JosÃ© Manuel Amarilla

List of Publications by Year
in descending order

70 papers	2,558 citations	159585 30 h-index	197818 49 g-index
75 all docs	75 docs citations	75 times ranked	3528 citing authors

#	Article	IF	Citations
1	Amorphous Carbon Nanofibers and Their Activated Carbon Nanofibers as Supercapacitor Electrodes. Journal of Physical Chemistry C, 2010, 114, 10302-10307.	3.1	240
2	Macroporous 3D Architectures of Self-Assembled MWCNT Surface Decorated with Pt Nanoparticles as Anodes for a Direct Methanol Fuel Cell. Journal of Physical Chemistry C, 2007, 111, 5557-5560.	3.1	132
3	High Temperature Co-doped LiMn2O4-Based Spinels. Structural, Electrical, and Electrochemical Characterization. Chemistry of Materials, 2002, 14, 1598-1605.	6.7	112
4	Chromium doping as a new approach to improve the cycling performance at high temperature of 5V LiNi0.5Mn1.5O4-based positive electrode. Journal of Power Sources, 2008, 185, 501-511.	7.8	111
5	Synthesizing nanocrystalline LiMn2O4 by a combustion route. Journal of Materials Chemistry, 2002, 12, 1184-1188.	6.7	109
6	Nanosize LiNiyMn2 ? yO4 (0 < y ? 0.5) spinels synthesized by a sucrose-aided combustion method. Characterization and electrochemical performance. Journal of Materials Chemistry, 2004, 14, 1640.	6.7	93
7	Understanding RuO2Â·xH2O/carbon nanofibre composites as supercapacitor electrodes. Journal of Power Sources, 2008, 176, 417-425.	7.8	82
8	PPO15-PEO22-PPO15 block copolymer assisted synthesis of monolithic macro- and microporous carbon aerogels exhibiting high conductivity and remarkable capacitance. Journal of Materials Chemistry, 2009, 19, 1236.	6.7	82
9	Ruthenium oxide/carbon composites with microporous or mesoporous carbon as support and prepared by two procedures. A comparative study as supercapacitor electrodes. Electrochimica Acta, 2009, 54, 2239-2245.	5.2	72
10	Sucrose-aided combustion synthesis of nanosized LiMn1.99âˆ’yLiyM0.01O4 (M=Al3+, Ni2+, Cr3+, Co3+,) Tj ETQq0 0 0 rgBT /Overlock 1	7.8	66
11	The role of particle size on the electrochemical properties at 25 and at 55Â°C of the LiCr0.2Ni0.4Mn1.4O4 spinel as 5V-cathode materials for lithium-ion batteries. Electrochimica Acta, 2009, 54, 7542-7550.	5.2	63
12	Influence of the synthesis method on the electrochemical properties of the Li4Ti5O12 spinel in Li-half and Li-ion full-cells. A systematic comparison. Electrochimica Acta, 2013, 93, 163-172.	5.2	61
13	Multifunctional Response of Anatase Nanostructures Based on 25 nm Mesocrystalâ€Like Porous Assemblies. Advanced Materials, 2011, 23, 4904-4907.	21.0	59
14	Sub-micrometric LiCr0.2Ni0.4Mn1.4O4 spinel as 5V-cathode material exhibiting huge rate capability at 25 and 55Â°C. Electrochemistry Communications, 2010, 12, 548-552.	4.7	54
15	LiMn2O4-based composites processed by a chemical-route Microstructural, electrical, electrochemical, and mechanical characterization. Journal of Power Sources, 2003, 115, 315-322.	7.8	52
16	Nanosized LiMYMn2âˆ’YO4 (M=Cr, Co and Ni) spinels synthesized by a sucrose-aided combustion method. Journal of Power Sources, 2007, 174, 1212-1217.	7.8	50
17	Computational Investigation of Li Insertion in Li₃VO₄. Chemistry of Materials, 2016, 28, 5643-5651.	6.7	50
18	Antimonic acid and sulfonated polystyrene proton-conducting polymeric composites. Solid State Ionics, 2000, 127, 133-139.	2.7	48

#	Article	IF	Citations
19	TiO₂ Nanostructures as Anode Materials for Li/Naâ€ion Batteries. Chemical Record, 2018, 18, 1178-1191.	5.8	47
20	Electrochemical characteristics of cobalt-doped LiCoyMn2âˆ'yO4 (0â‰yâ‰0.66) spinels synthesized at low temperature from CoxMn3âˆ'xO4 precursors. Solid State Ionics, 2000, 127, 73-81.	2.7	45
21	Understanding the sucrose-assisted combustion method: Effects of the atmosphere and fuel amount on the synthesis and electrochemical performances of LiNi0.5Mn1.5O4 spinel. Journal of Power Sources, 2011, 196, 5951-5959.	7.8	45
22	Iron oxide porous nanorods with different textural properties and surface composition: Preparation, characterization and electrochemical lithium storage capabilities. Journal of Power Sources, 2011, 196, 2164-2170.	7.8	41
23	Aerosol-Assisted Synthesis of Colloidal Aggregates with Different Morphology: Toward the Electrochemical Optimization of Li₃VO₄ Battery Anodes Using Scalable Routes. Chemistry of Materials, 2016, 28, 986-993.	6.7	41
24	LiCr0.2Ni0.4Mn1.4O4 spinels exhibiting huge rate capability at 25 and 55Â°C: Analysis of the effect of the particle size. Journal of Power Sources, 2011, 196, 10222-10227.	7.8	40
25	Influence of KOH concentration on the Î³-MnO2 redox mechanism. Electrochimica Acta, 1994, 39, 2321-2331.	5.2	38
26	Combustion synthesis of nanocrystalline LiNiYCo1âˆ'2YMn1+YO4 spinels for 5V cathode materials. Journal of Power Sources, 2006, 160, 529-535.	7.8	35
27	RuO2Â·xH2O/NiO composites as electrodes for electrochemical capacitors. Electrochimica Acta, 2006, 51, 4693-4700.	5.2	35
28	A Procedure for Evaluating the Capacity Associated with Battery-Type Electrode and Supercapacitor-Type One in Composite Electrodes. Journal of the Electrochemical Society, 2018, 165, A4034-A4040.	2.9	34
29	Additive-free Li₄Ti₅O₁₂ thick electrodes for Li-ion batteries with high electrochemical performance. Journal of Materials Chemistry A, 2018, 6, 5952-5961.	10.3	33
30	Effect of thermal treatment used in the solâ€"gel synthesis of Li 4 Ti 5 O 12 spinel on its electrochemical properties as anode for lithium ion batteries. Electrochimica Acta, 2015, 163, 213-222.	5.2	32
31	Lithium-niobium vanadium oxide and lithium-tantalum vanadium oxide, MVO5, bronzes. Chemistry of Materials, 1992, 4, 62-67.	6.7	30
32	Amorphous carbon nanofibres inducing high specific capacitance of deposited hydrous ruthenium oxide. Electrochimica Acta, 2009, 54, 7452-7457.	5.2	29
33	On the LiCo2/3Ni1/6Mn1/6O2 positive electrode material. Electrochimica Acta, 2011, 56, 4081-4086.	5.2	29
34	Effect of the Thermal Treatment on the Particle Size and Electrochemical Response of LiCr[sub 0.2]Mn[sub 1.8]O[sub 4] Spinel. Journal of the Electrochemical Society, 2005, 152, A301.	2.9	28
35	Asymmetrical imidazolium-trialkylammonium room temperature dicationic ionic liquid electrolytes for Li-ion batteries. Electrochimica Acta, 2018, 280, 171-180.	5.2	26
36	Synthesis and characterization of the new mixed oxide NbVO5. Materials Letters, 1989, 8, 132-136.	2.6	24

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37	Porous inorganic nanostructures with colloidal dimensions: synthesis and applications in electrochemical energy devices. Chemical Communications, 2014, 50, 2077-2088.	4.1	24
38	Effects of architecture on the electrochemistry of binder-free inverse opal carbons as Liâ€“air cathodes in an ionic liquid-based electrolyte. Journal of Materials Chemistry A, 2013, 1, 14270.	10.3	23
39	Electrochemical response in aprotic ionic liquid electrolytes of TiO2 anatase anodes based on mesoporous mesocrystals with uniform colloidal size. Journal of Power Sources, 2015, 273, 368-374.	7.8	22
40	Thermal evolution of infrared vibrational properties ofLi4/3Ti5/3O4measured by specular reflectance. Physical Review B, 2000, 62, 12062-12068.	3.2	21
41	Cation distribution and phase transformations in LiMn2âˆ'yTiyO4 solid solutions. Solid State Sciences, 2005, 7, 277-286.	3.2	21
42	LixNi0.7Co0.3O2 electrode material: Structural, physical and electrochemical investigations. Electrochimica Acta, 2008, 53, 5266-5271.	5.2	21
43	Chemical vs. electrochemical extraction of lithium from the Li-excess Li1.10Mn1.90O4 spinel followed by NMR and DRX techniques. Physical Chemistry Chemical Physics, 2014, 16, 3282.	2.8	20
44	Atomic Level Study of LiMn2O4 as Electrode in Lithium Batteries. ChemPhysChem, 2002, 3, 367-370.	2.1	19
45	51V and 93Nb high resolution NMR study of NbVO5. Journal of Materials Research, 1991, 6, 393-400.	2.6	18
46	Effect of composition, sonication and pressure on the rate capability of 5V-LiNi0.5Mn1.5O4 composite cathodes. Electrochimica Acta, 2013, 108, 175-181.	5.2	16
47	Organosilicic membranes doped with crown-ethers. Journal of Materials Chemistry, 1993, 3, 687-688.	6.7	15
48	Lithium-deficient LiYMn2O4 spinels (0.9â‰Y<1): Lithium content, synthesis temperature, thermal behaviour and electrochemical properties. Electrochimica Acta, 2006, 51, 3193-3201.	5.2	13
49	The design and study of new Li-ion full cells of LiCo2/3Ni1/6Mn1/6O2 positive electrode paired with MnSn2 and Li4Ti5O12 negative electrodes. Solid State Ionics, 2017, 300, 175-181.	2.7	13
50	Electrochemical reduction of Î²î—¸MnO2, ramsdellite, Î³- and Îµî—¸MnO2. Solid State Ionics, 1994, 70-71, 649-653.	2.7	12
51	TayNb1âˆ'yVO5 (0<y<1) mixed oxides synthesized by solâ€“gel method: electrochemical Li+-insertion. Catalysis Today, 2003, 78, 571-579.	4.4	11
52	Composition and structure of acid leached LiMn2âˆ'yTiyO4 (0.2â‰yâ‰1.5) spinels. Journal of Solid State Chemistry, 2009, 182, 3226-3231.	2.9	11
53	Toward a Better Understanding and Optimization of the Electrochemical Activity of Na-Ion TiO₂ Anatase Anodes Using Uniform Nanostructures and Ionic Liquid Electrolytes. ACS Omega, 2017, 2, 3647-3657.	3.5	11
54	High-temperature thermal behaviour of Cr-Doped LiMn2O4 spinels synthesized by the sucrose-aided combustion method. Journal of Thermal Analysis and Calorimetry, 2007, 90, 67-72.	3.6	10

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55	A New Family of Bismuth-Based Oxide Materials:Â Bi2-2xUxLaxO(3+3x/2)(0.333 â‰¥xâ‰¥ 0.038):Â Synthesis, Characterization, and Phase Transformations on Aging. Chemistry of Materials, 1996, 8, 401-407.	6.7	9
56	Operando monitoring the nanometric morphological evolution of TiO2 nanoparticles in a Na-ion battery. Materials Today Energy, 2018, 10, 23-27.	4.7	9
57	TaxNb1â^’xVO5 (0 < x < 1) ternary oxides: Synthesis by sol-gel and structural characterization. Journal of Solid State Chemistry, 1992, 99, 258-266.	2.9	8
58	Preparation, Characterization, and Thermal Behavior of a New High Oxide Ion Conductor: Bismuth Uranium Lanthanum Oxide. Chemistry of Materials, 1995, 7, 341-347.	6.7	7
59	Study of the structural and thermal stability of Li0.3Co2/3Ni1/6Mn1/6O2. Electrochimica Acta, 2014, 135, 536-542.	5.2	7
60	Differential scanning calorimetry an essential tool to characterize LiMn2O4 spinel. Journal of Thermal Analysis and Calorimetry, 2003, 73, 191-200.	3.6	6
61	The cubic BiULaO mixed oxide: Synthesis, structural characterization, thermal stability and electrical properties. Solid State Ionics, 2005, 176, 2313-2318.	2.7	6
62	Surfactant-Free Vanadium Oxides from Reverse Micelles and Organic Oxidants: Solution Processable Nanoribbons with Potential Applicability as Battery Insertion Electrodes Assembled in Different Configurations. Langmuir, 2015, 31, 12489-12496.	3.5	6
63	Highâ€performance Liâ€ion Battery based on Crâ€Substituted Lithium Manganite and Lithium Titanate Spinels: Influence of Mass Balance on its Electrochemistry. Energy Technology, 2017, 5, 725-731.	3.8	6
64	Electrochemical Activity of Natural and Synthetic Manganese Dioxides. Materials Research Society Symposia Proceedings, 1994, 369, 87.	0.1	5
65	Polymorphism, Phase Transformations, and Oxide Ion Conductivity in Bi1.56U0.22La0.22O3.33. Chemistry of Materials, 1998, 10, 574-580.	6.7	5
66	Dissimilar Crystal Dependence of Vanadium Oxide Cathodes in Organic Carbonate and Safe Ionic Liquid Electrolytes. ACS Applied Materials & Interfaces, 2016, 8, 2132-2141.	8.0	5
67	Ionic Conductivity and Structural Phase Transformations for Hexagonal and Cubic Bi1.33U0.33La0.33O3.5Polymorphs. Chemistry of Materials, 1997, 9, 1262-1267.	6.7	4
68	Structural study of the trigonal Bi2.34U0.33La0.33O5 oxide ion conductor: Rietveld refinement of X-ray and neutron powder diffraction data. Journal of the Chemical Society Dalton Transactions, 1999, , 1137-1142.	1.1	3
69	Tailored 3D Foams Decorated with Nanostructured Manganese Oxide for Asymmetric Electrochemical Capacitors. Journal of the Electrochemical Society, 2022, 169, 020511.	2.9	2
70	OptimizaciÃ³n de espinelas LiCo_yMn_{2-y}O₄ para electrodos positivos de baterÃas recargables de ion-litio mediante ajuste del dopado y de la temperatura de sÃntesis. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2004, 43, 127-131.	1.9	1