

# Irune Villaluenga

## List of Publications by Year in descending order

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Version: 2024-02-01

28  
papers

4,318  
citations

516561

16  
h-index

501076

28  
g-index

28  
all docs

28  
docs citations

28  
times ranked

6701  
citing authors

#	ARTICLE	IF	CITATIONS
1	Na-ion batteries, recent advances and present challenges to become low cost energy storage systems. Energy and Environmental Science, 2012, 5, 5884.	15.6	3,078
2	Dispersion and surface functionalization of oxide nanoparticles for transparent photocatalytic and UV-protecting coatings and sunscreens. Science and Technology of Advanced Materials, 2013, 14, 023001.	2.8	252
3	Negative Transference Numbers in Poly(ethylene oxide)-Based Electrolytes. Journal of the Electrochemical Society, 2017, 164, E3569-E3575.	1.3	178
4	Compliant glass-polymer hybrid single ion-conducting electrolytes for lithium batteries. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 52-57.	3.3	108
5	Diffusion and migration in polymer electrolytes. Progress in Polymer Science, 2020, 103, 101220.	11.8	100
6	Negative Stefan-Maxwell Diffusion Coefficients and Complete Electrochemical Transport Characterization of Homopolymer and Block Copolymer Electrolytes. Journal of the Electrochemical Society, 2018, 165, A2766-A2773.	1.3	81
7	Nanoparticle-Driven Assembly of Highly Conducting Hybrid Block Copolymer Electrolytes. Macromolecules, 2015, 48, 358-364.	2.2	71
8	Comparative study on the photocatalytic behaviour of titanium oxide thermal sprayed coatings from powders and suspensions. Surface and Coatings Technology, 2009, 203, 2150-2156.	2.2	65
9	Polymer and composite electrolytes. MRS Bulletin, 2018, 43, 759-767.	1.7	60
10	Cation only conduction in new polymer-SiO <sub>2</sub> nanohybrids: Na <sup>+</sup> electrolytes. Journal of Materials Chemistry A, 2013, 1, 8348.	5.2	57
11	Nanostructured Single-Ion-Conducting Hybrid Electrolytes Based on Salty Nanoparticles and Block Copolymers. Macromolecules, 2017, 50, 1998-2005.	2.2	53
12	Anisotropic Ion Diffusion and Electrochemically Driven Transport in Nanostructured Block Copolymer Electrolytes. Journal of Physical Chemistry B, 2018, 122, 1537-1544.	1.2	39
13	Anomalous Self-Assembly and Ion Transport in Nanostructured Organic-Inorganic Solid Electrolytes. ACS Macro Letters, 2018, 7, 1056-1061.	2.3	27
14	Conductivity of carbonate- and perfluoropolyether-based electrolytes in porous separators. Journal of Power Sources, 2016, 323, 158-165.	4.0	24
15	Crosslinked perfluoropolyether solid electrolytes for lithium ion transport. Solid State Ionics, 2017, 310, 71-80.	1.3	21
16	Structure and Thermodynamics of Hybrid Organic-Inorganic Diblock Copolymers with Salt. Macromolecules, 2019, 52, 3165-3175.	2.2	18
17	Liquid Sulfur Impregnation of Microporous Carbon Accelerated by Nanoscale Interfacial Effects. Nano Letters, 2017, 17, 2517-2523.	4.5	16
18	Reversible Changes in the Grain Structure and Conductivity in a Block Copolymer Electrolyte. Macromolecules, 2020, 53, 5455-5464.	2.2	11

#	ARTICLE	IF	CITATIONS
19	Effect of crystallization of the polyhedral oligomeric silsesquioxane block on self-assembly in hybrid organic-inorganic block copolymers with salt. <i>Giant</i> , 2021, 6, 100055.	2.5	10
20	Formation of disulfonated poly(arylene ether sulfone) thin film desalination membranes plasticized with poly(ethylene glycol) by solvent-free melt extrusion. <i>Polymer</i> , 2017, 109, 106-114.	1.8	9
21	Optimizing the monomer structure of polyhedral oligomeric silsesquioxane for ion transport in hybrid organic-inorganic block copolymers. <i>Journal of Polymer Science</i> , 2020, 58, 363-371.	2.0	8
22	Effect of Yield Stress on Stability of Block Copolymer Electrolytes against Lithium Metal Electrodes. <i>ACS Applied Energy Materials</i> , 2022, 5, 852-861.	2.5	8
23	Ion diffusion across a disorder-to-order phase transition in a poly(ethylene Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 587 Td (oxid) Engineering, 2019, 4, 357-364.	1.7	6
24	Lithium-Sulfur Batteries with a Block Copolymer Electrolyte Analyzed by X-ray Microtomography. <i>Journal of the Electrochemical Society</i> , 2020, 167, 060506.	1.3	5
25	Effect of microphase separation on the limiting current density in hybrid organic-inorganic copolymer electrolytes. <i>Solid State Ionics</i> , 2021, 368, 115702.	1.3	5
26	Synthesis of Pyrrolo[1,2- <i>b</i> ]isoquinolines through Mesityllithium-Mediated Intramolecular Carbolithiation. <i>Synlett</i> , 2008, 2008, 3188-3192.	1.0	4
27	Nanostructured Ionic Separator Formed by Block Copolymer Self-Assembly: A Gateway for Alleviating Concentration Polarization in Batteries. <i>Macromolecules</i> , 2022, 55, 2787-2796.	2.2	3
28	Interplay between Mechanical and Electrochemical Properties of Block Copolymer Electrolytes and its Effect on Stability against Lithium Metal Electrodes. <i>Journal of the Electrochemical Society</i> , 2021, 168, 120546.	1.3	1