

Carlo Alberto Bignozzi

List of Publications by Year in descending order

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72
papers

4,579
citations

101543

36
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98798

67
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76
all docs

76
docs citations

76
times ranked

5830
citing authors

#	ARTICLE	IF	CITATIONS
1	Phosphonate-Based Bipyridine Dyes for Stable Photovoltaic Devices. <i>Inorganic Chemistry</i> , 2001, 40, 6073-6079.	4.0	303
2	Nanostructured photoelectrodes based on WO ₃ : applications to photooxidation of aqueous electrolytes. <i>Chemical Society Reviews</i> , 2013, 42, 2228-2246.	38.1	250
3	Efficient Dye-Sensitized Solar Cells Using Red Turnip and Purple Wild Sicilian Prickly Pear Fruits. <i>International Journal of Molecular Sciences</i> , 2010, 11, 254-267.	4.1	233
4	Porphyrin dyes for TiO ₂ sensitization. <i>Journal of Materials Chemistry</i> , 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. <i>Coordination Chemistry Reviews</i> , 2004, 248, 1299-1316.	18.8	218
6	Sensitization of Nanocrystalline TiO ₂ with Black Absorbers Based on Os and Ru Polypyridine Complexes. <i>Journal of the American Chemical Society</i> , 2005, 127, 15342-15343.	13.7	203
7	Photoinduced electron and energy transfer in polynuclear complexes. <i>Topics in Current Chemistry</i> , 1990, , 73-149.	4.0	189
8	Electronic coupling in cyano-bridged ruthenium polypyridine complexes and role of electronic effects on cyanide stretching frequencies. <i>Inorganic Chemistry</i> , 1992, 31, 5260-5267.	4.0	164
9	Natural dye sensitizers for photoelectrochemical cells. <i>Energy and Environmental Science</i> , 2009, 2, 1162.	30.8	162
10	Efficient Photoelectrochemical Water Splitting by Anodically Grown WO ₃ Electrodes. <i>Langmuir</i> , 2011, 27, 7276-7284.	3.5	158
11	Zirconium oxide coating improves implant osseointegration in vivo. <i>Dental Materials</i> , 2008, 24, 357-361.	3.5	155
12	Hierarchical organization of perylene bisimides and polyoxometalates for photo-assisted water oxidation. <i>Nature Chemistry</i> , 2019, 11, 146-153.	13.6	132
13	Efficient Non-corrosive Electron-Transfer Mediator Mixtures for Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2006, 128, 9996-9997.	13.7	118
14	Modification of Nanocrystalline WO ₃ with a Dicationic Perylene Bisimide: Applications to Molecular Level Solar Water Splitting. <i>Journal of the American Chemical Society</i> , 2015, 137, 4630-4633.	13.7	114
15	Synthesis and Comprehensive Characterizations of New cis-RuL ₂ X ₂ (X = Cl, CN, and NCS) Sensitizers for Nanocrystalline TiO ₂ Solar Cell Using Bis-Phosphonated Bipyridine Ligands (L). <i>Inorganic Chemistry</i> , 2003, 42, 6655-6666.	4.0	109
16	Photoanodes Based on Nanostructured WO ₃ for Water Splitting. <i>ChemPhysChem</i> , 2012, 13, 3025-3034.	2.1	99
17	Intervalence transfer in cyano-bridged bi- and trinuclear ruthenium complexes. <i>Journal of the American Chemical Society</i> , 1985, 107, 1644-1651.	13.7	88
18	Preparation and photoelectrochemical characterization of a red sensitive osmium complex containing 4,4'-dicarboxy-2,2'-bipyridine and cyanide ligands. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004, 164, 15-21.	13.7	81

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19	Photo-electrochemical properties of nanostructured WO ₃ prepared with different organic dispersing agents. <i>Solar Energy Materials and Solar Cells</i> , 2010, 94, 788-796.	6.2	79
20	Syntheses and spectroscopic characterization of fac-[Re(CO) ₃ (phen)(L)]PF ₆ , L=trans- and cis-1,2-bis(4-pyridyl)ethylene. <i>Inorganica Chimica Acta</i> , 2001, 313, 149-155.	2.4	76
21	Optical electron-transfer transitions in polynuclear complexes of the type X(NH ₃) ₄ RuNCRu(bpy) ₂ CNRu(NH ₃) ₄ Y ^{m+} (X = NH ₃ , py; Y = NH ₃ , py; m = 4-6). <i>Inorganic Chemistry</i> , 1988, 27, 408-414.	4.0	65
22	Solvent Effects on the Oxidative Electrochemical Behavior of cis-Bis(isothiocyanato)ruthenium(II)-bis-2,2'-bipyridine-4,4'-dicarboxylic Acid. <i>Journal of Physical Chemistry B</i> , 2002, 106, 3926-3932.	2.6	61
23	Long-range energy transfer in oligomeric metal complex assemblies. <i>Journal of the American Chemical Society</i> , 1992, 114, 8727-8729.	13.7	55
24	Efficiency enhancement of the electrocatalytic reduction of CO ₂ : fac-[Re(v-bpy)(CO) ₃ Cl] electropolymerized onto mesoporous TiO ₂ electrodes. <i>Inorganica Chimica Acta</i> , 2006, 359, 3871-3874.	2.4	55
25	Novel Ru-Dioxolene Complexes as Potential Electrochromic Materials and NIR Dyes. <i>Inorganic Chemistry</i> , 2003, 42, 6613-6615.	4.0	54
26	Ruthenium(II) 2,2'-bipyridine complexes containing methyl isocyanide ligands. Extreme effects of nonchromophoric ligands on excited-state properties. <i>Journal of the American Chemical Society</i> , 1988, 110, 7381-7386.	13.7	50
27	Solvatochromic Dye Sensitized Nanocrystalline Solar Cells. <i>Nano Letters</i> , 2002, 2, 625-628.	9.1	50
28	Mesostructured self-assembled titania films for photovoltaic applications. <i>Microporous and Mesoporous Materials</i> , 2006, 88, 304-311.	4.4	48
29	Electrochromic Devices Based on Binuclear Mixed Valence Compounds Adsorbed on Nanocrystalline Semiconductors. <i>Inorganic Chemistry</i> , 2003, 42, 3966-3968.	4.0	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 Push-Pull Zn(II) Porphyrins Acting as Dyes in DSSCs. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23170-23182.	3.1	45
31	Comparative Evaluation of Catalytic Counter Electrodes for Co(III)/(II) Electron Shuttles in Regenerative Photoelectrochemical Cells. <i>Journal of Physical Chemistry C</i> , 2013, 117, 5142-5153.	3.1	45
32	Photoelectrochemical mineralization of emerging contaminants at porous WO ₃ interfaces. <i>Applied Catalysis B: Environmental</i> , 2017, 204, 273-282.	20.2	45
33	Photosensitization of wide bandgap semiconductors with antenna molecules. <i>Solar Energy Materials and Solar Cells</i> , 1995, 38, 187-198.	6.2	43
34	New Components for Dye-Sensitized Solar Cells. <i>International Journal of Photoenergy</i> , 2010, 2010, 1-16.	2.5	43
35	A New Strategy Against Peri-Implantitis: Antibacterial Internal Coating. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3897.	4.1	43
36	Some aspects of the charge transfer dynamics in nanostructured WO ₃ films. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2995-3006.	10.3	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. <i>Journal of Physical Chemistry C</i> , 2011, 115, 3777-3788.	3.1	35
38	Bis(8-quinolinolato)platinum(II): a novel complex exhibiting efficient, long-lived luminescence in fluid solution. <i>Inorganica Chimica Acta</i> , 1978, 31, L423-L424.	2.4	33
39	Photoinduced energy and electron transfer in inorganic covalently linked systems. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1994, 82, 191-202.	3.9	33
40	4-Phenylpyridine as ancillary ligand in ruthenium(II) polypyridyl complexes for sensitization of n-type TiO ₂ electrodes. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1998, 115, 239-242.	3.9	33
41	A New 1,3,4-oxadiazole-Based Hole-Transport Material for Efficient CH ₃ NH ₃ PbBr ₃ Perovskite Solar Cells. <i>ChemSusChem</i> , 2016, 9, 657-661.	6.8	31
42	Efficient solar water oxidation using photovoltaic devices functionalized with earth-abundant oxygen evolving catalysts. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 13083.	2.8	30
43	Excited-state proton-transfer processes of cis-dicyanobis(2,2'-bipyridine)ruthenium(II) in acetonitrile/water solvent systems. <i>The Journal of Physical Chemistry</i> , 1989, 93, 1373-1380.	2.9	29
44	Genetic effect of zirconium oxide coating on osteoblast-like cells. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008, 84B, 550-558.	3.4	28
45	Conductive PEDOT Covalently Bound to Transparent FTO Electrodes. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16782-16790.	3.1	27
46	Hematite Photoanodes Modified with an Fe ^{III} Water Oxidation Catalyst. <i>ChemPhysChem</i> , 2014, 15, 1164-1174.	2.1	26
47	Single Walled Carbon Nanohorns as Catalytic Counter Electrodes for Co(III)/(II) Electron Mediators in Dye Sensitized Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 14604-14612.	8.0	26
48	Dye-sensitized solar cells based on PEDOP as a hole conductive medium. <i>Inorganica Chimica Acta</i> , 2008, 361, 627-634.	2.4	24
49	On the stability of manganese tris(η^2 -diketonate) complexes as redox mediators in DSSCs. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 5949-5956.	2.8	24
50	Perylene Diimide Aggregates on Sb-Doped SnO ₂ : Charge Transfer Dynamics Relevant to Solar Fuel Generation. <i>Journal of Physical Chemistry C</i> , 2017, 121, 17737-17745.	3.1	22
51	Photoelectrochemical degradation of pharmaceuticals at η^{25} modified WO ₃ interfaces. <i>Catalysis Today</i> , 2020, 340, 302-310.	4.4	20
52	Electrochemical and electrochromic investigation of poly-bithiophene films on a mesoporous TiO ₂ surface. <i>Synthetic Metals</i> , 2006, 156, 27-31.	3.9	18
53	Electronic and charge transfer properties of bio-inspired flavylum ions for applications in TiO ₂ -based dye-sensitized solar cells. <i>Photochemical and Photobiological Sciences</i> , 2017, 16, 1400-1414.	2.9	18
54	Photoelectrocatalytic degradation of emerging contaminants at WO ₃ /BiVO ₄ photoanodes in aqueous solution. <i>Photochemical and Photobiological Sciences</i> , 2019, 18, 2150-2163.	2.9	18

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55	Charge Transfer Dynamics in \hat{I}^2 - and <i>Meso</i> -Substituted Dithienylethylene Porphyrins. Journal of Physical Chemistry C, 2017, 121, 18385-18400.	3.1	17
56	On the Use of PEDOT as a Catalytic Counter Electrode Material in Dye-Sensitized Solar Cells. Applied Sciences (Switzerland), 2021, 11, 3795.	2.5	14
57	Sensitization of n-Type TiO ₂ 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 SnO ₂ films. Inorganica Chimica Acta, 2007, 360, 1131-1137.	2.4	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.	4.0	12
60	A viable surface passivation approach to improve efficiency in cobalt based dye sensitized solar cells. Polyhedron, 2014, 82, 173-180.	2.2	12
61	Electrochemical characterization of polypyridine iron(II) and cobalt(II) complexes for organic redox flow batteries. Polyhedron, 2018, 140, 99-108.	2.2	12
62	Photochemistry of dimeric and trimeric hydroxo-bridged diammine platinum(II) complexes in aqueous solution. Inorganica Chimica Acta, 1982, 62, 187-191.	2.4	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 Antimicrobial Activity: A Rabbit Study. Materials, 2020, 13, 3613.	2.9	8
65	Bis(bipyridine)ruthenium(II) cyanobridge polymeric cations. Inorganica Chimica Acta, 1984, 86, 133-136.	2.4	7
66	Photoelectrochemical Behavior of Electrophoretically Deposited Hematite Thin Films Modified with Ti(IV). Molecules, 2016, 21, 942.	3.8	6
67	Evaluation of the Transepidermal Penetration of a Carnosine Complex in Gel Formulation by 3D Skin Models. Cosmetics, 2018, 5, 67.	3.3	5
68	Modular stand-alone photoelectrocatalytic reactor for emergent contaminant degradation via solar radiation. Solar Energy, 2021, 228, 120-127.	6.1	5
69	Hematite-based photoelectrochemical interfaces for solar fuel production. Inorganica Chimica Acta, 2022, 535, 120862.	2.4	5
70	Optically Transparent Gold Nanoparticles for DSSC Counter-Electrode: An Electrochemical Characterization. Molecules, 2022, 27, 4178.	3.8	3
71	Self-Assembled Multinuclear Complexes for Cobalt(II/III) Mediated Sensitized Solar Cells. Applied Sciences (Switzerland), 2021, 11, 2769.	2.5	2
72	Cyano-Bridged Supramolecular Systems Containing the Ru(bpy) ₂ ²⁺ Photosensitizer Unit. , 1987, , 121-133.		2