

Publications-last-five-years

- Original antifouling strategy: Polypropylene films modified with chitosan-coated silver nanoparticles

Giuliana Mosconi, María Fernanda Stragliotto, Walter Slenk, Laura E. Valenti, Carla E. Giacomelli, **Miriam C. Strumia**, Cesar G. Gomez*

Journal Applied Polym. Sci. 137(10),48448 (2020). DOI: [10.1002/app.48448](https://doi.org/10.1002/app.48448)

- Volumetric properties of carbón dioxide + acrylic acid binary in the context of supercritical precipitation polymerization.

Matias Menossi, Juan Milanesio*, Séverine Camy, Simon Harrisson, **Miriam Strumia**, Mathias Destarac.

The Journal Supercritical Fluids,160, 104787, (2020).

<https://doi.org/10.1016/j.supflu.2020.104787>

- Effect of including a hydrophobic comonomer on the rheology of an acrylamide-acrylic acid based copolymer.

Roger M. Juárez Data, Facundo Mattea*, **Miriam C. Strumia** and Juan M. Milanesio.

Journal Applied Polym. Sci. 137(47),49532. (2020). DOI: [10.1002/app.49532](https://doi.org/10.1002/app.49532)

- Revealing the NIR Triggered Chemotherapy Therapeutic Window of Magnetic and Thermoresponsive Nanogels.

Catalina Biglione, Julian Bergueiro, Stefanie Wedepohl, Bastian Klemke, **Miriam C. Strumia*** and Marcelo Calderón*

Nanoscale, 12, 21635-21646, (2020), DOI: [10.1039/D0NR02953J](https://doi.org/10.1039/D0NR02953J)

- The role of polymers in analytical medical applications. A review

Marcelo Romero, Micaela. A. Macchione, Facundo Mattea*, **Miriam Strumia**.

Microchemical Journal, 159,105366. 2020, <https://doi.org/10.1016/j.microc.2020.105366>

- Biopesticidal silo bag prepared by co-extrusion process

Herrera, J M*; Zygadlo, J A ; **Strumia, M C** ; Peralta, E .

Food Packaging and Shelf Life, 28, 100645, 2021. DOI:

<https://doi.org/10.1016/j.fpsl.2021.100645>

- Polystyrene Brushes/TiO₂ Nanoparticles Prepared via SI-ATRP on Polypropylene and its Superhydrophobicity.

Cintia Contreras, Daniel Weibel* and **Miriam Strumia***.

J. Polym. Research (Springer), 28, 103 (2021) <https://doi.org/10.1007/s10965-021-02462-9>

- Biobased polyester from soybean oil: Synthesis, characterization and degradation studies

Mariana Bernard, Verónica Nicolau* and **Miriam Strumia***

Polyolefins Journal. Vol. 9, No. 1, 45-60 (2022). DOI: [10.22063/POJ.2021.3019.1203](https://doi.org/10.22063/POJ.2021.3019.1203)

- Antimicrobial modification of polypropylene films by photograft and layered double hydroxides assembly

Giuliana Mosconi, Yadira Salguero, Laura E. Valenti, Ricardo Rojas, **Miriam C. Strumia**, Cesar G. Gomez, Carla E. Giacomelli*

Reactive and Functional Polymers. 178 (2022) 105349.

DOI: <https://doi.org/10.1016/j.reactfunctpolym.2022.105349>

- The disulfide bond as a key motif for the construction of multivalent glycoclusters.
[María Emilia Cano](#), [Walter Jara](#), [Alejandro Cagnoni](#), [Emmanuel Brizzio](#), [Miriam C. Strumia](#), [Evangeline Repetto](#) and [María Laura Uhrig](#)*
New J. Chem., 46, 17682-17695 (2022). DOI: <https://doi.org/10.1039/D2NJ03071C>

- Chemical overview of gel dosimetry systems: A Comprehensive Review
 Micaela Macchione, Leidy Sofía Lechón Páez, **Miriam Cristina Strumia**, Mauro Valente *, Facundo Mattea *
Gels, 8, 663-690. 2022. <https://doi.org/10.3390/gels8100663>.
<https://www.mdpi.com/2310-2861/8/10/663>

- Organic Chemistry in Argentina and the Genesis of SAIQO
 Special Issue: Organic Chemistry in Argentina: Research from XXIII SINAQO
 Miriam Strumia, Juan Argüello and Alejandro Fracaroli. (Guest Editors)
J. Org. Chem., 87, 13423–13426 (2022). DOI: <https://doi.org/10.1021/acs.joc.2c01958>
Org. Lett., 24, 7483–7486. (2022). DOI: <https://doi.org/10.1021/acs.orglett.2c02837>

- Mesoporous silica and oligo (ethylene glycol) methacrylates-based dual-responsive hybrid nanogels
 Micaela A. Macchione, Dariana Aristizabal, Eva Rivero-Buceta, Pablo Botella *, **Miriam C. Strumia** *
Nanomaterials, 12, 3835-3854, (2022) <https://doi.org/10.3390/nano12213835>

- Acrylic acid -co- sodium acrylate copolymers synthesized in supercritical carbon dioxide: is it possible to pre-neutralize polymers at high pressure?
 Ramses S. Meleán Brito, Facundo Mattea, Juan M. Padró, Miriam C. Strumia, Séverine Camy, Mathias Destarac, Juan M. Milanesio.
The Journal of Supercritical Fluids 209, 10626. (2024).
<https://doi.org/10.1016/j.supflu.2024.106261>

- Tannic Acid-Modified Poly(acrylamide-co-acrylic acid): A Versatile Approach for Aqueous Viscosity Modulation
 Ramses S. Meleán Brito, Juan Milanesio, María Belén Oviedo, Juan M. Padró, **Miriam C. Strumia**, Facundo Mattea*
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<https://pubs.acs.org/10.1021/acsapm.3c03056>

- Hydrophobic dendritic modification of a poly(acrylamide-co-acrylic acid) copolymer with Behera's amine as viscous agent
 Ramses S. Meleán Brito, Juan M. Padró, Cristian Villa-Pérez, **Miriam C. Strumia**, Facundo Mattea and Juan M. Milanesio
Industrial & Engineering Chemistry Research, ISSN 0888-5885, 63 (31), pp. 13580-13589, (2024) <https://doi.org/10.1021/acs.iecr.4c01650>.

- The role of hyperbranched polyesters in acrylamide-based polymers as thickening agents in aqueous solutions.
 Ramses S. Meleán Brito, Juan M. Padró, Jhon J. Pizon Barrantes, Cristian Villa-Pérez, **Miriam C. Strumia**, Juan M. Milanesio and Facundo Mattea.
Journal of Applied Polymer Science, ISSN 1097-4628, 141 (37), pp. 1-11, (2024)
<https://doi.org/10.1002/app.56149>.

- Taming Visible-Light Induced Precipitation Polymerization in Continuous Flow. Developing Thermo-Responsive Nanogels for Controlled Antimicrobial Delivery
Figuerola, Francisco; Torres, Jazmín; Campagno, Luciana; Calderón, Marcelo; Alovero, Fabiana; **Strumia, Miriam**; Garcia, Monica; Oksdath-Mansilla, Gabriela.

ACS Applied Engineering Materials. September, 2, 2397-2413, (2024).
<https://doi.org/10.1021/acsaenm.4c00444>

- *Phase boundaries and copolymerization of acrylic acid + butyl metacrilato in supercritical carbon dióxido bajo iniciación de fluido único a alta presión*

Ramses S. Meleán Brito, Joana E. Tasque, Juan M. Padró, Gerardo Martínez Delfa, **Miriam C. Strumia**, Facundo Mattea, Juan M. Giussi and Juan M. Milanesio.

The Journal of Supercritical Fluids, 215, 106412, 1-10 (2025) ISSN 0896-8446.
<https://doi.org/10.1016/j.supflu.2024.106412>.

- Copolymerization of acrylic acid and 2- acrylamido-2-methylpropane sulfonic acid in supercritical carbon dioxide.

Ramses S. Meleán Brito, Juan M. Milanesio, Juan M. Padró, Cristian Villa-Pérez, **Miriam C. Strumia**, Séverine Camy, Mathias Destarac, Facundo Mattea*

The Journal of Supercritical Fluids, **V 218**, 106485. (2025)
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- Hyperbranched Star Monomer: A New Strategy to Improve HPAM in Harsh Environments

Meleán Brito, Ramses; Iborra, Agustin; Padró, Juan; Vega, Isabel; **Strumia, Miriam**; Milanesio, Juan; Mattea, Facundo; Giussi, Juan

Ind Eng Chem Res, 64, 948–958, (2025). [doi:10.1021/acs.iecr.4c03364](https://doi.org/10.1021/acs.iecr.4c03364).

- A Comparative Study of Two Synthesis Methods for Poly(Acrylic Acid-Co-Acrylamide) Incorporating a Hyperbranched Star-Shaped Monomer

Ramses S. Meleán Brito, Agustin Iborra, Juan M. Padro, Cristian Villa-Perez, **Miriam C. Strumia**, Facundo Mattea, Juan M. Giussi and Juan M. Milanesio*

Polymers, 17, 964, 1-26, (2025). <https://doi.org/10.3390/polym17070964>