Maria Teresa Colomer

List of Publications by Year
in descending order

95 papers	2,124 citations	218592 26 h-index	276775 41 g-index
96 all docs	96 docs citations	96 times ranked	2461 citing authors

#	Article	IF	Citations
1	Effect of sintering under CO+N2/H2 and CO2+air atmospheres on the physicochemical features of a commercial nano-YSZ. Journal of Alloys and Compounds, 2022, 904, 163976.	2.8	2
2	Impact of Tb4+ and morphology on the thermal evolution of Tb-doped TiO2 nanostructured hollow spheres and nanoparticles. Journal of Alloys and Compounds, 2021, 853, 156973.	2.8	11
3	Influence of Nd3+ Doping on the Structure, Thermal Evolution and Photoluminescence Properties of Nanoparticulate TiO2 Xerogels. Journal of Alloys and Compounds, 2020, 819, 152972.	2.8	11
4	Preparation of nanostructured TiO2 films with high catalytic activity and their 3D spatial distribution of anatase and rutile phases. Journal of Materials Science, 2019, 54, 9414-9425.	1.7	6
5	Processing and electrical conductivity of non-stoichiometric lanthanum strontium manganite perovskites prepared from powders synthesized by a polymerizable-complexation route. Ceramics International, 2018, 44, 13389-13395.	2.3	6
6	Structural-microstructural characterization and optical properties of Eu3+,Tb3+-codoped LaPO4Â·nH2O and LaPO4 nanorods hydrothermally synthesized with microwaves. Ceramics International, 2018, 44, 11993-12001.	2.3	14
7	Evidencing early pyrochlore formation in rare-earth doped TiO2 nanocrystals: Structure sensing via VIS and NIR Er3+ light emission. Journal of Alloys and Compounds, 2018, 735, 2267-2274.	2.8	8
8	An interplay between electronic and structural effects on the photoluminescence decay mechanisms in LaPO₄Â·nH₂O:Tb³⁺ and LaPO₄:Tb³⁺ single-crystal nanorods. Journal of Materials Chemistry C, 2018, 6, 12643-12651.	2.7	4
9	Effect of Sr2+ doping on sintering behavior, microstructural development and electrical properties of LaPO4Â·nH2O nanorods prepared byÂdryÂmechanical milling. International Journal of Hydrogen Energy, 2018, 43, 13462-13474.	3.8	2
10	Preparation, thermal and phase evolution and functional properties of non-stoichiometric strontium-doped lanthanum manganite perovskite ceramics. Journal of the European Ceramic Society, 2017, 37, 3527-3533.	2.8	11
11	Raman characterization and photoluminescence properties of La1-Tb PO4Â·nH2O and La1-Tb PO4 phosphor nanorods prepared by microwave-assisted hydrothermal synthesis. Ceramics International, 2017, 43, 10840-10847.	2.3	9
12	Structure-property relationships for Eu doped TiO₂ thin films grown by a laser assisted technique from colloidal sols. RSC Advances, 2017, 7, 37643-37653.	1.7	32
13	Textural characteristics, degree of protonation, water uptake and proton transport properties relationships in colloidal solâ€“gel derived micro-Âand mesoporous silica membranes. International Journal of Hydrogen Energy, 2016, 41, 5748-5757.	3.8	5
14	Effect of Tb3+ doping and self-generated pressure on the crystallographic/morphological features and thermal stability of LaPO4Â·nH2O single-crystal nanorods obtained by microwave-assisted hydrothermal synthesis. Ceramics International, 2016, 42, 18074-18086.	2.3	7
15	Effect of titania doping and sintering temperature on titanium local environment and electrical conductivity of YSZ. Journal of Alloys and Compounds, 2016, 689, 512-524.	2.8	14
16	Effect of sintering time on structural, microstructural and chemical composition of Ni-doped lanthanum gallate perovskites. Journal of Solid State Chemistry, 2015, 228, 167-173.	1.4	5
17	Thermal evolution, second phases, and sintering behavior of LaPO4Â·nH2O nanorods prepared by two different chemical synthesis routes. Ceramics International, 2015, 41, 8080-8092.	2.3	17
18	Structural and Photoluminescence Study of Eu³⁺/TiO₂ Xerogels as a Function of the Temperature Using Optical Techniques. Journal of the American Ceramic Society, 2015, 98, 338-345.	1.9	12

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19	Strontium and cobalt doped-lanthanum chromite: Characterisation of synthesised powders and sintered materials. Ceramics International, 2015, 41, 1177-1187.	2.3	13
20	Role of shaping in the preparation of heterogeneous catalysts: Tableting and slip-casting of oxidation catalysts. Catalysis Today, 2015, 246, 81-91.	2.2	25
21	Microwaveâ€assisted Hydrothermal Synthesis of Singleâ€crystal Nanorods of Rhabdophaneâ€type <scp><scp>Sr</scp></scp>â€doped <scp><scp>LaPO</scp></scp>₄Â·n<scp><scp>H₂O</scp></scp>. Journal of the American Ceramic Society, 2014, 97, 750-758.	1.9	11
22	Relationships between structural and electrical properties in mixed conductors duplex materials in the ZrO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>-Y<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub><mml:math>	1.1	7
23	Synthesis and photocatalytic activity of Eu3+-doped nanoparticulate TiO2 sols and thermal stability of the resulting xerogels. Materials Chemistry and Physics, 2014, 144, 8-16.	2.0	25
24	Effect of the RE (RE=Eu, Er) doping on the structural and textural properties of mesoporous TiO2 thin films obtained by evaporation induced self-assembly method. Thin Solid Films, 2014, 558, 140-148.	0.8	16
25	TPR studies on NiOâ€“CGO composites prepared by combustion synthesis. Ceramics International, 2014, 40, 3469-3475.	2.3	18
26	TiO₂/Eu³⁺ Thin Films with High Photoluminescence Emission Prepared by Electrophoretic Deposition from Nanoparticulate Sols. European Journal of Inorganic Chemistry, 2014, 2014, 5152-5159.	1.0	14
27	Rare earth-doped TiO2 nanocrystalline thin films: Preparation and thermal stability. Journal of the European Ceramic Society, 2014, 34, 4457-4462.	2.8	21
28	Straightforward synthesis of Ti-doped YSZ gels by chemical modification of the precursors alkoxides. Journal of Sol-Gel Science and Technology, 2013, 67, 135-144.	1.1	33
29	Effect of Er3+ doping on the thermal stability of TiO2 nanoparticulate xerogels. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	15
30	Understanding the molecular basics behind catalyst shaping: Preparation of suspensions of vanadiumâ€“aluminum mixed (hydr)oxides. Applied Catalysis A: General, 2013, 468, 190-203.	2.2	15
31	Manufacture of a non-stoichiometric LSM cathode SOFC material by aqueous tape casting. Journal of the European Ceramic Society, 2013, 33, 1137-1143.	2.8	10
32	Electrophoretic Deposition of TiO₂/Er³⁺ Nanoparticulate Sols. Journal of Physical Chemistry B, 2013, 117, 1556-1562.	1.2	17
33	InfluÃªncia da atmosfera na sinterizaÃ§Ã£o do cromito de lantÂ¢nio dopado. Ceramica, 2013, 59, 366-371.	0.3	0
34	Thin Films of Europium (III) Doped-TiO₂ Prepared by Electrophoretic Deposition from Nanoparticulate Sols. Key Engineering Materials, 2012, 507, 73-77.	0.4	2
35	Manufacture of YSZ-LSM Semi-Cell by Colloidal Processing. Materials Science Forum, 2012, 727-728, 746-751.	0.3	0
36	Synthesis and characterization of TiO2/Rh3+ nanoparticulate sols, xerogels and cryogels for photocatalytic applications. Journal of Sol-Gel Science and Technology, 2012, 63, 408-415.	1.1	15

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37	Mesoporous Î±-Fe2O3 membranes as proton conductors: Synthesis by microwave-assisted solâ€“gel route and effect of their textural characteristics on water uptake and proton conductivity. Microporous and Mesoporous Materials, 2012, 161, 123-133.	2.2	13
38	Synthesis and Characterization of Nanoparticulate Sols of TiO2 Doped with Erbium (III) for Photoinduced Applications. Materials Research Society Symposia Proceedings, 2012, 1442, 59.	0.1	1
39	Synthesis and Characterization of Anataseâ€Structured Titania Hollow Spheres Doped with Erbium (<scp>III</scp>). Journal of the American Ceramic Society, 2012, 95, 3005-3011.	1.9	18
40	Synthesis and dispersion of yttria-stabilized zirconia (YSZ) nanoparticles in supercritical water. Materials Chemistry and Physics, 2012, 134, 451-458.	2.0	9
41	Proton transport, water uptake and hydrogen permeability of nanoporous hematite ceramic membranes. Journal of Power Sources, 2011, 196, 8280-8285.	4.0	10
42	Fabrication of Sr- and Co-doped lanthanum chromite interconnectors for SOFC. Materials Research Bulletin, 2011, 46, 983-986.	2.7	14
43	Mixed conductivity, structural and microstructural characterization of titania-doped yttria tetragonal zirconia polycrystalline/titania-doped yttria stabilized zirconia composite anode matrices. Journal of Solid State Chemistry, 2011, 184, 365-372.	1.4	18
44	Ni-doped lanthanum gallate perovskites: Synthesis and structural, microstructural, and electrical characterisation. Solid State Ionics, 2011, 182, 76-81.	1.3	16
45	Comportamento reolÃ³gico de suspensÃµes aquosas de cromito de lantÃ¢nio. Ceramica, 2011, 57, 237-243.	0.3	0
46	Colloidal processing and sintering of porous percolative Ni-YSZ layers. Journal of Membrane Science, 2010, 352, 55-62.	4.1	15
47	Tape casting of strontium and cobalt doped lanthanum chromite suspensions. Journal of the European Ceramic Society, 2010, 30, 2897-2903.	2.8	20
48	Peptization of Nanoparticulate Titania Sols Prepared Under Different Waterâ€Alkoxide Molar Ratios. Journal of the American Ceramic Society, 2010, 93, 59-64.	1.9	24
49	Nanometric Srâ€Doped LaPO₄ Monazite: Synthesis by Mechanical Milling, Characterization, and Water Incorporation on its Structure. Journal of the American Ceramic Society, 2010, 93, 393-398.	1.9	16
50	Combustion Synthesis and Electrical Behavior of Nanometric Î²-NiMoO₄. Journal of Physical Chemistry C, 2010, 114, 4251-4257.	1.5	86
51	PhysicoChemical Characterization of Strontiumâ€and Cobaltâ€Doped Lanthanum Chromite Powders Produced by Combustion Synthesis. International Journal of Applied Ceramic Technology, 2009, 6, 626-635.	1.1	12
52	Surface behaviour and stability of strontium and cobalt doped-lanthanum chromite powders in water. Solid State Ionics, 2009, 180, 71-75.	1.3	9
53	Influence of the urea content on the YSZ hydrothermal synthesis under dilute conditions and its role as dispersant agent in the post-reaction medium. Journal of the European Ceramic Society, 2009, 29, 3185-3195.	2.8	34
54	Colloidal stability of nanosized titania aqueous suspensions. Journal of the European Ceramic Society, 2008, 28, 2171-2176.	2.8	95

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55	Determination of Peptization Time of Particulate Sols Using Optical Techniques: Titania As a Case Study. Chemistry of Materials, 2008, 20, 4161-4165.	3.2	21
56	A rapid method to obtain nanometric particles of rhabdophane LaPO4Â·nH2O by mechanical milling. Journal of Alloys and Compounds, 2007, 427, 87-93.	2.8	56
57	Transport properties of fast proton conducting mesoporous silica xerogels. Journal of Power Sources, 2007, 167, 53-57.	4.0	25
58	Rutile-type dense ceramics fabricated by pressureless sintering of Ti1â^'xRuxO2 powders prepared by solâ€“gel. Journal of the European Ceramic Society, 2007, 27, 2369-2376.	2.8	18
59	Synthesis of ceria-based electrolyte nanometric powders by urea-combustion technique. Journal of the European Ceramic Society, 2007, 27, 3619-3623.	2.8	52
60	YSZ/Niâ€“YSZ semi-cells shaped by electrophoretic deposition. Journal of the European Ceramic Society, 2007, 27, 4241-4244.	2.8	26
61	Synthesis and characterisation of a green NiO/La(Sr)PO4â^'Î´ cermet anode for phosphate based solid oxide fuel cells. Journal of the European Ceramic Society, 2007, 27, 4237-4240.	2.8	8
62	Synthesis of Mullite Powders Through a Suspension Combustion Process. Journal of the American Ceramic Society, 2006, 89, 484-489.	1.9	32
63	Influence of combustion aids on suspension combustion synthesis of mullite powders. Journal of the European Ceramic Society, 2006, 26, 3365-3372.	2.8	29
64	Synthesis and thermal evolution of TiO2-RuO2 xerogels. Journal of Sol-Gel Science and Technology, 2006, 39, 211-222.	1.1	28
65	Proton conductivity of nanoporous anatase xerogels prepared by a particulate solâ€“gel method. Journal of Solid State Electrochemistry, 2006, 10, 54-59.	1.2	6
66	Methane oxidation on composite ruthenium electrodes in YSZ cells. Solid State Ionics, 2006, 177, 2087-2091.	1.3	19
67	Nanoporous anatase ceramic membranes as fast-proton-conducting materials. Journal of the European Ceramic Society, 2006, 26, 1231-1236.	2.8	23
68	Magnetic studies on Sr0.8Ce0.1Fe0.7Co0.3O3â^'Î´ perovskite. Solid State Sciences, 2006, 8, 444-449.	1.5	7
69	Nanoporous Anatase Thin Films as Fast Proton-Conducting Materials. Advanced Materials, 2006, 18, 371-374.	11.1	91
70	Synthesis and characterization of monazite-type Sr:LaPO4 prepared through coprecipitation. Journal of the European Ceramic Society, 2005, 25, 2003-2007.	2.8	31
71	Combustion Synthesis of Nanometric Powders of LaPO4and Sr-Substituted LaPO4. Chemistry of Materials, 2005, 17, 4154-4161.	3.2	79
72	Proton conductivity in nanopore silica xerogels. Ionics, 2003, 9, 207-213.	1.2	7

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73	Impedance spectroscopy and proton transport number measurements on Sr-substituted LaPO4 prepared by combustion synthesis. Solid State Ionics, 2003, 162-163, 167-173.	1.3	54
74	La_{2-x}Sr_xNiO_{4+Î´} Ceramic Powders Prepared by Combustion Synthesis. Key Engineering Materials, 2002, 206-213, 155-158.	0.4	2
75	Structure, Microstructure, and Mixed Conduction of [(ZrO2)0.92(Y2O3)0.08]0.9(TiO2)0.1. Journal of Solid State Chemistry, 2002, 165, 79-88.	1.4	38
76	Structural and electrochemical properties of the Sr0.8Ce0.1Fe0.7Co0.3O3Ã¢ÂˆÂ'ÃŽÂ´ perovskite as cathode material for ITSOFCs. Solid State Ionics, 2002, 147, 41-48.	1.3	101
77	Estudios de materiales de cÃ¡todos hÃbridos y Ã¡nodos vÃtreos. CaracterizaciÃ³n en celdas de ion litio. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2002, 41, 115-121.	0.9	1
78	Combustion Synthesis of La_{2-x}Ca_xNiO_{4+Î´} Ceramic Powders. Key Engineering Materials, 2001, 206-213, 151-154.	0.4	1
79	Fe4+content and ordering of anion vacancies in partially reduced AFexTi1-xO3-y(A = Ca, Sr;xâ©½0.6) perovskites. An57Fe MÃ¶ssbauer spectroscopy study. Journal of Physics Condensed Matter, 2001, 13, 8171-8187.	0.7	41
80	High porosity silica xerogels prepared by a particulate solâ€“gel route: pore structure and proton conductivity. Journal of Non-Crystalline Solids, 2001, 290, 93-104.	1.5	87
81	Impedance spectroscopy of Sr0.97Ti1âˆ'xFexO3âˆ'Î´ materials with moderate Fe-contents. Solid State Ionics, 2001, 143, 251-257.	1.3	31
82	Ceramic conductors for electrochemical cell applications: new perspectives in materials and synthesis. Solid State Ionics, 2000, 135, 365-372.	1.3	8
83	Structural, Microstructural, and Electrical Transport Properties of TiO2âˆ'RuO2 Ceramic Materials Obtained by Polymeric Solâˆ'Gel Route. Chemistry of Materials, 2000, 12, 923-930.	3.2	49
84	Nanopore Ceramic Membranes as Novel Electrolytes for Proton Exchange Membranes. Electrochemical and Solid-State Letters, 1999, 2, 313.	2.2	72
85	Thick film cermet of ZrO2â€“Y2O3â€“TiO2/Ni: anodic polarization study. Journal of the European Ceramic Society, 1999, 19, 143-148.	2.8	7
86	Effects of humidity on the electrical behaviour of Sr0Â·97Ti0Â·97Fe0Â·03O3-Î´. Journal of the European Ceramic Society, 1999, 19, 769-772.	2.8	7
87	Preparation and Characterization of High Porosity Si02 Xerogels for Low k Dielectrics. Materials Research Society Symposia Proceedings, 1999, 565, 211.	0.1	4
88	Nonâ€stoichiometric La(1 âˆ' x)NiO(3 âˆ' Î´) perovskites produced by combustion synthesis. Journal of Materials Chemistry, 1999, 9, 2505-2510.	6.7	58
89	Preparation and Electrical Characterization of Ruthenia-Doped Yttria-Stabilized Zirconia Ceramics. Journal of Solid State Chemistry, 1998, 141, 282-289.	1.4	11
90	Variable-range-hopping conduction and dielectric relaxation in disorderedSr0.97(Ti1âˆ'xFex)O3âˆ'Î´. Physical Review B, 1998, 57, 11858-11861.	1.1	64

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91	Preparation and characterization of gels of the ZrO2î—¸Y2O3î—¸RuO2 system. Journal of Non-Crystalline Solids, 1997, 217, 48-54.	1.5	12
92	Microstructure, electrical properties and phase equilibria relationships in the ZrO2Y2O3TiO2 system: The subsolidus isothermal section at 1500Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 229, 114-122.	2.6	30
93	Impedance spectroscopy studies of orthorhombic FeNbO4. Journal of Materials Science, 1996, 31, 2043-2046.	1.7	14
94	Role of grain boundaries on the electrical properties of titania doped yttria stabilized zirconia. Materials Research Bulletin, 1995, 30, 515-522.	2.7	30
95	Evaluation of Titania Doped YSZ for SOFC Anodes. ECS Proceedings Volumes, 1993, 1993-4, 523-532.	0.1	1