

Maria Teresa Colomer

List of Publications by Year in descending order

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95
papers

2,124
citations

218592

26
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41
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96
all docs

96
docs citations

96
times ranked

2461
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural and electrochemical properties of the Sr _{0.8} Ce _{0.1} Fe _{0.7} Co _{0.3} O _{3-δ} perovskite as cathode material for ITSOFCs. <i>Solid State Ionics</i> , 2002, 147, 41-48.	1.3	101
2	Colloidal stability of nanosized titania aqueous suspensions. <i>Journal of the European Ceramic Society</i> , 2008, 28, 2171-2176.	2.8	95
3	Nanoporous Anatase Thin Films as Fast Proton-Conducting Materials. <i>Advanced Materials</i> , 2006, 18, 371-374.	11.1	91
4	High porosity silica xerogels prepared by a particulate sol-gel route: pore structure and proton conductivity. <i>Journal of Non-Crystalline Solids</i> , 2001, 290, 93-104.	1.5	87
5	Combustion Synthesis and Electrical Behavior of Nanometric NiMoO_4 . <i>Journal of Physical Chemistry C</i> , 2010, 114, 4251-4257.	1.5	86
6	Combustion Synthesis of Nanometric Powders of LaPO ₄ and Sr-Substituted LaPO ₄ . <i>Chemistry of Materials</i> , 2005, 17, 4154-4161.	3.2	79
7	Nanopore Ceramic Membranes as Novel Electrolytes for Proton Exchange Membranes. <i>Electrochemical and Solid-State Letters</i> , 1999, 2, 313.	2.2	72
8	Variable-range-hopping conduction and dielectric relaxation in disordered Sr _{0.97} (Ti _{1-x} Fe _x)O ₃ . <i>Physical Review B</i> , 1998, 57, 11858-11861.	1.1	64
9	Non-stoichiometric La(1-x)NiO(3-x) perovskites produced by combustion synthesis. <i>Journal of Materials Chemistry</i> , 1999, 9, 2505-2510.	6.7	58
10	A rapid method to obtain nanometric particles of rhabdophane LaPO ₄ ·nH ₂ O by mechanical milling. <i>Journal of Alloys and Compounds</i> , 2007, 427, 87-93.	2.8	56
11	Impedance spectroscopy and proton transport number measurements on Sr-substituted LaPO ₄ prepared by combustion synthesis. <i>Solid State Ionics</i> , 2003, 162-163, 167-173.	1.3	54
12	Synthesis of ceria-based electrolyte nanometric powders by urea-combustion technique. <i>Journal of the European Ceramic Society</i> , 2007, 27, 3619-3623.	2.8	52
13	Structural, Microstructural, and Electrical Transport Properties of TiO ₂ ~RuO ₂ Ceramic Materials Obtained by Polymeric Sol-Gel Route. <i>Chemistry of Materials</i> , 2000, 12, 923-930.	3.2	49
14	Fe ⁴⁺ content and ordering of anion vacancies in partially reduced AFe _x Ti _{1-x} O _{3-y} (A = Ca, Sr; x ≈ 0.6) perovskites. An ⁵⁷ Fe Mössbauer spectroscopy study. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 8171-8187.	0.7	41
15	Structure, Microstructure, and Mixed Conduction of [(ZrO ₂) _{0.92} (Y ₂ O ₃) _{0.08}] _{0.9} (TiO ₂) _{0.1} . <i>Journal of Solid State Chemistry</i> , 2002, 165, 79-88.	1.4	38
16	Influence of the urea content on the YSZ hydrothermal synthesis under dilute conditions and its role as dispersant agent in the post-reaction medium. <i>Journal of the European Ceramic Society</i> , 2009, 29, 3185-3195.	2.8	34
17	Straightforward synthesis of Ti-doped YSZ gels by chemical modification of the precursors alkoxides. <i>Journal of Sol-Gel Science and Technology</i> , 2013, 67, 135-144.	1.1	33
18	Synthesis of Mullite Powders Through a Suspension Combustion Process. <i>Journal of the American Ceramic Society</i> , 2006, 89, 484-489.	1.9	32

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19	Structure-property relationships for Eu doped TiO ₂ thin films grown by a laser assisted technique from colloidal sols. RSC Advances, 2017, 7, 37643-37653.	1.7	32
20	Impedance spectroscopy of Sr _{0.97} Ti _{1-x} Fe _x O ₃ materials with moderate Fe-contents. Solid State Ionics, 2001, 143, 251-257.	1.3	31
21	Synthesis and characterization of monazite-type Sr:LaPO ₄ prepared through coprecipitation. Journal of the European Ceramic Society, 2005, 25, 2003-2007.	2.8	31
22	Role of grain boundaries on the electrical properties of titania doped yttria stabilized zirconia. Materials Research Bulletin, 1995, 30, 515-522.	2.7	30
23	Microstructure, electrical properties and phase equilibria relationships in the ZrO ₂ Y ₂ O ₃ TiO ₂ system: The subsolidus isothermal section at 1500°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 229, 114-122.	2.6	30
24	Influence of combustion aids on suspension combustion synthesis of mullite powders. Journal of the European Ceramic Society, 2006, 26, 3365-3372.	2.8	29
25	Synthesis and thermal evolution of TiO ₂ -RuO ₂ xerogels. Journal of Sol-Gel Science and Technology, 2006, 39, 211-222.	1.1	28
26	YSZ/Ni-YSZ semi-cells shaped by electrophoretic deposition. Journal of the European Ceramic Society, 2007, 27, 4241-4244.	2.8	26
27	Transport properties of fast proton conducting mesoporous silica xerogels. Journal of Power Sources, 2007, 167, 53-57.	4.0	25
28	Synthesis and photocatalytic activity of Eu ³⁺ -doped nanoparticulate TiO ₂ sols and thermal stability of the resulting xerogels. Materials Chemistry and Physics, 2014, 144, 8-16.	2.0	25
29	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
30	Peptization of Nanoparticulate Titania Sols Prepared Under Different Water-Alkoxide Molar Ratios. Journal of the American Ceramic Society, 2010, 93, 59-64.	1.9	24
31	Nanoporous anatase ceramic membranes as fast-proton-conducting materials. Journal of the European Ceramic Society, 2006, 26, 1231-1236.	2.8	23
32	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
33	Rare earth-doped TiO ₂ nanocrystalline thin films: Preparation and thermal stability. Journal of the European Ceramic Society, 2014, 34, 4457-4462.	2.8	21
34	Tape casting of strontium and cobalt doped lanthanum chromite suspensions. Journal of the European Ceramic Society, 2010, 30, 2897-2903.	2.8	20
35	Methane oxidation on composite ruthenium electrodes in YSZ cells. Solid State Ionics, 2006, 177, 2087-2091.	1.3	19
36	Rutile-type dense ceramics fabricated by pressureless sintering of Ti _{1-x} Ru _x O ₂ powders prepared by sol-gel. Journal of the European Ceramic Society, 2007, 27, 2369-2376.	2.8	18

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37	Mixed conductivity, structural and microstructural characterization of titania-doped yttria tetragonal zirconia polycrystalline/titania-doped yttria stabilized zirconia composite anode matrices. <i>Journal of Solid State Chemistry</i> , 2011, 184, 365-372.	1.4	18
38	Synthesis and Characterization of Anatase-Structured Titania Hollow Spheres Doped with Erbium (Er^{3+}). <i>Journal of the American Ceramic Society</i> , 2012, 95, 3005-3011.	1.9	18
39	TPR studies on Ni-CGO composites prepared by combustion synthesis. <i>Ceramics International</i> , 2014, 40, 3469-3475.	2.3	18
40	Electrophoretic Deposition of $\text{TiO}_2/\text{Er}^{3+}$ Nanoparticulate Sols. <i>Journal of Physical Chemistry B</i> , 2013, 117, 1556-1562.	1.2	17
41	Thermal evolution, second phases, and sintering behavior of $\text{LaPO}_4 \cdot n\text{H}_2\text{O}$ nanorods prepared by two different chemical synthesis routes. <i>Ceramics International</i> , 2015, 41, 8080-8092.	2.3	17
42	Nanometric Sr-Doped LaPO_4 Monazite: Synthesis by Mechanical Milling, Characterization, and Water Incorporation on its Structure. <i>Journal of the American Ceramic Society</i> , 2010, 93, 393-398.	1.9	16
43	Ni-doped lanthanum gallate perovskites: Synthesis and structural, microstructural, and electrical characterisation. <i>Solid State Ionics</i> , 2011, 182, 76-81.	1.3	16
44	Effect of the RE (RE=Eu, Er) doping on the structural and textural properties of mesoporous TiO_2 thin films obtained by evaporation induced self-assembly method. <i>Thin Solid Films</i> , 2014, 558, 140-148.	0.8	16
45	Colloidal processing and sintering of porous percolative Ni-YSZ layers. <i>Journal of Membrane Science</i> , 2010, 352, 55-62.	4.1	15
46	Synthesis and characterization of $\text{TiO}_2/\text{Rh}^{3+}$ nanoparticulate sols, xerogels and cryogels for photocatalytic applications. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 63, 408-415.	1.1	15
47	Effect of Er^{3+} doping on the thermal stability of TiO_2 nanoparticulate xerogels. <i>Journal of Nanoparticle Research</i> , 2013, 15, 1.	0.8	15
48	Understanding the molecular basics behind catalyst shaping: Preparation of suspensions of vanadium-aluminum mixed (hydr)oxides. <i>Applied Catalysis A: General</i> , 2013, 468, 190-203.	2.2	15
49	Impedance spectroscopy studies of orthorhombic FeNbO_4 . <i>Journal of Materials Science</i> , 1996, 31, 2043-2046.	1.7	14
50	Fabrication of Sr- and Co-doped lanthanum chromite interconnectors for SOFC. <i>Materials Research Bulletin</i> , 2011, 46, 983-986.	2.7	14
51	$\text{TiO}_2/\text{Eu}^{3+}$ Thin Films with High Photoluminescence Emission Prepared by Electrophoretic Deposition from Nanoparticulate Sols. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 5152-5159.	1.0	14
52	Effect of titania doping and sintering temperature on titanium local environment and electrical conductivity of YSZ. <i>Journal of Alloys and Compounds</i> , 2016, 689, 512-524.	2.8	14
53	Structural-microstructural characterization and optical properties of $\text{Eu}^{3+}, \text{Tb}^{3+}$ -codoped $\text{LaPO}_4 \cdot n\text{H}_2\text{O}$ and LaPO_4 nanorods hydrothermally synthesized with microwaves. <i>Ceramics International</i> , 2018, 44, 11993-12001.	2.3	14
54	Mesoporous Fe_2O_3 membranes as proton conductors: Synthesis by microwave-assisted sol-gel route and effect of their textural characteristics on water uptake and proton conductivity. <i>Microporous and Mesoporous Materials</i> , 2012, 161, 123-133.	2.2	13

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55	Strontium and cobalt doped-lanthanum chromite: Characterisation of synthesised powders and sintered materials. <i>Ceramics International</i> , 2015, 41, 1177-1187.	2.3	13
56	Preparation and characterization of gels of the ZrO_2 - Y_2O_3 - RuO_2 system. <i>Journal of Non-Crystalline Solids</i> , 1997, 217, 48-54.	1.5	12
57	PhysicoChemical Characterization of Strontium and Cobalt Doped Lanthanum Chromite Powders Produced by Combustion Synthesis. <i>International Journal of Applied Ceramic Technology</i> , 2009, 6, 626-635.	1.1	12
58	Structural and Photoluminescence Study of Eu^{3+}/TiO_2 Xerogels as a Function of the Temperature Using Optical Techniques. <i>Journal of the American Ceramic Society</i> , 2015, 98, 338-345.	1.9	12
59	Preparation and Electrical Characterization of Ruthenia-Doped Yttria-Stabilized Zirconia Ceramics. <i>Journal of Solid State Chemistry</i> , 1998, 141, 282-289.	1.4	11
60	Microwave Assisted Hydrothermal Synthesis of Single Crystal Nanorods of Rhabdophane type Sr -doped $LaPO_4 \cdot nH_2O$. <i>Journal of the American Ceramic Society</i> , 2014, 97, 750-758.	1.9	11
61	Preparation, thermal and phase evolution and functional properties of non-stoichiometric strontium-doped lanthanum manganite perovskite ceramics. <i>Journal of the European Ceramic Society</i> , 2017, 37, 3527-3533.	2.8	11
62	Influence of Nd^{3+} Doping on the Structure, Thermal Evolution and Photoluminescence Properties of Nanoparticulate TiO_2 Xerogels. <i>Journal of Alloys and Compounds</i> , 2020, 819, 152972.	2.8	11
63	Impact of Tb^{4+} and morphology on the thermal evolution of Tb -doped TiO_2 nanostructured hollow spheres and nanoparticles. <i>Journal of Alloys and Compounds</i> , 2021, 853, 156973.	2.8	11
64	Proton transport, water uptake and hydrogen permeability of nanoporous hematite ceramic membranes. <i>Journal of Power Sources</i> , 2011, 196, 8280-8285.	4.0	10
65	Manufacture of a non-stoichiometric LSM cathode SOFC material by aqueous tape casting. <i>Journal of the European Ceramic Society</i> , 2013, 33, 1137-1143.	2.8	10
66	Surface behaviour and stability of strontium and cobalt doped-lanthanum chromite powders in water. <i>Solid State Ionics</i> , 2009, 180, 71-75.	1.3	9
67	Synthesis and dispersion of yttria-stabilized zirconia (YSZ) nanoparticles in supercritical water. <i>Materials Chemistry and Physics</i> , 2012, 134, 451-458.	2.0	9
68	Raman characterization and photoluminescence properties of $La_{1-x}Tb_xPO_4 \cdot nH_2O$ and $La_{1-x}Tb_xPO_4$ phosphor nanorods prepared by microwave-assisted hydrothermal synthesis. <i>Ceramics International</i> , 2017, 43, 10840-10847.	2.3	9
69	Ceramic conductors for electrochemical cell applications: new perspectives in materials and synthesis. <i>Solid State Ionics</i> , 2000, 135, 365-372.	1.3	8
70	Synthesis and characterisation of a green $NiO/La(Sr)PO_4$ cermet anode for phosphate based solid oxide fuel cells. <i>Journal of the European Ceramic Society</i> , 2007, 27, 4237-4240.	2.8	8
71	Evidencing early pyrochlore formation in rare-earth doped TiO_2 nanocrystals: Structure sensing via VIS and NIR Er^{3+} light emission. <i>Journal of Alloys and Compounds</i> , 2018, 735, 2267-2274.	2.8	8
72	Thick film cermet of ZrO_2 - Y_2O_3 - TiO_2/Ni : anodic polarization study. <i>Journal of the European Ceramic Society</i> , 1999, 19, 143-148.	2.8	7

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73	Effects of humidity on the electrical behaviour of Sr _{0.97} Ti _{0.97} Fe _{0.03} O _{3-δ} . Journal of the European Ceramic Society, 1999, 19, 769-772.	2.8	7
74	Proton conductivity in nanopore silica xerogels. Ionics, 2003, 9, 207-213.	1.2	7
75	Magnetic studies on Sr _{0.8} Ce _{0.1} Fe _{0.7} Co _{0.3} O _{3-δ} perovskite. Solid State Sciences, 2006, 8, 444-449.	1.5	7
76	Relationships between structural and electrical properties in mixed conductors duplex materials in the ZrO ₂ -Y ₂ O ₃ system. Journal of Materials Chemistry, 1998, 8, 1047-1052.	1.1	7
77	Effect of Tb ³⁺ doping and self-generated pressure on the crystallographic/morphological features and thermal stability of LaPO ₄ ·nH ₂ O single-crystal nanorods obtained by microwave-assisted hydrothermal synthesis. Ceramics International, 2016, 42, 18074-18086.	2.3	7
78	Proton conductivity of nanoporous anatase xerogels prepared by a particulate sol-gel method. Journal of Solid State Electrochemistry, 2006, 10, 54-59.	1.2	6
79	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
80	Preparation of nanostructured TiO ₂ 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
81	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
82	Textural characteristics, degree of protonation, water uptake and proton transport properties relationships in colloidal sol-gel derived micro- and mesoporous silica membranes. International Journal of Hydrogen Energy, 2016, 41, 5748-5757.	3.8	5
83	Preparation and Characterization of High Porosity SiO ₂ Xerogels for Low ϵ Dielectrics. Materials Research Society Symposia Proceedings, 1999, 565, 211.	0.1	4
84	An interplay between electronic and structural effects on the photoluminescence decay mechanisms in LaPO ₄ ·nH ₂ O:Tb ³⁺ and LaPO ₄ ·nH ₂ O:Tb ³⁺ single-crystal nanorods. Journal of Materials Chemistry C, 2018, 6, 12643-12651.	2.7	4
85	La _{2-x} Sr _x NiO ₄ ; Ceramic Powders Prepared by Combustion Synthesis. Key Engineering Materials, 2002, 206-213, 155-158.	0.4	2
86	Thin Films of Europium (III) Doped-TiO ₂ Prepared by Electrophoretic Deposition from Nanoparticulate Sols. Key Engineering Materials, 2012, 507, 73-77.	0.4	2
87	Effect of Sr ²⁺ doping on sintering behavior, microstructural development and electrical properties of LaPO ₄ ·nH ₂ O nanorods prepared by dry-mechanical milling. International Journal of Hydrogen Energy, 2018, 43, 13462-13474.	3.8	2
88	Effect of sintering under CO+N ₂ /H ₂ and CO ₂ +air atmospheres on the physicochemical features of a commercial nano-YSZ. Journal of Alloys and Compounds, 2022, 904, 163976.	2.8	2
89	Evaluation of Titania Doped YSZ for SOFC Anodes. ECS Proceedings Volumes, 1993, 1993-4, 523-532.	0.1	1
90	Combustion Synthesis of La _{2-x} Ca _x NiO ₄ . Ceramic Powders. Key Engineering Materials, 2001, 206-213, 151-154.	0.4	1

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91	Synthesis and Characterization of Nanoparticulate Sols of TiO ₂ Doped with Erbium (III) for Photoinduced Applications. Materials Research Society Symposia Proceedings, 2012, 1442, 59.	0.1	1
92	Estudios de materiales de cÃ¡todos hÃ¡bridos y Ã¡nodos vÃ¡treos. CaracterizaciÃ³n en celdas de ion litio. Boletín De La Sociedad Espanola De Ceramica Y Vidrio, 2002, 41, 115-121.	0.9	1
93	Manufacture of YSZ-LSM Semi-Cell by Colloidal Processing. Materials Science Forum, 2012, 727-728, 746-751.	0.3	0
94	InfluÃªncia da atmosfera na sinterizaÃ§Ã£o do cromito de lantÃ¢nio dopado. Ceramica, 2013, 59, 366-371.	0.3	0
95	Comportamento reolÃ³gico de suspensÃµes aquosas de cromito de lantÃ¢nio. Ceramica, 2011, 57, 237-243.	0.3	0