

# Frédéric Lemaître

## List of Publications by Year in descending order

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45  
papers

1,470  
citations

331670

21  
h-index

315739

38  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1309  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical Monitoring of Single Cell Secretion: Vesicular Exocytosis and Oxidative Stress. <i>Chemical Reviews</i> , 2008, 108, 2585-2621.	47.7	354
2	Coupling of Electrochemistry and Fluorescence Microscopy at Indium Tin Oxide Microelectrodes for the Analysis of Single Exocytotic Events. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 4000-4003.	13.8	82
3	Regulation of Exocytosis in Chromaffin Cells by Trans-Insertion of Lysophosphatidylcholine and Arachidonic Acid into the Outer Leaflet of the Cell Membrane. <i>ChemBioChem</i> , 2006, 7, 1998-2003.	2.6	81
4	Highly Sensitive Platinum-Black Coated Platinum Electrodes for Electrochemical Detection of Hydrogen Peroxide and Nitrite in Microchannel. <i>Electroanalysis</i> , 2013, 25, 895-902.	2.9	71
5	Coupling Amperometry and Total Internal Reflection Fluorescence Microscopy at ITO Surfaces for Monitoring Exocytosis of Single Vesicles. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 5081-5084.	13.8	68
6	Investigation of photocurrents resulting from a living unicellular algae suspension with quinones over time. <i>Chemical Science</i> , 2018, 9, 8271-8281.	7.4	53
7	Quantitative Analyses of ROS and RNS Production in Breast Cancer Cell Lines Incubated with Ferrocifens. <i>ChemMedChem</i> , 2014, 9, 1286-1293.	3.2	46
8	Relationship between amperometric pre-spike feet and secretion granule composition in Chromaffin cells: An overview. <i>Biophysical Chemistry</i> , 2007, 129, 181-189.	2.8	43
9	Comparison of apex and bottom secretion efficiency at chromaffin cells as measured by amperometry. <i>Biophysical Chemistry</i> , 2007, 127, 165-171.	2.8	39
10	Electrochemical Detection of Nitric Oxide and Peroxynitrite Anion in Microchannels at Highly Sensitive Platinum-Black Coated Electrodes. Application to ROS and RNS Mixtures prior to Biological Investigations. <i>Electrochimica Acta</i> , 2014, 144, 111-118.	5.2	37
11	Indium Tin Oxide devices for amperometric detection of vesicular release by single cells. <i>Biophysical Chemistry</i> , 2012, 162, 14-21.	2.8	34
12	Vesicular release of neurotransmitters: converting amperometric measurements into size, dynamics and energetics of initial fusion pores. <i>Faraday Discussions</i> , 2013, 164, 33.	3.2	33
13	Evaluation of photosynthetic electrons derivation by exogenous redox mediators. <i>Biophysical Chemistry</i> , 2015, 205, 1-8.	2.8	33
14	Redesigning the QA binding site of Photosystem II allows reduction of exogenous quinones. <i>Nature Communications</i> , 2017, 8, 15274.	12.8	33
15	Electrochemical Harvesting of Photosynthetic Electrons from Unicellular Algae Population at the Preparative Scale by Using 2,6-dichlorobenzoquinone. <i>Electrochimica Acta</i> , 2017, 236, 337-342.	5.2	32
16	Vesicular Exocytosis under Hypotonic Conditions Shows Two Distinct Populations of Dense Core Vesicles in Bovine Chromaffin Cells. <i>ChemPhysChem</i> , 2007, 8, 578-585.	2.1	31
17	A Dual Functional Electroactive and Fluorescent Probe for Coupled Measurements of Vesicular Exocytosis with High Spatial and Temporal Resolution. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2366-2370.	13.8	31
18	Downstream Simultaneous Electrochemical Detection of Primary Reactive Oxygen and Nitrogen Species Released by Cell Populations in an Integrated Microfluidic Device. <i>Analytical Chemistry</i> , 2018, 90, 9386-9394.	6.5	31

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19	Recent advances in Electrochemical Detection of Exocytosis. <i>Electrochimica Acta</i> , 2014, 140, 457-466.	5.2	30
20	Invariance of Exocytotic Events Detected by Amperometry as a Function of the Carbon Fiber Microelectrode Diameter. <i>Analytical Chemistry</i> , 2009, 81, 3087-3093.	6.5	26
21	Vesicular exocytosis and microdevices – microelectrode arrays. <i>Analyst</i> , 2015, 140, 3687-3695.	3.5	25
22	Amperometric detection of vesicular exocytosis from BON cells at carbon fiber microelectrodes. <i>Electrochimica Acta</i> , 2014, 126, 74-80.	5.2	21
23	Mediator-Microorganism Interaction in Microbial Solar Cell: a Fluo-Electrochemical Insight. <i>Analytical Chemistry</i> , 2020, 92, 7532-7539.	6.5	19
24	The Pd <sub>3</sub> (dppm) <sub>3</sub> (CO) <sub>2</sub> +Cluster: An Efficient Electrochemically Assisted Lewis Acid Catalyst for the Fluorination and Alcoholysis of Acyl Chlorides. <i>Journal of Organic Chemistry</i> , 2002, 67, 7537-7540.	3.2	17
25	Multi-chambers Microsystem for Simultaneous and Direct Electrochemical Detection of Reactive Oxygen and Nitrogen Species Released by Cell Populations. <i>Electroanalysis</i> , 2016, 28, 1865-1872.	2.9	17
26	Electrocatalytic Mechanism Involving Michaelis-Menten Kinetics at the Preparative Scale: Theory and Applicability to Photocurrents from a Photosynthetic Algae Suspension With Quinones. <i>ChemPhysChem</i> , 2017, 18, 2643-2650.	2.1	15
27	The Nature and Efficiency of Neurotransmitter Exocytosis also Depend on Physicochemical Parameters. <i>ChemPhysChem</i> , 2007, 8, 1597-1605.	2.1	14
28	Dynamic Electrochemiluminescence Imaging of Single Giant Liposome Opening at Polarized Electrodes. <i>Analytical Chemistry</i> , 2022, 94, 1686-1696.	6.5	14
29	Coupling electrochemistry and TIRF-microscopy with the fluorescent false neurotransmitter FFN102 supports the fluorescence signals during single vesicle exocytosis detection. <i>Biophysical Chemistry</i> , 2018, 235, 48-55.	2.8	13
30	Electrochemical Fluorescence Switch of Organic Fluorescent or Fluorogenic Molecules. <i>Chemical Record</i> , 2021, 21, 2193-2202.	5.8	11
31	Prediction of Local pH Variations during Amperometric Monitoring of Vesicular Exocytotic Events at Chromaffin Cells. <i>ChemPhysChem</i> , 2010, 11, 2931-2941.	2.1	10
32	Diverting photosynthetic electrons from suspensions of <i>Chlamydomonas reinhardtii</i> algae - New insights using an electrochemical well device. <i>Electrochimica Acta</i> , 2019, 304, 465-473.	5.2	10
33	Electroactive fluorescent false neurotransmitter FFN102 partially replaces dopamine in PC12 cell vesicles. <i>Biophysical Chemistry</i> , 2019, 245, 1-5.	2.8	10
34	Finding Adapted Quinones for Harvesting Electrons from Photosynthetic Algae Suspensions. <i>ChemElectroChem</i> , 2021, 8, 2968-2978.	3.4	10
35	A Dual Functional Electroactive and Fluorescent Probe for Coupled Measurements of Vesicular Exocytosis with High Spatial and Temporal Resolution. <i>Angewandte Chemie</i> , 2017, 129, 2406-2410.	2.0	8
36	A Fluorescent False Neurotransmitter as a Dual Electrofluorescent Probe for Secretory Cell Models. <i>ChemPlusChem</i> , 2019, 84, 1578-1586.	2.8	6

#	ARTICLE	IF	CITATIONS
37	Overview and outlook of the strategies devoted to electrofluorescence surveys: Application to single cell secretion analysis. <i>TrAC - Trends in Analytical Chemistry</i> , 2020, 132, 116055.	11.4	5
38	Underlying mechanisms in microbial solar cells: how modeling can help. <i>Sustainable Energy and Fuels</i> , 2020, 4, 6004-6010.	4.9	4
39	Simulations of amperometric monitoring of exocytosis: moderate pH variations within the cell-electrode cleft with the buffer diffusion. <i>Analytical and Bioanalytical Chemistry</i> , 2021, 413, 6769-6776.	3.7	3
40	Recent developments concerning the investigation of exocytosis with amperometry. <i>Current Opinion in Electrochemistry</i> , 2021, 29, 100751.	4.8	3
41	Indium Tin Oxide Microsystem for Electrochemical Detection of Exocytosis of Migratory Dendritic Cells. <i>Electroanalysis</i> , 2017, 29, 197-202.	2.9	1
42	From FFN dual probe screening to ITO microdevice for exocytosis monitoring: electrochemical and fluorescence requirements. <i>ChemElectroChem</i> , 0, , .	3.4	1
43	The Pd <sub>3</sub> (dppm) <sub>3</sub> (CO) <sub>2</sub> <sup>+</sup> Cluster: An Efficient Electrochemically Assisted Lewis Acid Catalyst for the Fluorination and Alcoholysis of Acyl Chlorides.. <i>ChemInform</i> , 2003, 34, no.	0.0	0
44	More Transparency in BioAnalysis of Exocytosis: Coupling of Electrochemistry and Fluorescence Microscopy at ITO Electrodes. <i>BIO Web of Conferences</i> , 2016, 6, 01004.	0.2	0
45	CHAPTER 6. Real Time Monitoring of Peroxynitrite by Stimulation of Macrophages with Ultramicroelectrodes. <i>RSC Detection Science</i> , 2015, , 96-120.	0.0	0