Mario L Moreira

List of Publications by Citations

69 papers	1,604 citations	20 h-index	39 g-index
71 ext. papers	1,792 ext. citations	3.5 avg, IF	4.38 L-index

#	Paper	IF	Citations
69	Structural and optical properties of CaTiO3 perovskite-based materials obtained by microwave-assisted hydrothermal synthesis: An experimental and theoretical insight. *Acta Materialia*, **2009**, 57, 5174-5185	8.4	157
68	Hydrothermal Microwave: A New Route to Obtain Photoluminescent Crystalline BaTiO3 Nanoparticles. *Chemistry of Materials*, **2008**, 20, 5381-5387	9.6	147
67	CeO2 nanoparticles synthesized by a microwave-assisted hydrothermal method: evolution from nanospheres to nanorods. *CrystEngComm*, **2012**, 14, 1150-1154	3.3	96
66	ZnO architectures synthesized by a microwave-assisted hydrothermal method and their photoluminescence properties. *Solid State Ionics*, **2010**, 181, 775-780	3.3	79
65	Synthesis of Fine Micro-sized BaZrO3 Powders Based on a Decaoctahedron Shape by the Microwave-Assisted Hydrothermal Method. *Crystal Growth and Design*, **2009**, 9, 833-839	3.5	76
64	Long-range and short-range structures of cube-like shape SrTiO3 powders: microwave-assisted hydrothermal synthesis and photocatalytic activity. *Physical Chemistry Chemical Physics*, **2013**, 15, 12386-93	3.6	74
63	Photoluminescence of barium titanate and barium zirconate in multilayer disordered thin films at room temperature. *Journal of Physical Chemistry A*, **2008**, 112, 8938-42	2.8	68
62	An efficient microwave-assisted hydrothermal synthesis of BaZrO3 microcrystals: growth mechanism and photoluminescence emissions. *CrystEngComm*, **2010**, 12, 3612	3.3	64
61	First principles calculations on the origin of violet-blue and green light photoluminescence emission in SrZrO3 and SrTiO3 perovskites. *Theoretical Chemistry Accounts*, **2009**, 124, 385-394	1.9	63
60	CaTiO3:Eu3+ obtained by microwave assisted hydrothermal method: A photoluminescent approach. *Optical Materials*, **2010**, 32, 990-997	3.3	58
59	Quantum Mechanics Insight into the Microwave Nucleation of SrTiO3 Nanospheres. *Journal of Physical Chemistry C*, **2012**, 116, 24792-24808	3.8	52
58	Influence of different solvents on the structural, optical and morphological properties of CdS nanoparticles. *Journal of Alloys and Compounds*, **2011**, 509, 6880-6883	5.7	44
57	SnO2 nanocrystals synthesized by microwave-assisted hydrothermal method: towards a relationship between structural and optical properties. *Journal of Nanoparticle Research*, **2012**, 14, 1	2.3	42
56	Insight into the Effects of Fe Addition on the Local Structure and Electronic Properties of SrTiO3. *Journal of Physical Chemistry C*, **2014**, 118, 4930-4940	3.8	40
55	High-efficient microwave synthesis and characterisation of SrSnO3. *Chemical Engineering Journal*, **2009**, 155, 905-909	14.7	40
54	On the reversed crystal growth of BaZrO3 decaoctahedron: shape evolution and mechanism. *CrystEngComm*, **2011**, 13, 5818	3.3	39
53	Radioluminescence properties of decaoctahedral BaZrO3. *Scripta Materialia*, **2011**, 64, 118-121	5.6	31

52	Photoluminescent behavior of SrZrO3/SrTiO3 multilayer thin films. *Chemical Physics Letters*, **2009**, 473, 293-298	2.5	27
51	Joint experimental and theoretical analysis of order-disorder effects in cubic BaZrO3 assembled nanoparticles under decaoctahedral shape. *Journal of Physical Chemistry A*, **2011**, 115, 4482-90	2.8	24
50	Crystal phase analysis of SnO2-based varistor ceramic using the Rietveld method. *Materials Characterization*, **2006**, 57, 193-198	3.9	21
49	Novel SrTi1−xFexO3 nanocubes synthesized by microwave-assisted hydrothermal method. *CrystEngComm*, **2012**, 14, 4068	3.3	20
48	BaZrO3 photoluminescence property: An ab initio analysis of structural deformation and symmetry changes. *International Journal of Quantum Chemistry*, **2011**, 111, 694-701	2.1	18
47	Relationship between Crystal Shape, Photoluminescence, and Local Structure inSrTiO3Synthesized by Microwave-Assisted Hydrothermal Method. *Journal of Nanomaterials*, **2012**, 2012, 1-6	3.2	18
46	Photoluminescence of barium−calcium titanates obtained by the microwave-assisted hydrothermal method (MAH). *Chemical Physics Letters*, **2010**, 488, 54-56	2.5	18
45	Structural and Electronic Properties of Bulk ZnX (X = O, S, Se, Te), ZnF, and ZnO/ZnF: A DFT Investigation within PBE, PBE + , and Hybrid HSE Functionals. *Journal of Physical Chemistry A*, **2020**, 124, 3778-3785	2.8	17
44	Black SiO2 nanoparticles obtained by pyrolysis of rice husk. *Dyes and Pigments*, **2019**, 164, 272-278	4.6	16
43	Sintering of porous alumina obtained by biotemplate fibers for low thermal conductivity applications. *Journal of the European Ceramic Society*, **2013**, 33, 1087-1092	6	16
42	Quantitative evaluation of the surface stability and morphological changes of CuO particles. *Heliyon*, **2019**, 5, e02500	3.6	15
41	Photoresponse of KNbO3−AFeO3 (A = Bi3+ or La3+) ceramics and its relationship with bandgap narrowing. *Materials Letters*, **2018**, 221, 326-329	3.3	15
40	Optical and structural investigation of ZnO@ZnS core−shell nanostructures. *Materials Chemistry and Physics*, **2016**, 173, 347-354	4.4	15
39	Quantum mechanical modeling of excited electronic states and their relationship to cathodoluminescence of BaZrO3. *Journal of Applied Physics*, **2013**, 114, 043714	2.5	15
38	Increase of Voc using heterojunctions of BaTiO3 without sensitization. *Ceramics International*, **2020**, 46, 4907-4913	5.1	14
37	Band alignment and charge transfer predictions of ZnO/ZnX (X = S, Se or Te) interfaces applied to solar cells: a PBE+U theoretical study. *Physical Chemistry Chemical Physics*, **2018**, 20, 4953-4961	3.6	13
36	Europium-doped calcium titanate: Optical and structural evaluations. *Journal of Alloys and Compounds*, **2014**, 585, 154-162	5.7	13
35	Interfacial photoluminescence emission properties of core/shell Al2O3/ZrO2. *CrystEngComm*, **2012**, 14, 393-396	3.3	13

34	In situ microwave-assisted deposition of CoS counter electrode for dye-sensitized solar cells. *Solar Energy*, **2020**, 198, 658-664	6.8	12
33	Morphological and Structural changes of CaxSr1−xTiO3 Powders Obtained by the Microwave-Assisted Hydrothermal Method. *International Journal of Applied Ceramic Technology*, **2012**, 9, 186-192	2	11
32	Photocatalytic degradation of rhodamine B using Nb2O5 synthesized with different niobium precursors: Factorial design of experiments. *Ceramics International*, **2021**, 47, 20570-20578	5.1	11
31	Fingerprints of short-range and long-range structure in BaZr(1-x)HfxO3 solid solutions: an experimental and theoretical study. *Physical Chemistry Chemical Physics*, **2015**, 17, 11341-9	3.6	9
30	Order−disorder degree of self-assembled clusters: Influence on photoluminescence emission and morphology of BaxSr1−xTiO3 nanocrystals. *Chemical Physics Letters*, **2011**, 514, 301-306	2.5	9
29	Influence of titanium precursor on photoluminescent emission of micro-cube-shaped CaTiO3. *Journal of Luminescence*, **2015**, 165, 130-137	3.8	8
28	Development of a Yellow Pigment Based on Bismuth and Molybdenum-Doped TiO2 for Coloring Polymers. *International Journal of Applied Ceramic Technology*, **2015**, 12, E112-E119	2	7
27	Unveiling the efficiency of microwave-assisted hydrothermal treatment for the preparation of SrTiO mesocrystals. *Physical Chemistry Chemical Physics*, **2019**, 21, 22031-22038	3.6	6
26	Influence of Nb2O5 crystal structure on photocatalytic efficiency. *Chemical Physics Letters*, **2021**, 764, 138271	2.5	6
25	Evolutionary design algorithm for optimal light trapping in solar cells. *Journal of Applied Physics*, **2019**, 125, 043105	2.5	5
24	The effect of titanium dioxide nanoparticles obtained by microwave-assisted hydrothermal method on the color and decay resistance of pinewood. *Maderas: Ciencia Y Tecnologia*, **2017**, 0-0	1	5
23	Physico-chemical description of titanium dioxide−cellulose nanocomposite formation by microwave radiation with high thermal stability. *Cellulose*, **2018**, 25, 2331-2341	5.5	5
22	Unveiling the infrared complex dielectric function of ilmenite CdTiO3. *Journal of Alloys and Compounds*, **2020**, 813, 152136	5.7	5
21	Multi-Photonic behavior of Nb2O5 and its correlation with synthetic methods. *Journal of Materials Science*, **2021**, 56, 7889-7905	4.3	4
20	Functionalized pink AlO:Mn pigments applied in prosthetic dentistry. *Journal of Prosthetic Dentistry* , **2017**, 118, 771-777	4	3
19	A description of the formation and growth processes of CaTiO3 mesocrystals: a joint experimental and theoretical approach. *Molecular Systems Design and Engineering*, **2020**, 5, 1255-1266	4.6	3
18	Study of the Evolution of Phase Calcium Aluminate through the Method for Polymeric Precursors C12A7. *Materials Science Forum*, **2015**, 820, 137-142	0.4	2
17	A first-principles investigation on the luminescence emissions of BaZrO3 obtained by microwave-assisted hydrothermal method. *Journal of Luminescence*, **2016**, 180, 73-80	3.8	2

16	Chemical Synthesis and Sintering Behaviour of Ca3Al206 Obtained by Polymeric Precursor Method. *Materials Science Forum*, **2015**, 820, 143-148	0.4	2
15	Investigation of the properties of niobium pentoxide for use in dye-sensitized solar cells. *Journal of the American Ceramic Society*, **2018**, 102, 1884	3.8	2
14	Correlation between local structure and electronic properties of BaZrO3:TbYb Optical Ceramics. *Journal of Electron Spectroscopy and Related Phenomena*, **2021**, 251, 147106	1.7	2
13	Processing conditions for the production of polystyrene microcapsules containing demineralized water. *Advanced Powder Technology*, **2017**, 28, 1221-1227	4.6	1
12	Influence of Eu valence on the optical activity of BaTiO decorated with CaF synthesized by microwave-assisted hydrothermal method. *Dalton Transactions*, **2020**, 49, 8540-8548	4.3	1
11	Properties of zinc titanates synthesized by microwave assisted hydrothermal method. *Heliyon*, **2021**, 7, e06521	3.6	1
10	Synthesis of NaNbO3 nanowires and their photocatalytic activity. *Ceramics International*, **2021**, 47, 10185-10188	5.1	1
9	Resistance of TiO2-treated Eucalyptus botryoides Wood to the Fungus Ganoderma applanatum. *Floresta E Ambiente*, **2018**, 25,	1	1
8	Redução da inflamabilidade da madeira de Pinus elliottii modificada com partículas de TiO2. *Revista Materia*, **2018**, 23,	0.8	1
7	A Statistical Study of Assembly Parameter Modifications Effects on the Photovoltaic Response of Dye-Sensitized Solar Cells. *Journal of Electronic Materials*, **2021**, 50, 6149-6158	1.9	1
6	An investigation of the photovoltaic parameters of ZnS grown on ZnO(101). *New Journal of Chemistry*, **2020**, 44, 20600-20609	3.6	0
5	Facile preparation of Nb2O5/TiO2 heterostructures for photocatalytic application. *Chemical Physics Impact*, **2022**, 100079	1.6	0
4	Microstructure and Thermal Conductivity of Porous Al2O3-ZrO2 Ceramics. *Materials Science Forum*, **2015**, 820, 268-273	0.4	
3	Morphology and Properties of (Ba, Sr, Ca) Titanates Synthesized by Microwave-Assisted Hydrothermal Method. *IOP Conference Series: Materials Science and Engineering*, **2011**, 18, 062019	0.4	
2	Wetting-state transition of random surfaces. *Thin Solid Films*, **2022**, 745, 139102	2.2	
1	Microwave-assisted solvothermal: An efficient and new method to obtain hydrophobic wood surfaces. *Maderas: Ciencia Y Tecnologia*, **2018**, 0-0	1	