Nataly C Rosero-Navarro

List of Publications by Year
in descending order

82 papers	2,587 citations	136950 32 h-index	197818 49 g-index
83 all docs	83 docs citations	83 times ranked	2743 citing authors

#	Article	IF	Citations
1	Liquid-phase syntheses of sulfide electrolytes for all-solid-state lithium battery. Nature Reviews Chemistry, 2019, 3, 189-198.	30.2	238
2	Effects of Ce-containing solâ€“gel coatings reinforced with SiO2 nanoparticles on the protection of AA2024. Corrosion Science, 2008, 50, 1283-1291.	6.6	156
3	Nanostructured Bacterial Celluloseâ€“Poly(4-styrene sulfonic acid) Composite Membranes with High Storage Modulus and Protonic Conductivity. ACS Applied Materials & Interfaces, 2014, 6, 7864-7875.	8.0	81
4	Instantaneous preparation of high lithium-ion conducting sulfide solid electrolyte Li₇P₃S₁₁ by a liquid phase process. RSC Advances, 2017, 7, 46499-46504.	3.6	79
5	SiO2 based hybrid inorganicâ€“organic films doped with TiO2â€“CeO2 nanoparticles for corrosion protection of AA2024 and Mg-AZ31B alloys. Corrosion Science, 2009, 51, 1998-2005.	6.6	77
6	Effect of Sintering Additives on Relative Density and Liâ€ion Conductivity of Nbâ€Doped Li₇La₃ZrO₁₂ Solid Electrolyte. Journal of the American Ceramic Society, 2017, 100, 276-285.	3.8	76
7	Liquid-phase synthesis of Li6PS5Br using ultrasonication and application to cathode composite electrodes in all-solid-state batteries. Ceramics International, 2018, 44, 742-746.	4.8	75
8	Electrochemical performance of a garnet solid electrolyte based lithium metal battery with interface modification. Journal of Materials Chemistry A, 2018, 6, 21018-21028.	10.3	71
9	Electrochemical techniques for practical evaluation of corrosion inhibitor effectiveness. Performance of cerium nitrate as corrosion inhibitor for AA2024T3 alloy. Corrosion Science, 2010, 52, 3356-3366.	6.6	70
10	Preparation of Li7La3(Zr2â˜,Nb)O12 (x= 0â€“1.5) and Li3BO3/LiBO2 composites at low temperatures using a solâ€“gel process. Solid State Ionics, 2016, 285, 6-12.	2.7	65
11	Improved corrosion resistance of AA2024 alloys through hybrid organicâ€“inorganic solâ€“gel coatings produced from sols with controlled polymerisation. Surface and Coatings Technology, 2009, 203, 1897-1903.	4.8	64
12	Study of the effect of cerium nitrate on AA2024-T3 by means of electrochemical micro-cell technique. Electrochimica Acta, 2012, 70, 25-33.	5.2	64
13	Optimization of hybrid solâ€“gel coatings by combination of layers with complementary properties for corrosion protection of AA2024. Progress in Organic Coatings, 2010, 69, 167-174.	3.9	60
14	Multilayer silica-methacrylate hybrid coatings prepared by solâ€“gel on stainless steel 316L: Electrochemical evaluation. Surface and Coatings Technology, 2008, 202, 2194-2201.	4.8	59
15	Composite cathode prepared by argyrodite precursor solution assisted by dispersant agents for bulk-type all-solid-state batteries. Journal of Power Sources, 2018, 396, 33-40.	7.8	59
16	Preparation of sulfide solid electrolytes in the Li₂Sâ€“P₂S₅ system by a liquid phase process. Inorganic Chemistry Frontiers, 2018, 5, 501-508.	6.0	53
17	Nitrogenâ€Rich Manganese Oxynitrides with Enhanced Catalytic Activity in the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2016, 55, 7963-7967.	13.8	52
18	Effect of the binder content on the electrochemical performance of composite cathode using Li6PS5Cl precursor solution in an all-solid-state lithium battery. Ionics, 2017, 23, 1619-1624.	2.4	52

#	Article	IF	Citations
19	Structural and Electrochemical Evaluation of Three- and Two-Dimensional Organohalide Perovskites and Their Influence on the Reversibility of Lithium Intercalation. Inorganic Chemistry, 2018, 57, 4181-4188.	4.0	51
20	Observing and Modeling the Sequential Pairwise Reactions that Drive Solidâ€State Ceramic Synthesis. Advanced Materials, 2021, 33, e2100312.	21.0	51
21	Active corrosion inhibition of mild steel by environmentally-friendly Ce-doped organicâ€“inorganic solâ€“gel coatings. RSC Advances, 2016, 6, 39577-39586.	3.6	49
22	Protonic conductivity and fuel cell tests of nanocomposite membranes based on bacterial cellulose. Electrochimica Acta, 2017, 233, 52-61.	5.2	49
23	Inhibition effect of cerium in hybrid solâ€“gel films on aluminium alloy AA2024. Surface and Interface Analysis, 2010, 42, 299-305.	1.8	48
24	Preparation of lithium ion conductive Li6PS5Cl solid electrolyte from solution for the fabrication of composite cathode of all-solid-state lithium battery. Journal of Sol-Gel Science and Technology, 2019, 89, 303-309.	2.4	46
25	Protonic Conductivity of Nanocrystalline Zeolitic Imidazolate Framework 8. Electrochimica Acta, 2015, 153, 19-27.	5.2	44
26	Development and industrial scale-up of ZrO2 coatings and hybrid organicâ€“inorganic coatings used as pre-treatments before painting aluminium alloys. Progress in Organic Coatings, 2011, 72, 3-14.	3.9	41
27	Porous ZnV₂O₄ Nanowire for Stable and High-Rate Lithium-Ion Battery Anodes. ACS Applied Nano Materials, 2019, 2, 4247-4256.	5.0	41
28	Electrochemical performance of bulk-type all-solid-state batteries using small-sized Li7P3S11 solid electrolyte prepared by liquid phase as the ionic conductor in the composite cathode. Electrochimica Acta, 2019, 296, 473-480.	5.2	40
29	FePS3 electrodes in all-solid-state lithium secondary batteries using sulfide-based solid electrolytes. Electrochimica Acta, 2017, 241, 370-374.	5.2	37
30	Corrosion protection of aluminium alloy AA2024 with cerium doped methacrylate-silica coatings. Journal of Sol-Gel Science and Technology, 2009, 52, 31-40.	2.4	36
31	Influence of cerium concentration on the structure and properties of silica-methacrylate solâ€“gel coatings. Journal of Sol-Gel Science and Technology, 2010, 54, 301-311.	2.4	36
32	Optimization of Al2O3 and Li3BO3 Content as Sintering Additives of Li7â^'x La2.95Ca0.05ZrTaO12 at Low Temperature. Journal of Electronic Materials, 2017, 46, 497-501.	2.2	34
33	ZrO2 solâ€“gel pre-treatments doped with cerium nitrate for the corrosion protection of AA6060. Progress in Organic Coatings, 2012, 74, 311-319.	3.9	32
34	Chemical stability of Li4PS4I solid electrolyte against hydrolysis. Applied Materials Today, 2021, 22, 100918.	4.3	32
35	Glass-like CexOy solâ€“gel coatings for corrosion protection of aluminium and magnesium alloys. Surface and Coatings Technology, 2011, 206, 257-264.	4.8	31
36	Selective metathesis synthesis of MgCr₂S₄ by control of thermodynamic driving forces. Materials Horizons, 2020, 7, 1310-1316.	12.2	27

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37	Electrochemical evaluation of multilayer silicaâ€“metacrylate hybrid solâ€“gel coatings containing bioactive particles on surgical grade stainless steel. Surface and Coatings Technology, 2008, 203, 80-86.	4.8	26
38	Significant Reduction in the Interfacial Resistance of Garnet-Type Solid Electrolyte and Lithium Metal by a Thick Amorphous Lithium Silicate Layer. ACS Applied Energy Materials, 2020, 3, 5533-5541.	5.1	25
39	Kinetically Stabilized Cation Arrangement in Li₃YCl₆ Superionic Conductor during Solidâ€State Reaction. Advanced Science, 2021, 8, e2101413.	11.2	24
40	Synthesis of sulfide solid electrolytes from Li₂S and P₂S₅ in anisole. Journal of Materials Chemistry A, 2021, 9, 400-405.	10.3	22
41	Protonic conductivity and viscoelastic behaviour of NafionÂ® membranes with periodic mesoporous organosilica fillers. International Journal of Hydrogen Energy, 2014, 39, 5338-5349.	7.1	20
42	Self-Combustion Synthesis of Novel Metastable Ternary Molybdenum Nitrides. , 2019, 1, 64-70.		20
43	Formation Mechanism of Thiophosphate Anions in the Liquid-Phase Synthesis of Sulfide Solid Electrolytes Using Polar Aprotic Solvents. Chemistry of Materials, 2020, 32, 9627-9632.	6.7	20
44	Formation Mechanism of Î²-Li₃PS₄ through Decomposition of Complexes. Inorganic Chemistry, 2021, 60, 6964-6970.	4.0	19
45	Organicâ€“Inorganic Hybrid Materials for Interface Design in All-Solid-State Batteries with a Garnet-Type Solid Electrolyte. ACS Applied Energy Materials, 2020, 3, 11260-11268.	5.1	18
46	Two-Dimensional Hybrid Halide Perovskite as Electrode Materials for All-Solid-State Lithium Secondary Batteries Based on Sulfide Solid Electrolytes. ACS Applied Energy Materials, 2019, 2, 6569-6576.	5.1	17
47	Explosive Reaction for Barium Niobium Perovskite Oxynitride. Inorganic Chemistry, 2018, 57, 24-27.	4.0	16
48	Crystal Structure and Superconductivity of Tetragonal and Monoclinic Ce_{1â€“x}Pr_xOBiS₂. Inorganic Chemistry, 2018, 57, 5364-5370.	4.0	14
49	Synthesis and ionic conductivity of a high-entropy layered hydroxide. Journal of the Ceramic Society of Japan, 2020, 128, 336-339.	1.1	13
50	Mg-Al layered double hydroxide as an electrolyte membrane for aqueous ammonia fuel cell. Materials Research Bulletin, 2019, 119, 110561.	5.2	11
51	Feâ€“Pâ€“S electrodes for all-solid-state lithium secondary batteries using sulfide-based solid electrolytes. Journal of Power Sources, 2020, 449, 227576.	7.8	11
52	Meso-structured organosilicas as fillers for NafionÂ® membranes. Solid State Ionics, 2014, 262, 324-327.	2.7	10
53	Reaction Mechanism of FePS₃ Electrodes in All-Solid-State Lithium Secondary Batteries Using Sulfide-Based Solid Electrolytes. Journal of the Electrochemical Society, 2018, 165, A2948-A2954.	2.9	10
54	Composition, valence and oxygen reduction reaction activity of Mn-based layered double hydroxides. Journal of Asian Ceramic Societies, 2019, 7, 147-153.	2.3	10

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55	Synthesis of highly Li-ion conductive garnet-type solid ceramic electrolytes by solution-process-derived sintering additives. Journal of the European Ceramic Society, 2021, 41, 6767-6771.	5.7	10
56	Impact of Sulfur Infiltration Time and Its Content in an N-doped Mesoporous Carbon for Application in Li-S Batteries. Batteries, 2022, 8, 58.	4.5	9
57	Synthesis, crystal structure and optical absorption of NaInS2-Se. Journal of Alloys and Compounds, 2018, 750, 409-413.	5.5	8
58	Synthesis of submicron-sized NiPS₃ particles and electrochemical properties as active materials in all-solid-state lithium batteries. Journal of the Ceramic Society of Japan, 2018, 126, 568-572.	1.1	8
59	An electronic structure governed by the displacement of the indium site in Inâ€“S₆ octahedra: LnOInS₂ (Ln = La, Ce, and Pr). Dalton Transactions, 2019, 48, 12272-12278.	3.3	8
60	Preparation of Composite Electrodes for All-Solid-State Batteries Based on Sulfide Electrolytes: An Electrochemical Point of View. Batteries, 2021, 7, 77.	4.5	8
61	Multiscale numerical modeling of Ce³⁺-inhibitor release from novel corrosion protection coatings. Modelling and Simulation in Materials Science and Engineering, 2011, 19, 025009.	2.0	7
62	Enhanced hydroxide ion conductivity of Mgâ€“Al layered double hydroxide at low humidity by intercalating dodecyl sulfate anion. Journal of the Ceramic Society of Japan, 2019, 127, 788-792.	1.1	7
63	Catalytic Activity for Oxygen Reduction Reaction of Ni-Mn-Fe Layered Double Hydroxide-Carbon Gel Composite. Chemistry Letters, 2019, 48, 696-699.	1.3	4
64	Kinetic Control of the Li_{0.9}Mn_{1.6}Ni_{0.4}O₄ Spinel Structure with Enhanced Electrochemical Performance. ACS Applied Materials & Interfaces, 2021, 13, 14056-14067.	8.0	4
65	Combustion Reactions between Transition-Metal Chlorides and Sodium Amide and Their Ignition Temperature. Inorganic Chemistry, 2021, 60, 12753-12758.	4.0	4
66	Argyrodite solid electrolyte-coated graphite as anode material for all-solid-state batteries. Journal of Sol-Gel Science and Technology, 2022, 101, 8-15.	2.4	4
67	Graphite/Li7P3S11 composite prepared by â€œseedâ€•process for all-solid-state batteries. Solid State Ionics, 2021, 372, 115789.	2.7	4
68	Preparation of transparent and mechanically hard inorganic-organic hybrid thick films from 3-glycidoxypropyltrimethoxysilane and zirconium propoxide. Journal of Sol-Gel Science and Technology, 2022, 104, 478-483.	2.4	4
69	Electrical properties of pyrochlore-type silver tantalate and fluorite-type silver niobate. Journal of the Ceramic Society of Japan, 2020, 128, 46-50.	1.1	3
70	Two-step liquid-phase synthesis of argyrodite Li6PS5Cl solid electrolyte using nonionic surfactant. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2023, 62, 187-193.	1.9	3
71	Synthesis of LaO_{0.5}F_{0.5}BiS₂ nanosheets by ultrasonification. Journal of Asian Ceramic Societies, 2017, 5, 183-185.	2.3	2
72	Sol-Gel Processing of Solid Electrolytes for Li-Ion Batteries. , 2018, , 2631-2648.		2

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73	Fast dischargeâ€“charge properties of FePS3 electrode for all-solid-state batteries using sulfide electrolytes and its stable diffusion path. Functional Materials Letters, 2021, 14, 2141005.	1.2	2
74	Wet Chemical Processes for the Preparation of Composite Electrodes in All-Solid-State Lithium Battery. , 2021, , 85-92.		1
75	Phase transition, magnetic, and electronic properties of CeOInS₂. Journal of the Ceramic Society of Japan, 2021, 129, 249-253.	1.1	1
76	Ti₄O₇ Used as Electrode in Biomedicine and for Electrochemical Study of Scavenging Mechanism. Key Engineering Materials, 0, 493-494, 896-901.	0.4	0
77	Microwave Fusion of the Composite LiMn1.6Ni0.4O4-LiFePO4 /C to Improve the Stability of Spinel Phase. ECS Meeting Abstracts, 2020, MA2020-01, 398-398.	0.0	0
78	Preparation of Cu3N thin films by nitridation of solution process-derived thin films using urea. Journal of Sol-Gel Science and Technology, 0, , 1.	2.4	0
79	Li2s-P2S5 Solutions for Forming Solid Electrolyte Coating Layers on Electrode Materials for All-Solid-State Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 136-136.	0.0	0
80	Liquid-phase Synthesis of Sulfide Electrolytes and Synthesis Mechanism. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2022, 69, 95-98.	0.2	0
81	Sulfide-Based Solid-State Electrolytes. ACS Symposium Series, 0, , 319-351.	0.5	0
82	Application of sol-gel processes to materials and interfaces in oxide-based all-solid-state batteries. Journal of Sol-Gel Science and Technology, 2022, 103, 680-689.	2.4	0