Joaquim M Vieira

List of Publications by Year
in descending order

111	2,311	304743	223800
papers	citations	22 h-index	46 g-index

111	111	111	2213
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The orthorhombic-tetragonal morphotropic phase boundary in high-pressure synthesized BiMg0.5Ti0.5O3â€“BiZn0.5Ti0.5O3 perovskite solid solutions. Journal of Physics and Chemistry of Solids, 2022, 161, 110392.	4.0	3
2	Interplay of Magnetic Properties and Doping in Epitaxial Films of hâ€REFeO₃ Multiferroic Oxides. Small, 2021, 17, e2005700.	10.0	5
3	Dielectric and Infrared Spectroscopy Characterization of Coâ€“Al Layered Double Hydroxides. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100106.	1.8	0
4	Magnetic-field-assisted deposition of self-assembling crystallite layers of Co²⁺-containing layered double hydroxides. Chemical Communications, 2021, 57, 6899-6902.	4.1	2
5	Comparative Optic Studies of Cobalt-Based Layered Double Hydroxides with Nitrate and Carbonate Anions and CoII/A1III ratio n = 2, 3, 4. , 2021, , .		0
6	Magnetic Behaviour of Perovskite Compositions Derived from BiFeO3. Magnetochemistry, 2021, 7, 151.	2.4	3
7	Phase Transitions in the Metastable Perovskite Multiferroics BiCrO₃ and BiCr_{0.9}Sc_{0.1}O₃: A Comparative Study. Inorganic Chemistry, 2020, 59, 8727-8735.	4.0	5
8	Bonded ferrite-based exchange-coupled nanocomposite magnet produced by Warm compaction. Journal Physics D: Applied Physics, 2020, 53, 494003.	2.8	8
9	Cast iron corrosion protection with chemically modified Mg Al layered double hydroxides synthesized using a novel approach. Surface and Coatings Technology, 2019, 375, 158-163.	4.8	15
10	Enhancement of maximum energy product in exchange-coupled BaFe12O19/Fe3O4 core-shell-like nanocomposites. Journal of Alloys and Compounds, 2019, 806, 120-126.	5.5	28
11	High-Power Ultrasonic Synthesis and Magnetic-Field-Assisted Arrangement of Nanosized Crystallites of Cobalt-Containing Layered Double Hydroxides. ChemEngineering, 2019, 3, 62.	2.4	5
12	Processing and Mechanical Properties of Dual-Carbide (B4C, SiC), Dual-Metallic Phases (Al, Si) Infiltrated Composites. Materials Today: Proceedings, 2019, 16, 374-383.	1.8	3
13	Link of Weak Ferromagnetism to Emergence of Topological Vortices in Bulk Ceramics of h-LuMnxO3 Manganite. Journal of Physical Chemistry C, 2019, 123, 6158-6166.	3.1	2
14	SYNTHESIS, CRYSTAL STRUCTURE, AND MAGNETIC PROPERTIES OF LANTHANUM-STRONTIUM MANGANITES CONTAINING NICKEL IONS. High Temperature Material Processes, 2019, 23, 337-344.	0.6	0
15	Nanoscale analysis of dispersive ferroelectric domains in bulk of hexagonal multiferroic ceramics. Materials Characterization, 2018, 145, 347-352.	4.4	2
16	Interaction of multiferroic properties and interfaces in hexagonal LuMnO₃ceramics. Journal Physics D: Applied Physics, 2017, 50, 055304.	2.8	5
17	Development of ferroelectric domains and topological defects in vacancy doped ceramics of h-LuMnO3. Journal of Applied Physics, 2017, 122, .	2.5	5
18	Interdiffusion Processes in High-Coercivity RF-Sputtered Alnico Thin Films on Si Substrates. Jom, 2017, 69, 1427-1431.	1.9	3

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19	Assessing Segregation Effects on Multiferroic Properties of Antiferromagnetic-Weak Ferromagnetic Coupled Systems by Analytical HRTEM. Microscopy and Microanalysis, 2016, 22, 58-59.	0.4	1
20	Nanodomains Coupled to Ferroelectric Domains Induced by Lattice Distortion in Self-Doped LuMnxO3Â±Î´ Hexagonal Ceramics. Journal of Physical Chemistry C, 2016, 120, 21897-21904.	3.1	6
21	Magnetic structure of an incommensurate phase of La-doped<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>BiFe</mml:mi><mml:mrow><mml:mn>0.5</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>: Role of antisymmetric exchange interactions. Physical Review B, 2015, 92, .	3.2	15
22	Crystal structure, magnetic and dielectric behavior of h-LuMn O3Â± ceramics (0.95â‰¤xâ‰¤1.04). Journal of Magnetism and Magnetic Materials, 2015, 395, 303-311.	2.3	10
23	EMAS 2013 Workshop: 13th European Workshop on Modern Developments and Applications in Microbeam Analysis. IOP Conference Series: Materials Science and Engineering, 2014, 55, 011001.	0.6	1
24	Study of multi-carbide B4C-SiC/(Al, Si) reaction infiltrated composites by SEM with EBSD. IOP Conference Series: Materials Science and Engineering, 2014, 55, 012001.	0.6	4
25	Reactive infiltration processing of SiC/Feâ€“Si composites using preforms made of coked rice husks and SiC powder. Ceramics International, 2013, 39, 3831-3842.	4.8	8
26	XRD, SEM and Petrologic Characterization of a L4-L5 Ordinary Chondrite Meteorite. Materials Science Forum, 2012, 730-732, 170-175.	0.3	0
27	Diffusion, Intrusion and Reaction between Al-Containing Intermetallics and TiC Sintered Body during Thermal Pressure Holding. Rare Metal Materials and Engineering, 2012, 41, 203-207.	0.8	3
28	Enhancement of superconductivity in LFZ-grown BSCCO fibres by steeper axial temperature gradients. Applied Surface Science, 2012, 258, 9175-9180.	6.1	16
29	Microstructure and mechanical properties of multi-carbides/(Al, Si) composites derived from porous B4C preforms by reactive melt infiltration. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 551, 200-208.	5.6	17
30	A high-strength SiCw/SiCâ€“Si composite derived from pyrolyzed rice husks by liquid silicon infiltration. Journal of Materials Science, 2012, 47, 4921-4927.	3.7	14
31	SiC whisker reinforced multi-carbides composites prepared from B4C and pyrolyzed rice husks via reactive infiltration. Ceramics International, 2012, 38, 3519-3527.	4.8	18
32	Pulling rate and current intensity competition in an electrically assisted laser floating zone. Superconductor Science and Technology, 2009, 22, 065016.	3.5	11
33	Radial inhomogeneities induced by fiber diameter in electrically assisted LFZ growth of Bi-2212. Applied Surface Science, 2009, 255, 5503-5506.	6.1	14
34	Doping strategies for increased performance in BiFeO3. Journal of Magnetism and Magnetic Materials, 2009, 321, 1692-1698.	2.3	161
35	Effect of Gd substitution on the crystal structure and multiferroic properties of BiFeO3. Acta Materialia, 2009, 57, 5137-5145.	7.9	144
36	Crystal structure and magnetic properties of Bi0.8(Gd1â^'xBax)0.2FeO3(x= 0, 0.5, 1) multiferroics. Journal Physics D: Applied Physics, 2009, 42, 045418.	2.8	40

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37	Weak ferromagnetism in diamagnetically-doped Bi1â^'xAxFeO3 (A=Ca, Sr, Pb, Ba) multiferroics. Materials Letters, 2008, 62, 1927-1929.	2.6	80
38	Effect of diamagnetic Ca, Sr, Pb, and Ba substitution on the crystal structure and multiferroic properties of the BiFeO3 perovskite. Journal of Applied Physics, 2008, 103, .	2.5	316
39	Crystal structure and multiferroic properties of Gd-substituted BiFeO3. Applied Physics Letters, 2008, 93, .	3.3	172
40	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
41	Coexistence of spontaneous ferroelectricity and weak ferromagnetism in Bi_{0.8}Pb_{0.2}FeO_{2.9}perovskite. Journal of Physics Condensed Matter, 2008, 20, 155207.	1.8	18
42	Intrinsic nature of the magnetization enhancement in heterovalently doped Bi_{1â^'x}A_xFeO₃(A= Ca, Sr, Pb, Ba) multiferroics. Journal Physics D: Applied Physics, 2008, 41, 102003.	2.8	88
43	Effect of Diamagnetic A2+ Substitution on the Magnetic and Ferroelectric Properties of the Bi1â^'xAxFeO3 Multiferroics. Materials Research Society Symposia Proceedings, 2007, 1034, 182.	0.1	0
44	Synthesis and multiferroic properties of Bi0.8A0.2FeO3 (A=Ca,Sr,Pb) ceramics. Applied Physics Letters, 2007, 90, 242901.	3.3	167
45	Annealing time effect on Bi-2223 phase development in LFZ and EALFZ grown superconducting fibres. Applied Surface Science, 2006, 252, 4957-4963.	6.1	5
46	High strength TiC matrix Fe28Al toughened composites prepared by spontaneous melt infiltration. Journal of the European Ceramic Society, 2006, 26, 3853-3859.	5.7	25
47	Enhancement of Bi-2223 phase formation by electrical assisted laser floating zone technique. Journal of Physics and Chemistry of Solids, 2006, 67, 416-418.	4.0	3
48	The effect of current direction on superconducting properties of BSCCO fibres grown by an electrically assisted laser floating zone process. Superconductor Science and Technology, 2006, 19, 15-21.	3.5	6
49	Biâ€“Srâ€“Caâ€“Cuâ€“O superconducting fibres processed by the laser floating zone technique under different electrical current intensities. Superconductor Science and Technology, 2006, 19, 373-380.	3.5	6
50	The Effect of Annealing Temperature on the Transport Properties of BSCCO Fibres Grown by LFZ and EALFZ. Materials Science Forum, 2006, 514-516, 338-342.	0.3	1
51	The Oxidation Behaviour of TiC Matrix Ni₃Al and Fe40Al Toughened Composites at High Temperatures. Materials Science Forum, 2006, 514-516, 657-661.	0.3	3
52	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
53	Preparation and Properties of New Superconductor Material MgB₂. Materials Science Forum, 2006, 514-516, 333-337.	0.3	0
54	The Growth of SiC Crystals from CoSi Molten Alloy Fluxes. Materials Science Forum, 2006, 514-516, 343-347.	0.3	1

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55	The Effects of Ca and Mn Excess Co-Doping in CMR Manganites Solid Solution Structures. Materials Science Forum, 2006, 514-516, 294-298.	0.3	2
56	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
57	Strength improvement and fracture mechanism in Fe40Al/TiC composites with high content of TiC. Intermetallics, 2005, 13, 460-466.	3.9	19
58	Mechanical Properties and Microstructure of Fe40Al/TiC Composites with Low Content of Intermetallic. Materials Science Forum, 2004, 455-456, 239-243.	0.3	2
59	Ion beam studies of single crystalline manganite thin films. Nuclear Instruments & Methods in Physics Research B, 2004, 219-220, 933-937.	1.4	0
60	Microstructural characteristics of NiAl/TiC composites with high TiC content prepared by pressureless melt infiltration. Journal of Materials Science, 2004, 39, 6385-6387.	3.7	3
61	Structural and magnetic study of self- doped La1â^'xâ^'yCaxÃ˜yMno3. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1753-1755.	2.3	6
62	LFZ fibre texture modification induced by electrical polarization. Physica C: Superconductivity and Its Applications, 2004, 408-410, 915-916.	1.2	10
63	The formation of coreâ€“rim structures in Fe40Al/(TiCâ€“TiNâ€“WC) cermets produced by pressureless melt infiltration. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 371, 277-282.	5.6	13
64	Electrical field freezing effect on laser floating zone (LFZ)-grown Bi2Sr2Ca2Cu4O11superconducting fibres. Superconductor Science and Technology, 2004, 17, 612-619.	3.5	24
65	Interpenetrating microstructure and fracture mechanism of NiAl/TiC composites by pressureless melt infiltration. Materials Letters, 2004, 58, 1761-1765.	2.6	43
66	On the half unit cell intergrowth of Bi2Sr2Ca3Cu4O12 with other superconducting phases in two-step annealed LFZ fibres. Physica C: Superconductivity and Its Applications, 2003, 398, 31-36.	1.2	7
67	Infiltration of SiC preforms with iron silicide melts: microstructures and properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 359, 343-349.	5.6	21
68	Tricritical points in La-based ferromagnetic manganites. Journal of Applied Physics, 2003, 93, 7646-7648.	2.5	22
69	Trapping control of phase development in zone melting of BiÂSrÂCaÂCuÂO superconducting fibres. Superconductor Science and Technology, 2003, 16, 392-397.	3.5	7
70	Towards the Preparation of Superconductor Bi₂Sr₂CaCu₂O_{8+Î´} Films by Electrodeposition. Key Engineering Materials, 2002, 230-232, 144-147.	0.4	0
71	Subsurface Damage in Abrasive Machining of Self-Reinforced Si₃N₄ Composites. Key Engineering Materials, 2002, 230-232, 263-266.	0.4	0
72	Substrate and Composition Effects on BSCCO Thin Films Deposited by Aerosol MOCVD. Key Engineering Materials, 2002, 230-232, 173-176.	0.4	0

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73	On the Half Unit Cell Intergrowth of Bi2Sr2Ca3Cu4Ox with Other Superconducting Phases in Two-step Annealed LFZ Fibers. Microscopy and Microanalysis, 2002, 8, 1352-1353.	0.4	0
74	Discontinuous transition effects in manganites: magnetization study in the paramagnetic phase. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 655-658.	2.3	23
75	The reaction rate at Si3N4/steel interfaces as a function of sintering aids. Journal of the European Ceramic Society, 2002, 22, 2561-2570.	5.7	4
76	Metastable Superstructures in RuSr2Gd1.4Ce0.6Cu2O10-Î?Superconductor Based on TEM Observation at Room Temperature. Materials Research Society Symposia Proceedings, 2001, 689, 1.	0.1	0
77	Microstructure, toughness and flexural strength of self-reinforced silicon nitride ceramics doped with yttrium oxide and ytterbium oxide. Journal of Microscopy, 2001, 201, 238-249.	1.8	21
78	Sliding speed-temperature wear transition maps for Si3N4/iron alloy couples. Wear, 2001, 250, 293-298.	3.1	27
79	Growth of the Bi-2223 phase after a short nucleation stage at high temperature. Physica B: Condensed Matter, 2001, 294-295, 700-704.	2.7	3
80	Hyperfine Fields at the Cd Site in La0.67Cd0.25MnO3 CMR Manganites. Hyperfine Interactions, 2001, 133, 89-94.	0.5	8
81	Non-linear conduction in LaCaMnO3 thin films: interface tunneling effects. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 942-944.	2.3	4
82	Anomalous magnetic behavior in La2/3Ca1/3MnO3 near the critical point: stable clusters and crossover to uniform ferromagnetism. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 837-839.	2.3	12
83	Diffusion phenomena and crystallization path during the growth of LFZ Bi-Sr-Ca-Cu-O superconducting fibres. Superconductor Science and Technology, 2001, 14, 910-920.	3.5	23
84	Thermochemistry of contacts between silicon nitride ceramics and steels. Acta Materialia, 2000, 48, 4659-4665.	7.9	7
85	Relationship between flexural strength and surface roughness for hot-pressed Si3N4 self-reinforced ceramics. Journal of the European Ceramic Society, 2000, 20, 1345-1353.	5.7	23
86	Anisotropic electrical transport in epitaxial La2/3Ca1/3MnO3 thin films. Journal of Applied Physics, 2000, 87, 5570-5572.	2.5	22
87	Substrate, annealing, and Mn excess effects on Laâ€“Caâ€“MnO3 thin films grown by metalorganic chemical vapor deposition: A way to room-temperature Tc. Journal of Applied Physics, 1999, 85, 5411-5413.	2.5	16
88	Phase transformation kinetics during thermal annealing of LFZ Biâ€“Srâ€“Caâ€“Cuâ€“O superconducting fibers in the range 800â€“870Â°C. Physica C: Superconductivity and Its Applications, 1999, 323, 23-41.	1.2	34
89	Carbothermal reduction and nitridation of silica: nuclei planar growth controlled by silicon monoxide diffusion on the reducer surface. Journal of Materials Processing Technology, 1999, 92-93, 112-117.	6.3	7
90	Tribooxidational Effects on Friction and Wear Behavior of Silicon Nitride/Tool Steel and Silicon Nitride/Gray Cast Iron Contacts. Journal of the American Ceramic Society, 1999, 82, 953-960.	3.8	26

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91	Deposition of LaCaMnO3 thin films using aerosol-assisted metalorganic chemical vapor deposition (MOCVD) substrate and annealing effects. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 490-492.	2.3	1
92	Properties of epitaxial LaCaMnO laser ablated thin films on (1 0 0) and (1 1 0) SrTiO3 substrates. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 495-497.	2.3	6
93	Modeling of chemical wear in ferrous alloys/ silicon nitride contacts during high speed cutting. Acta Materialia, 1998, 46, 2501-2507.	7.9	18
94	Grain growth in synthetic and natural dolomas. Ceramics International, 1998, 24, 163-173.	4.8	5
95	Anomalous low-field magnetization in La2/3Ca1/3MnO3 near the critical point: Stable clusters?. Journal of Applied Physics, 1998, 83, 7154-7156.	2.5	24
96	Deposition of Magnetoresistive La_{1-x}Ca_xMnO₃ Thin Films by Aerosol-Assisted MOCVD. Key Engineering Materials, 1997, 132-136, 1416-1419.	0.4	3
97	Giant Magnetoresistance in La_{1-x}Ca_xMnO₃ Ceramics and Thin Films. Key Engineering Materials, 1997, 132-136, 1412-1415.	0.4	1
98	Phase Transformation During Hot-Pressing of Si3N4-Al2O3 (P) Composite Materials. , 1997, , 229-237.		0
99	Densification and Microstructural Evolution in a Reactive Silicon Nitride/Alumina Platelet System. Key Engineering Materials, 1996, 127-131, 377-384.	0.4	2
100	Hot hardness of Si3N4-based materials. Journal of Materials Science, 1995, 30, 5531-5536.	3.7	11
101	Friction measurements on hot filament CVD diamond films deposited on etched tungsten carbide surfaces. Diamond and Related Materials, 1995, 4, 730-734.	3.9	13
102	Crystallization process, phase chemistry and transport properties of superconducting fibers prepared by the LFZ method followed by isothermal annealing. Physica C: Superconductivity and Its Applications, 1994, 235-240, 513-514.	1.2	5
103	The role of nitrogen in the intergranular glass phase of Si3N4 on high temperature applications and wear. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1993, 168, 55-59.	5.6	6
104	Resistance of Si3N4 ceramic tools to thermal and mechanical loading in cutting of iron alloys. Wear, 1991, 148, 69-89.	3.1	28
105	Whiskerâ€"Reinforced Composites. , 1991, , 132-156.		0
106	Bi-Ca-Sr-Cu-O superconductors obtained by glass crystallisation; Effect of potassium doping. Physica C: Superconductivity and Its Applications, 1989, 159, 273-276.	1.2	2
107	Preparation of superconductors of the BiSrCaCuO system by glass crystallization. Journal of the Less Common Metals, 1989, 150, 305-310.	0.8	4
108	DEPENDENCE OF THE DENSIFICATION ON GRAIN GROWTH AND ON AGGLOMERATION IN SINTERING OF DOLOMITE. Journal De Physique Colloque, 1986, 47, C1-435-C1-440.	0.2	1

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109	Kinetics of Hotâ€Pressing: The Semilogarithmic Law. Journal of the American Ceramic Society, 1984, 67, 245-249.	3.8	61
110	Phase Separation of La_{0.70-x}Er_xSr_{0.30}MnO₃ and its Effect on Magnetic and Magnetocaloric Properties. Materials Science Forum, 0, 587-588, 338-342.	0.4	2
111	Correlation between Ionic Radius of Substituting Element and Magnetic Properties of Bi_{1-x}A_xFeO_{3-x/2} (A= Ca, Sr, Pb, Ba) Multiferroics. Solid State Phenomena, 0, 152-153, 131-134.	0.3	1