

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

g-index

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all docs

81

docs citations

81

times ranked

1381

citing authors

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

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19	Statistical properties of Barkhausen noise in amorphous ferromagnetic films. <i>Physical Review E</i> , 2014, 90, 032821.	0.8	17
20	Magnetization dynamics in nanostructures with weak/strong anisotropy. <i>Journal of Applied Physics</i> , 2014, 115, 103908.	1.1	20
21	Angular dependence of asymmetric magnetoimpedance in exchange biased NiFe/IrMn multilayers. <i>Applied Physics Letters</i> , 2014, 104, 102405.	1.5	38
22	Annealing effect on the crystal structure and exchange bias in Heusler Ni45.5Mn43.0In11.5 alloy ribbons. <i>Journal of Alloys and Compounds</i> , 2014, 582, 588-593.	2.8	13
23	Rotatable anisotropy of $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ altimg="si0008.gif" overflow="scroll" } \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Ni} \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 81 \langle / \text{mml:mn} \rangle \langle / \text{mml:mrow} \rangle \langle / \text{mml:math} \rangle$. <i>Journal of Magnetism and Magnetic Materials</i> , 2013, 346, 1-4.	1.0	11
24	Interlayer coupling in spin valves studied by broadband ferromagnetic resonance. <i>Physical Review B</i> , 2013, 88, .	1.1	29
25	Universal properties of magnetization dynamics in polycrystalline ferromagnetic films. <i>Physical Review E</i> , 2013, 88, 032811.	0.8	12
26	Tailoring of Magnetocaloric Effect in Ni45.5Mn43.0In11.5 Metamagnetic Shape Memory Alloy. <i>Research Letters in Physics</i> , 2012, 2012, 1-5.	0.2	7
27	Finite element model for the characterization of deleterious phases by eddy current technique. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2012, 39, 305-310.	0.3	4
28	Multifractality in domain wall dynamics of a ferromagnetic film. <i>Physical Review E</i> , 2012, 86, 066117.	0.8	16
29	Universality beyond power laws and the average avalanche shape. <i>Nature Physics</i> , 2011, 7, 316-320.	6.5	185
30	Wide frequency range magnetoimpedance in tri-layered thin NiFe/Ag/NiFe films: Experiment and numerical calculation. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	26
31	Tailoring the magnetoimpedance effect of NiFe/Ag multilayer. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 295004.	1.3	66
32	High frequency magnetoimpedance in Ni81Fe19/Fe50Mn50 exchange biased multilayer. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	34
33	Magnetic properties of Fe90Zr7B3 ribbons studied by FMR and magnetization. <i>Journal of Magnetism and Magnetic Materials</i> , 2008, 320, e358-e361.	1.0	8
34	Giant magnetoimpedance in FM/SiO ₂ /Cu/SiO ₂ /FM films at GHz frequencies. <i>Journal of Magnetism and Magnetic Materials</i> , 2008, 320, e25-e28.	1.0	15
35	Magnetoimpedance effect in structured multilayered amorphous thin films. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 175003.	1.3	23
36	Magnetoimpedance of single and multilayered FeCuNbSiB films in frequencies up to 1.8GHz. <i>Journal of Applied Physics</i> , 2007, 101, 043905.	1.1	20

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

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55	Dynamic hysteresis in finemet thin films. <i>IEEE Transactions on Magnetics</i> , 2003, 39, 2666-2668.	1.2	22
56	Domain structure in Joule-heated CoFeSiB glass-covered amorphous microwires probed by magnetoimpedance and ferromagnetic resonance. <i>Journal of Applied Physics</i> , 2003, 94, 4539-4543.	1.1	6
57	Giant magnetoimpedance in glass-covered amorphous microwires at microwave frequencies. <i>Journal of Applied Physics</i> , 2002, 91, 7436.	1.1	8
58	Tunnel magnetoresistance in NiFe/TaO _x /Al ₂ O ₃ /Co junctions with a thin TaO _x layer. <i>Journal of Applied Physics</i> , 2002, 91, 7971.	1.1	6
59	Barkhausen noise measurements in materials with vanishing magnetoelastic anisotropies. <i>Journal of Applied Physics</i> , 2002, 91, 8201.	1.1	4
60	Stress level in Finemet materials studied by impedanciometry. <i>Journal of Applied Physics</i> , 2002, 91, 8441.	1.1	14
61	Domain wall dynamics studied by impedanciometry. <i>Physica B: Condensed Matter</i> , 2002, 320, 159-161.	1.3	0
62	Giant magnetoimpedance in glass-covered amorphous microwires at microwave frequencies. <i>Physica B: Condensed Matter</i> , 2002, 320, 156-158.	1.3	1
63	Barkhausen noise studies in amorphous materials at vanishing anisotropies. <i>Physica B: Condensed Matter</i> , 2002, 320, 217-220.	1.3	0
64	Giant magnetoimpedance of Fe- and Co-based amorphous wires up to 2GHz. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 249, 288-292.	1.0	7
65	Magnetization dynamics as derived from magneto impedance measurements. <i>Journal of Applied Physics</i> , 2000, 88, 331-335.	1.1	42
66	Domain size effects in Barkhausen noise. <i>Physical Review E</i> , 1999, 59, 3884-3887.	0.8	33
67	Magneto-impedance effects in multilayered permalloy materials. <i>Journal of Applied Physics</i> , 1999, 86, 1057-1061.	1.1	24
68	Magnetization process and magnetoimpedance in (110)[001]FeSi3%. <i>Journal of Applied Physics</i> , 1998, 84, 3792-3797.	1.1	13
69	Magnetic and magneto-transport properties of metastable Cd _x Nb _{1-x} alloys. <i>IEEE Transactions on Magnetics</i> , 1998, 34, 1135-1137.	1.2	2
70	Angular dependence of exchange coupling in ferromagnet/antiferromagnet bilayers. <i>Physical Review B</i> , 1997, 56, 83-86.	1.1	201
71	Giant magnetoimpedance in highly textured (110)[001] FeSi3%. <i>Journal of Applied Physics</i> , 1997, 81, 4107-4109.	1.1	7
72	Annealing and geometric effects in the magneto-impedance of amorphous Co70.4Fe4.6Si15B10 alloys. <i>Journal of Applied Physics</i> , 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 Fe73.5Cu1Nb3Si13.5B9 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 _{1-x} 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 _{1-x} 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