Nilson de Oliveira

List of Publications by Year
in descending order

137 papers	3,057 citations	218677 26 h-index	182427 51 g-index
138 all docs	138 docs citations	138 times ranked	1622 citing authors

#	Article	IF	Citations
1	Theoretical aspects of the magnetocaloric effect. Physics Reports, 2010, 489, 89-159.	25.6	530
2	Pressure-Induced Colossal Magnetocaloric Effect in MnAs. Physical Review Letters, 2004, 93, 237202.	7.8	290
3	Ambient pressure colossal magnetocaloric effect tuned by composition in Mn1â˘'xFe x As. Nature Materials, 2006, 5, 802-804.	27.5	197
4	Magnetocaloric effect around a magnetic phase transition. Physical Review B, 2008, 77, .	3.2	90
5	Magnetocaloric effect in theRNi5(R=Pr, Nd, Gd, Tb, Dy, Ho, Er) series. Physical Review B, 2004, 70, .	3.2	84
6	Magnetocaloric effect in the intermetallic compoundsRCo2(R=Dy,Ho,Er). Physical Review B, 2002, 66, .	3.2	75
7	Investigations on magnetic refrigeration: Application to RNi2 (R=Nd, Gd, Tb, Dy, Ho, and Er). Journal of Applied Physics, 2003, 93, 4055-4059.	2.5	71
8	Understanding the inverse magnetocaloric effect in antiferro- and ferrimagnetic arrangements. Journal of Physics Condensed Matter, 2009, 21, 056004.	1.8	67
9	Analytical model to understand the colossal magnetocaloric effect. Physical Review B, 2005, 71, .	3.2	65
10	Understanding the influence of the first-order magnetic phase transition on the magnetocaloric effect: application to Gd5(SixGe1â˘'x)4. Journal of Magnetism and Magnetic Materials, 2004, 277, 78-83.	2.3	63
11	Theoretical description of the colossal entropic magnetocaloric effect: Application to MnAs. Physical Review B, 2006, 73, .	3.2	62
12	Entropy change upon magnetic field and pressure variations. Applied Physics Letters, 2007, 90, 052501.	3.3	53
13	Theoretical investigations on giant magnetocaloric effect in MnAs1â˘'xSbx. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 320, 302-306.	2.1	49
14	Calculation of the giant magnetocaloric effect in theMnFeP0.45As0.55compound. Physical Review B, 2004, 70, .	3.2	49
15	Ambient pressure colossal magnetocaloric effect in Mn1â˘'xCuxAs compounds. Applied Physics Letters, 2007, 90, 242507.	3.3	48
16	Monte Carlo calculations of the magnetocaloric effect inGd5(SixGe1â˘'x)4compounds. Physical Review B, 2005, 72, .	3.2	42
17	The influence of crystalline electric field on the magnetocaloric effect in the series RAl2 (R=Pr,Nd,Tb,Dy,Ho,Er, and Tm). Journal of Magnetism and Magnetic Materials, 2001, 226-230, 970-972.	2.3	39
18	Magnetocaloric effect in Laves-phase rare-earth compounds with the second-order magnetic phase transition: Estimation of the high-field properties. Acta Materialia, 2017, 133, 230-239.	7.9	39

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19	Magnetocaloric and barocaloric effects: Theoretical description and trends. International Journal of Refrigeration, 2014, 37, 237-248.	3.4	37
20	Giant magnetocaloric and barocaloric effects in Mn(As1â^'Sb). Journal of Alloys and Compounds, 2010, 501, 177-182.	5.5	35
21	Magnetocaloric effect in the Laves phase pseudobinary (Er1â^'cDyc)Co2. Journal of Magnetism and Magnetic Materials, 2003, 264, 55-61.	2.3	31
22	The giant anisotropic magnetocaloric effect in DyAl2. Journal of Applied Physics, 2008, 104, .	2.5	31
23	Barocaloric and magnetocaloric effects in La(Fe0.89Si0.11)13. Journal of Applied Physics, 2008, 103, .	2.5	31
24	Theoretical calculations of the magnetocaloric effect in MnFeP0.45As0.55: a model of itinerant electrons. Journal of Physics Condensed Matter, 2005, 17, 3325-3332.	1.8	29
25	Magnetocaloric effect in rare-earth pseudobinaryEr(Co1â^'cNic)2. Physical Review B, 2004, 69, .	3.2	28
26	Magnetocaloric effect in transition metals based compounds: a theoretical approach. European Physical Journal B, 2004, 40, 259-264.	1.5	27
27	Magnetocaloric effect due to spin reorientation in the crystalline electrical field: Theory applied toDyAl2. Physical Review B, 2007, 75, .	3.2	27
28	Transition-metal impurities in Fe: Magnetic- and hyperfine-field properties. Physical Review B, 1995, 52, 9137-9139.	3.2	25
29	Magnetocaloric effect in(GdxTb1â^'x)5Si4by Monte Carlo simulations. Physical Review B, 2006, 74, .	3.2	25
30	Barocaloric effect and the pressure induced solid state refrigerator. Journal of Applied Physics, 2011, 109, 053515.	2.5	25
31	Investigation of the first-order metamagnetic transitions and the colossal magnetocaloric effect using a Landau expansion applied to MnAs compound. European Physical Journal B, 2009, 68, 67-72.	1.5	23
32	Magnetocaloric properties of compounds with first order phase transition: Hysteresis effect. Journal of Alloys and Compounds, 2011, 509, 6346-6349.	5.5	21
33	Experimental and theoretical analysis of magnetocaloric behavior of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Dy</mml:mi><mml:mrow><mml:mn>1</m		

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37	Investigation on the magnetocaloric effect in (Gd,Pr)Al2 solid solutions. Journal of Magnetism and Magnetic Materials, 2011, 323, 794-798.	2.3	18
38	Monte Carlo calculations of the magnetocaloric effect in RAl2 (R=Dy,Er). Journal of Applied Physics, 2006, 99, 08Q103.	2.5	16
39	Magnetocaloric effect in doped with hydrogen and under external pressure. Journal of Alloys and Compounds, 2006, 424, 41-45.	5.5	16
40	Magnetocaloric effect in the pseudobinaries (Ho1â˜'cRc)Co2 (R = Er and Dy). European Physical Journal B, 2008, 65, 207-212.	1.5	16
41	Influence of spin reorientation on magnetocaloric effect inNdAl2: A microscopic model. Physical Review B, 2006, 74, .	3.2	15
42	Magnetocaloric effect in rare earth doped compounds. Journal of Alloys and Compounds, 2008, 455, 81-86.	5.5	15
43	Theoretical investigation on the magnetocaloric effect in amorphous systems, application to: Gd80Au20 and Gd70Ni30. Journal of Applied Physics, 2013, 113, .	2.5	15
44	Theoretical investigations on magnetocaloric effect in Er1â˜'Tb Al2 series. Journal of Magnetism and Magnetic Materials, 2015, 379, 112-116.	2.3	15
45	Thermal and magnetic effects in quasi-binary Tb1-xDyxNi2 (xÂ= 0.25, 0.5, 0.75) intermetallics. Acta Materialia, 2019, 173, 27-33.	7.9	15
46	Metal-insulator transition in Kondo insulators: A functional-integral approach. Physical Review B, 1998, 57, 6943-6948.	3.2	14
47	Theoretical investigations on the magnetocaloric and barocaloric effects in TbyGd(1â˜'y)Al2 series. Journal of Alloys and Compounds, 2013, 563, 242-248.	5.5	14
48	Local magnetization and hyperfine field systematics ofsâ˜'pand noble impurities in Gd and Ni hosts. Journal of Applied Physics, 1997, 81, 4215-4217.	2.5	13
49	Magnetocaloric effect in the Laves phase pseudobinaries (and Ho). Journal of Magnetism and Magnetic Materials, 2008, 320, 386-392.	2.3	13
50	Theoretical investigation on the existence of inverse and direct magnetocaloric effect in perovskite EuZrO3. Journal of Applied Physics, 2011, 109, .	2.5	13
51	Theoretical investigation on the magnetocaloric effect in MnAs using a microscopic model to describe the magnetic and thermal hysteresis. Solid State Communications, 2012, 152, 951-954.	1.9	13
52	Rotating magnetocaloric effect in HoAl2 single crystal. Intermetallics, 2015, 64, 59-62.	3.9	13
53	Functional integral approach to the rare-earth-transition-metal Laves phase intermetallic compounds. Journal of Magnetism and Magnetic Materials, 1992, 117, 175-182.	2.3	12
54	Magnetocaloric effect in the rare earth doped compounds. Solid State Communications, 2007, 144, 103-108.	1.9	12

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55	Giant magnetocaloric and barocaloric effects in R5Si2Ge2 (Râ€‰=â€‰Tb, Gd). Journal of Applied Physics, 2013, 113, 033910.	2.5	12
56	Giant rotating magnetocaloric effect in RNi5 single crystals. Journal of Physics and Chemistry of Solids, 2017, 103, 13-15.	4.0	12
57	The influence of the quadrupolar interaction in the magnetocaloric effect. Solid State Communications, 2000, 114, 487-491.	1.9	11
58	Magnetocaloric effect in rare-earth-based compounds: A Monte Carlo study. Physica B: Condensed Matter, 2006, 378-380, 716-717.	2.7	11
59	Monte Carlo calculations of the magnetocaloric effect in. Journal of Magnetism and Magnetic Materials, 2007, 310, 2805-2807.	2.3	11
60	Magnetocaloric effect under applied pressure and the barocaloric effect in the compounds RCo2(R =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.8	11
61	Investigation on the magnetocaloric effect in DyNi2, DyAl2 and Tb1â^'Gd Al2 (n=0, 0.4, 0.6) compounds. Journal of Magnetism and Magnetic Materials, 2009, 321, 3462-3465.	2.3	11
62	The influence of magnetic and electric coupling properties on the magnetocaloric effect in quantum paraelectric EuTiO3. Journal of Magnetism and Magnetic Materials, 2012, 324, 1290-1295.	2.3	11
63	Effect of composition changes on the structural, magnetic and thermodynamic properties in Tb1-xDyxNi2 intermetallic compounds. Journal of Alloys and Compounds, 2018, 769, 588-596.	5.5	11
64	Magnetocaloric effect in the Laves phase pseudobinary Er[sub 1â^'c]Y[sub c]Co[sub 2]. Journal of Applied Physics, 2002, 91, 8879.	2.5	10
65	Theoretical calculations of the magnetocaloric effect in. Journal of Magnetism and Magnetic Materials, 2006, 306, 265-271.	2.3	10
66	Magnetocaloric and barocaloric effects in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0026.gif" overflow="scroll"><mml:mi>Mn</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:msub><mml:mrow><mml:mi>As</mml:mi></mml:mrow><mml:mrow><mml:mn>0.7</mml:mn></m 1558-1560.	2.3	10
67	Spin reorientation and the magnetocaloric effect in HoyEr(1â^'y)N. Journal of Applied Physics, 2012, 111, .	2.5	10
68	Functional integral approach to the magnetic properties of Laves phase intermetallics. Journal of Magnetism and Magnetic Materials, 1992, 114, 269-282.	2.3	9
69	Magnetocaloric effect in systems of itinerant electrons: application to Fe, Co, Ni, YFe2 and YFe3 compounds. Journal of Alloys and Compounds, 2005, 403, 45-48.	5.5	9
70	Magnetocaloric effect in. Journal of Magnetism and Magnetic Materials, 2006, 301, 503-512.	2.3	9
71	Theoretical investigation on the magnetocaloric effect in garnets R3Fe5O12 where (R=Y and Dy). Journal of Applied Physics, 2009, 106, 053914.	2.5	9
72	Magnetic moment formation at dilute Cd impurities inRNi2andRCo2intermetallic compounds. Physical Review B, 2003, 67, .	3.2	8

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73	Magnetocaloric effect in the pseudobinary Ho(Co1â˜’cRhc)2. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 583-584.	2.3	8
74	Monte Carlo calculations of the magnetocaloric effect in gadolinium. Journal of Magnetism and Magnetic Materials, 2008, 320, e147-e149.	2.3	8
75	Magnetocaloric effect in. Journal of Magnetism and Magnetic Materials, 2008, 320, e150-e152.	2.3	8
76	Electric field triggering the spin reorientation and controlling the absorption and release of heat in the induced multiferroic compound EuTiO3. Journal of Applied Physics, 2015, 118, .	2.5	8
77	Influence of chemical doping and hydrostatic pressure on the magnetic properties ofMn1â˜’xFexAsmagnetocaloric compounds. Physical Review B, 2016, 93, .	3.2	8
78	The influence of the spin reorientation process on the magnetocaloric effect: Application to PrAl2. Journal of Magnetism and Magnetic Materials, 2007, 313, 176-181.	2.3	7
79	The influence of the magnetoelastic interaction on the magnetocaloric effect in ferrimagnetic systems: a theoretical investigation. Journal of Physics Condensed Matter, 2010, 22, 486008.	1.8	7
80	Anomalous barocaloric effect in solid magnetic materials. Journal of Physics Condensed Matter, 2011, 23, 306003.	1.8	7
81	Comments on the rotating magnetocaloric effect: Application to PrSi and HoMn2O5. Journal of Applied Physics, 2020, 127, .	2.5	7
82	Theoretical study of hyperfine fields at diluted sâ€“p, noble, and nd impurities in ferromagnetic compounds GdX (X=Zn,â€ŠCd). Journal of Applied Physics, 2000, 87, 4882-4884.	2.5	6
83	Theoretical investigation on the barocaloric and magnetocaloric properties in the Gd5Si2Ge2 compound. Journal of Applied Physics, 2014, 116, .	2.5	6
84	Theoretical investigation on the magnetic and electric properties in TbSb compound through an anisotropic microscopic model. Journal of Applied Physics, 2016, 119, .	2.5	6
85	Systematics of magnetic hyperfine fields at diluted impurities in ferromagnetic rare-earth compounds GdX (X = Zn and Cd): A theoretical study. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 1091-1092.	2.3	5
86	Magnetic-field-driven metal-insulator transition in Kondo insulators. Physical Review B, 1999, 60, 1444-1447.	3.2	5
87	Local magnetic moment on a Ta impurity diluted in YFe2 and GdFe2: a functional integral approach. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E631-E632.	2.3	5
88	Magnetocaloric effect in under applied pressure. Journal of Magnetism and Magnetic Materials, 2008, 320, e153-e155.	2.3	5
89	Theoretical investigation on the magnetocaloric effect in the intermetallic. Journal of Alloys and Compounds, 2011, 509, 8979-8982.	5.5	5
90	Theoretical investigations on magnetic entropy change in amorphous and crystalline systems: Applications to RAg (R=Tb, Dy, Ho) and GdCuAl. Journal of Magnetism and Magnetic Materials, 2014, 369, 34-39.	2.3	5

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91	Calculations of the magnetic entropy change in amorphous through a microscopic anisotropic model: Applications to Dy70Zr30 and DyCo3.4 alloys. Journal of Applied Physics, 2014, 116, 143903.	2.5	5
92	Temperature dependence of the magnetic hyperfine field at an sâ€“p impurity diluted in R Ni 2. Journal of Magnetism and Magnetic Materials, 2016, 401, 248-250.	2.3	5
93	Study of magnetic hyperfine data on rare-earth impurities in Fe and Ni: Non-orbital contribution. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 1441-1442.	2.3	4
94	On the nature of the magnetic phase transition of the HoCo2 intermetallic. Journal of Applied Physics, 1998, 83, 6967-6968.	2.5	4
95	Hyperfine fields at 3d impurities in ZrFe[sub 2] intermetallic compound: A theoretical study. Journal of Applied Physics, 2002, 91, 8876.	2.5	4
96	On the magnetocaloric effect in Gd(Zn1â^'xCdx). Solid State Communications, 2006, 137, 431-435.	1.9	4
97	The influence of quadrupolar interaction on the magnetocaloric effect in PrMg2. Journal of Alloys and Compounds, 2007, 440, 46-50.	5.5	4
98	Theoretical investigation on the anisotropic magnetocaloric effect: Application to DyAl2. Journal of Magnetism and Magnetic Materials, 2008, 320, e143-e146.	2.3	4
99	Local magnetic moments and hyperfine fields of transition element impurities in ferromagnetic Gd and Tb rare earth metals. Journal of Magnetism and Magnetic Materials, 2008, 320, e446-e449.	2.3	4
100	On the magnetocaloric effect of itinerant electron systems with first order transition. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 1355-1360.	2.6	4
101	Anisotropic magnetocaloric effect in <i>TmAl</i>2 single crystal. Journal of Applied Physics, 2014, 116, .	2.5	4
102	Anisotropy effect on the caloric properties of NdAl2 single crystal. Journal of Magnetism and Magnetic Materials, 2015, 393, 88-91.	2.3	4
103	Magnetic hyperfine field at a Cd impurity diluted in RCo2 at finite temperatures. Journal of Magnetism and Magnetic Materials, 2015, 384, 284-288.	2.3	4
104	Magnetocaloric effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si11.gif" overflow="scroll"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:msub><mml:mrow><mml:mtext>Tb</mml:mtext></mml:mrow><mml:mrow><mml:mi>c</mml:mi> Journal of Alloys and Compounds, 2015, 618, 386-389.	5.5	4
105	A new cooling process driven by charge transfer mechanism: Application to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mi>Y</mml:mi><mml:mi>b</mml:mi><mml:mi>I</mml:mi><mml:mi>n</mml:mi><mml:mi>C</m Journal of Alloys and Compounds, 2019, 779, 335-338.	5.5	4
106	Finite temperature magnetic properties of the PrCo2 intermetallic compound. Physica B: Condensed Matter, 1998, 253, 158-162.	2.7	3
107	Change of universality class of metalâ€“insulator transition due to magnetic ordering. Journal of Applied Physics, 1999, 85, 5332-5334.	2.5	3
108	Title is missing!. Hyperfine Interactions, 2001, 133, 221-233.	0.5	3

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109	Magnetic field effect on doped Kondo insulators. Journal of Physics and Chemistry of Solids, 2003, 64, 1173-1177.	4.0	3
110	Magnetic moment formation at a dilute Ta impurity in RCo2 intermetallic compounds. Journal of Magnetism and Magnetic Materials, 2004, 270, 208-215.	2.3	3
111	Magnetic moment formation at a dilute C140e impurity in RCo2 compounds. Journal of Applied Physics, 2010, 107, .	2.5	3
112	Temperature dependence of the local magnetic momment at a Cd impurity diluted in<i>R</i>Zn (<i>R</i>= Gd, Tb and Dy) compounds. Materials Research Express, 2016, 3, 016502.	1.6	3
113	On the magnetocaloric effect in single crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 385, 126957.	2.1	3
114	Spin fluctuations in (U1â^'xMx)(Al1â^'yCoy)2compounds. Physical Review B, 1993, 47, 11883-11886.	3.2	2
115	Theoretical study of hyperfine fields at impurity nuclei in GdX (X=Zn,Cd) compounds: A two-center model. Journal of Applied Physics, 1998, 83, 6971-6973.	2.5	2
116	Local magnetic- and hyperfine-field properties of sâ€"p, noble and transition-metal impurities in Co host. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 391-393.	2.3	2
117	The hyperfine field at rare-earth impurities diluted in Fe, Co and Ni hosts: a theoretical study. Journal of Physics Condensed Matter, 2002, 14, 1949-1955.	1.8	2
118	ON THE TEMPERATURE INDEPENDENT RESISTIVITY OF IMPURITIES DILUTED IN NOBLE HOSTS. Modern Physics Letters B, 2004, 18, 149-156.	1.9	2
119	Residual resistivity of â€"d impurities diluted in noble hosts. Physica B: Condensed Matter, 2004, 354, 345-347.	2.7	2
120	Functional integral calculation of local magnetic moments at Ta impurities embedded in compounds: Temperature dependence. Physica B: Condensed Matter, 2008, 403, 1408-1410.	2.7	2
121	altimg="si0011.gif" overflow="scroll"><mml:mo stretchy="false">(</mml:mo><mml:msub><mml:mrow><mml:mi) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 Td (mathvariant=	2.3	2
122	Magnetic hyperfine field at sâ€"p impurities on Laves phase compounds. Journal of Magnetism and Magnetic Materials, 2011, 323, 881-884.	2.3	2
123	Theoretical study of the hyperfine field at Cu impurities diluted in an iron host. Physical Review C, 2012, 86, .	2.9	2
124	Magnetic and magnetocaloric properties of amorphous Y3Fe5O12 compound. Journal of Magnetism and Magnetic Materials, 2017, 422, 157-160.	2.3	2
125	A simple model for anisotropic Kondo insulators. Physica B: Condensed Matter, 2001, 304, 404-409.	2.7	1
126	On the magnetic hyperfine fields at nd impurities in Gd and Tb hosts. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 639-640.	2.3	1

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127	Local magnetic moment formation and magnetic hyperfine fields at Cd impurity in RAl2 (R = rare earth) Tj ETQq1 1 0.784314 rgBT /O	1.3	1
128	Investigation on the magnetocaloric effect in TbN compound. Journal of Magnetism and Magnetic Materials, 2013, 341, 138-141.	2.3	1
129	Temperature-driven metal-non-metal transition in Kondo insulators. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 331-332.	2.3	0
130	On the magnetization of the Ho(Co1-xRhx)2pseudobinary. Journal of Physics Condensed Matter, 2000, 12, 8249-8255.	1.8	0
131	Impurity effect on the metal-insulator transition in Kondo insulators. Physical Review B, 2000, 61, 15726-15730.	3.2	0
132	Local magnetic moment formation at Sn119 MÃ¶ssbauer impurity in RCo2 (R=Gd,Tb,Dy,Ho,Er) Laves phase compounds. Journal of Applied Physics, 2008, 103, 07C909.	2.5	0
133	Local magnetic moment formation at 119Sn MÃ¶ssbauer impurity in () Laves phases compounds. Journal of Magnetism and Magnetic Materials, 2010, 322, 1102-1104.	2.3	0
134	On the local magnetic moment formation and on the magnetic hyperfine field at isoelectronic noble impurities (Cu, Ag, Au) diluted in GdZn: Period effect. Journal of Magnetism and Magnetic Materials, 2017, 429, 211-213.	2.3	0
135	Charge Transfer Induced Caloric Effects. Physica Status Solidi (B): Basic Research, 2018, 255, 1800218.	1.5	0
136	Local magnetic moments and hyperfine fields at Ta impurities diluted in XFe2 (X = Y, Gd, Yb) Laves phases compounds. Journal of the Brazilian Chemical Society, 2008, 19, .	0.6	0
137	Functional integral approach for temperature dependence of the magnetic hyperfine field at a Cd site in RCd (R = Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho and Er). Journal of Magnetism and Magnetic Materials, 2022, 560, 169594.	2.3	0