Douglas Gouvea

List of Publications by Year
in descending order

87 papers	1,972 citations	257450 24 h-index	265206 42 g-index
89 all docs	89 docs citations	89 times ranked	2181 citing authors

#	Article	IF	Citations
1	Effect of Cobalt(II) Oxide and Manganese(IV) Oxide on Sintering of Tin(IV) Oxide. Journal of the American Ceramic Society, 1996, 79, 799-804.	3.8	170
2	Direct Calorimetric Measurement of Enthalpy of Adsorption of Carbon Dioxide on CD-MOF-2, a Green Metalâ€"Organic Framework. Journal of the American Chemical Society, 2013, 135, 6790-6793.	13.7	140
3	Surface Segregation and Consequent SO2Sensor Response in SnO2â^'NiO. Chemistry of Materials, 2005, 17, 4149-4153.	6.7	115
4	Surface Energy and Thermodynamic Stability of Î³-Alumina:â€‰ Effect of Dopants and Water. Chemistry of Materials, 2006, 18, 1867-1872.	6.7	96
5	Microstructure and structure of NiOâ€"SnO2 and Fe2O3â€"SnO2 systems. Applied Surface Science, 2003, 214, 172-177.	6.1	88
6	Sintering and Nanostability: The Thermodynamic Perspective. Journal of the American Ceramic Society, 2016, 99, 1105-1121.	3.8	78
7	Evidences of the evolution from solid solution to surface segregation in Niâ€doped SnO₂ nanoparticles using Raman spectroscopy. Journal of Raman Spectroscopy, 2011, 42, 1081-1086.	2.5	72
8	Surface Segregation in SnO2-Fe2O3 Nanopowders and Effects in MÃ¶ssbauer Spectroscopy. European Journal of Inorganic Chemistry, 2005, 2005, 2134-2138.	2.0	52
9	Structural and magnetic properties of pure and nickel doped SnO₂nanoparticles. Journal of Physics Condensed Matter, 2010, 22, 496003.	1.8	50
10	Interface Energy Measurement of MgO and ZnO: Understanding the Thermodynamic Stability of Nanoparticles. Chemistry of Materials, 2010, 22, 2502-2509.	6.7	50
11	Densification and electrical conductivity of fast fired manganese-doped ceria ceramics. Materials Letters, 2005, 59, 1195-1199.	2.6	49
12	Surface segregation of additives on SnO2 based powders and their relationship with macroscopic properties. Applied Surface Science, 2002, 195, 277-283.	6.1	48
13	Energetics of CO₂ and H₂O Adsorption on Zinc Oxide. Langmuir, 2014, 30, 9091-9097.	3.5	47
14	Quantification of MgO surface excess on the SnO2 nanoparticles and relationship with nanostability and growth. Applied Surface Science, 2011, 257, 4219-4226.	6.1	43
15	Spin-glass-like behavior of uncompensated surface spins in NiO nanoparticulated powder. Physica B: Condensed Matter, 2012, 407, 2601-2605.	2.7	43
16	Flash sintering of ionic conductors: The need of a reversible electrochemical reaction. Journal of the European Ceramic Society, 2016, 36, 1253-1260.	5.7	40
17	Surface modification of SnO2 nanoparticles containing Mg or Fe: Effects on sintering. Applied Surface Science, 2007, 253, 4581-4585.	6.1	38
18	Nanocrystalline yttria-doped zirconia sintered by fast firing. Materials Letters, 2016, 166, 196-200.	2.6	38

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19	Sintering: the role of interface energies. Applied Surface Science, 2003, 217, 194-201.	6.1	32
20	Densification and coarsening of SnO2-based materials containing manganese oxide. Journal of the European Ceramic Society, 1998, 18, 345-351.	5.7	30
21	Interface Excess and Polymorphic Stability of Nanosized Zirconia-Magnesia. Chemistry of Materials, 2008, 20, 3505-3511.	6.7	30
22	Relationship between surface segregation and rapid propane electrical response in Cd-doped SnO2 nanomaterials. Sensors and Actuators B: Chemical, 2008, 133, 263-269.	7.8	29
23	Experimental study of the structural, microscopy and magnetic properties of Ni-doped SnO2 nanoparticles. Journal of Non-Crystalline Solids, 2010, 356, 2960-2964.	3.1	29
24	Simultaneous segregation of lanthanum to surfaces and grain boundaries in MgAl2O4 nanocrystals. Applied Surface Science, 2020, 529, 147145.	6.1	28
25	Colloidal Processing of Glassâ€"Ceramics for Laminated Object Manufacturing. Journal of the American Ceramic Society, 2009, 92, 1186-1191.	3.8	27
26	TiO₂ Surface Engineering to Improve Nanostability: The Role of Interface Segregation. Journal of Physical Chemistry C, 2019, 123, 4949-4960.	3.1	25
27	Effect of fluorine doping on the properties of tin oxide based powders prepared via Pechiniâ€™s method. Applied Surface Science, 2004, 229, 24-29.	6.1	21
28	Using bone ash as an additive in porcelain sintering. Ceramics International, 2015, 41, 487-496.	4.8	19
29	The influence of the Chitosan adsorption on the stability of SnO2 suspensions. Journal of the European Ceramic Society, 2003, 23, 897-903.	5.7	18
30	Transport properties of La0.6Y0.1Ca0.3MnO3 compounds with different interfaces. Journal of the European Ceramic Society, 2004, 24, 1271-1275.	5.7	18
31	Quantifying adsorption of heparin on a PVC substrate using ATR-FTIR. Polymer International, 2005, 54, 209-214.	3.1	18
32	Surface and grainâ€boundary excess of ZnOâ€doped SnO₂ nanopowders by the selective lixiviation method. Journal of the American Ceramic Society, 2017, 100, 4331-4340.	3.8	18
33	Energetics of CO2 and H2O adsorption on alkaline earth metal doped TiO2. Physical Chemistry Chemical Physics, 2020, 22, 15600-15607.	2.8	18
34	Influence of the acidâ€"basic character of oxide surfaces in dispersants effectiveness. Ceramics International, 2004, 30, 2215-2221.	4.8	17
35	Surface and grain boundary excess of ZnO-doped TiO2 anatase nanopowders. Ceramics International, 2018, 44, 11390-11396.	4.8	17
36	Surface Segregation in Chromiumâ€Doped Nanocrystalline Tin Dioxide Pigments. Journal of the American Ceramic Society, 2012, 95, 170-176.	3.8	15

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37	The Nanocrystalline SnO₂â€“TiO₂ Systemâ€'Part II: Surface Energies and Thermodynamic Stability. Journal of the American Ceramic Society, 2016, 99, 638-644.	3.8	15
38	Synthesis of Ca-doped spinel by Ultrasonic Spray Pyrolysis. Materials Letters, 2016, 171, 232-235.	2.6	15
39	Direct measurement of interface energies of magnesium aluminate spinel and a brief sintering analysis. Journal of the European Ceramic Society, 2017, 37, 4051-4058.	5.7	15
40	A simple flash sintering setup under applied mechanical stress and controlled atmosphere. MethodsX, 2015, 2, 392-398.	1.6	14
41	Interface excess on Sb-doped TiO2 photocatalysts and its influence on photocatalytic activity. Ceramics International, 2021, 47, 619-625.	4.8	14
42	Yttria-stabilized zirconia closed end tubes prepared by electrophoretic deposition. Ceramics International, 2011, 37, 273-277.	4.8	13
43	Modification of surface properties of alumina by plasma treatment. Journal of Materials Chemistry, 2000, 10, 259-261.	6.7	12
44	Structural and hyperfine properties of Cr-doped SnO₂nanoparticles. Journal of Physics: Conference Series, 2010, 217, 012079.	0.4	12
45	The Effect of Additives on the Sintering of Tin Oxide. Solid State Phenomena, 1992, 25-26, 259-268.	0.3	11
46	Translucent Tin Dioxide Ceramics Obtained by Natural Sintering. Journal of the American Ceramic Society, 1997, 80, 2735-2736.	3.8	11
47	Effect of segregation on particle size stability and SPS sintering of Li2O-Doped magnesium aluminate spinel. Journal of the European Ceramic Society, 2019, 39, 3213-3220.	5.7	11
48	Fe2O3-doped SnO2 membranes with enhanced mechanical resistance for ultrafiltration application. Journal of the European Ceramic Society, 2020, 40, 5959-5966.	5.7	11
49	Surface reactivity and electrophoretic deposition of ZrO2â€“MgO mechanical mixture. Journal of Materials Science, 2007, 42, 6946-6950.	3.7	10
50	The Nanocrystalline SnO 2 â€“TiO 2 Systemâ€"Part I: Structural Features. Journal of the American Ceramic Society, 2016, 99, 631-637.	3.8	10
51	Engineering surface and electrophoretic deposition of SiC powder. Materials Letters, 2001, 50, 115-119.	2.6	9
52	Effects of particle size on the structural and hyperfine properties of tin dioxide nanoparticles. Hyperfine Interactions, 2011, 202, 73-79.	0.5	9
53	Interfacial segregation in Clâˆ’-doped nano-ZnO polycrystalline semiconductors and its effect on electrical properties. Ceramics International, 2021, 47, 24860-24867.	4.8	9
54	The rheological behavior and surface charging of gelcasting alumina suspensions. Ceramics International, 2008, 34, 237-241.	4.8	8

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55	Structural and hyperfine properties of Ni-doped SnO2 nanoparticles. Hyperfine Interactions, 2012, 211, 77-82.	0.5	8
56	Li₂Oâ€doped MgAl₂O₄ nanopowders: Energetics of interface segregation. Journal of the American Ceramic Society, 2020, 103, 2835-2844.	3.8	8
57	CaracterizaÃ§Ã£o superficial de nanopartÃculas de BaTiO3 preparado pelo mÃ©todo dos precursores polimÃ©ricos. Ceramica, 2010, 56, 228-236.	0.8	8
58	Polymeric Precursor Synthesis of Alumina Containing Manganese Oxide. Materials Science Forum, 1999, 299-300, 91-98.	0.3	7
59	Transport properties and phase separation in La0.6Y0.1Ca0.3MnO3 ceramics. Physica Status Solidi A, 2003, 199, 255-264.	1.7	7
60	Interface excess on Li2O-doped Î³-Al2O3 nanoparticles. Ceramics International, 2020, 46, 10555-10560.	4.8	7
61	Surface tension of polyethylene used in thermal coating. Polymer Engineering and Science, 2000, 40, 1663-1671.	3.1	5
62	Electrophoretic deposition of ZrO2â€“Y2O3: a bi-component study concerning self-assemblies. Journal of Materials Science, 2009, 44, 1851-1857.	3.7	5
63	Surface modification of bovine bone ash prepared by milling and acid washing process. Ceramics International, 2009, 35, 3043-3049.	4.8	5
64	Synthesis of TiO2 microspheres by ultrasonic spray pyrolysis and photocatalytic activity evaluation. Ceramics International, 2022, 48, 9739-9745.	4.8	5
65	Particle Size Distribution Analysis of an Alumina Powder: Influence of Some Dispersants, pH and Supersonic Vibration. Materials Science Forum, 2005, 498-499, 73-78.	0.3	4
66	Microstructural Effects of Sn Addition to Fe₂O₃ Thin Films. Journal of Nanoscience and Nanotechnology, 2010, 10, 1338-1342.	0.9	4
67	Ulcer pressure prevention and opportunity for innovation during the COVID-19 crisis. Clinics, 2020, 75, e2292.	1.5	4
68	Doped Tin Oxide Nanometric Films for Environment Monitoring. Materials Science Forum, 2005, 498-499, 636-641.	0.3	2
69	ObtenÃ§Ã£o de BaTiO3 livre de resÃduos de carbonato de bÃ¡rio pelo mÃ©todo dos precursores polimÃ©ricos. Ceramica, 2011, 57, 338-347.	0.8	2
70	SegregaÃ§Ã£o superficial de MgO em nanopartÃculas de TiO2. Ceramica, 2016, 62, 400-404.	0.8	2
71	Thermoluminescence and optical absorption properties of glass from natural diopside and of synthetic diopside glass. Journal of Non-Crystalline Solids, 2017, 456, 22-26.	3.1	2
72	Selfâ€segregation and solubility in nonstoichiometric MgAl₂O₄ nanoparticles. Journal of the American Ceramic Society, 2022, 105, 4994-5002.	3.8	2

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73	A New Method for Obtaining Adsorption Isotherms on Colloidal Suspensions via Electrokinetic Sonic Amplitude Measurement. Langmuir, 2005, 21, 11645-11650.	3.5	1
74	Effects of Dependence between Solid Solution and Surface Excess in Nanoparticles. Materials Science Forum, 2010, 660-661, 995-1000.	0.3	1
75	ELECTRORHEOLOGY OF DISPERSIONS OF Ba_xSr_(1-x)TiO₃ IN SILICONE OIL UNDER AC OR DC ELECTRIC FIELD. International Journal of Modern Physics B, 2012, 26, 1250081.	2.0	1
76	ConsolidaÃ§Ã£o de pastas cimentÃcias contendo policarboxilatos um estudo calorimÃ©trico e reolÃ³gico. Ceramica, 2012, 58, 137-143.	0.8	1
77	Evaluation of Industrial Rejects of Mineral and Metallurgical Processing as Ceramic Synthetic Proppants. Materials Science Forum, 2014, 798-799, 503-508.	0.3	1
78	Development of Sodium Hydroxide-Activated Metakaolin with Nanocarbon Materials as Synthetic Ceramic Proppants. Materials Science Forum, 2018, 912, 251-256.	0.3	1
79	Proppants Development and the Shale Oil and Gas Market Perspective. Materials Science Forum, 2018, 930, 37-42.	0.3	1
80	QuantificaÃ§Ã£o da segregaÃ§Ã£o de MgO em pÃ³s nanomÃ©tricos de SnO2 preparados por mÃ©todo quÃmico. Ceramica, 2009, 55, 393-399.	0.8	1
81	Efeito da calcinaÃ§Ã£o do resÃduo de bauxita nas caracterÃsticas reolÃ³gicas e no estado endurecido de suspensÃµes com cimento Portland. Ambiente ConstruÃdo, 2012, 12, 53-61.	0.4	1
82	Influence of Tin Oxide Addition in the Morphologic Characteristics of Zinc Oxide Powders Synthesized by Pechini's Method. Materials Science Forum, 2005, 498-499, 704-709.	0.3	0
83	Uso de ossos bovinos calcinados como aditivo de sinterizaÃ§Ã£o na fabricaÃ§Ã£o de porcelanas. Ceramica, 2009, 55, 252-256.	0.8	0
84	Efeito da modificaÃ§Ã£o da composiÃ§Ã£o quÃmica na sinterizaÃ§Ã£o e microestrutura de porcelanas de ossos bovinos. Ceramica, 2010, 56, 393-398.	0.8	0
85	ModificaÃ§Ã£o da estabilidade dos polimorfos de TiO2 nanomÃ©trico pelo excesso de superfÃcie de SnO2. Ceramica, 2012, 58, 53-57.	0.8	0
86	Segregation and Color Change on (Cr,Ca) Codoped Nanocrystalline Tin Dioxide. Advances in Science and Technology, 2014, 87, 73-78.	0.2	0
87	DeterminaÃ§Ã£o das energias de superfÃcie do SnO2 puro e dopado. Ceramica, 2009, 55, 342-348.	0.8	0