Matteo Bonomo

List of Publications by Citations

59 papers	1,101 citations	18 h-index	30 g-index
64 ext. papers	1,543 ext. citations	5.5 avg, IF	5.33 L-index

#	Paper	IF	Citations
59	Recent advances in eco-friendly and cost-effective materials towards sustainable dye-sensitized solar cells. *Green Chemistry*, **2020**, 22, 7168-7218	10	147
58	Hydrogel Electrolytes Based on Xanthan Gum: Green Route towards Stable Dye-Sensitized Solar Cells. *Nanomaterials*, **2020**, 10,	5.4	84
57	Nanostructured Semiconductor Materials for Dye-Sensitized Solar Cells. *Journal of Nanomaterials*, **2017**, 2017, 1-31	3.2	71
56	Photoanodes for Aqueous Solar Cells: Exploring Additives and Formulations Starting from a Commercial TiO Paste. *ChemSusChem*, **2020**, 13, 6562-6573	8.3	52
55	Synthesis and characterization of NiO nanostructures: a review. *Journal of Nanoparticle Research*, **2018**, 20, 1	2.3	46
54	Nanostructured p-Type Semiconductor Electrodes and Photoelectrochemistry of Their Reduction Processes. *Energies*, **2016**, 9, 373	3.1	41
53	Beneficial Effect of Electron-Withdrawing Groups on the Sensitizing Action of Squaraines for p-Type Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2016**, 120, 16340-16353	3.8	41
52	Lignin-Based Polymer Electrolyte Membranes for Sustainable Aqueous Dye-Sensitized Solar Cells. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 8550-8560	8.3	39
51	Xanthan-Based Hydrogel for Stable and Efficient Quasi-Solid Truly Aqueous Dye-Sensitized Solar Cell with Cobalt Mediator. *Solar Rrl*, **2021**, 5, 2000823	7.1	38
50	Electrochemical and Photoelectrochemical Properties of Screen-Printed Nickel Oxide Thin Films Obtained from Precursor Pastes with Different Compositions. *Journal of the Electrochemical Society* , **2017**, 164, H137-H147	3.9	35
49	Adsorption Behavior of I and I Ions at a Nanoporous NiO/Acetonitrile Interface Studied by X-ray Photoelectron Spectroscopy. *Langmuir*, **2016**, 32, 11540-11550	4	29
48	Electrochemical and Photoelectrochemical Properties of Nickel Oxide (NiO) With Nanostructured Morphology for Photoconversion Applications. *Frontiers in Chemistry*, **2018**, 6, 601	5	29
47	Surface properties of nanostructured NiO undergoing electrochemical oxidation in 3-methoxy-propionitrile. *Applied Surface Science*, **2017**, 403, 441-447	6.7	24
46	KuQuinones as sensitizers for NiO based p-type dye-sensitized solar cells. *New Journal of Chemistry*, **2017**, 41, 2769-2779	3.6	22
45	X-Ray structure and ionic conductivity studies of anhydrous and hydrated choline chloride and oxalic acid deep eutectic solvents. *Physical Chemistry Chemical Physics*, **2018**, 20, 30120-30124	3.6	22
44	Integration of graphene onto silicon through electrochemical reduction of graphene oxide layers in non-aqueous medium. *Applied Surface Science*, **2018**, 445, 404-414	6.7	21
43	Poly(3,4-ethylenedioxythiophene) in Dye-Sensitized Solar Cells: Toward Solid-State and Platinum-Free Photovoltaics. *Advanced Sustainable Systems*,2100025	5.9	21

42	Intriguing transport dynamics of ethylammonium nitrate-acetonitrile binary mixtures arising from nano-inhomogeneity. *Physical Chemistry Chemical Physics*, **2017**, 19, 27212-27220	3.6	19
41	Electrochemically Deposited NiO Films as a Blocking Layer in -Type Dye-Sensitized Solar Cells with an Impressive 45% Fill Factor. *Nanomaterials*, **2020**, 10,	5.4	18
40	New pyran-based dyes as efficient sensitizers of p-type dye-sensitized solar cells. *Solar Energy*, **2018**, 169, 237-241	6.8	16
39	. *Advanced Energy Materials*,2100785	21.8	16
38	Cobalt Sulfide as Counter Electrode in p-Type Dye-Sensitized Solar Cells. *ChemistrySelect*, **2016**, 1, 2808-2815	1.8	16
37	Effect of Alkyl Chain Length on the Sensitizing Action of Substituted Non-Symmetric Squaraines for p-Type Dye-Sensitized Solar Cells. *ChemElectroChem*, **2017**, 4, 2385-2397	4.3	14
36	Impact of P3HT Regioregularity and Molecular Weight on the Efficiency and Stability of Perovskite Solar Cells. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 5061-5073	8.3	14
35	X-ray photoelectron spectroscopy investigation of nanoporous NiO electrodes sensitized with Erythrosine B. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2017**, 532, 464-471	5.1	12
34	Pristine and Al-doped hematite printed films as photoanodes of p-type dye-sensitized solar cells. *Journal of Nanoparticle Research*, **2017**, 19, 1	2.3	12
33	Thermosetting Polyurethane Resins as Low-Cost, Easily Scalable, and Effective Oxygen and Moisture Barriers for Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 54862-54875	9.5	12
32	First Examples of Pyran Based Colorants as Sensitizing Agents ofp-Type Dye-Sensitized Solar Cells. *Journal of the Electrochemical Society*, **2017**, 164, F1412-F1418	3.9	11
31	New pyran-based molecules as both n- and p-type sensitizers in semi-transparent Dye Sensitized Solar Cells. *Dyes and Pigments*, **2020**, 175, 108140	4.6	11
30	Study of the Influence of the I-Based Electrolyte Composition on the Photoconversion Properties of p-Type Dye-Sensitized Solar Cells. *Journal of the Electrochemical Society*, **2018**, 165, H889-H896	3.9	11
29	Toward Sustainable, Colorless, and Transparent Photovoltaics: State of the Art and Perspectives for the Development of Selective Near-Infrared Dye-Sensitized Solar Cells. *Advanced Energy Materials*,2101598	21.8	11
28	Modified P3HT materials as hole transport layers for flexible perovskite solar cells. *Journal of Power Sources*, **2021**, 494, 229735	8.9	10
27	The unseen evidence of Reduced Ionicity: The elephant in (the) room temperature ionic liquids. *Journal of Molecular Liquids*, **2021**, 324, 115069	6	9
26	Nanocomposites of Nickel Oxide and Zirconia for the Preparation of Photocathodes with Improved Performance in p-Type Dye-Sensitized Solar Cells. *Journal of the Electrochemical Society*, **2019**, 166, D290-D300	3.9	8
25	Application of Metal-Organic Frameworks and Covalent Organic Frameworks as (Photo)Active Material in Hybrid Photovoltaic Technologies. *Energies*, **2020**, 13, 5602	3.1	8

24	Assessing the Structure of Protic Ionic Liquids Based on Triethylammonium and Organic Acid Anions. *Journal of Physical Chemistry B*, **2021**, 125, 2781-2792	3.4	8
23	Limits on the use of cobalt sulfide as anode of p-type dye-sensitized solar cells. *Journal Physics D: Applied Physics*, **2017**, 50, 215501	3	7
22	In-Depth Physico-Chemical and Structural Investigation of a Dicarboxylic Acid/Choline Chloride Natural Deep Eutectic Solvent (NADES): A Spotlight on the Importance of a Rigorous Preparation Procedure. *ACS Sustainable Chemistry and Engineering*, **2019**,	8.3	7
21	A combined electrochemical, infrared and EDXD tool to disclose Deep Eutectic Solvents formation when one precursor is liquid: Glyceline as case study. *Journal of Molecular Liquids*, **2020**, 319, 114292	6	7
20	Methoxy-substituted copper complexes as possible redox mediators in dye-sensitized solar cells. *New Journal of Chemistry*, **2021**, 45, 15303-15311	3.6	7
19	Effect of Sodium Hydroxide Pretreatment of NiOx Cathodes on the Performance of Squaraine-Sensitized p-Type Dye-Sensitized Solar Cells. *ChemistrySelect*, **2018**, 3, 1066-1075	1.8	6
18	Oxidative dissolution of NiO in aqueous electrolyte: An impedance study. *Journal of Electroanalytical Chemistry*, **2018**, 816, 205-214	4.1	6
17	Dopant-Free All-Organic Small-Molecule HTMs for Perovskite Solar Cells: Concepts and Structure Property Relationships. *Energies*, **2021**, 14, 2279	3.1	6
16	Xanthan-Based Hydrogel for Stable and Efficient Quasi-Solid Truly Aqueous Dye-Sensitized Solar Cell with Cobalt Mediator. *Solar Rrl*, **2021**, 5, 2170074	7.1	6
15	Sodium Hydroxide Pretreatment as an Effective Approach to Reduce the Dye/Holes Recombination Reaction in P-Type DSCs. *Frontiers in Chemistry*, **2019**, 7, 99	5	5
14	Influence of the Conditions of Sensitization on the Characteristics ofp-DSCs Sensitized with Asymmetric Squaraines. *Journal of the Electrochemical Society*, **2017**, 164, H1099-H1111	3.9	5
13	Statistic-Driven Proton Transfer Affecting Nanoscopic Organization in an Ethylammonium Nitrate Ionic Liquid and 1,4-Diaminobutane Binary Mixture: A Steamy Pizza Model. *Symmetry*, **2019**, 11, 1425	2.7	5
12	First Evidence of Electrode Reconstruction in Mesoporous NiO After Operation as Photocathode of Dye-Sensitized Solar Cells. *ChemistrySelect*, **2018**, 3, 6729-6736	1.8	5
11	How do arenediazonium salts behave in deep eutectic solvents? A combined experimental and computational approach. *Journal of Molecular Liquids*, **2021**, 339, 116743	6	5
10	Contact Glow Discharge Electrolysis: Effect of Electrolyte Conductivity on Discharge Voltage. *Catalysts*, **2020**, 10, 1104	4	4
9	Polymeric Dopant-Free Hole Transporting Materials for Perovskite Solar Cells: Structures and Concepts towards Better Performances. *Polymers*, **2021**, 13,	4.5	4
8	Effect of Sensitization on the Electrochemical Properties of Nanostructured NiO. *Coatings*, **2018**, 8, 232	2.9	3
7	Emerging Photovoltaic Technologies and Eco-Design Criticisms and Potential Improvements		2

6	Towards an ink-based method for the deposition of ZnxCd1-xS buffer layers in CZTS solar cells. *Journal of Materials Science: Materials in Electronics*, **2020**, 31, 2575-2582	2.1	2
5	Adsorption Dynamics of Redox Active Species onto Polarized Surfaces of Sensitized NiO. *ACS Omega*, **2019**, 4, 1690-1699	3.9	2
4	Novel DPP derivatives functionalized with auxiliary electron-acceptor groups and characterized by narrow bandgap and ambipolar charge transport properties. *Dyes and Pigments*, **2021**, 186, 109026	4.6	2
3	NiO/ZrO2 nanocomposites as photocathodes of tandem DSCs with higher photoconversion efficiency with respect to parent single-photoelectrode p-DSCs. *Sustainable Energy and Fuels*, **2021**, 5, 4736-4748	5.8	2
2	Copper-Free Halodediazoniation of Arenediazonium Tetrafluoroborates in Deep Eutectic Solvents-like Mixtures.. *Molecules*, **2022**, 27,	4.8	2
1	Neutron irradiated perovskite films and solar cells on PET substrates. *Nano Energy*, **2022**, 93, 106879	17.1	1