Federico Bella

List of Publications by Year
in descending order

101 papers	9,244 citations	12330 69 h-index	39675 94 g-index
112 all docs	112 docs citations	112 times ranked	9922 citing authors

#	Article	IF	Citations
1	Lignin as Polymer Electrolyte Precursor for Stable and Sustainable Potassium Batteries. ChemSusChem, 2022, 15, .	6.8	50
2	Microâ€Mesoporous Carbons from Cyclodextrin Nanosponges Enabling Highâ€Capacity Silicon Anodes and Sulfur Cathodes for Lithiated Siâ€S Batteries. Chemistry - A European Journal, 2022, 28, .	3.3	48
3	Cardanol-Derived Epoxy Resins as Biobased Gel Polymer Electrolytes for Potassium-Ion Conduction. ACS Applied Polymer Materials, 2022, 4, 3855-3865.	4.4	49
4	A review of textile dye-sensitized solar cells for wearable electronics. Ionics, 2022, 28, 2563-2583.	2.4	63
5	Solar H₂ production systems: current status and prospective applications. Green Chemistry, 2022, 24, 5379-5402.	9.0	60
6	Self-healable dynamic poly(urea-urethane) gel electrolyte for lithium batteries. Journal of Materials Chemistry A, 2022, 10, 12588-12596.	10.3	42
7	Role and Responsibility of Sustainable Chemistry and Engineering in Providing Safe and Sufficient Nitrogen Fertilizer Supply at Turbulent Times. ACS Sustainable Chemistry and Engineering, 2022, 10, 8997-9001.	6.7	22
8	Integrated energy conversion and storage devices: Interfacing solar cells, batteries and supercapacitors. Energy Storage Materials, 2022, 51, 400-434.	18.0	133
9	Platinum-free photoelectrochromic devices working with copper-based electrolytes for ultrastable smart windows. Journal of Materials Chemistry A, 2021, 9, 19687-19691.	10.3	53
10	Scientific writing and publishing for early-career researchers from the perspective of young chemists. Journal of Materials Chemistry A, 2021, 9, 18674-18680.	10.3	4
11	Xanthanâ€Based Hydrogel for Stable and Efficient Quasiâ€Solid Truly Aqueous Dyeâ€Sensitized Solar Cell with Cobalt Mediator. Solar Rrl, 2021, 5, 2000823.	5.8	65
12	An Overview on Anodes for Magnesium Batteries: Challenges towards a Promising Storage Solution for Renewables. Nanomaterials, 2021, 11, 810.	4.1	97
13	Poly(3,4â€ethylenedioxythiophene) in Dyeâ€Sensitized Solar Cells: Toward Solidâ€State and Platinumâ€Free Photovoltaics. Advanced Sustainable Systems, 2021, 5, 2100025.	5.3	64
14	Nanosponge-Based Composite Gel Polymer Electrolyte for Safer Li-O2 Batteries. Polymers, 2021, 13, 1625.	4.5	73
15	Lignin-Based Polymer Electrolyte Membranes for Sustainable Aqueous Dye-Sensitized Solar Cells. ACS Sustainable Chemistry and Engineering, 2021, 9, 8550-8560.	6.7	87
16	Xanthanâ€Based Hydrogel for Stable and Efficient Quasiâ€Solid Truly Aqueous Dyeâ€Sensitized Solar Cell with Cobalt Mediator. Solar Rrl, 2021, 5, 2170074.	5.8	16
17	Chitosan as a paradigm for biopolymer electrolytes in solid-state dye-sensitised solar cells. Polymer, 2021, 230, 124092.	3.8	81
18			

#	Article	IF	Citations
19	Poly(glycidyl ether)s recycling from industrial waste and feasibility study of reuse as electrolytes in sodium-based batteries. Chemical Engineering Journal, 2020, 382, 122934.	12.7	73
20	Photoelectrochromic devices with cobalt redox electrolytes. Materials Today Energy, 2020, 15, 100365.	4.7	50
21	Photoanodes for Aqueous Solar Cells: Exploring Additives and Formulations Starting from a Commercial TiO₂ Paste. ChemSusChem, 2020, 13, 6562-6573.	6.8	71
22	Recent advances in eco-friendly and cost-effective materials towards sustainable dye-sensitized solar cells. Green Chemistry, 2020, 22, 7168-7218.	9.0	272
23	Hydrogel Electrolytes Based on Xanthan Gum: Green Route towards Stable Dye-Sensitized Solar Cells. Nanomaterials, 2020, 10, 1585.	4.1	103
24	First-principles study of Na insertion at TiO₂ anatase surfaces: new hints for Na-ion battery design. Nanoscale Advances, 2020, 2, 2745-2751.	4.6	75
25	Role of surface defects in CO2 adsorption and activation on CuFeO2 delafossite oxide. Molecular Catalysis, 2020, 496, 111181.	2.0	29
26	Across the Board: Federico Bella on Electrochemical Nitrogen Reduction. ChemSusChem, 2020, 13, 3053-3055.	6.8	4
27	Transparent photovoltaic technologies: Current trends towards upscaling. Energy Conversion and Management, 2020, 219, 112982.	9.2	112
28	A water-based and metal-free dye solar cell exceeding 7% efficiency using a cationic poly(3,4-ethylenedioxythiophene) derivative. Chemical Science, 2020, 11, 1485-1493.	7.4	91
29	PEO/LAGP hybrid solid polymer electrolytes for ambient temperature lithium batteries by solvent-free, â€œone potâ€•preparation. Journal of Energy Storage, 2019, 26, 100947.	8.1	117
30	Boosting the efficiency of aqueous solar cells: A photoelectrochemical estimation on the effectiveness of TiCl4 treatment. Electrochimica Acta, 2019, 302, 31-37.	5.2	81
31	Understanding the Effect of UV-Induced Cross-Linking on the Physicochemical Properties of Highly Performing PEO/LiTFSI-Based Polymer Electrolytes. Langmuir, 2019, 35, 8210-8219.	3.5	92
32	Low-cost high-efficiency system for solar-driven conversion of CO ₂ to hydrocarbons. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9735-9740.	7.1	126
33	UV-Cross-Linked Composite Polymer Electrolyte for High-Rate, Ambient Temperature Lithium Batteries. ACS Applied Energy Materials, 2019, 2, 1600-1607.	5.1	97
34	Carbon-based materials for stable, cheaper and large-scale processable perovskite solar cells. Energy and Environmental Science, 2019, 12, 3437-3472.	30.8	223
35	Innovative multipolymer electrolyte membrane designed by oxygen inhibited UV-crosslinking enables solid-state in plane integration of energy conversion and storage devices. Energy, 2019, 166, 789-795.	8.8	87
36	Room temperature ionic liquid (RTIL)-based electrolyte cocktails for safe, high working potential Li-based polymer batteries. Journal of Power Sources, 2019, 412, 398-407.	7.8	100

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37	Frontispiece: Perovskite Solar Cells: From the Laboratory to the Assembly Line. Chemistry - A European Journal, 2018, 24, .	3.3	1
38	Finely tuning electrolytes and photoanodes in aqueous solar cells by experimental design. Solar Energy, 2018, 163, 251-255.	6.1	90
39	Perovskite Solar Cells: From the Laboratory to the Assembly Line. Chemistry - A European Journal, 2018, 24, 3083-3100.	3.3	118
40	Patterning dye-sensitized solar cell photoanodes through a polymeric approach: A perspective. Materials Science in Semiconductor Processing, 2018, 73, 92-98.	4.0	74
41	Tuning optical and electronic properties in novel carbazole photosensitizers for p-type dye-sensitized solar cells. Electrochimica Acta, 2018, 292, 805-816.	5.2	67
42	Sprayâ€Dried Mesoporous Mixed Cuâ€Ni Oxide@Graphene Nanocomposite Microspheres for High Power and Durable Liâ€Ion Battery Anodes. Advanced Energy Materials, 2018, 8, 1802438.	19.5	70
43	Caesium for Perovskite Solar Cells: An Overview. Chemistry - A European Journal, 2018, 24, 12183-12205.	3.3	138
44	Combined Structural, Chemometric, and Electrochemical Investigation of Vertically Aligned TiO₂ Nanotubes for Na-ion Batteries. ACS Omega, 2018, 3, 8440-8450.	3.5	86
45	Frontispiece: Caesium for Perovskite Solar Cells: An Overview. Chemistry - A European Journal, 2018, 24, .	3.3	1
46	Metal organic framework laden poly(ethylene oxide) based composite electrolytes for all-solid-state Li-S and Li-metal polymer batteries. Electrochimica Acta, 2018, 285, 355-364.	5.2	118
47	High-Performing and Stable Wearable Supercapacitor Exploiting rGO Aerogel Decorated with Copper and Molybdenum Sulfides on Carbon Fibers. ACS Applied Energy Materials, 2018, 1, 4440-4447.	5.1	88
48	Photopolymers for Third-generation Solar Cells. RSC Polymer Chemistry Series, 2018, , 504-523.	0.2	1
49	A flexible and portable powerpack by solid-state supercapacitor and dye-sensitized solar cell integration. Journal of Power Sources, 2017, 359, 311-321.	7.8	134
50	Unveiling the controversial mechanism of reversible Na storage in TiO2 nanotube arrays: Amorphous versus anatase TiO2. Nano Research, 2017, 10, 2891-2903.	10.4	90
51	Paper-based quasi-solid dye-sensitized solar cells. Electrochimica Acta, 2017, 237, 87-93.	5.2	89
52	Approaching truly sustainable solar cells by the use of water and cellulose derivatives. Green Chemistry, 2017, 19, 1043-1051.	9.0	98
53	Interfacial Effects in Solidâ€“Liquid Electrolytes for Improved Stability and Performance of Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 37797-37803.	8.0	76
54	Light-cured polymer electrolytes for safe, low-cost and sustainable sodium-ion batteries. Journal of Power Sources, 2017, 365, 293-302.	7.8	99

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55	Photoanode/Electrolyte Interface Stability in Aqueous Dyeâ€Sensitized Solar Cells. Energy Technology, 2017, 5, 300-311.	3.8	68
56	Cobalt-Based Electrolytes for Dye-Sensitized Solar Cells: Recent Advances towards Stable Devices. Energies, 2016, 9, 384.	3.1	97
57	A New Design Paradigm for Smart Windows: Photocurable Polymers for Quasiâ€Solid Photoelectrochromic Devices with Excellent Longâ€Term Stability under Real Outdoor Operating Conditions. Advanced Functional Materials, 2016, 26, 1127-1137.	14.9	109
58	Floating, Flexible Polymeric Dyeâ€Sensitized Solarâ€Cell Architecture: The Way of Nearâ€Future Photovoltaics. Advanced Materials Technologies, 2016, 1, .	5.8	20
59	Unveiling iodine-based electrolytes chemistry in aqueous dye-sensitized solar cells. Chemical Science, 2016, 7, 4880-4890.	7.4	90
60	Single-Ion Conducting Polymer Electrolytes for Lithium Metal Polymer Batteries that Operate at Ambient Temperature. ACS Energy Letters, 2016, 1, 678-682.	17.4	270
61	Improving efficiency and stability of perovskite solar cells with photocurable fluoropolymers. Science, 2016, 354, 203-206.	12.6	748
62	Poly(methyl methacrylate-co-butyl acrylate-co-acrylic acid): Physico-chemical characterization and targeted dye sensitized solar cell application. Materials and Design, 2016, 108, 560-569.	7.0	79
63	Luminescent Downshifting by Photoâ€Induced Solâ€Gel Hybrid Coatings: Accessing Multifunctionality on Flexible Organic Photovoltaics via Ambient Temperature Material Processing. Advanced Electronic Materials, 2016, 2, 1600288.	5.1	85
64	One-Dimensional ZnO/Gold Junction for Simultaneous and Versatile Multisensing Measurements. Scientific Reports, 2016, 6, 29763.	3.3	79
65	Super Soft All-Ethylene Oxide Polymer Electrolyte for Safe All-Solid Lithium Batteries. Scientific Reports, 2016, 6, 19892.	3.3	300
66	A simple route toward next-gen green energy storage concept by nanofibres-based self-supporting electrodes and a solid polymeric design. Carbon, 2016, 107, 811-822.	10.3	80
67	Toward Totally Flexible Dye-Sensitized Solar Cells Based on Titanium Grids and Polymeric Electrolyte. IEEE Journal of Photovoltaics, 2016, 6, 498-505.	2.5	70
68	Nanocellulose-laden composite polymer electrolytes for high performing lithiumâ€"sulphur batteries. Energy Storage Materials, 2016, 3, 69-76.	18.0	102
69	Thermally cured semi-interpenetrating electrolyte networks (s-IPN) for safe and aging-resistant secondary lithium polymer batteries. Journal of Power Sources, 2016, 306, 258-267.	7.8	98
70	Photopolymer Electrolytes for Sustainable, Upscalable, Safe, and Ambientâ€Temperature Sodiumâ€Ion Secondary Batteries. ChemSusChem, 2015, 8, 3668-3676.	6.8	85
71	Newly Elaborated Multipurpose Polymer Electrolyte Encompassing RTILs for Smart Energy-Efficient Devices. ACS Applied Materials & Interfaces, 2015, 7, 12961-12971.	8.0	74
72	Electrodes/Electrolyte Interfaces in the Presence of a Surfaceâ€Modified Photopolymer Electrolyte: Application in Dyeâ€Sensitized Solar Cells. ChemPhysChem, 2015, 16, 960-969.	2.1	69

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73	Nanostructured photoelectrodes and polymeric nanointerfaces engineering: The critical transition from rigid to flexible dye-sensitized solar cells. , 2015, , .		0
74	Performance and stability improvements for dye-sensitized solar cells in the presence of luminescent coatings. Journal of Power Sources, 2015, 283, 195-203.	7.8	81
75	Polymer electrolytes and perovskites: lights and shadows in photovoltaic devices. Electrochimica Acta, 2015, 175, 151-161.	5.2	89
76	Cellulose-based novel hybrid polymer electrolytes for green and efficient Na-ion batteries. Electrochimica Acta, 2015, 174, 185-190.	5.2	132
77	Dispelling clichÃ©s at the nanoscale: the true effect of polymer electrolytes on the performance of dye-sensitized solar cells. Nanoscale, 2015, 7, 12010-12017.	5.6	68
78	Aqueous dye-sensitized solar cells. Chemical Society Reviews, 2015, 44, 3431-3473.	38.1	389
79	Effect of lithium bis(trifluoromethylsulfonyl)imide salt-doped UV-cured glycidyl methacrylate. Journal of Solid State Electrochemistry, 2015, 19, 3079-3085.	2.5	79
80	Direct light-induced polymerization of cobalt-based redox shuttles: an ultrafast way towards stable dye-sensitized solar cells. Chemical Communications, 2015, 51, 16308-16311.	4.1	73
81	Multifunctional Luminescent Downâ€Shifting Fluoropolymer Coatings: A Straightforward Strategy to Improve the UVâ€Light Harvesting Ability and Longâ€Term Outdoor Stability of Organic Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1401312.	19.5	103
82	From seaweeds to biopolymeric electrolytes for third generation solar cells: An intriguing approach. Electrochimica Acta, 2015, 151, 306-311.	5.2	86
83	Structure-Performance Correlation of Nanocellulose-Based Polymer Electrolytes for Efficient Quasi-solid DSSCs. ChemElectroChem, 2014, 1, 1241-1241.	3.4	2
84	Structureâ€"Performance Correlation of Nanocelluloseâ€Based Polymer Electrolytes for Efficient Quasiâ€solid DSSCs. ChemElectroChem, 2014, 1, 1350-1358.	3.4	68
85	Multi-functional energy conversion and storage electrodes using flower-like Zinc oxide nanostructures. Energy, 2014, 65, 639-646.	8.8	87
86	Polymer electrolytes for dye-sensitized solar cells prepared by photopolymerization of PEG-based oligomers. International Journal of Hydrogen Energy, 2014, 39, 3036-3045.	7.1	67
87	Additives and salts for dye-sensitized solar cells electrolytes: what is the best choice?. Journal of Power Sources, 2014, 264, 333-343.	7.8	76
88	TiO 2 nanotubes as flexible photoanode for back-illuminated dye-sensitized solar cells with hemi-squaraine organic dye and iodine-free transparent electrolyte. Organic Electronics, 2014, 15, 3715-3722.	2.6	74
89	New insights in long-term photovoltaic performance characterization of cellulose-based gel electrolytes for stable dye-sensitized solar cells. Electrochimica Acta, 2014, 146, 44-51.	5.2	72
90	Novel electrode and electrolyte membranes: Towards flexible dye-sensitized solar cell combining vertically aligned TiO2 nanotube array and light-cured polymer network. Journal of Membrane Science, 2014, 470, 125-131.	8.2	71

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91	Photochemically produced quasi-linear copolymers for stable and efficient electrolytes in dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 289, 73-80.	3.9	73
92	A UV-prepared linear polymer electrolyte membrane for dye-sensitized solar cells. Physica B: Condensed Matter, 2014, 450, 151-154.	2.7	65
93	Light cured networks containing metal organic frameworks as efficient and durable polymer electrolytes for dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 9033.	10.3	90
94	Towards green, efficient and durable quasi-solid dye-sensitized solar cells integrated with a cellulose-based gel-polymer electrolyte optimized by a chemometric DoE approach. RSC Advances, 2013, 3, 15993.	3.6	82
95	Photo-polymerization of acrylic/methacrylic gelâ€“polymer electrolyte membranes for dye-sensitized solar cells. Chemical Engineering Journal, 2013, 225, 873-879.	12.7	69
96	A Chemometric Approach for the Sensitization Procedure of ZnO Flowerlike Microstructures for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 11288-11295.	8.0	78
97	A UV-crosslinked polymer electrolyte membrane for quasi-solid dye-sensitized solar cells with excellent efficiency and durability. Physical Chemistry Chemical Physics, 2013, 15, 3706.	2.8	82
98	Photoinduced polymerization: An innovative, powerful and environmentally friendly technique for the preparation of polymer electrolytes for dye-sensitized solar cells. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2013, 16, 1-21.	11.6	102
99	First Pseudohalogen Polymer Electrolyte for Dye-Sensitized Solar Cells Promising for <i>In Situ</i> Photopolymerization. Journal of Physical Chemistry C, 2013, 117, 20421-20430.	3.1	71
100	Waste Cleaning Waste: Photodegradation of Monochlorophenols in the Presence of Waste-Derived Photosensitizer. ACS Sustainable Chemistry and Engineering, 2013, 1, 1545-1550.	6.7	75
101	ChiMiCapisce. ChemistryViews, 0, , .	0.0	0