

# João S Amaral

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7414770/publications.pdf>

Version: 2024-02-01

93  
papers

1,830  
citations

331670

21  
h-index

302126

39  
g-index

95  
all docs

95  
docs citations

95  
times ranked

1624  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetoelastic coupling influence on the magnetocaloric effect in ferromagnetic materials. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2104-2105.	2.3	217
2	Magnetocaloric effect in Er- and Eu-substituted ferromagnetic La-Sr manganites. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 686-689.	2.3	172
3	On estimating the magnetocaloric effect from magnetization measurements. Journal of Magnetism and Magnetic Materials, 2010, 322, 1552-1557.	2.3	161
4	The effect of magnetic irreversibility on estimating the magnetocaloric effect from magnetization measurements. Applied Physics Letters, 2009, 94, .	3.3	92
5	On the Curie temperature dependency of the magnetocaloric effect. Applied Physics Letters, 2012, 100, .	3.3	67
6	A mean-field scaling method for first- and second-order phase transition ferromagnets and its application in magnetocaloric studies. Applied Physics Letters, 2007, 91, .	3.3	64
7	Effect of surfactants on the optical and magnetic properties of cobalt-zinc ferrite Co <sub>0.5</sub> Zn <sub>0.5</sub> Fe <sub>2</sub> O <sub>4</sub> . Journal of Alloys and Compounds, 2019, 774, 1250-1259.	5.5	48
8	Estimating spontaneous magnetization from a mean field analysis of the magnetic entropy change. Journal of Magnetism and Magnetic Materials, 2010, 322, 1569-1571.	2.3	45
9	Tailoring Ca <sub>3</sub> Co <sub>4</sub> O <sub>9</sub> microstructure and performances using a transient liquid phase sintering additive. Journal of the European Ceramic Society, 2016, 36, 1025-1032.	5.7	38
10	Magnetic Driven Nanocarriers for pH-Responsive Doxorubicin Release in Cancer Therapy. Molecules, 2020, 25, 333.	3.8	38
11	Spontaneous magnetization above T <sub>C</sub> in polycrystalline La <sub>0.7</sub> Ca <sub>0.3</sub> MnO <sub>3</sub> and La <sub>0.7</sub> Ba <sub>0.3</sub> MnO <sub>3</sub> . Physical Review B, 2014, 90, .	3.2	37
12	Disorder effects in giant magnetocaloric materials. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 971-974.	1.8	36
13	Magnetic nanosorbents with siliceous hybrid shells of alginic acid and carrageenan for removal of ciprofloxacin. International Journal of Biological Macromolecules, 2019, 139, 827-841.	7.5	35
14	The effect of chemical distribution on the magnetocaloric effect: A case study in second-order phase transition manganites. Journal of Non-Crystalline Solids, 2008, 354, 5301-5303.	3.1	34
15	Handling mixed-state magnetization data for magnetocaloric studies—a solution to achieve realistic entropy behaviour. Journal Physics D: Applied Physics, 2010, 43, 152002.	2.8	32
16	On the efficient removal, regeneration and reuse of quaternary chitosan magnetite nanosorbents for glyphosate herbicide in water. Journal of Environmental Chemical Engineering, 2021, 9, 105189.	6.7	32
17	and short-range magneto-electric clusters in CdCr <sub>3</sub> ions	3.2	28
18	Enhancement of maximum energy product in exchange-coupled BaFe <sub>12</sub> O <sub>19</sub> /Fe <sub>3</sub> O <sub>4</sub> core-shell-like nanocomposites. Journal of Alloys and Compounds, 2019, 806, 120-126.	5.5	28

#	ARTICLE	IF	CITATIONS
19	High thermoelectric performance in Bi <sub>2-x</sub> Pb <sub>x</sub> Ba <sub>2</sub> Co <sub>2</sub> O <sub>y</sub> promoted by directional growth and annealing. Journal of the European Ceramic Society, 2016, 36, 67-74.	5.7	26
20	Magnetic wood-based biomorphic Sr <sub>3</sub> Co <sub>2</sub> Fe <sub>24</sub> O <sub>41</sub> Z-type hexaferrite ecoceramics made from cork templates. Materials and Design, 2015, 82, 297-303.	7.0	24
21	Development of polyurethane foam incorporating phase change material for thermal energy storage. Journal of Energy Storage, 2020, 28, 101177.	8.1	23
22	Structural, magnetic, magneto-transport properties and Rødbell model simulation of disorder effects in Cr <sup>3+</sup> substituted La <sub>0.67</sub> Ba <sub>0.33</sub> MnO <sub>3</sub> nanocrystalline synthesized by modified Pechini method. RSC Advances, 2016, 6, 32193-32201.	3.6	22
23	Experimental and numerical analysis of the thermal performance of polyurethane foams panels incorporating phase change material. Energy, 2021, 216, 119213.	8.8	22
24	Organic-inorganic hybrid materials based on iron(III)-polyoxotungstates and 1-butyl-3-methylimidazolium cations. Dalton Transactions, 2012, 41, 12145.	3.3	21
25	Synthesis and Characterization of Rare Earth Orthoferrite LnFeO <sub>3</sub> Nanoparticles for Bioimaging. European Journal of Inorganic Chemistry, 2018, 2018, 3570-3578.	2.0	21
26	Unveiling the (De)coupling of magnetostructural transition nature in magnetocaloric R <sub>5</sub> Si <sub>2</sub> Ge <sub>2</sub> (R = Tb, Tj) Tj EQq0 0,0 rgBT /Ov	3.5	20
27	Dielectric spectroscopy and magnetometry investigation of Gd-doped strontium titanate ceramics. Journal of the European Ceramic Society, 2017, 37, 2391-2397.	5.7	18
28	Enhancement of the dielectric permittivity and magnetic properties of Dy substituted strontium titanate ceramics. Journal of the European Ceramic Society, 2018, 38, 605-611.	5.7	18
29	Characterization of electrodeposited Ni and Ni <sub>80</sub> Fe <sub>20</sub> nanowires. Journal of Non-Crystalline Solids, 2008, 354, 5241-5243.	3.1	17
30	Nano-Localized Thermal Analysis and Mapping of Surface and Sub-Surface Thermal Properties Using Scanning Thermal Microscopy (SThM). Microscopy and Microanalysis, 2016, 22, 1270-1280.	0.4	15
31	Percolation processes and spin-reorientation of $\text{PrNi}_{5-x}\text{Co}_x$ magnetic compounds exploiting its spin reorientation and magnetic transition over a wide temperature zone. Physical Review B, 2009, 79, 014411.	3.2	14
32	Processing and phase separation of LSMO-based multiferroic composite ceramics. Journal of the European Ceramic Society, 2007, 27, 3941-3945.	5.7	13
33	High refrigerant capacity of PrNi <sub>5-x</sub> Co <sub>x</sub> magnetic compounds exploiting its spin reorientation and magnetic transition over a wide temperature zone. Journal Physics D: Applied Physics, 2009, 42, 055002.	2.8	13
34	Heatrapy: A flexible Python framework for computing dynamic heat transfer processes involving caloric effects in 1.5D systems. SoftwareX, 2018, 7, 373-382.	2.6	13
35	Magnetoelectric coupling in multiferroic heterostructure of rf-sputtered Ni <sub>1-x</sub> Mn <sub>x</sub> Ga thin film on PMN <sub>1-x</sub> PT. Journal of Magnetism and Magnetic Materials, 2012, 324, 1882-1886.	2.3	12
36	Magnetic Properties of Ferrite Ceramics Made from Wastes. Waste and Biomass Valorization, 2014, 5, 133-138.	3.4	12

#	ARTICLE	IF	CITATIONS
37	Smallest Bimetallic CoPt <sub>3</sub> Superparamagnetic Nanoparticles. Journal of Physical Chemistry Letters, 2016, 7, 4039-4046.	4.6	12
38	A geometry-independent moment correction method for the MPMS3 SQUID-based magnetometer. Measurement Science and Technology, 2021, 32, 105602.	2.6	12
39	Modeling the magnetic properties and magnetocaloric effect of La <sub>0.7</sub> Sr <sub>0.3</sub> Mn <sub>0.9</sub> Ti <sub>0.1</sub> O <sub>3</sub> . Journal of Alloys and Compounds, 2016, 685, 633-638.	5.5	11
40	On the Optimization of Magneto-Volume Coupling for Practical Applied Field Magnetic Refrigeration. Physica Status Solidi (B): Basic Research, 2019, 256, 1800419.	1.5	11
41	Enhancing the temperature span of thermal switch-based solid state magnetic refrigerators with field sweeping. International Journal of Energy Research, 2019, 43, 742-748.	4.5	11
42	Development of structural layers PVC incorporating phase change materials for thermal energy storage. Applied Thermal Engineering, 2020, 179, 115707.	6.0	11
43	Prediction of realistic entropy behavior from mixed state magnetization data for first order phase transition materials. Journal of Applied Physics, 2010, 107, 09A912.	2.5	10
44	Crystal structure, magnetic and dielectric behavior of h-LuMn O <sub>3</sub> ± ceramics (0.95±x%1.04). Journal of Magnetism and Magnetic Materials, 2015, 395, 303-311.	2.3	10
45	Modeling and computing magnetocaloric systems using the Python framework heatrapy. International Journal of Refrigeration, 2019, 106, 278-282.	3.4	10
46	Effective production of multifunctional magnetic-sensitive biomaterial by an extrusion-based additive manufacturing technique. Biomedical Materials (Bristol), 2021, 16, 015011.	3.3	10
47	Magnetocaloric Effect in Manganites: Ferromagnetism and Charge-Ordering Effects. Materials Science Forum, 2004, 455-456, 148-152.	0.3	9
48	Peculiar Magnetoelectric Coupling in BaTiO <sub>3</sub> :Fe <sub>113</sub> Nanoscopic Segregations. ACS Applied Materials & Interfaces, 2015, 7, 24741-24747.	8.0	9
49	Novel magnetic stimulation methodology for low-current implantable medical devices. Medical Engineering and Physics, 2019, 73, 77-84.	1.7	9
50	Cooling by sweeping: A new operation method to achieve ferroic refrigeration without fluids or thermally switchable components. International Journal of Refrigeration, 2019, 101, 98-105.	3.4	9
51	overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" style="display: none;">	2.3	8
52	Modeling the magnetic isotherms of (La <sub>0.56</sub> Ce <sub>0.14</sub> )Sr <sub>0.30</sub> MnO <sub>3</sub> by a mean-field scaling method and estimation of magnetic entropy change. Journal of Magnetism and Magnetic Materials, 2015, 393, 105-109.	2.3	8
53	Temperature dependent thermal conductivity of magnetocaloric materials: Impact assessment on the performance of active magnetic regenerative refrigerators. International Journal of Refrigeration, 2019, 106, 181-187.	3.4	8
54	Bonded ferrite-based exchange-coupled nanocomposite magnet produced by Warm compaction. Journal Physics D: Applied Physics, 2020, 53, 494003.	2.8	8

#	ARTICLE	IF	CITATIONS
55	Thermodynamics of the 2-D Ising Model From a Random Path Sampling Method. IEEE Transactions on Magnetism, 2014, 50, 1-4.	2.1	7
56	Magnetovolume Effects in Heusler Compounds via First-Principles Calculations. IEEE Transactions on Magnetism, 2014, 50, 1-4.	2.1	7
57	Hidden value in low-cost inorganic pigments as potentially valuable magnetic materials. Ceramics International, 2016, 42, 9605-9612.	4.8	7
58	Volume dependence of magnetic properties in $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0021.gif" overflow="scroll"> \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Co} \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle / \text{mml:mrow} \rangle$ Journal of Magnetism and Magnetic Materials, 2017, 428, 362-367.	2.8	7
59	Enhanced ferromagnetism and glassy state in phase separated $\text{La}_{0.95}\text{Sr}_{0.05}\text{MnO}_3$ . Journal of Applied Physics, 2012, 112, 103907.	2.5	6
60	Magnetoelectric effect probe through ppm Fe doping in $\text{BaTiO}_3$ . Journal of Alloys and Compounds, 2016, 661, 495-500.	5.5	6
61	Valorisation of industrial iron oxide waste to produce magnetic barium hexaferrite. ChemistrySelect, 2016, 1, 819-825.	1.5	5
62	Interaction of multiferroic properties and interfaces in hexagonal $\text{LuMnO}_3$ ceramics. Journal Physics D: Applied Physics, 2017, 50, 055304.	2.8	5
63	Experimental realisation of off-stoichiometric Fe-Mn-Si full Heusler alloy with hexagonal crystal structure by pulsed laser deposition. Materials and Design, 2018, 143, 268-273.	7.0	5
64	Broad Multi-Parameter Dimensioning of Magnetocaloric Systems Using Statistical Learning Classifiers. Frontiers in Energy Research, 2020, 8, .	2.3	5
65	Tuning of Magnetocaloric Effect in Ferromagnetic La-Sr Manganites through Er and Eu Doping. Materials Science Forum, 2006, 514-516, 299-303.	0.3	4
66	Studies of local fields in the $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$ system using perturbed angular correlation spectroscopy. Journal of Non-Crystalline Solids, 2008, 354, 5315-5317.	3.1	4
67	Superferromagnetism in mechanically alloyed fcc $\text{Fe}_{23}\text{Cu}_{77}$ with bimodal cluster size distribution. Journal of Physics Condensed Matter, 2009, 21, 046003.	1.8	4
68	Strain induced enhanced ferromagnetic behavior in inhomogeneous low doped $\text{La}_{0.95}\text{Sr}_{0.05}\text{MnO}_3$ . Applied Physics Letters, 2013, 102, .	3.3	4
69	Experimental and theoretical evidences that atomic disorder suppresses half-metallicity of Heusler compounds. Intermetallics, 2019, 111, 106502.	3.9	4
70	Direct measurement and imaging of magnetocaloric effect inhomogeneities at the microscale in $\text{Ni}_{44}\text{Co}_6\text{Mn}_{30}\text{Ga}_{20}$ with infrared thermography. Journal of Magnetism and Magnetic Materials, 2021, 538, 168283.	2.3	4
71	Charge-Ordering and Magnetoelastic Coupling Effects on the Magnetocaloric Properties of Manganites. Acta Physica Polonica A, 2004, 105, 163-171.	0.5	4
72	A combined thermodynamics and first principles study of the electronic, lattice and magnetic contributions to the magnetocaloric effect in $\text{La}_{0.75}\text{Ca}_{0.25}\text{MnO}_3$ . Journal Physics D: Applied Physics, 2016, 49, 285001.	2.8	3



#	ARTICLE	IF	CITATIONS
91	Enhanced strain-induced magnetoelectric coupling in polarization-free Fe/BaTiO <sub>3</sub> heterostructures. Physical Chemistry Chemical Physics, 2021, 23, 16053-16059.	2.8	0
92	Synthesis and characterisation of lead free BaFe <sub>12</sub> O <sub>19</sub> / (K <sub>0.5</sub> Na <sub>0.5</sub> )NbO <sub>3</sub> magnetoelectric composites, and the comparison of various synthetic routes. Journal of Alloys and Compounds, 2021, 883, 160819.	5.5	0
93	Thermal Response of Magnetic Refrigerants: Combined Effect of Temperature Dependent Specific Heat and Thermal Conductivity. Applied Sciences (Switzerland), 2022, 12, 6581.	2.5	0