

Isabella Nicotera

List of Publications by Year in descending order

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3283
citing authors

#	ARTICLE	IF	CITATIONS
1	NMR Investigation of Ionic Liquid ⁺ LiX Mixtures: \hat{A} Pyrrolidinium Cations and TFSI-Anions. <i>Journal of Physical Chemistry B</i> , 2005, 109, 22814-22819.	1.2	178
2	Graphene ⁺ -Based Nafion Nanocomposite Membranes: Enhanced Proton Transport and Water Retention by Novel Organo ⁺ -functionalized Graphene Oxide Nanosheets. <i>Small</i> , 2012, 8, 3338-3349.	5.2	131
3	Investigation of ionic conduction and mechanical properties of PMMA ⁺ -PVdF blend-based polymer electrolytes ⁺ . <i>Solid State Ionics</i> , 2006, 177, 581-588.	1.3	97
4	Understanding the Effect of UV-Induced Cross-Linking on the Physicochemical Properties of Highly Performing PEO/LiTFSI-Based Polymer Electrolytes. <i>Langmuir</i> , 2019, 35, 8210-8219.	1.6	92
5	Graphene oxide and titania hybrid Nafion membranes for efficient removal of methyl orange dye from water. <i>Carbon</i> , 2015, 82, 489-499.	5.4	86
6	Sulfonated Graphene Oxide Platelets in Nafion Nanocomposite Membrane: Advantages for Application in Direct Methanol Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 24357-24368.	1.5	85
7	Probing membrane and interface properties in concentrated electrolyte solutions. <i>Journal of Membrane Science</i> , 2014, 459, 177-189.	4.1	78
8	Structural changes in CTAB/H ₂ O mixtures using a rheological approach. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 2364.	1.3	75
9	Effect of solution concentration and composition on the electrochemical properties of ion exchange membranes for energy conversion. <i>Journal of Power Sources</i> , 2017, 340, 282-293.	4.0	62
10	An NMR and SAXS investigation of DMFC composite recast Nafion membranes containing ceramic fillers. <i>Journal of Membrane Science</i> , 2006, 270, 221-227.	4.1	58
11	Dynamic phase diagram and onion formation in the system C10E3/D ₂ O. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2003, 228, 85-90.	2.3	51
12	Nafion [®] nanocomposite membranes with enhanced properties at high temperature and low humidity environments. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 22406-22414.	3.8	51
13	Clay ⁺ -Carbon Nanotubes Hybrid Materials for Nanocomposite Membranes: Advantages of Branched Structure for Proton Transport under Low Humidity Conditions in PEMFCs. <i>Journal of Physical Chemistry C</i> , 2016, 120, 2574-2584.	1.5	51
14	Cationic and anionic azo-dye removal from water by sulfonated graphene oxide nanosheets in Nafion membranes. <i>New Journal of Chemistry</i> , 2016, 40, 3654-3663.	1.4	49
15	A study of stability of plasticized PEO electrolytes. <i>Solid State Ionics</i> , 2002, 146, 143-150.	1.3	47
16	Evaluation of smectite clays as nanofillers for the synthesis of nanocomposite polymer electrolytes for fuel cell applications. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 6236-6245.	3.8	47
17	Toxicity Evaluation of Graphene Oxide and Titania Loaded Nafion Membranes in Zebrafish. <i>Frontiers in Physiology</i> , 2017, 8, 1039.	1.3	45
18	NMR Investigation of the Dynamics of Confined Water in Nafion-Based Electrolyte Membranes at Subfreezing Temperatures. <i>Journal of Physical Chemistry B</i> , 2009, 113, 13935-13941.	1.2	44

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19	Temperature dependence of lithium ion solvation in ethylene carbonate/LiClO ₄ solutions. <i>Journal of Chemical Physics</i> , 2003, 118, 5537-5541.	1.2	43
20	Composite polymer electrolyte membranes based on Mg-Al layered double hydroxide (LDH) platelets for H ₂ /air-fed fuel cells. <i>Solid State Ionics</i> , 2015, 276, 40-46.	1.3	41
21	NMR Characterization of Composite Polymer Membranes for Low-Humidity PEM Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2007, 154, B466.	1.3	40
22	Electrochemical investigation of a propane-fed solid oxide fuel cell based on a composite Ni-perovskite anode catalyst. <i>Applied Catalysis B: Environmental</i> , 2009, 89, 49-57.	10.8	38
23	Sulfonated polyethersulfone/polyetheretherketone blend as high performing and cost-effective electrolyte membrane for direct methanol fuel cells. <i>Renewable Energy</i> , 2020, 159, 336-345.	4.3	38
24	Swollen and collapsed lyotropic lamellar rheology. <i>Journal of Colloid and Interface Science</i> , 2008, 321, 459-467.	5.0	37
25	Graphene oxide and sulfonated-derivative: Proton transport properties and electrochemical behavior of Nafion-based nanocomposites. <i>Electrochimica Acta</i> , 2019, 297, 240-249.	2.6	37
26	Highly-performing and low-cost nanostructured membranes based on Polysulfone and layered doubled hydroxide for high-temperature proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2020, 471, 228440.	4.0	37
27	Dynamical Properties of Self-Assembled Surfactant-Based Mixtures: Triggering of One-Dimensional Anomalous Diffusion in Bis(2-ethylhexyl)phosphoric Acid/n-Octylamine Systems. <i>Langmuir</i> , 2013, 29, 14848-14854.	1.6	36
28	A Novel Li-Nafion-Sulfonated Graphene Oxide Membrane as Single Lithium-Ion Conducting Polymer Electrolyte for Lithium Batteries. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27406-27416.	1.5	36
29	Effective Improvement of Water-Retention in Nanocomposite Membranes Using Novel Organo-Modified Clays as Fillers for High Temperature PEMFCs. <i>Journal of Physical Chemistry B</i> , 2011, 115, 9087-9097.	1.2	35
30	Barrier properties of sulfonated polysulfone/layered double hydroxides nanocomposite membrane for direct methanol fuel cell operating at high methanol concentrations. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 20647-20658.	3.8	35
31	An NMR spectroscopic study of water and methanol transport properties in DMFC composite membranes: Influence on the electrochemical behaviour. <i>Journal of Power Sources</i> , 2006, 163, 52-55.	4.0	34
32	Simplified All-Solid-State WO ₃ Based Electrochromic Devices on Single Substrate: Toward Large Area, Low Voltage, High Contrast, and Fast Switching Dynamics. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901663.	1.9	33
33	Advances in hybrid composite membranes engineering for high-performance direct methanol fuel cells by alignment of 2D nanostructures and a dual-layer approach. <i>Journal of Membrane Science</i> , 2020, 599, 117858.	4.1	33
34	Investigation of layered double hydroxide (LDH) Nafion-based nanocomposite membranes for high temperature PEFCs. <i>Energy Conversion and Management</i> , 2015, 96, 39-46.	4.4	32
35	Composite Gel Polymer Electrolytes Based on Organo-Modified Nanoclays: Investigation on Lithium-Ion Transport and Mechanical Properties. <i>Membranes</i> , 2018, 8, 69.	1.4	32
36	Enhanced safety and galvanostatic performance of high voltage lithium batteries by using ionic liquids. <i>Electrochimica Acta</i> , 2019, 316, 1-7.	2.6	32

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37	Influence of membrane-type and flow field design on methanol crossover on a single-cell DMFC: An experimental and multi-physics modeling study. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 27995-28010.	3.8	31
38	Autonomous Self-Healing Strategy for Stable Sodium-Ion Battery: A Case Study of Black Phosphorus Anodes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 13170-13182.	4.0	31
39	Enhancement of proton mobility and mitigation of methanol crossover in sPEEK fuel cells by an organically modified titania nanofiller. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 1585-1598.	1.2	30
40	Ion Dynamics and Mechanical Properties of Sulfonated Polybenzimidazole Membranes for High-Temperature Proton Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9745-9753.	1.5	28
41	Reduced methanol crossover and enhanced proton transport in nanocomposite membranes based on clay-CNTs hybrid materials for direct methanol fuel cells. <i>Ionics</i> , 2017, 23, 2113-2123.	1.2	28
42	Advanced processing and characterization of Nafion electrolyte films for solid-state electrochromic devices fabricated at room temperature on single substrate. <i>Solid State Ionics</i> , 2018, 317, 46-52.	1.3	28
43	Polysulfone and organo-modified graphene oxide for new hybrid proton exchange membranes: A green alternative for high-efficiency PEMFCs. <i>Electrochimica Acta</i> , 2021, 380, 138214.	2.6	28
44	NMR investigation of water and methanol mobility in nanocomposite fuel cell membranes. <i>Ionics</i> , 2008, 14, 243-253.	1.2	27
45	Methanol and proton transport in layered double hydroxide and smectite clay-based composites: influence on the electrochemical behavior of direct methanol fuel cells at intermediate temperatures. <i>Journal of Solid State Electrochemistry</i> , 2015, 19, 2053-2061.	1.2	26
46	NMR investigation on nanocomposite membranes based on organosilica layered materials bearing different functional groups for PEMFCs. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 27940-27949.	3.8	26
47	Shear rheology and phase behaviour of sodium oleate/water mixtures. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 297, 95-104.	2.3	25
48	NMR and Electrochemical Investigation of the Transport Properties of Methanol and Water in Nafion and Clay-Nanocomposites Membranes for DMFCs. <i>Membranes</i> , 2012, 2, 325-345.	1.4	25
49	An NMR study on the molecular dynamic and exchange effects in composite Nafion/sulfated titania membranes for PEMFCs. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 14651-14660.	3.8	25
50	Non-Monotonic Temperature Dependence of Hydroxide Ion Diffusion in Anion Exchange Membranes. <i>Chemistry of Materials</i> , 2022, 34, 2133-2145.	3.2	25
51	Electrochemical behaviour of propane-fed solid oxide fuel cells based on low Ni content anode catalysts. <i>Electrochimica Acta</i> , 2009, 54, 5280-5285.	2.6	23
52	Highly stable surfactant-crumb rubber-modified bitumen: NMR and rheological investigation. <i>Road Materials and Pavement Design</i> , 2018, 19, 1192-1202.	2.0	23
53	A facile approach to fabricating organosilica layered material with sulfonic groups as an efficient filler for polymer electrolyte nanocomposites. <i>New Journal of Chemistry</i> , 2017, 41, 9489-9496.	1.4	22
54	Toward optimization of a robust low-cost sulfonated polyethersulfone containing layered double hydroxide for PEM fuel cells. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47884.	1.3	22

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55	Temperature evolution of thermoreversible polymer gel electrolytes LiClO ₄ /ethylene carbonate/poly(acrylonitrile). <i>Journal of Chemical Physics</i> , 2002, 117, 7373-7380.	1.2	21
56	Evidence of Formation of Ammonium Perfluorononanoate/2H ₂ O Multilamellar Vesicles: Morphological Analysis by Rheology and Rheo-2H NMR Experiments. <i>Langmuir</i> , 2010, 26, 19060-19065.	1.6	21
57	Assessment of commercial poly(ϵ -caprolactone) as a renewable candidate for carbon capture and utilization. <i>Journal of CO₂ Utilization</i> , 2017, 19, 185-193.	3.3	20
58	Solution and Liquid Crystalline Microstructures in Sodium Taurodeoxycholate/D ₂ O Mixtures. <i>Langmuir</i> , 2003, 19, 1990-1999.	1.6	19
59	Sulfated titania as additive in Nafion membranes for water electrolysis applications. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 27851-27858.	3.8	19
60	Some physicochemical properties of PAN-based electrolytes: solution and gel microstructures. <i>Solid State Ionics</i> , 2004, 167, 213-220.	1.3	18
61	Unravelling micellar structure and dynamics in an unusually extensive DDAB/bile salt cationic solution by rheology and NMR-diffusometry. <i>Journal of Colloid and Interface Science</i> , 2008, 324, 192-198.	5.0	18
62	How the Morphology of Nafion-Based Membranes Affects Proton Transport. <i>Polymers</i> , 2021, 13, 359.	2.0	18
63	Exploring the Structure-Performance Relationship of Sulfonated Polysulfone Proton Exchange Membrane by a Combined Computational and Experimental Approach. <i>Polymers</i> , 2021, 13, 959.	2.0	18
64	Rheological investigation of thermal transitions in vesicular dispersion. <i>Journal of Colloid and Interface Science</i> , 2009, 338, 550-557.	5.0	17
65	Safe gel polymer electrolytes for high voltage Li-batteries. <i>Electrochimica Acta</i> , 2022, 401, 139470.	2.6	17
66	Nano-demixing as a novel strategy for magnetic field responsive systems: the case of dibutyl phosphate/bis(2-ethylhexyl)amine systems. <i>RSC Advances</i> , 2016, 6, 26696-26708.	1.7	16
67	Transport Properties and Mechanical Features of Sulfonated Polyether Ether Ketone/Organosilica Layered Materials Nanocomposite Membranes for Fuel Cell Applications. <i>Membranes</i> , 2020, 10, 87.	1.4	16
68	Effect of LDH platelets on the transport properties and carbonation of anion exchange membranes. <i>Electrochimica Acta</i> , 2022, 403, 139713.	2.6	16
69	Rheological properties and impedance spectroscopy of PMMA-PVdF blend and PMMA gel polymer electrolytes for advanced lithium batteries. <i>Ionics</i> , 2005, 11, 87-94.	1.2	14
70	Titanium Dioxide Grafted on Graphene Oxide: Hybrid Nanofiller for Effective and Low-Cost Proton Exchange Membranes. <i>Nanomaterials</i> , 2020, 10, 1572.	1.9	14
71	Electrochemical Performance and Alkaline Stability of Cross-linked Quaternized Polyepichlorohydrin/PvDF Blends for Anion-Exchange Membrane Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5494-5504.	1.5	14
72	Sodiated Nafion membranes for sodium metal aprotic batteries. <i>Electrochimica Acta</i> , 2022, 410, 139936.	2.6	14

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73	N,Nâ€™-Hexadecanoyl l-2-diaminomethyl-18-crown-6 surfactant: Synthesis and aggregation features in aqueous solution. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 61, 30-38.	2.5	13
74	Solution microstructures of the micellar phase of Pluronic L64/SDS/water system. <i>Journal of Colloid and Interface Science</i> , 2010, 342, 348-353.	5.0	13
75	Hexagonal Mesoporous Silica for carbon capture: Unrevealing CO2 microscopic dynamics by Nuclear Magnetic Resonance. <i>Journal of CO2 Utilization</i> , 2022, 55, 101809.	3.3	13
76	A new physicochemical characterization of sodium taurodeoxycholate/water system. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 6880.	1.3	11
77	Solution Casting Blending: An Effective Way for Tailoring Gas Transport and Mechanical Properties of Poly(vinyl butyral) and Pebax2533. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11264-11272.	1.5	10
78	Decoupling of Dynamic Processes in Surfactant-Based Liquid Mixtures: The Case of Lithium-Containing Bis(2-ethylhexyl)phosphoric Acid/Bis(2-ethylhexyl)amine Systems. <i>Langmuir</i> , 2014, 30, 8336-8341.	1.6	9
79	Microscopic and macroscopic investigation on the gas diffusion in poly(ether-block-amide) membranes doped with polysorbate nonionic surfactants. <i>Polymer</i> , 2020, 209, 122949.	1.8	8
80	Anisotropic behavior of mechanically extruded sulfonated polysulfone: Implications for proton exchange membrane fuel cell applications. <i>Solid State Ionics</i> , 2021, 362, 115581.	1.3	8
81	MRI Experiments as a Tool to Study Asymptotic-Shear Flow Behaviour of a Worm-Like Reverse Micellar Phase. <i>Applied Rheology</i> , 2006, 16, 190-197.	3.5	7
82	Solid-State NMR Characterization of Electrolyte Breakdown Products in Nonaqueous Asymmetric Hybrid Supercapacitors. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, A5.	2.2	7
83	Quaternized polyepichlorohydrin-based membrane as high-selective CO2 sorbent for cost-effective carbon capture. <i>Journal of CO2 Utilization</i> , 2022, 63, 102135.	3.3	7
84	New Insights into Properties of Methanol Transport in Sulfonated Polysulfone Composite Membranes for Direct Methanol Fuel Cells. <i>Polymers</i> , 2021, 13, 1386.	2.0	6
85	The impact of carbonation on hydroxide diffusion in nano-confined anion exchange membranes. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11137-11149.	5.2	6
86	A Defective Lamellar Phase in a Nonionic Surfactant Water System Studied by NMR Methods. <i>Molecular Crystals and Liquid Crystals</i> , 2003, 398, 157-167.	0.4	5
87	Dynamic Rheological Analysis of MLVs and Lamellar Phases in the System C12E4 / D2O. <i>Applied Rheology</i> , 2005, 15, 230-237.	3.5	5
88	Effect of shear on vesicle and lamellar phases of DDAB/lecithin ternary systems. <i>Journal of Colloid and Interface Science</i> , 2011, 358, 506-512.	5.0	5
89	Bis(2-ethylhexyl)phosphoric acid/bis(2-ethylhexyl)amine mixtures as solvent media for lithium-ions: A dynamical study. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 489, 447-453.	2.3	5
90	Sulfonated Polyether Ether Ketone and Organosilica Layered Nanofiller for Sustainable Proton Exchange Membranes Fuel Cells (PEMFCs). <i>Applied Sciences (Switzerland)</i> , 2022, 12, 963.	1.3	5

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91	Azimuthal anchoring energy of a chiral nematic in cylindrical cavities. Applied Physics Letters, 1999, 75, 343-345.	1.5	4
92	Spectromechanical Properties of Polymeric Gel Electrolytes and Blends. Macromolecular Symposia, 2007, 247, 282-294.	0.4	4
93	Indirect detection of structural changes on the pluronic Pe 6200/H2O system by rheological measurements. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 245, 183-192.	2.3	3
94	Gi Protein Modulation of the Potassium Channel TASK-2 Mediates Vesicle Osmotic Swelling to Facilitate the Fusion of Aquaporin-2 Water Channel Containing Vesicles. Cells, 2018, 7, 276.	1.8	3
95	Aqueous self-assembly and physicochemical properties of 1,2-dilauroyl-rac-glycero-3-(Nl±-acetyl-l-arginine). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 327, 111-121.	2.3	2
96	Nafion-based cation-exchange membranes for direct methanol fuel cells. , 2020, , 13-36.		2
97	Elucidating the Water and Methanol Dynamics in Sulfonated Polyether Ether Ketone Nanocomposite Membranes Bearing Layered Double Hydroxides. Membranes, 2022, 12, 419.	1.4	2
98	Rheological Properties of the Reverse Mesophases of the Pluronic L64/P-Xylene/Water System. Applied Rheology, 2004, 14, 315-323.	3.5	1
99	Mechanical properties of PAN-based gel electrolytes: small-amplitude oscillatory shear study. Plastics, Rubber and Composites, 2004, 33, 125-129.	0.9	1
100	AQUEOUS MICROSTRUCTURES OF PLURONIC L64âˆ•SDS SYSTEM: NMR SELF-DIFFUSION AND FLOW BEHAVIOUR. AIP Conference Proceedings, 2008, , .	0.3	0
101	Photocatalytic properties of Nafion membranes containing graphene oxide/titania nanocomposites. , 2014, , .		0