Carlo Alberto Bignozzi

List of Publications by Year
in descending order

72 papers	4,579 citations	101384 36 h-index	98622 67 g-index
76 all docs	76 docs citations	76 times ranked	5830 citing authors

#	Article	IF	Citations
1	Phosphonate-Based Bipyridine Dyes for Stable Photovoltaic Devices. Inorganic Chemistry, 2001, 40, 6073-6079.	1.9	303
2	Nanostructured photoelectrodes based on WO₃: applications to photooxidation of aqueous electrolytes. Chemical Society Reviews, 2013, 42, 2228-2246.	18.7	250
3	Efficient Dye-Sensitized Solar Cells Using Red Turnip and Purple Wild Sicilian Prickly Pear Fruits. International Journal of Molecular Sciences, 2010, 11, 254-267.	1.8	233
4	Porphyrin dyes for TiO2 sensitization. Journal of Materials Chemistry, 2003, 13, 502-510.	6.7	224
5	Design of molecular dyes for application in photoelectrochemical and electrochromic devices based on nanocrystalline metal oxide semiconductors. Coordination Chemistry Reviews, 2004, 248, 1299-1316.	9.5	218
6	Sensitization of Nanocrystalline TiO2 with Black Absorbers Based on Os and Ru Polypyridine Complexes. Journal of the American Chemical Society, 2005, 127, 15342-15343.	6.6	203
7	Photoinduced electron and energy transfer in polynuclear complexes. Topics in Current Chemistry, 1990, , 73-149.	4.0	189
8	Electronic coupling in cyano-bridged ruthenium polypyridine complexes and role of electronic effects on cyanide stretching frequencies. Inorganic Chemistry, 1992, 31, 5260-5267.	1.9	164
9	Natural dye senstizers for photoelectrochemical cells. Energy and Environmental Science, 2009, 2, 1162.	15.6	162
10	Efficient Photoelectrochemical Water Splitting by Anodically Grown WO₃Electrodes. Langmuir, 2011, 27, 7276-7284.	1.6	158
11	Zirconium oxide coating improves implant osseointegration in vivo. Dental Materials, 2008, 24, 357-361.	1.6	155
12	Hierarchical organization of perylene bisimides and polyoxometalates for photo-assisted water oxidation. Nature Chemistry, 2019, 11, 146-153.	6.6	132
13	Efficient Non-corrosive Electron-Transfer Mediator Mixtures for Dye-Sensitized Solar Cells. Journal of the American Chemical Society, 2006, 128, 9996-9997.	6.6	118
14	Modification of Nanocrystalline WO₃ with a Dicationic Perylene Bisimide: Applications to Molecular Level Solar Water Splitting. Journal of the American Chemical Society, 2015, 137, 4630-4633.	6.6	114
15	Synthesis and Comprehensive Characterizations of Newcis-RuL2X2(X = Cl, CN, and NCS) Sensitizers for Nanocrystalline TiO2Solar Cell Using Bis-Phosphonated Bipyridine Ligands (L). Inorganic Chemistry, 2003, 42, 6655-6666.	1.9	109
16	Photoanodes Based on Nanostructured WO₃ for Water Splitting. ChemPhysChem, 2012, 13, 3025-3034.	1.0	99
17	Intervalence transfer in cyano-bridged bi- and trinuclear ruthenium complexes. Journal of the American Chemical Society, 1985, 107, 1644-1651.	6.6	88
18	Preparation and photoelectrochemical characterization of a red sensitive osmium complex containing 4,4â€²,4â€²â€²-tricarboxy-2,2â€²:6â€²,2â€²â€²-terpyridine and cyanide ligands. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 164, 15-21.	2.0	81

#	ARTICLE	IF	CITATIONS
19	Photo-electrochemical properties of nanostructured WO3 prepared with different organic dispersing agents. Solar Energy Materials and Solar Cells, 2010, 94, 788-796.	3.0	79
20	Syntheses and spectroscopic characterization of fac-[Re(CO)3(phen)(L)]PF6, L=trans- and cis-1,2-bis(4-pyridyl)ethylene. Inorganica Chimica Acta, 2001, 313, 149-155.	1.2	76
21	Optical electron-transfer transitions in polynuclear complexes of the type X(NH3)4RuNCRu(bpy)2CNRu(NH3)4Ym+ (X = NH3, py; Y = NH3, py; m = 4-6). Inorganic Chemistry, 1988, 27, 408-414.	1.9	65
22	Solvent Effects on the Oxidative Electrochemical Behavior ofcis-Bis(isothiocyanato)ruthenium(II)-bis-2,2â€˜-bipyridine-4,4â€˜-dicarboxylic Acid. Journal of Physical Chemistry B, 2002, 106, 3926-3932.	1.2	61
23	Long-range energy transfer in oligomeric metal complex assemblies. Journal of the American Chemical Society, 1992, 114, 8727-8729.	6.6	55
24	Efficiency enhancement of the electrocatalytic reduction of CO2: fac-[Re(v-bpy)(CO)3Cl] electropolymerized onto mesoporous TiO2 electrodes. Inorganica Chimica Acta, 2006, 359, 3871-3874.	1.2	55
25	Novel Ru-Dioxolene Complexes as Potential Electrochromic Materials and NIR Dyes. Inorganic Chemistry, 2003, 42, 6613-6615.	1.9	54
26	Ruthenium(II) 2,2'-bipyridine complexes containing methyl isocyanide ligands. Extreme effects of nonchromophoric ligands on excited-state properties. Journal of the American Chemical Society, 1988, 110, 7381-7386.	6.6	50
27	Solvatochromic Dye Sensitized Nanocrystalline Solar Cells. Nano Letters, 2002, 2, 625-628.	4.5	50
28	Mesostructured self-assembled titania films for photovoltaic applications. Microporous and Mesoporous Materials, 2006, 88, 304-311.	2.2	48
29	Electrochromic Devices Based on Binuclear Mixed Valence Compounds Adsorbed on Nanocrystalline Semiconductors. Inorganic Chemistry, 2003, 42, 3966-3968.	1.9	47
30	A Multitechnique Physicochemical Investigation of Various Factors Controlling the Photoaction Spectra and of Some Aspects of the Electron Transfer for a Series of Pushâ€“Pull Zn(II) Porphyrins Acting as Dyes in DSSCs. Journal of Physical Chemistry C, 2011, 115, 23170-23182.	1.5	45
31	Comparative Evaluation of Catalytic Counter Electrodes for Co(III)/(II) Electron Shuttles in Regenerative Photoelectrochemical Cells. Journal of Physical Chemistry C, 2013, 117, 5142-5153.	1.5	45
32	Photoelectrochemical mineralization of emerging contaminants at porous WO3 interfaces. Applied Catalysis B: Environmental, 2017, 204, 273-282.	10.8	45
33	Photosensitization of wide bandgap semiconductors with antenna molecules. Solar Energy Materials and Solar Cells, 1995, 38, 187-198.	3.0	43
34	New Components for Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2010, 2010, 1-16.	1.4	43
35	A New Strategy Against Peri-Implantitis: Antibacterial Internal Coating. International Journal of Molecular Sciences, 2019, 20, 3897.	1.8	43
36	Some aspects of the charge transfer dynamics in nanostructured WO₃ films. Journal of Materials Chemistry A, 2016, 4, 2995-3006.	5.2	40

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37	Fluorous Molecules for Dye-Sensitized Solar Cells: Synthesis and Photoelectrochemistry of Unsymmetrical Zinc Phthalocyanine Sensitizers with Bulky Fluorophilic Donor Groups. Journal of Physical Chemistry C, 2011, 115, 3777-3788.	1.5	35
38	Bis(8-quinolinolato)platinum(II): a novel complex exhibiting efficient, long-lived luminescence in fluid solution. Inorganica Chimica Acta, 1978, 31, L423-L424.	1.2	33
39	Photoinduced energy and electron transfer in inorganic covalently linked systems. Journal of Photochemistry and Photobiology A: Chemistry, 1994, 82, 191-202.	2.0	33
40	4-Phenylpyridine as ancillary ligand in ruthenium(II) polypyridyl complexes for sensitization of n-type TiO2 electrodes. Journal of Photochemistry and Photobiology A: Chemistry, 1998, 115, 239-242.	2.0	33
41	A New 1,3,4â€Oxadiazoleâ€Based Holeâ€Transport Material for Efficient CH₃NH₃PbBr₃ Perovskite Solar Cells. ChemSusChem, 2016, 9, 657-661.	3.6	31
42	Efficient solar water oxidation using photovoltaic devices functionalized with earth-abundant oxygen evolving catalysts. Physical Chemistry Chemical Physics, 2013, 15, 13083.	1.3	30
43	Excited-state proton-transfer processes of cis-dicyanobis(2,2'-bipyridine)ruthenium(II) in acetonitrile/water solvent systems. The Journal of Physical Chemistry, 1989, 93, 1373-1380.	2.9	29
44	Genetic effect of zirconium oxide coating on osteoblastâ€like cells. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 84B, 550-558.	1.6	28
45	Conductive PEDOT Covalently Bound to Transparent FTO Electrodes. Journal of Physical Chemistry C, 2014, 118, 16782-16790.	1.5	27
46	Hematite Photoanodes Modified with an Fe^{III} Water Oxidation Catalyst. ChemPhysChem, 2014, 15, 1164-1174.	1.0	26
47	Single Walled Carbon Nanohorns as Catalytic Counter Electrodes for Co(III)/(II) Electron Mediators in Dye Sensitized Cells. ACS Applied Materials & Interfaces, 2016, 8, 14604-14612.	4.0	26
48	Dye-sensitized solar cells based on PEDOP as a hole conductive medium. Inorganica Chimica Acta, 2008, 361, 627-634.	1.2	24
49	On the stability of manganese tris(Î²-diketonate) complexes as redox mediators in DSSCs. Physical Chemistry Chemical Physics, 2016, 18, 5949-5956.	1.3	24
50	Perylene Diimide Aggregates on Sb-Doped SnO₂: Charge Transfer Dynamics Relevant to Solar Fuel Generation. Journal of Physical Chemistry C, 2017, 121, 17737-17745.	1.5	22
51	Photoelectrochemical degradation of pharmaceuticals at Î²25 modified WO3 interfaces. Catalysis Today, 2020, 340, 302-310.	2.2	20
52	Electrochemical and electrochromic investigation of poly-bithiophene films on a mesoporous TiO2 surface. Synthetic Metals, 2006, 156, 27-31.	2.1	18
53	Electronic and charge transfer properties of bio-inspired flavylium ions for applications in TiO2-based dye-sensitized solar cells. Photochemical and Photobiological Sciences, 2017, 16, 1400-1414.	1.6	18
54	Photoelectrocatalytic degradation of emerging contaminants at WO3/BiVO4 photoanodes in aqueous solution. Photochemical and Photobiological Sciences, 2019, 18, 2150-2163.	1.6	18

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55	Charge Transfer Dynamics in Î^{2}- and <i>Meso</i>-Substituted Dithienylethylene Porphyrins. Journal of Physical Chemistry C, 2017, 121, 18385-18400.	1.5	17
56	On the Use of PEDOT as a Catalytic Counter Electrode Material in Dye-Sensitized Solar Cells. Applied Sciences (Switzerland), 2021, 11, 3795.	1.3	14
57	Sensitization of n-Type TiO2 Electrode by a Novel Isoquinoline Ruthenium(II) Polypyridyl Complex. Journal of the Brazilian Chemical Society, 1998, 9, 13-15.	0.6	12
58	Electrochromic properties of mixed valence binuclear ruthenium complexes adsorbed on nanocrystalline SnO2 films. Inorganica Chimica Acta, 2007, 360, 1131-1137.	1.2	12
59	Particulate adducts based on sodium risedronate and titanium dioxide for the bioavailability enhancement of oral administered bisphosphonates. European Journal of Pharmaceutical Sciences, 2010, 41, 328-336.	1.9	12
60	A viable surface passivation approach to improve efficiency in cobalt based dye sensitized solar cells. Polyhedron, 2014, 82, 173-180.	1.0	12
61	Electrochemical characterization of polypyridine iron(II) and cobalt(II) complexes for organic redox flow batteries. Polyhedron, 2018, 140, 99-108.	1.0	12
62	Photochemistry of dimeric and trimeric hydroxo-bridged diammine platinum(II) complexes in aqueous solution. Inorganica Chimica Acta, 1982, 62, 187-191.	1.2	10
63	Hydrogen Production with Nanostructured and Sensitized Metal Oxides. Topics in Current Chemistry, 2011, 303, 39-94.	4.0	9
64	Titanium Implants Coated with a Bifunctional Molecule with Antimicrobic Activity: A Rabbit Study. Materials, 2020, 13, 3613.	1.3	8
65	Bis(bipyridine)ruthenium(II) cyanobridge polymeric cations. Inorganica Chimica Acta, 1984, 86, 133-136.	1.2	7
66	Photoelectrochemical Behavior of Electrophoretically Deposited Hematite Thin Films Modified with Ti(IV). Molecules, 2016, 21, 942.	1.7	6
67	Evaluation of the Transepidermal Penetration of a Carnosine Complex in Gel Formulation by 3D Skin Models. Cosmetics, 2018, 5, 67.	1.5	5
68	Modular stand-alone photoelectrocatalytic reactor for emergent contaminant degradation via solar radiation. Solar Energy, 2021, 228, 120-127.	2.9	5
69	Hematite-based photoelectrochemical interfaces for solar fuel production. Inorganica Chimica Acta, 2022, 535, 120862.	1.2	5
70	Optically Transparent Gold Nanoparticles for DSSC Counter-Electrode: An Electrochemical Characterization. Molecules, 2022, 27, 4178.	1.7	3
71	Self-Assembled Multinuclear Complexes for Cobalt(II/III) Mediated Sensitized Solar Cells. Applied Sciences (Switzerland), 2021, 11, 2769.	1.3	2
72	Cyano-Bridged Supramolecular Systems Containing the Ru(bpy) 2 2+ Photosensitizer Unit. , 1987, , 121-133.		2