

# Rubem L Sommer

## List of Publications by Year in descending order

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81  
papers

1,773  
citations

318942

23  
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325983

40  
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81  
all docs

81  
docs citations

81  
times ranked

1381  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin rectification by planar Hall effect in synthetic antiferromagnets. Journal of Magnetism and Magnetic Materials, 2022, 560, 169614.	1.0	2
2	Dynamic magnetic properties of $\text{Co}/\text{FeAl}/\text{IrMn}$ bilayers. Journal of Magnetism and Magnetic Materials, 2022, 560, 169618.	1.0	4
3	Revealing the true impact of interstitial and substitutional nitrogen doping in $\text{TiO}_2$ on photoelectrochemical applications. Journal of Materials Chemistry A, 2021, 9, 12214-12224.	5.2	38
4	Homogeneous V incorporation via single-step anodization: Structural doping or heterostructure formation?. Applied Surface Science, 2021, 556, 149694.	3.1	6
5	Waiting-time statistics in magnetic systems. Scientific Reports, 2020, 10, 9692.	1.6	3
6	Excitation-Independent Blue-Emitting Carbon Dots from Mesoporous Aminosilica Nanoreactor for Bioanalytical Application. ACS Applied Nano Materials, 2020, 3, 3652-3664.	2.4	16
7	An Alternative Approach to Investigate V-Shaped Electrothermal Microactuators in Vacuum. Journal of Microelectromechanical Systems, 2020, 29, 387-396.	1.7	7
8	Thiol Ligand Adsorption on Gold Nanoparticle Surfaces: Mathematical Models to Predict Optimal Concentration of Heterobifunctional Polyethylene Glycol for Horseradish Peroxidase Immobilization. Advanced Science, Engineering and Medicine, 2020, 12, 473-483.	0.3	0
9	Spin wave dynamics in elliptical dots. Physical Review B, 2019, 99, .	1.1	6
10	Pure spin current manipulation in antiferromagnetically exchange coupled heterostructures. Journal of Applied Physics, 2018, 123, .	1.1	4
11	Playing with universality classes of Barkhausen avalanches. Scientific Reports, 2018, 8, 11294.	1.6	30
12	Universal temporal characteristics and vanishing of multifractality in Barkhausen avalanches. Physical Review E, 2017, 96, 022159.	0.8	23
13	Influence of the thermal interface resistance on the thermovoltage of a magnetic tunnel junction. Physical Review B, 2017, 95, .	1.1	27
14	Quantitative Scaling of Magnetic Avalanches. Physical Review Letters, 2016, 117, 087201.	2.9	48
15	Microwave absorption of electroplated NiFeCu/Cu multilayers deposited directly on Si (100) substrates. Journal of Magnetism and Magnetic Materials, 2016, 420, 23-27.	1.0	6
16	Exploring the magnetization dynamics of NiFe/Pt multilayers in flexible substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 211, 115-120.	1.7	14
17	Annealing effects on the microwave linewidth broadening of FeCuNbSiB ferromagnetic films. Journal of Applied Physics, 2015, 117, 123913.	1.1	4
18	Magnetoimpedance effect at the high frequency range for the thin film geometry: Numerical calculation and experiment. Journal of Applied Physics, 2014, 116, 243904.	1.1	25



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37	Zippering method applied to Barkhausen noise: A new tool to investigate the micromagnetic disorder in amorphous magnetic materials. Journal of Alloys and Compounds, 2007, 434-435, 604-607.	2.8	0
38	Thickness dependence of the high-frequency magnetic permeability in amorphous Fe <sub>73.5</sub> Cu <sub>1</sub> Nb <sub>3</sub> Si <sub>13.5</sub> B <sub>9</sub> thin films. Journal of Applied Physics, 2007, 101, 033908.	1.1	31
39	Magnetostriction, Barkhausen noise and magnetization processes in E110 grade non-oriented electrical steels. Journal of Magnetism and Magnetic Materials, 2007, 317, 20-28.	1.0	20
40	Magnetoimpedance in amorphous/metal/amorphous sandwiched films at GHz frequencies. Physica B: Condensed Matter, 2006, 384, 155-157.	1.3	3
41	Low-field microwave magnetic permeability on FeSiBNbCu thin films. Physica B: Condensed Matter, 2006, 384, 271-273.	1.3	5
42	Effects of thickness on the statistical properties of the Barkhausen noise in amorphous films. Physica B: Condensed Matter, 2006, 384, 144-146.	1.3	26
43	GMI in FeCuNbSiBCu multilayers. Physica B: Condensed Matter, 2006, 384, 162-164.	1.3	8
44	Complex high-frequency magnetization dynamics and magnetoimpedance in thin films. Physica B: Condensed Matter, 2006, 384, 172-174.	1.3	2
45	Magnetostriction in non-oriented electrical steels. Physica B: Condensed Matter, 2006, 384, 294-296.	1.3	7
46	Domain wall propagation in continuous thin films initiated by precessional reversal. Journal of Magnetism and Magnetic Materials, 2005, 286, 51-55.	1.0	1
47	Effect of stress on the entropy calculated by applying the zippering method to Barkhausen noise. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1165-1167.	1.0	0
48	Study of CoFeSiB glass-covered amorphous microwires under applied stress. Journal of Applied Physics, 2005, 98, 033902.	1.1	16
49	Applying the zippering method to Barkhausen noise in order to estimate the degree of (dis)order. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E551-E552.	1.0	2
50	Magnetic properties and magnetoimpedance in electrodeposited amorphous CoP layers. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1460-1462.	1.0	20
51	Investigation of scaling properties of hysteresis in Finemet thin films. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E913-E914.	1.0	4
52	FMR and domain structure in joule-heated glass-covered microwires. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1858-1859.	1.0	0
53	Barkhausen noise and high induction losses in non-oriented electrical steel. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E561-E562.	1.0	6
54	Magnetoimpedance of NiFe/Ag multilayers in the 100kHz-1.8GHz range. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1846-1847.	1.0	14

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55	Dynamic hysteresis in finemet thin films. IEEE Transactions on Magnetics, 2003, 39, 2666-2668.	1.2	22
56	Domain structure in Joule-heated CoFeSiB glass-covered amorphous microwires probed by magnetoimpedance and ferromagnetic resonance. Journal of Applied Physics, 2003, 94, 4539-4543.	1.1	6
57	Giant magnetoimpedance in glass-covered amorphous microwires at microwave frequencies. Journal of Applied Physics, 2002, 91, 7436.	1.1	8
58	Tunnel magnetoresistance in NiFe/TaO <sub>x</sub> /Al <sub>2</sub> O <sub>3</sub> /Co junctions with a thin TaO <sub>x</sub> layer. Journal of Applied Physics, 2002, 91, 7971.	1.1	6
59	Barkhausen noise measurements in materials with vanishing magnetoelastic anisotropies. Journal of Applied Physics, 2002, 91, 8201.	1.1	4
60	Stress level in Finemet materials studied by impedanciometry. Journal of Applied Physics, 2002, 91, 8441.	1.1	14
61	Domain wall dynamics studied by impedanciometry. Physica B: Condensed Matter, 2002, 320, 159-161.	1.3	0
62	Giant magnetoimpedance in glass-covered amorphous microwires at microwave frequencies. Physica B: Condensed Matter, 2002, 320, 156-158.	1.3	1
63	Barkhausen noise studies in amorphous materials at vanishing anisotropies. Physica B: Condensed Matter, 2002, 320, 217-220.	1.3	0
64	Giant magnetoimpedance of Fe- and Co-based amorphous wires up to 2GHz. Journal of Magnetism and Magnetic Materials, 2002, 249, 288-292.	1.0	7
65	Magnetization dynamics as derived from magneto impedance measurements. Journal of Applied Physics, 2000, 88, 331-335.	1.1	42
66	Domain size effects in Barkhausen noise. Physical Review E, 1999, 59, 3884-3887.	0.8	33
67	Magneto-impedance effects in multilayered permalloy materials. Journal of Applied Physics, 1999, 86, 1057-1061.	1.1	24
68	Magnetization process and magnetoimpedance in (110)[001]FeSi <sub>3</sub> %. Journal of Applied Physics, 1998, 84, 3792-3797.	1.1	13
69	Magnetic and magneto-transport properties of metastable Gd <sub>x</sub> Nb <sub>1-x</sub> alloys. IEEE Transactions on Magnetics, 1998, 34, 1135-1137.	1.2	2
70	Angular dependence of exchange coupling in ferromagnet/antiferromagnet bilayers. Physical Review B, 1997, 56, 83-86.	1.1	201
71	Giant magnetoimpedance in highly textured (110)[001] FeSi <sub>3</sub> %. Journal of Applied Physics, 1997, 81, 4107-4109.	1.1	7
72	Annealing and geometric effects in the magneto-impedance of amorphous Co <sub>70.4</sub> Fe <sub>4.6</sub> Si <sub>15</sub> B <sub>10</sub> alloys. Journal of Applied Physics, 1996, 79, 6117.	1.1	5

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73	Longitudinal, transverse, and perpendicular magnetoimpedance in nearly zero magnetostrictive amorphous alloys. <i>Physical Review B</i> , 1996, 53, R5982-R5985.	1.1	29
74	Giant magneto-impedance effects in Metglas 2705M. <i>Journal of Applied Physics</i> , 1996, 79, 5139.	1.1	46
75	Longitudinal and transverse magnetoimpedance in amorphous Fe <sub>73.5</sub> Cu <sub>1</sub> Nb <sub>3</sub> Si <sub>13.5</sub> B <sub>9</sub> films. <i>Applied Physics Letters</i> , 1995, 67, 3346-3348.	1.5	165
76	Role of magnetic anisotropy in the magnetoimpedance effect in amorphous alloys. <i>Applied Physics Letters</i> , 1995, 67, 857-859.	1.5	138
77	Simulations of the Barkhausen noise in ferromagnetic materials: A tool to understand experiments?. <i>Journal of Magnetism and Magnetic Materials</i> , 1993, 127, L25-L32.	1.0	2
78	Barkhausen noise in the reentrant system Ni <sub>1-x</sub> Mnx: A study of the power spectra. <i>Journal of Applied Physics</i> , 1993, 73, 5497-5499.	1.1	3
79	Magnetic noise in the reentrant system Ni <sub>1-x</sub> Mnx. <i>Journal of Magnetism and Magnetic Materials</i> , 1992, 103, 25-29.	1.0	8
80	Stochastic wall motion and reservoir dynamics. <i>Journal of Magnetism and Magnetic Materials</i> , 1991, 97, 305-315.	1.0	6
81	Barkhausen Noise Measurements in Small (110) [001] Silicon-Iron Samples. <i>Physica Status Solidi A</i> , 1990, 120, 609-615.	1.7	9