONS
1	The quantum Hall effect as an electrical resistance standard. Reports on Progress in Physics, 2001, 64, 1603-1655.	20.1	226
2	Revised technical guidelines for reliable dc measurements of the quantized Hall resistance. Metrologia, 2003, 40, 217-223.	1.2	200
3	Determination of the Planck constant with the METAS watt balance. Metrologia, 2011, 48, 133-141.	1.2	96
4	Tracing Planck's constant to the kilogram by electromechanical methods. Metrologia, 2003, 40, 356-365.	1.2	91
5	Design of the new METAS watt balance experiment Mark II. Metrologia, 2013, 50, 235-242.	1.2	84
6	High-precision measurements of the quantized Hall resistance: Experimental conditions for universality. Physical Review B, 1997, 55, 13124-13134.	3.2	66
7	Spectroscopic quadrupole moment of ^{23}Na from muonic X-rays. Nuclear Physics A, 1983, 408, 495-506.	1.5	41
8	New Precision Determination of the $^{\pi^-}$ Mass from Pionic X Rays. Physical Review Letters, 1986, 56, 1444-1447.	7.8	41
9	A proposal for a new moving-coil experiment. IEEE Transactions on Instrumentation and Measurement, 1999, 48, 192-195.	4.7	36
10	The mass of the negative pion. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 335, 326-329.	4.1	34
11	Material, device, and step independence of the quantized Hall resistance. IEEE Transactions on Instrumentation and Measurement, 1995, 44, 269-272.	4.7	34
12	The quantized Hall resistance: towards a primary standard of impedance. Metrologia, 2006, 43, 409-413.	1.2	31
13	Observation of the integer quantum Hall effect by magnetic coupling to a Corbino ring. Physical Review B, 1995, 51, 9752-9756.	3.2	28
14	New precision determination of the $^{\pi^-}$ mass from pionic X-rays. Nuclear Physics A, 1986, 457, 709-730.	1.5	25
15	Influence of the device-width on the accuracy of quantization in the integer quantum Hall effect. IEEE Transactions on Instrumentation and Measurement, 1995, 44, 254-257.	4.7	25
16	Status of the metas watt balance experiment. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 626-630.	4.7	25
17	The OFMET Watt balance: Progress report. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 583-586.	4.7	24
18	Evaluation of the local value of the Earth gravity field in the context of the new definition of the kilogram. Metrologia, 2009, 46, 178-186.	1.2	23

#	ARTICLE	IF	CITATIONS
19	Spectroscopic quadrupole moments of ^{25}Mg and ^{27}Al from muonic X-rays. Nuclear Physics A, 1982, 377, 361-378.	1.5	22
20	A new determination of the 25.7 keV wavelength standard in the decay of ^{161}Tb . Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1985, 241, 191-198.	1.6	22
21	Improvements in the realization of the quantized Hall resistance standard at OFMET. IEEE Transactions on Instrumentation and Measurement, 1995, 44, 265-268.	4.7	22
22	Optimization of QHE-devices for metrological applications. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 218-222.	4.7	22
23	Effects of metallic gates on ac measurements of the quantum hall resistance. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 574-578.	4.7	22
24	Comparison of quantum Hall effect resistance standards of the OFMET and the BIPM. Metrologia, 1995, 32, 385-388.	1.2	21
25	The european acqhe project: modular system for the calibration of capacitance standards based on the quantum hall effect. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 563-568.	4.7	21
26	LVD at Gran Sasso. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1988, 264, 5-17.	1.6	19
27	The quantum Hall effect as an electrical resistance standard. Measurement Science and Technology, 2003, 14, 1229-1236.	2.6	19
28	Towards a new kilogram definition based on a fundamental constant. Comptes Rendus Physique, 2004, 5, 881-892.	0.9	19
29	Influence of the voltage contacts on the four-terminal quantized Hall resistance in the nonlinear regime. IEEE Transactions on Instrumentation and Measurement, 1997, 46, 276-280.	4.7	16
30	Development and integration of high straightness flexure guiding mechanisms dedicated to the METAS watt balance Mark II. Metrologia, 2014, 51, S88-S95.	1.2	15
31	Crystal spectrometer for measurements of pionic X-rays. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1985, 238, 365-380.	1.6	12
32	The isoscalar pion-nucleus interaction from pionic atoms. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1987, 186, 9-13.	4.1	12
33	Final report on RMO key comparison EUROMET.EM-K2: Comparison of resistance standards at $10\text{ M}\Omega$ and $1\text{ G}\Omega$. Metrologia, 2010, 47, 01006-01006.	1.2	9
34	Transport behavior of commercially available 100Ω standard resistors. IEEE Transactions on Instrumentation and Measurement, 2001, 50, 242-244.	4.7	8
35	Low-Ohmic Resistance Comparison: Measurement Capabilities and Resistor Traveling Behavior. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 1723-1728.	4.7	8
36	Precision measurement of the $2p-1s$ transition wavelength in muonic ^{13}C . Nuclear Physics A, 1985, 444, 589-596.	1.5	7

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37	Influence of infrared illumination on the accuracy of the quantized Hall resistance. IEEE Transactions on Instrumentation and Measurement, 1997, 46, 285-288.	4.7	7
38	Final report on supplementary comparison EURAMET.EM-S32: Comparison of resistance standards at 1 T $\hat{\text{T}}\text{\textcircled{C}}$ and 100 T $\hat{\text{T}}\text{\textcircled{C}}$. Metrologia, 2013, 50, 01008-01008.	1.2	7
39	Measurement of the hyperfine splitting of the 1s state in muonic 7Li as a search for axial-vector muon-nucleon interactions. Nuclear Physics A, 1985, 433, 634-648.	1.5	6
40	The Elementary Charge for the Definition and Realization of the Ampere. Annalen Der Physik, 2019, 531, 1800389.	2.4	6
41	Precision measurement of the wavelengths and natural line widths of 3d-2p pionic x-ray transitions in low-z atoms. Nuclear Physics A, 1985, 442, 637-666.	1.5	5
42	Metrology in electricity and magnetism: EURAMET activities today and tomorrow. Metrologia, 2017, 54, R1-R24.	1.2	5
43	Contactless measurements of the internal capacitance of a Corbino ring in the quantum Hall regime. IEEE Transactions on Instrumentation and Measurement, 1999, 48, 301-304.	4.7	4
44	First realisation of the kilogram with the METAS Kibble balance. Metrologia, 2022, 59, 025008.	1.2	4
45	Are anomalous values of the quantized Hall resistance really anomalous?. Metrologia, 1996, 33, 499-502.	1.2	3
46	Final Report of Euromet Project 599: Comparison of voltage ratio standards. Metrologia, 2005, 42, 01004-01004.	1.2	3
47	Reproducibility of the metas watt balance. , 2008, , .		3
48	The METAS watt balance Mark II experiment. , 2012, , .		3
49	Nonflammable gas mixtures for streamer tubes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1989, 274, 177-182.	1.6	2
50	A.C. measurements of edgeless currents in a Corbino ring in the quantum Hall regime. Solid State Communications, 1997, 102, 287-290.	1.9	2
51	Comparison EUROMET.EM-K8 of DC Voltage Ratio: Results. IEEE Transactions on Instrumentation and Measurement, 2005, 54, 576-579.	4.7	2
52	Euromet 495 Comparison of High Direct Voltage Measurements up to 100 kV. , 2004, , .		1
53	Comparison of CERN and metas high current standards up to 10kA. , 2008, , .		1
54	Accurate high-ohmic resistance measurement techniques up to 1 P $\&\#x2126;$;. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
55	The METAS watt balance Mark II. , 2016, , .		1
56	The Quantum Hall Effect as an Electrical Resistance Standard. , 2005, , 55-131.		1
57	Comments on "Influence of voltage contacts on precision measurements of the quantized Hall resistance: an effect of externally injected current". IEEE Transactions on Instrumentation and Measurement, 1999, 48, 1010.	4.7	0
58	Comparison Euromet.EM-K8 of DC Voltage Ratio: Results. , 2004, , .		0
59	Analysis of measurement comparison EUROMET.EM-K2. , 2008, , .		0
60	Universality of the quantized Hall resistance. , 2008, , .		0
61	Results from the METAS watt balance. , 2010, , .		0
62	RMO key comparison EURAMET.EM-K2.1: Comparison of resistance standards at 10 MÎ© and 1 GÎ©. Metrologia, 2013, 50, 01001-01001.	1.2	0
63	The METAS watt balance Mark II experiment: Progress report. , 2014, , .		0