



Connecting research and researchers

[SIGN IN/REGISTER](#)

English



[https://orcid.org/  
0000-0001-6253-9229](https://orcid.org/0000-0001-6253-9229)

### Websites & social links

[Malacrida Lab web page \(Unit of Advanced Microscopy and Biophotonics\)](#)

### Other IDs

[Loop profile: 1008600](#)

[Scopus Author ID: 8066633700](#)

[ResearcherID: AAO-1082-2020](#)

### Keywords

Multiphoton microscopy, Biophotonics, FLIM&hyperspectral imaging, Membrane Biophysics, Phasor plot analysis, Image Correlation Spectroscopy, Macromolecular Crowding

### Countries

Uruguay

Name

# Leonel Malacrida

## Activities

[Collapse all](#)

### ▼ Employment (4)

 Sort

#### Universidad de la República Facultad de Medicina: Montevideo, Montevideo, UY

2020-05-10 to present | Associate Professor (Departamento de Fisiopatologia) [Show more detail](#)  
Employment

**Source:** Leonel Malacrida

#### Pasteur Institute of Montevideo: MONTEVIDEO, montevideo, UY

2019-07-01 to present | Heas (Advanced Bioimaging Unit) [Show more detail](#)  
Employment

**Source:** Leonel Malacrida

#### Universidad de la República Facultad de Medicina: Montevideo, Montevideo, UY

2010-01-01 to 2020-05-09 | Associate Researcher (Departamento de Fisiopatologia) [Show more detail](#)  
Employment

**Source:** Leonel Malacrida

#### University of California Irvine: Irvine, CA, US

2015-07-01 to 2019-06-30 | PostDoc (Laboratory For Fluorescence Dynamics) [Show more detail](#)  
Employment

**Source:** Leonel Malacrida

▼ Education and qualifications (2)

☰ Sort

**Universidad de la República Facultad de Ciencias: Montevideo, Montevideo, UY**

2009-08-01 to 2014-08-14 | PhD in Biology-Biophysics  
Education

[Show more detail](#)

**Source:** Leonel Malacrida

**Universidad de la República Facultad de Ciencias: Montevideo, Montevideo, UY**

1999-03-01 to 2009-05-31 | Bachelor in Biochemistry  
Education

[Show more detail](#)

**Source:** Leonel Malacrida

▼ Invited positions and distinctions (1)

☰ Sort

**Institute Pasteur of Montevideo: MONTEVIDEO, montevideo, UY**

2013-01-01 to 2019-06-01 | Associate Researcher (Proteomics and Analytical  
Biochemistry Unit)  
Invited position

[Show more detail](#)

**Source:** Leonel Malacrida

▼ Membership and service (1)

☰ Sort

**Biophysical Society: Rockville, MD, US**

2001-01-01 to present | Early carrer member  
Membership

[Show more detail](#)

**Source:** Leonel Malacrida

### Linear Combination Properties of the Phasor Space in Fluorescence Imaging

Sensors

[Show more detail](#)

2022-01 | Journal article | *Author*

DOI: [10.3390/s22030999](https://doi.org/10.3390/s22030999)

CONTRIBUTORS: Belén Torrado; Leonel Malacrida; Suman Ranjit

**Source:** Multidisciplinary Digital Publishing Institute

### LAURDAN since Weber: The Quest for Visualizing Membrane Heterogeneity

Accounts of Chemical Research

[Show more detail](#)

2021 | Journal article

DOI: [10.1021/ACS.ACCOUNTS.0C00687](https://doi.org/10.1021/ACS.ACCOUNTS.0C00687)

WOSUID: [WOS:000620925900021](https://www.wosid.com/WOSUID/000620925900021)

CONTRIBUTORS: Gunther, German; Malacrida, Leonel; Jameson, David M.; Gratton, Enrico; Sanchez, Susana A.

**Source:** Web of Science

### Ultrafast phasor-based hyperspectral snapshot microscopy for biomedical imaging

BioRxiv

[Show more detail](#)

2021 | Journal article

DOI: [10.1101/2020.10.14.339416](https://doi.org/10.1101/2020.10.14.339416)

WOSUID: [PPRN:8298844](https://www.wosid.com/WOSUID/PPRN:8298844)

CONTRIBUTORS: P. N. Hedde; R. Cinco; L. Malacrida; A. Kamaid; E. Gratton

**Source:** Web of Science

### A novel nitroalkene- $\alpha$ -tocopherol analogue inhibits inflammation and ameliorates atherosclerosis in Apo E knockout mice

British Journal of Pharmacology

[Show more detail](#)

2019 | Journal article

DOI: [10.1111/bph.14561](https://doi.org/10.1111/bph.14561)

EID: 2-s2.0-85060982626

Part of ISBN: 14765381 00071188

CONTRIBUTORS: Rodriguez-Duarte, J.; Galliussi, G.; Dapuetto, R.; Rossello, J.; Malacrida, L.; Kamaid, A.; Schopfer, F.J.; Escande, C.; López, G.V.; Batthyány, C.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **CAPRYDAA, an anthracene dye analog to LAURDAN: A comparative study using cuvette and microscopy**

Journal of Materials Chemistry B

[Show more detail](#)

2019 | Journal article

DOI: [10.1039/c9tb01738k](https://doi.org/10.1039/c9tb01738k)

EID: 2-s2.0-85076876799

Part of ISBN: 20507518 2050750X

CONTRIBUTORS: Castro-Castillo, V.; Gajardo, J.; Sandoval-Altamirano, C.; Gunther, G.; Gratton, E.; Malacrida, L.; Sanchez, S.; Malacrida, L.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **Determination of the metabolic index using the fluorescence lifetime of free and bound nicotinamide adenine dinucleotide using the phasor approach**

Journal of Biophotonics

[Show more detail](#)

2019 | Journal article

DOI: [10.1002/jbio.201900156](https://doi.org/10.1002/jbio.201900156)

EID: 2-s2.0-85074676136

Part of ISBN: 18640648 1864063X

CONTRIBUTORS: Ranjit, S.; Malacrida, L.; Stakic, M.; Gratton, E.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **StarD5: An ER stress protein regulates plasma membrane and intracellular cholesterol homeostasis**

Journal of Lipid Research

[Show more detail](#)

2019 | Journal article

DOI: [10.1194/jlr.M091967](https://doi.org/10.1194/jlr.M091967)

EID: 2-s2.0-85067089832

Part of ISBN: 15397262 00222275

CONTRIBUTORS: Rodriguez-Agudo, D.; Malacrida, L.; Kakiyama, G.; Sparrer, T.; Fortes, C.; Maceyka, M.; Subler, M.A.; Windle, J.J.; Gratton, E.; Pandak, W.M. et al.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Alteration in Fluidity of Cell Plasma Membrane in Huntington Disease Revealed by Spectral Phasor Analysis

Scientific Reports

[Show more detail](#)

2018 | Journal article

DOI: [10.1038/s41598-018-19160-0](https://doi.org/10.1038/s41598-018-19160-0)

EID: 2-s2.0-85040768507

Part of ISBN: 20452322

CONTRIBUTORS: Sameni, S.; Malacrida, L.; Tan, Z.; Digman, M.A.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Comparison between iMSD and 2D-pCF analysis for molecular motion studies on in vivo cells: The case of the epidermal growth factor receptor

Methods

[Show more detail](#)

2018 | Journal article

DOI: [10.1016/j.ymeth.2018.01.010](https://doi.org/10.1016/j.ymeth.2018.01.010)

EID: 2-s2.0-85042878643

Part of ISBN: 10959130 10462023

CONTRIBUTORS: Malacrida, L.; Rao, E.; Gratton, E.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Differences between FLIM phasor analyses for data collected with the Becker and Hickl SPC830 card and with the FLIMbox card

Microscopy Research and Technique

[Show more detail](#)

2018 | Journal article

DOI: [10.1002/jemt.23061](https://doi.org/10.1002/jemt.23061)

EID: 2-s2.0-85054557200

Part of ISBN: 10970029 1059910X

CONTRIBUTORS: Ranjit, S.; Malacrida, L.; Gratton, E.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Erratum: Publisher Correction: Alteration in Fluidity of Cell Plasma Membrane in Huntington Disease Revealed by Spectral Phasor Analysis (Scientific reports (2018) 8 1 (734))

Scientific reports  
2018 | Journal article  
DOI: [10.1038/s41598-018-24031-9](https://doi.org/10.1038/s41598-018-24031-9)  
EID: 2-s2.0-85070453422  
*Part of* ISBN: 20452322  
CONTRIBUTORS: Sameni, S.; Malacrida, L.; Tan, Z.; Digman, M.A.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **Fit-free analysis of fluorescence lifetime imaging data using the phasor approach**

Nature Protocols  
2018 | Journal article  
DOI: [10.1038/s41596-018-0026-5](https://doi.org/10.1038/s41596-018-0026-5)  
EID: 2-s2.0-85053357278  
*Part of* ISBN: 17502799 17542189  
CONTRIBUTORS: Ranjit, S.; Malacrida, L.; Jameson, D.M.; Gratton, E.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **LAURDAN fluorescence and phasor plots reveal the effects of a H<sub>2</sub>O<sub>2</sub> bolus in NIH-3T3 fibroblast membranes dynamics and hydration**

Free Radical Biology and Medicine  
2018 | Journal article  
DOI: [10.1016/j.freeradbiomed.2018.06.004](https://doi.org/10.1016/j.freeradbiomed.2018.06.004)  
EID: 2-s2.0-85048411934  
*Part of* ISBN: 18734596 08915849  
CONTRIBUTORS: Malacrida, L.; Gratton, E.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **PTEN deficiency and AMPK activation promote nutrient scavenging and anabolism in prostate cancer cells**

Cancer Discovery  
2018 | Journal article  
DOI: [10.1158/2159-8290.CD-17-1215](https://doi.org/10.1158/2159-8290.CD-17-1215)  
EID: 2-s2.0-85047048855  
*Part of* ISBN: 21598290 21598274  
CONTRIBUTORS: Kim, S.M.; Nguyen, T.T.; Ravi, A.; Kubiniok, P.; Finicle, B.T.; Jayashankar, V.; Malacrida, L.; Hou, J.; Robertson, J.; Gao, D. et al.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Visualization of barriers and obstacles to molecular diffusion in live cells by spatial pair-cross-correlation in two dimensions

Biomedical Optics Express

2018 | Journal article

DOI: [10.1364/BOE.9.000303](https://doi.org/10.1364/BOE.9.000303)

EID: 2-s2.0-85039741051

Part of ISBN: 21567085

CONTRIBUTORS: Malacrida, L.; Hedde, P.N.; Ranjit, S.; Cardarelli, F.; Gratton, E.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## A multidimensional phasor approach reveals LAURDAN photophysics in NIH-3T3 cell membranes

Scientific Reports

2017 | Journal article

DOI: [10.1038/s41598-017-08564-z](https://doi.org/10.1038/s41598-017-08564-z)

EID: 2-s2.0-85028059583

Part of ISBN: 20452322

CONTRIBUTORS: Malacrida, L.; Jameson, D.M.; Gratton, E.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## sideSPIM - Selective plane illumination based on a conventional inverted microscope

Biomedical Optics Express

2017 | Journal article

DOI: [10.1364/BOE.8.003918](https://doi.org/10.1364/BOE.8.003918)

EID: 2-s2.0-85028779220

Part of ISBN: 21567085

CONTRIBUTORS: Hedde, P.N.; Malacrida, L.; Ahrar, S.; Siryaporn, A.; Gratton, E.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Spectral phasor analysis reveals altered membrane order and function of root hair cells in Arabidopsis dry2/sqe1-5 drought hypersensitive mutant



Plant Physiology and Biochemistry

2017 | Journal article

DOI: [10.1016/j.plaphy.2017.08.017](https://doi.org/10.1016/j.plaphy.2017.08.017)

EID: 2-s2.0-85029030362

Part of ISBN: 09819428

CONTRIBUTORS: Sena, F.; Sotelo-Silveira, M.; Astrada, S.; Botella, M.A.; Malacrida, L.; Borsani, O.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **Erratum: Model-free methods to study membrane environmental probes: A comparison of the spectral phasor and generalized polarization approaches (Methods and Applications in Fluorescence (2015) 3 (047001))**

Methods and Applications in Fluorescence

2016 | Journal article

DOI: [10.1088/2050-6120/4/1/019601](https://doi.org/10.1088/2050-6120/4/1/019601)

EID: 2-s2.0-84974529329

Part of ISBN: 20506120

CONTRIBUTORS: Malacrida, L.; Gratton, E.; Jameson, D.M.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **Measurements of absolute concentrations of NADH in cells using the phasor FLIM method**

Biomedical Optics Express

2016 | Journal article

DOI: [10.1364/BOE.7.002441](https://doi.org/10.1364/BOE.7.002441)

EID: 2-s2.0-84977108895

Part of ISBN: 21567085

CONTRIBUTORS: Ma, N.; Digman, M.A.; Malacrida, L.; Gratton, E.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

### **Spectral phasor analysis of LAURDAN fluorescence in live A549 lung cells to study the hydration and time evolution of intracellular lamellar body-like structures**

Biochimica et Biophysica Acta - Biomembranes

2016 | Journal article

DOI: [10.1016/j.bbamem.2016.07.017](https://doi.org/10.1016/j.bbamem.2016.07.017)

EID: 2-s2.0-84980350809

Part of ISBN: 18792642 00052736

CONTRIBUTORS: Malacrida, L.; Astrada, S.; Briva, A.; Bollati-Fogolín, M.; Gratton, E.; Bagatolli, L.A.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Model-free methods to study membrane environmental probes: A comparison of the spectral phasor and generalized polarization approaches

Methods and Applications in Fluorescence

[Show more detail](#)

2015 | Journal article

DOI: [10.1088/2050-6120/3/4/047001](https://doi.org/10.1088/2050-6120/3/4/047001)

EID: 2-s2.0-84976568288

Part of ISBN: 20506120

CONTRIBUTORS: Malacrida, L.; Gratton, E.; Jameson, D.M.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Sevoflurane anesthesia deteriorates pulmonary surfactant promoting alveolar collapse in male sprague-dawley rats

Pulmonary Pharmacology and Therapeutics

[Show more detail](#)

2014 | Journal article

DOI: [10.1016/j.pupt.2013.12.005](https://doi.org/10.1016/j.pupt.2013.12.005)

EID: 2-s2.0-84904127938

Part of ISBN: 15229629 10945539

CONTRIBUTORS: Malacrida, L.; Reta, G.; Piriz, H.; Rocchiccioli, F.; Botti, H.; Denicola, A.; Briva, A.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Delayed mTOR inhibition with low dose of everolimus reduces TGF $\beta$ expression, attenuates proteinuria and renal damage in the renal mass reduction model

PLoS ONE

[Show more detail](#)

2012 | Journal article

DOI: [10.1371/journal.pone.0032516](https://doi.org/10.1371/journal.pone.0032516)

EID: 2-s2.0-84858011505

Part of ISBN: 19326203

CONTRIBUTORS: Kurdián, M.; Herrero-Fresneda, I.; Lloberas, N.; Gimenez-Bonafe, P.; Coria, V.; Grande, M.T.; Boggia, J.; Malacrida, L.; Torras, J.; Arévalo, M.A. et al.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Adenosine triphosphate-dependent calcium signaling during ventilator-induced lung injury is amplified by hypercapnia

Experimental Lung Research

[Show more detail](#)

2011 | Journal article

DOI: [10.3109/01902148.2011.598217](https://doi.org/10.3109/01902148.2011.598217)

EID: 2-s2.0-80052779199

Part of ISBN: 01902148 15210499

CONTRIBUTORS: Briva, A.; Santos, C.; Malacrida, L.; Rocchiccioli, F.; Soto, J.; Angulo, M.; Batthyany, C.; Cairolì, E.; Piriz, H.

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Salbutamol Improves Diaphragmatic Contractility in Chronic Airway Obstruction

Archivos de Bronconeumologia

2009 | Journal article

DOI: [10.1016/j.arbres.2008.09.007](https://doi.org/10.1016/j.arbres.2008.09.007)

WOSUID: [WOS:000266477200005](https://www.wosid.com/WOS/000266477200005)

CONTRIBUTORS: Angulo, Martin; Taranto, Eliseo; Pablo Soto, Juan; Malacrida, Leonel; Nin, Nicolas; Javier Hurtado, F.; Piriz, Hector

[Show more detail](#)

**Source:** Web of Science

## Salbutamol Improves Diaphragmatic Contractility in Chronic Airway Obstruction, El salbutamol mejora la contractilidad diafragmática en la obstrucción crónica de la vía aérea

Archivos de Bronconeumologia

2009 | Journal article

DOI: [10.1016/S1579-2129\(09\)72153-6](https://doi.org/10.1016/S1579-2129(09)72153-6)

EID: 2-s2.0-67349160183

*Part of* ISBN: 15792129 03002896

CONTRIBUTORS: Angulo, M.; Taranto, E.; Soto, J.P.; Malacrida, L.; Nin, N.; Hurtado, F.J.; Píriz, H.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Redox behavior of Re(V)-amino acid containing complexes

Journal of Colloid and Interface Science

2002 | Journal article

DOI: [10.1006/jcis.2002.8228](https://doi.org/10.1006/jcis.2002.8228)

EID: 2-s2.0-0036354122

*Part of* ISBN: 00219797

CONTRIBUTORS: Cerdá, M.F.; Méndez, E.; Malacrida, L.; Zinola, C.F.; Melián, C.; Martins, M.E.; Castro Luna, A.M.; Kremer, C.

[Show more detail](#)

**Source:** Leonel Malacrida *via* Scopus - Elsevier

## Barriers to Diffusion in Cells: Visualization of Membraneless Particles in the Nucleus

Journal article

DOI: [10.35459/TBP.2019.000111](https://doi.org/10.35459/TBP.2019.000111)

[Show more detail](#)

**Source:** Web of Science

*Record last modified Dec 29, 2022, 9:37:04 AM UTC*



The text of this website is published under a **CC0 license**. Images and marks are subject to copyright and trademark protection.

**About ORCID**

**Privacy Policy**

**Terms of Use**

**Accessibility Statement**

**Contact us**

**Dispute procedures**

**Brand Guidelines**