## Gonzalo Cosa

## List of Publications by Year in descending order

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101543 133252 4,105 114 36 59 citations h-index g-index papers 118 118 118 5140 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Photophysical Properties of Fluorescent DNA-dyes Bound to Single- and Double-stranded DNA in Aqueous Buffered Solution¶. Photochemistry and Photobiology, 2001, 73, 585.	2.5	310
2	Loading and selective release of cargo in DNA nanotubes with longitudinal variation. Nature Chemistry, 2010, 2, 319-328.	13.6	297
3	Photo-induced Metal-Catalyst-Free Aromatic Finkelstein Reaction. Journal of the American Chemical Society, 2015, 137, 8328-8331.	13.7	157
4	Bodipy Dyes with Tunable Redox Potentials and Functional Groups for Further Tethering: Preparation, Electrochemical, and Spectroscopic Characterization. Journal of the American Chemical Society, 2010, 132, 17560-17569.	13.7	143
5	Reactive Oxygen Species Mediated Activation of a Dormant Singlet Oxygen Photosensitizer: From Autocatalytic Singlet Oxygen Amplification to Chemicontrolled Photodynamic Therapy. Journal of the American Chemical Society, 2016, 138, 1215-1225.	13.7	143
6	Photosensitized Membrane Permeabilization Requires Contact-Dependent Reactions between Photosensitizer and Lipids. Journal of the American Chemical Society, 2018, 140, 9606-9615.	13.7	133
7	Modular construction of DNA nanotubes of tunable geometry and single- or double-stranded character. Nature Nanotechnology, 2009, 4, 349-352.	31.5	122
8	Influence of solvent polarity and base concentration on the photochemistry of ketoprofen: independent singlet and triplet pathways. Physical Chemistry Chemical Physics, 1999, 1, 3533-3537.	2.8	88
9	Design and Synthesis of a BODIPY-α-Tocopherol Adduct for Use as an Off/On Fluorescent Antioxidant Indicator. Journal of the American Chemical Society, 2007, 129, 1842-1843.	13.7	81
10	Photodegradation and photosensitization in pharmaceutical products: Assessing drug phototoxicity. Pure and Applied Chemistry, 2004, 76, 263-275.	1.9	77
11	Fluorogenic α-Tocopherol Analogue for Monitoring the Antioxidant Status within the Inner Mitochondrial Membrane of Live Cells. Journal of the American Chemical Society, 2013, 135, 17135-17143.	13.7	70
12	Secondary Structure and Secondary Structure Dynamics of DNA Hairpins Complexed with HIV-1 NC Protein. Biophysical Journal, 2004, 87, 2759-2767.	0.5	68
13	Single-Molecule FRET Studies of Important Intermediates in the Nucleocapsid-Protein-Chaperoned Minus-Strand Transfer Step in HIV-1 Reverse Transcription. Biophysical Journal, 2005, 89, 3470-3479.	0.5	68
14	Connecting the "Dots― From Free Radical Lipid Autoxidation to Cell Pathology and Disease. Chemical Reviews, 2020, 120, 12757-12787.	47.7	61
15	How Lipid Unsaturation, Peroxyl Radical Partitioning, and Chromanol Lipophilic Tail Affect the Antioxidant Activity of α-Tocopherol: Direct Visualization via High-Throughput Fluorescence Studies Conducted with Fluorogenic α-Tocopherol Analogues. Journal of the American Chemical Society, 2012, 134. 10102-10113.	13.7	60
16	A dissipative pathway for the structural evolution of DNA fibres. Nature Chemistry, 2021, 13, 843-849.	13.6	60
17	Mitochondria Alkylation and Cellular Trafficking Mapped with a Lipophilic BODIPY–Acrolein Fluorogenic Probe. Journal of the American Chemical Society, 2017, 139, 16273-16281.	13.7	59
18	How Drug Photodegradation Studies Led to the Promise of New Therapies and Some Fundamental Carbanion Reaction Dynamics along the Way. Accounts of Chemical Research, 2009, 42, 599-607.	15.6	56

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19	Highly Photostable and Fluorescent Microporous Solids Prepared via Solid-State Entrapment of Boron Dipyrromethene Dyes in a Nascent Metal–Organic Framework. Journal of the American Chemical Society, 2018, 140, 16882-16887.	13.7	56
20	Unifying Mechanism for Thiol-Induced Photoswitching and Photostability of Cyanine Dyes. Journal of the American Chemical Society, 2020, 142, 12681-12689.	13.7	56
21	Besting Vitamin E: Sidechain Substitution is Key to the Reactivity of Naphthyridinol Antioxidants in Lipid Bilayers. Journal of the American Chemical Society, 2013, 135, 1394-1405.	13.7	52
22	Stepwise growth of surface-grafted DNA nanotubes visualized at the single-molecule level. Nature Chemistry, 2015, 7, 295-300.	13.6	51
23	Phenol-Based Lipophilic Fluorescent Antioxidant Indicators: A Rational Approach. Journal of Organic Chemistry, 2009, 74, 3641-3651.	3.2	49
24	Cy3 Photoprotection Mediated by Ni <sup>2+</sup> for Extended Single-Molecule Imaging: Old Tricks for New Techniques. Journal of the American Chemical Society, 2015, 137, 1116-1122.	13.7	49
25	Simple Design for DNA Nanotubes from a Minimal Set of Unmodified Strands: Rapid, Room-Temperature Assembly and Readily Tunable Structure. ACS Nano, 2013, 7, 3022-3028.	14.6	48
26	Intrazeolite Photochemistry. 26. Photophysical Properties of Nanosized TiO2Clusters Included in Zeolites Y, $\hat{l}^2$ , and Mordenite. Chemistry of Materials, 2001, 13, 715-722.	6.7	45
27	Rate of Lipid Peroxyl Radical Production during Cellular Homeostasis Unraveled via Fluorescence Imaging. Journal of the American Chemical Society, 2017, 139, 15801-15811.	13.7	44
28	Electronic Excited State Redox Properties for BODIPY Dyes Predicted from Hammett Constants: Estimating the Driving Force of Photoinduced Electron Transfer. Journal of Physical Chemistry A, 2014, 118, 10622-10630.	2.5	43
29	Dynamic DNA Nanotubes: Reversible Switching between Single and Double-Stranded Forms, and Effect of Base Deletions. ACS Nano, 2015, 9, 11898-11908.	14.6	43
30	Tuning the photocatalytic activity of titanium dioxide by encapsulation inside zeolites exemplified by the cases of thianthrene photooxygenation and horseradish peroxidase photodeactivation. New Journal of Chemistry, 2002, 26, 1448-1455.	2.8	40
31	Evidence for Non-Two-State Kinetics in the Nucleocapsid Protein Chaperoned Opening of DNA Hairpins. Journal of Physical Chemistry B, 2006, 110, 2419-2426.	2.6	40
32	When Push Comes to Shove: Unravelling the Mechanism and Scope of Nonemissive <i>meso</i> -Unsaturated BODIPY Dyes. Journal of Physical Chemistry B, 2015, 119, 4758-4765.	2.6	40
33	Efficient One-Step PEG-Silane Passivation of Glass Surfaces for Single-Molecule Fluorescence Studies. ACS Applied Materials & Samp; Interfaces, 2018, 10, 39505-39511.	8.0	40
34	Photocatalytic Activity of a Multicomponent System Assembled within Zeolites:Â Case of 2,4,6-Triphenylpyrylium or Ruthenium Tris(bipyridyl) Photosensitizers and Titanium Dioxide Relays within Zeolite Y. Journal of Physical Chemistry B, 2002, 106, 2460-2467.	2.6	38
35	Unraveling electronic energy transfer in single conjugated polyelectrolytes encapsulated in lipid vesicles. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17480-17485.	7.1	38
36	Molecular Imaging of Lipid Peroxyl Radicals in Living Cells with a BODIPYâ^α-Tocopherol Adduct. Biochemistry, 2009, 48, 5658-5668.	2.5	37

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37	Laser Techniques in the Study of Drug Photochemistry¶. Photochemistry and Photobiology, 2004, 80, 159.	2.5	36
38	meso-Acetoxymethyl BODIPY dyes for photodynamic therapy: improved photostability of singlet oxygen photosensitizers. Photochemical and Photobiological Sciences, 2017, 16, 178-184.	2.9	36
39	Liposome Encapsulation of Conjugated Polyelectrolytes:  Toward a Liposome Beacon. Journal of the American Chemical Society, 2008, 130, 457-459.	13.7	35
40	Self-Healing Dyesâ€"Keeping the Promise?. Journal of Physical Chemistry Letters, 2020, 11, 4462-4480.	4.6	35
41	Inversion of 4-methoxybenzophenone triplet in aqueous solutions. Photochemical and Photobiological Sciences, 2002, 1, 704-708.	2.9	34
42	N-(4-(di-tert-butyl[18F]fluorosilyl)benzyl)-2-hydroxy-N,N-dimethylethylammonium bromide ([18F]SiFAN+Brâ^²): A novel lead compound for the development of hydrophilic SiFA-based prosthetic groups for 18F-labeling. Journal of Fluorine Chemistry, 2011, 132, 27-34.	1.7	34
43	Assembly of Zwitterionic Phospholipid/Conjugated Polyelectrolyte Complexes: Structure and Photophysical Properties. Langmuir, 2010, 26, 6746-6754.	3.5	33
44	Redox-Based Photostabilizing Agents in Fluorescence Imaging: The Hidden Role of Intersystem Crossing in Geminate Radical Ion Pairs. Journal of the American Chemical Society, 2017, 139, 13227-13233.	13.7	32
45	DNA Damage Detection Technique Applying Time-Resolved Fluorescence Measurements. Analytical Chemistry, 2002, 74, 6163-6169.	6.5	31
46	Binding Kinetics and Affinities of Heterodimeric versus Homodimeric HIV-1 Reverse Transcriptase on DNA–DNA Substrates at the Single-Molecule Level. Journal of Physical Chemistry B, 2013, 117, 4560-4567.	2.6	31
47	Single-molecule methods in structural DNA nanotechnology. Chemical Society Reviews, 2020, 49, 4220-4233.	38.1	31
48	Improving the Photostability of Red- and Green-Emissive Single-Molecule Fluorophores via Ni <sup>2+</sup> Mediated Excited Triplet-State Quenching. Journal of Physical Chemistry B, 2016, 120, 11923-11929.	2.6	29
49	Direct determination of single-to-double stranded DNA ratio in solution applying time-resolved fluorescence measurements of dye–DNA complexes. Chemical Communications, 2000, , 689-690.	4.1	28
50	Characterisation of organic solid forms and real-time in situ monitoring of their transformations using solid-state fluorescence. CrystEngComm, 2013, 15, 5100.	2.6	28
51	Monitoring in Real-Time the Degrafting of Covalently Attached Fluorescent Polymer Brushes Grafted to Silica Substrates—Effects of pH and Salt. Macromolecules, 2011, 44, 8177-8184.	4.8	27
52	Biomimetic Light-Harvesting Antenna Based on the Self-Assembly of Conjugated Polyelectrolytes Embedded within Lipid Membranes. ACS Nano, 2016, 10, 10598-10605.	14.6	27
53	Monitoring Chemical and Biological Electron Transfer Reactions with a Fluorogenic Vitamin K Analogue Probe. Journal of the American Chemical Society, 2016, 138, 16388-16397.	13.7	26
54	Interactions of the Disordered Domain II of Hepatitis C Virus NS5A with Cyclophilin A, NS5B, and Viral RNA Show Extensive Overlap. ACS Infectious Diseases, 2016, 2, 839-851.	3.8	24

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55	Fluorogenic Ubiquinone Analogue for Monitoring Chemical and Biological Redox Processes. Journal of the American Chemical Society, 2016, 138, 11327-11334.	13.7	24
56	Tris-N-Nitrilotriacetic Acid Fluorophore as a Self-Healing Dye for Single-Molecule Fluorescence Imaging. Journal of the American Chemical Society, 2018, 140, 11006-11012.	13.7	24
57	Photophysical Properties of Fluorescent DNA-dyes Bound to Single- and Double-stranded DNA in Aqueous Buffered Solution¶. Photochemistry and Photobiology, 2001, 73, 585-599.	2.5	23
58	Reactivity of adrenaline toward alkoxyl radicals and carbonyl triplet states. Organic and Biomolecular Chemistry, 2008, 6, 4609.	2.8	22
59	Spectral Characteristics and Photosensitization of TiO <sub>2</sub> Nanoparticles in Reverse Micelles by Perylenes. Journal of Physical Chemistry B, 2013, 117, 4568-4581.	2.6	22
60	Dynamics of Hepatitis C Virus (HCV) RNA-dependent RNA Polymerase NS5B in Complex with RNA. Journal of Biological Chemistry, 2014, 289, 14399-14411.	3.4	22
61	Interaction of Anionic Phenylene Ethynylene Polymers with Lipids: From Membrane Embedding to Liposome Fusion. Langmuir, 2014, 30, 10704-10711.	3.5	21
62	DNA Nanotubes with Hydrophobic Environments: Toward New Platforms for Guest Encapsulation and Cellular Delivery. Advanced Healthcare Materials, 2018, 7, 1701049.	7.6	21
63	Conjugated polyelectrolyte–lipid interactions: Opportunities in biosensing. Pure and Applied Chemistry, 2010, 83, 43-55.	1.9	20
64	Absolute Rate Constants for Water Protonation of 1-(3-Benzoylphenyl)alkyl Carbanions. Organic Letters, 2002, 4, 3083-3085.	4.6	19
65	Fluorogenic probes for imaging reactive oxygen species. Photochemistry, 0, , 279-301.	0.2	19
66	Spatio-temporal monitoring of lipid peroxyl radicals in live cell studies combining fluorogenic antioxidants and fluorescence microscopy methods. Free Radical Biology and Medicine, 2018, 128, 124-136.	2.9	19
67	Cigarette smoke activates CFTR through ROS-stimulated cAMP signaling in human bronchial epithelial cells. American Journal of Physiology - Cell Physiology, 2018, 314, C118-C134.	4.6	18
68	First Determination of Absolute Rate Constants for the Reaction of Aroyl-Substituted Benzyl Carbanions in Water and DMSO. Journal of the American Chemical Society, 2002, 124, 15308-15312.	13.7	17
69	Site-Specific Fluorescent Labeling and Oriented Immobilization of a Triple Mutant of CYP3A4 via C64. Bioconjugate Chemistry, 2012, 23, 826-836.	3.6	17
70	Counting Single Redox Turnovers: Fluorogenic Antioxidant Conversion and Mass Transport Visualization via Single Molecule Spectroelectrochemistry. Journal of Physical Chemistry C, 2016, 120, 15349-15353.	3.1	17
71	Conformational Changes Spanning Angstroms to Nanometers via a Combined Protein-Induced Fluorescence Enhancement–Förster Resonance Energy Transfer Method. Journal of Physical Chemistry B, 2017, 121, 2039-2048.	2.6	17
72	Thermosetting supramolecular polymerization of compartmentalized DNA fibers with stereo sequence and length control. CheM, 2021, 7, 2395-2414.	11.7	16

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73	Increasing the life expectancy of carbanions by zeolite inclusion. Chemical Communications, 2002, , 2154-2155.	4.1	15
74	A High-Throughput Image Correlation Method for Rapid Analysis of Fluorophore Photoblinking and Photobleaching Rates. ACS Nano, 2019, 13, 11955-11966.	14.6	15
75	pH Effect on the efficiency of the photodeactivation pathways of naphazoline: a combined steady state and time resolved study. New Journal of Chemistry, 2000, 24, 159-163.	2.8	14
76	Synthesis and characterization of silicon phthalocyanines bearing axial phenoxyl groups for attachment to semiconducting metal oxides. Journal of Porphyrins and Phthalocyanines, 2011, 15, 943-950.	0.8	14
77	Room Temperature Phosphorescence vs Triplet–Triplet Annihilation in N-Substituted Acridone Solids. Journal of Physical Chemistry Letters, 2021, 12, 6431-6438.	4.6	14
78	Dye Lipophilicity and Retention in Lipid Membranes: Implications for Single-Molecule Spectroscopy. Langmuir, 2014, 30, 11138-11146.	3.5	13
79	Kinetics of Strand Displacement and Hybridization on Wireframe DNA Nanostructures: Dissecting the Roles of Size, Morphology, and Rigidity. ACS Nano, 2018, 12, 12836-12846.	14.6	13
80	Real-Time Single-Cell Imaging Reveals Accelerating Lipid Peroxyl Radical Formation in <i>Escherichia coli</i> Triggered by a Fluoroquinolone Antibiotic. ACS Infectious Diseases, 2020, 6, 2468-2477.	3.8	13
81	Estimation of the Bimolecular Rate Constant for Exciplex Formation from the Analysis of Its Emission Spectrum. Journal of Physical Chemistry A, 1997, 101, 4922-4928.	2.5	12
82	Comparative Study of the Reactivities of Substituted 3-(Benzoyl)benzyl Carbanions in Water and in DMSO. Journal of Organic Chemistry, 2004, 69, 7066-7071.	3.2	12
83	Enhancing the Emissive Properties of Poly( <i>p</i> phenylenevinylene)-Conjugated Polyelectrolyte-Coated SiO <sub>2</sub> Nanoparticles. Journal of the American Chemical Society, 2012, 134, 1648-1652.	13.7	12
84	Advancing Wireframe DNA Nanostructures Using Single-Molecule Fluorescence Microscopy Techniques. Accounts of Chemical Research, 2019, 52, 3199-3210.	15.6	12
85	Tuning Photoinduced Electron Transfer Efficiency of Fluorogenic BODIPYâ€ <i>α</i> àê√ocopherol Analogues. Photochemistry and Photobiology, 2019, 95, 192-201.	2.5	12
86	A Laser Flash Photolysis Study of Fenofibric Acid in Aqueous Buffered Media: Unexpected Triplet State Inversion in a Derivative of 4-Alkoxybenzophenone¶. Photochemistry and Photobiology, 2002, 75, 193.	2.5	11
87	Assembling nanoantennas. Nature Chemistry, 2013, 5, 159-160.	13.6	11
88	Development of a Fluorogenic Reactivity Palette for the Study of Nucleophilic Addition Reactions Based on <i>meso</i> -Formyl BODIPY Dyes. ACS Omega, 2017, 2, 8618-8624.	3.5	11
89	Ambient condition oxidation in individual liposomes observed at the single molecule level. Chemical Science, 2014, 5, 2525-2529.	7.4	10
90	Charge-Transfer Dynamics of Fluorescent Dye-Sensitized Electrodes under Applied Biases. Journal of Physical Chemistry Letters, 2015, 6, 2688-2693.	4.6	10

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91	Effect of antioxidant supplements on lipid peroxidation levels in primary cortical neuron cultures. Free Radical Biology and Medicine, 2019, 130, 471-477.	2.9	10
92	Laser techniques in the study of drug photochemistry. Photochemistry and Photobiology, 2004, 80, 159-74.	2.5	9
93	Photochemistry of Diketones:Â Observation of a Triplet Stateâ `Oxygen Adduct. Journal of the American Chemical Society, 2004, 126, 8636-8637.	13.7	8
94	Deposition of anionic conjugated poly(phenylenevinylene) onto silica nanoparticles via electrostatic interactionsÂâ€" Assembly and single-particle spectroscopy. Canadian Journal of Chemistry, 2011, 89, 385-394.	1.1	8
95	Photoinduced Electron Transfer in Peryleneâ€TiO <sub>2</sub> Nanoassemblies. Photochemistry and Photobiology, 2013, 89, 1375-1382.	2.5	7
96	Heterogeneous Charge Mobility in Individual Conjugated Polyelectrolyte Nanoparticles Revealed by Two-Color Single Particle Spectroelectrochemistry Studies. Journal of Physical Chemistry C, 2015, 119, 12875-12886.	3.1	7
97	Exploiting Conjugated Polyelectrolyte Photophysics toward Monitoring Real-Time Lipid Membrane-Surface Interaction Dynamics at the Single-Particle Level. Langmuir, 2015, 31, 11842-11850.	3.5	7
98	Chemically Tuned, Reversible Fluorogenic Electrophile for Live Cell Nanoscopy. ACS Sensors, 2022, 7, 166-174.	7.8	7
99	An evolutionary conserved detoxification system for membrane lipid–derived peroxyl radicals in Gram-negative bacteria. PLoS Biology, 2022, 20, e3001610.	5.6	6
100	Estimation of the solvent reorganization energy and the absolute energy of solvation of charge-transfer states from their emission spectra. Photochemical and Photobiological Sciences, 2010, 9, 675-686.	2.9	5
101	Stoichiometry and Dispersity of DNA Nanostructures Using Photobleaching Pair-Correlation Analysis. Bioconjugate Chemistry, 2017, 28, 2340-2349.	3.6	5
102	Laser Techniques in the Study of Drug Photochemistry < $\sup$ > $\hat{A}\P >. Photochemistry and Photobiology, 2004, 80, 159-174.$	2.5	4
103	Enhancing the photostability of poly(phenylene ethynylene) for single particle studies. Photochemical and Photobiological Sciences, 2017, 16, 1821-1831.	2.9	4
104	Dynamic Interconversions of HCV Helicase Binding Modes on the Nucleic Acid Substrate. ACS Infectious Diseases, 2017, 3, 99-109.	3.8	3
105	Quantifying Heme–Protein Maturation from Ratiometric Fluorescence Lifetime Measurements on the Single Fluorophore in Its GFP Fusion. Journal of Physical Chemistry A, 2020, 124, 746-754.	2.5	3
106	Fluorescence-Amplified Detection of Redox Turnovers in Supported Lipid Bilayers Illuminates Redox Processes of α-Tocopherol. ACS Applied Materials & Interfaces, 2022, 14, 13872-13882.	8.0	3
107	Hepatitis C Virus Helicase Binding Activity Monitored through Site-Specific Labeling Using an Expanded Genetic Code. ACS Infectious Diseases, 2019, 5, 2118-2126.	3.8	2
108	A dormant BODIPY-acrolein singlet oxygen photosensitizer intracellularly activated upon adduct formation with cysteine residues. Photochemical and Photobiological Sciences, 2019, 18, 2003-2011.	2.9	2

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109	A Laser Flash Photolysis Study of Fenofibric Acid in Aqueous Buffered Media: Unexpected Triplet State Inversion in a Derivative of 4-Alkoxybenzophenone¶. Photochemistry and Photobiology, 2002, 75, 193-200.	2.5	1
110	PROFILE: Early Excellence in Physical Organic Chemistry. Journal of Physical Organic Chemistry, 2012, 25, 732-732.	1.9	1
111	Increasing the Life Expectancy of Carbanions by Zeolite Inclusion ChemInform, 2003, 34, no-no.	0.0	O
112	Single Molecule Studies on Hcv RNA Polymerase Activity. Biophysical Journal, 2010, 98, 73a-74a.	0.5	0
113	Novel probes for visualizing reactive oxygen species in lipid membranes. Proceedings of SPIE, 2010, , .	0.8	O
114	Development of Fluorogenic Antioxidants to Monitor Reactive Oxygen Species in the Lipid Membrane of Live Cells Microscopy and Microanalysis, 2014, 20, 1356-1357.	0.4	0