## Carlo Punta

List of Publications by Year in descending order

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<u>CADLO ΡΙΙΝΤΑ</u>

#	Article	IF	CITATIONS
1	Free Radical Functionalization of Organic Compounds Catalyzed by <i>N-</i> Hydroxyphthalimide. Chemical Reviews, 2007, 107, 3800-3842.	23.0	592
2	Titanium Oxide Antibacterial Surfaces in Biomedical Devices. International Journal of Artificial Organs, 2011, 34, 929-946.	0.7	219
3	Mechanisms of the Aerobic Oxidation of Alcohols to Aldehydes and Ketones, Catalysed under Mild Conditions by Persistent and Non-Persistent Nitroxyl Radicals and Transition Metal Saltsâ~' Polar, Enthalpic, and Captodative Effects. European Journal of Organic Chemistry, 2004, 2004, 109-119.	1.2	138
4	Metal-free aerobic oxidations mediated by <i>N</i> -hydroxyphthalimide. A concise review. Beilstein Journal of Organic Chemistry, 2013, 9, 1296-1310.	1.3	138
5	TEMPO-mediated oxidation of polysaccharides: An ongoing story. Carbohydrate Polymers, 2017, 165, 71-85.	5.1	122
6	Aerobic Oxidation ofN-Alkylamides Catalyzed byN-Hydroxyphthalimide under Mild Conditions. Polar and Enthalpic Effects. Journal of Organic Chemistry, 2002, 67, 2671-2676.	1.7	100
7	A new, highly selective synthesis of aromatic aldehydes by aerobic free-radical oxidation of benzylic alcohols, catalysed by n-hydroxyphthalimide under mild conditions. Polar and enthalpic effects. Chemical Communications, 2002, , 688-689.	2.2	99
8	Effect of UV Irradiation and TiO2-Photocatalysis on Airborne Bacteria and Viruses: An Overview. Materials, 2021, 14, 1075.	1.3	81
9	TEMPOâ€Oxidized Cellulose Cross‣inked with Branched Polyethyleneimine: Nanostructured Adsorbent Sponges for Water Remediation. ChemPlusChem, 2015, 80, 1408-1415.	1.3	80
10	Silver Nanoparticles for Water Pollution Monitoring and Treatments: Ecosafety Challenge and Cellulose-Based Hybrids Solution. Polymers, 2020, 12, 1635.	2.0	77
11	Mechanisms of the aerobic oxidations catalyzed by N-hydroxyderivatives. Journal of Molecular Catalysis A, 2006, 251, 129-149.	4.8	71
12	Sunlight induced functionalisation of some heterocyclic bases in the presence of polycrystalline TiO2. Chemical Communications, 2003, , 2350.	2.2	70
13	Peroxyl Radical Clocks. Journal of Organic Chemistry, 2006, 71, 3527-3532.	1.7	69
14	Noncovalent paramagnetic complexes: detection of halogen bonding in solution by ESR spectroscopy. Tetrahedron Letters, 2006, 47, 3265-3269.	0.7	63
15	Solvent and Temperature Effects in the Free Radical Aerobic Oxidation of Alkyl and Acyl Aromatics Catalysed by Transition Metal Salts andN-Hydroxyphthalimide:Â New Processes for the Synthesis ofp-Hydroxybenzoic Acid, Diphenols, and Dienes for Liquid Crystals and Cross-Linked Polymers. Organic Process Research and Development, 2004. 8, 163-168.	1.3	61
16	Ceramic aerogels from TEMPO-oxidized cellulose nanofibre templates: Synthesis, characterization, and photocatalytic properties. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 261, 53-60.	2.0	61
17	Anomalous diffusion of Ibuprofen in cyclodextrin nanosponge hydrogels: an HRMAS NMR study. Beilstein Journal of Organic Chemistry, 2014, 10, 2715-2723.	1.3	59
18	Hydroperoxidation of Tertiary Alkylaromatics Catalyzed By <i>N</i> â€Hydroxyphthalimide and Aldehydes under Mild Conditions. Advanced Synthesis and Catalysis, 2011, 353, 147-154.	2.1	55

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19	ls it possible to implement Nâ€hydroxyphthalimide homogeneous catalysis for industrial applications? A case study of cumene aerobic oxidation. Journal of Chemical Technology and Biotechnology, 2014, 89, 1370-1378.	1.6	50
20	New Advances in Titanium-Mediated Free Radical Reactions. Molecules, 2012, 17, 14700-14732.	1.7	49
21	Sunlight-induced reactions of some heterocyclic bases with ethers in the presence of TiO2. Journal of Photochemistry and Photobiology A: Chemistry, 2005, 171, 237-242.	2.0	48
22	Molecule-induced homolysis of N-hydroxyphthalimide (NHPI) by peracids and dioxirane. A new, simple, selective aerobic radical epoxidation of alkenes. Tetrahedron Letters, 2006, 47, 1421-1424.	0.7	47
23	Tuning structural parameters for the optimization of drug delivery performance of cyclodextrin-based nanosponges. Expert Opinion on Drug Delivery, 2017, 14, 331-340.	2.4	46
24	Eco-design of nanostructured cellulose sponges for sea-water decontamination from heavy metal ions. Journal of Cleaner Production, 2020, 246, 119009.	4.6	46
25	A novel, selective free-radical carbamoylation of heteroaromatic bases by Ce(iv) oxidation of formamide, catalysed by N-hydroxyphthalimide. Chemical Communications, 2002, , 2496-2497.	2.2	45
26	Peroxidation of Polyunsaturated Fatty Acid Methyl Esters Catalyzed byN-Methyl Benzohydroxamic Acid:Â A New and Convenient Method for Selective Synthesis of Hydroperoxides and Alcohols. Chemical Research in Toxicology, 2005, 18, 349-356.	1.7	45
27	Surface-Functionalization of Nanostructured Cellulose Aerogels by Solid State Eumelanin Coating. Biomacromolecules, 2016, 17, 564-571.	2.6	45
28	Mechanical and Drug Release Properties of Sponges from Crossâ€linked Cellulose Nanofibers. ChemPlusChem, 2017, 82, 848-858.	1.3	45
29	Synthesis and Application of Cellulose-Polyethyleneimine Composites and Nanocomposites: A Concise Review. Materials, 2021, 14, 473.	1.3	45
30	Environmentally Sustainable and Ecosafe Polysaccharide-Based Materials for Water Nano-Treatment: An Eco-Design Study. Materials, 2018, 11, 1228.	1.3	43
31	Selective functionalisation of hydrocarbons by nitric acid and aerobic oxidation catalysed by N-hydroxyphthalimide and iodine under mild conditions. Tetrahedron Letters, 2003, 44, 6919-6922.	0.7	42
32	Free-Radical Version of the Strecker Synthesis of $\hat{1}\pm$ -Aminoamides Promoted by Aqueous H2O2/TiCl3/HCONH2System. Journal of the American Chemical Society, 2006, 128, 5358-5359.	6.6	42
33	Life cycle assessment of emerging environmental technologies in the early stage of development: A case study on nanostructured materials. Journal of Industrial Ecology, 2020, 24, 101-115.	2.8	42
34	Aerobic Oxidation of Alkylaromatics using a Lipophilic <i>N</i> â€Hydroxyphthalimide: Overcoming the Industrial Limit of Catalyst Solubility. ChemSusChem, 2014, 7, 2695-2703.	3.6	39
35	TEMPO-Nanocellulose/Ca2+ Hydrogels: Ibuprofen Drug Diffusion and In Vitro Cytocompatibility. Materials, 2020, 13, 183.	1.3	37
36	A New One-Pot, Four-Component Synthesis of 1,2-Amino Alcohols: TiCl <sub>3</sub> / <i>t</i> BuOOH-Mediated Radical Hydroxymethylation of Imines. Organic Letters, 2008, 10, 5063-5066.	2.4	36

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37	Connection between the vibrational dynamics and the crossâ€linking properties in cyclodextrinsâ€based polymers. Journal of Raman Spectroscopy, 2013, 44, 1457-1462.	1.2	36
38	Polar effects in freeâ€radical reactions. A novel homolytic acylation of heteroaromatic bases by aerobic oxidation of aldehydes, catalysed by <i>N</i> â€hydroxyphthalimide and Co salts. Journal of Heterocyclic Chemistry, 2003, 40, 325-328.	1.4	35
39	Key Role of Ti(IV) in the Selective Radicalâ^'Radical Cross-Coupling Mediated by the Ingold-Fischer Effect. Journal of the American Chemical Society, 2008, 130, 18018-18024.	6.6	34
40	Recent Developments in Nucleophilic Radical Addition to Imines: the Key Role of Transition Metals and the New Porta Radical-Type Version of the Mannich and Strecker Reactions. Mini-Reviews in Organic Chemistry, 2009, 6, 184-195.	0.6	34
41	TiO2 in Organic Photosynthesis: Sunlight Induced Functionalization of Heterocyclic Bases. Current Organic Chemistry, 2010, 14, 1153-1169.	0.9	34
42	Sunlight Induced Oxidative Photoactivation of <i>N</i> â€Hydroxyphthalimide Mediated by Naphthalene Imides. Advanced Synthesis and Catalysis, 2013, 355, 3210-3220.	2.1	34
43	Organocatalyzed Epoxidation of Alkenes in Continuous Flow using a Multiâ€Jet Oscillating Disk Reactor. ChemSusChem, 2012, 5, 261-265.	3.6	31
44	Selective catalytic aerobic oxidation of substituted ethylbenzenes under mild conditions. Journal of Molecular Catalysis A, 2012, 355, 155-160.	4.8	31
45	Lipophilic <i>N</i> â€Hydroxyphthalimide Catalysts for the Aerobic Oxidation of Cumene: Towards Solventâ€Free Conditions and Back. Chemistry - A European Journal, 2017, 23, 10616-10625.	1.7	30
46	Solventâ€Free Aerobic Oxidation of Ethylbenzene Promoted by NHPI/Co(II) Catalytic System: The Key Role of Ionic Liquids. ChemCatChem, 2020, 12, 259-266.	1.8	30
47	Direct evidence of gel–sol transition in cyclodextrin-based hydrogels as revealed by FTIR-ATR spectroscopy. Soft Matter, 2014, 10, 2320-2326.	1.2	29
48	Synthesis and characterization of a hyper-branched water-soluble β-cyclodextrin polymer. Beilstein Journal of Organic Chemistry, 2014, 10, 2586-2593.	1.3	28
49	Effect-Based Approach to Assess Nanostructured Cellulose Sponge Removal Efficacy of Zinc Ions from Seawater to Prevent Ecological Risks. Nanomaterials, 2020, 10, 1283.	1.9	28
50	Nanostructured Cellulose-Based Sorbent Materials for Water Decontamination from Organic Dyes. Nanomaterials, 2020, 10, 1570.	1.9	28
51	Free-Radical Addition to Ketimines Generated In Situ. New One-Pot Synthesis of Quaternary α-Aminoamides Promoted by a H <sub>2</sub> O <sub>2</sub> /TiCl <sub>4</sub> â~Zn/HCONH <sub>2</sub> System. Organic Letters, 2010, 12, 3898-3901.	2.4	27
52	Water and polymer dynamics in a model polysaccharide hydrogel: the role of hydrophobic/hydrophilic balance. Physical Chemistry Chemical Physics, 2015, 17, 963-971.	1.3	27
53	New Selective Metal-Free Oxidations of Primary Alcohols by HNO3or HNO3and O2, Catalyzed by Br2. Synlett, 2004, 2004, 2203-2205.	1.0	26
54	A New, Convenient, Highly Selective Free-Radical Hydroxymethylation of Heteroaromatic Bases by Persulfate Oxidation of Ethylene Glycol and Glycerol, Catalysed by AgNO3. Synlett, 2004, 2004, 0874-0876.	1.0	26

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55	Sunlight-induced functionalisation reactions of heteroaromatic bases with aldehydes in the presence of TiO2: A hypothesis on the mechanism. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 189, 322-328.	2.0	26
56	Cross-linked cellulose nano-sponges: a small angle neutron scattering (SANS) study. Cellulose, 2019, 26, 9005-9019.	2.4	26
57	Enthalpic and polar effects in the reactions of perfluoroalkyl radicals. Journal of Fluorine Chemistry, 2004, 125, 205-211.	0.9	25
58	Comparative Life Cycle Assessment of Cellulose Nanofibres Production Routes from Virgin and Recycled Raw Materials. Molecules, 2021, 26, 2558.	1.7	25
59	An aerogel obtained from chemo-enzymatically oxidized fenugreek galactomannans as a versatile delivery system. Carbohydrate Polymers, 2016, 144, 353-361.	5.1	24
60	Hydrogen-bond dynamics of water confined in cyclodextrin nanosponges hydrogel. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2014, 80, 69-75.	0.9	23
61	2D Correlation Spectroscopy (2DCoS) Analysis of Temperature-Dependent FTIR-ATR Spectra in Branched Polyethyleneimine/TEMPO-Oxidized Cellulose Nano-Fiber Xerogels. Polymers, 2021, 13, 528.	2.0	23
62	The Era of Nanomaterials: A Safe Solution or a Risk for Marine Environmental Pollution?. Biomolecules, 2021, 11, 441.	1.8	23
63	Cellulose for the Production of Air-Filtering Systems: A Critical Review. Materials, 2022, 15, 976.	1.3	23
64	Dip in colorimetric fluoride sensing by a chemically engineered polymeric cellulose/bPEI conjugate in the solid state. RSC Advances, 2015, 5, 83197-83205.	1.7	21
65	FTIR-ATR analysis of the H-bond network of water in branched polyethyleneimine/TEMPO-oxidized cellulose nano-fiber xerogels. Cellulose, 2020, 27, 8605-8618.	2.4	21
66	Suitability of a Cellulose-Based Nanomaterial for the Remediation of Heavy Metal Contaminated Freshwaters: A Case-Study Showing the Recovery of Cadmium Induced DNA Integrity Loss, Cell Proliferation Increase, Nuclear Morphology and Chromosomal Alterations on Dreissena polymorpha. Nanomaterials, 2020, 10, 1837.	1.9	20
67	Effective magnetic moment in cyclodextrin–polynitroxides: potential supramolecular vectors for magnetic resonance imaging. RSC Advances, 2015, 5, 76133-76140.	1.7	19
68	Dynamics and interactions of ibuprofen in cyclodextrin nanosponges by solid-state NMR spectroscopy. Beilstein Journal of Organic Chemistry, 2017, 13, 182-194.	1.3	19
69	Nakedâ€Eye Heterogeneous Sensing of Fluoride Ions by Coâ€Polymeric Nanosponge Systems Comprising Aromaticâ€Imideâ€Functionalized Nanocellulose and Branched Polyethyleneimine. ChemPlusChem, 2019, 84, 1512-1518.	1.3	19
70	Toward an understanding of the thermosensitive behaviour of pH-responsive hydrogels based on cyclodextrins. Soft Matter, 2015, 11, 5862-5871.	1.2	18
71	A green approach to the amidation of heterocyclic bases: the use of sunlight and air. Research on Chemical Intermediates, 2007, 33, 311-317.	1.3	17
72	Glass-like dynamics of new cross-linked polymeric systems: Behavior of the Boson peak. Journal of Non-Crystalline Solids, 2014, 401, 73-77.	1.5	17

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73	A New, Highly Selective, Free-Radical Aerobic Oxidation of Silanes to Silanols Catalysed by N-Hydroxyphthalimide under Mild Conditions Synlett, 2002, 2002, 1173-1175.	1.0	16
74	Combining Raman and infrared spectroscopy as a powerful tool for the structural elucidation of cyclodextrin-based polymeric hydrogels. Physical Chemistry Chemical Physics, 2015, 17, 10274-10282.	1.3	16
75	Influence of cellulose nanofibrils on the rheology, microstructure and strength of alkali activated ground granulated blast-furnace slag: a comparison with ordinary Portland cement. Materials and Structures/Materiaux Et Constructions, 2021, 54, 1.	1.3	16
76	Zinc- and Copper-Loaded Nanosponges from Cellulose Nanofibers Hydrogels: New Heterogeneous Catalysts for the Synthesis of Aromatic Acetals. Gels, 2022, 8, 54.	2.1	16
77	Gel-sol evolution of cyclodextrin-based nanosponges: role of the macrocycle size. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2014, 80, 77-83.	0.9	15
78	SANS investigation of water adsorption in tunable cyclodextrin-based polymeric hydrogels. Physical Chemistry Chemical Physics, 2017, 19, 6022-6029.	1.3	15
79	Microwave-assisted synthesis of TEMPO-labeled hydrogels traceable with MRI. Soft Matter, 2018, 14, 558-565.	1.2	15
80	Efficient radical domino approach to $\hat{l}^2$ -aminoalcohols from arylamines and alcohols triggered by Ti(III)/t-BuOOH. Tetrahedron, 2010, 66, 2044-2052.	1.0	14
81	Free-radical hydroxymethylation of ketimines generated in situ: a one-pot multicomponent synthesis of β,β-disubstituted-β-aminoalcohols. Tetrahedron, 2012, 68, 10151-10156.	1.0	14
82	Functionalization of Cyclodextrins with N-Hydroxyphthalimide Moiety: A New Class of Supramolecular Pro-Oxidant Organocatalysts. Molecules, 2015, 20, 15881-15892.	1.7	13
83	Probing the molecular connectivity of water confined in polymer hydrogels. Journal of Chemical Physics, 2015, 142, 014901.	1.2	13
84	Correlation between collective and molecular dynamics in pH-responsive cyclodextrin-based hydrogels. Physical Chemistry Chemical Physics, 2017, 19, 22555-22563.	1.3	13
85	New, Simple and Selective Synthesis of Perfluoroalkylquinones by Perfluoroalkyl Radicals - Enthalpic and Polar Effects. European Journal of Organic Chemistry, 2005, 2005, 4434-4440.	1.2	12
86	New domino radical synthesis of aminoalcohols promoted by TiCl4–Zn/t-BuOOH system: selective hydroxyalkylation of amines in alcohol or in cyclic ether cosolvents. Organic and Biomolecular Chemistry, 2011, 9, 3759.	1.5	12
87	Selective Monoetherification of 1,4-Hydroquinone Promoted by NaNO2. Current Organic Chemistry, 2013, 17, 1108-1113.	0.9	12
88	Guest–matrix interactions affect the solvation of cyclodextrin-based polymeric hydrogels: a UV Raman scattering study. Soft Matter, 2016, 12, 8861-8868.	1.2	11
89	Coâ€Polymeric Nanosponges from Cellulose Biomass as Heterogeneous Catalysts for amineâ€catalyzed Organic Reactions. ChemCatChem, 2020, 12, 6214-6222.	1.8	11
90	O <sub>2</sub> -Mediated Photocatalytic Functionalization of Organic Compounds: Recent Advances Towards Greener Synthetic Routes. Current Organic Chemistry, 2013, 17, 2406-2419.	0.9	11

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91	Reductive Coupling of Aromatic Aldehydes Promoted by an Aqueous TiCl3/tBuOOH System in Alcoholic Cosolvents. European Journal of Organic Chemistry, 2007, 2007, 4050-4055.	1.2	10
92	Understanding the topography effects on competitive adsorption on a nanosized anatase crystal: a molecular dynamics study. Chemical Communications, 2013, 49, 7581.	2.2	10
93	Vibrational signatures of the water behaviour upon confinement in nanoporous hydrogels. Physical Chemistry Chemical Physics, 2016, 18, 12252-12259.	1.3	10
94	Multicomponent versus domino reactions: One-pot free-radical synthesis of β-amino-ethers and β-amino-alcohols. Beilstein Journal of Organic Chemistry, 2015, 11, 66-73.	1.3	9
95	Flexible hybrid coatings with efficient antioxidation properties. Food Packaging and Shelf Life, 2016, 10, 106-114.	3.3	7
96	Transport Properties of Ibuprofen Encapsulated in Cyclodextrin Nanosponge Hydrogels: A Proton HR-MAS NMR Spectroscopy Study. Journal of Visualized Experiments, 2016, , .	0.2	7
97	Structural and molecular response in cyclodextrin-based pH-sensitive hydrogels by the joint use of Brillouin, UV Raman and Small Angle Neutron Scattering techniques. Journal of Molecular Liquids, 2018, 271, 738-746.	2.3	6
98	Selective Aerobic Radical Epoxidation of $\hat{I}\pm$ -Olefins Catalyzed by N-Hydroxyphthalimide. , 2008, , 217-229.		5
99	Photocatalytic Minisci Reaction. , 2015, , 339-352.		5
100	Cellular Responses Induced by Zinc in Zebra Mussel Haemocytes. Loss of DNA Integrity as a Cellular Mechanism to Evaluate the Suitability of Nanocellulose-Based Materials in Nanoremediation. Nanomaterials, 2021, 11, 2219.	1.9	5
101	New Developments in Peroxidation of Polyunsaturated Fatty Acids. Letters in Organic Chemistry, 2006, 3, 91-97.	0.2	4
102	Reactivity of benzyl radicals: The trapping of primary, secondary and tertiary benzyl radicals with heterocyclic bases. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 214, 112-114.	2.0	4
103	N-Hydroxyphthalimide catalysts as bioactive pro-oxidants. RSC Advances, 2016, 6, 21749-21755.	1.7	3
104	Recent advances in photocatalytic Minisci reaction: an eco-friendly functionalization of biologically relevant heteroarenes. , 2021, , 189-206.		3
105	An Optimized Process to 10-Bromo-1-decanol. Organic Process Research and Development, 2010, 14, 1215-1220.	1.3	2
106	Ecosafe nanomaterials for environmental remediation. , 2020, , 383-405.		2
107	A Novel, Selective Free-Radical Carbamoylation of Heteroaromatic Bases by Ce(IV) Oxidation of Formamide, Catalyzed by N-Hydroxyphthalimide ChemInform, 2003, 34, no.	0.1	0
108	Polar Effects in Free-Radical Reactions. A Novel Homolytic Acylation of Heteroaromatic Bases by Aerobic Oxidation of Aldehydes, Catalyzed by N-Hydroxyphthalimide and Co Salts ChemInform, 2003, 34, no.	0.1	0

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109	Selective Functionalization of Hydrocarbons by Nitric Acid and Aerobic Oxidation Catalyzed by N-Hydroxyphthalimide and Iodine under Mild Conditions ChemInform, 2003, 34, no.	0.1	0
110	Sunlight Induced Functionalization of Some Heterocyclic Bases in the Presence of Polycrystalline TiO2 ChemInform, 2004, 35, no.	0.1	0
111	Enthalpic and Polar Effects in the Reactions of Perfluoroalkyl Radicals. New Selective Synthetic Developments with Alkenes and Heteroaromatic Bases ChemInform, 2004, 35, no.	0.1	0
112	New Selective Metal-Free Oxidations of Primary Alcohols by HNO3 or HNO3 and O2, Catalyzed by Br2 ChemInform, 2005, 36, no.	0.1	0
113	Ecosafe Nano-based solutions for Pollution Monitoring and Control in the Marine Environment. , 2021, , .		0