

## Curriculum Vitae Susana Rocha

### Independent group leader positions

Dates	Details
10/2024	Associate Professor, Chemistry Dept. KU Leuven, Belgium
10/2019	Assistant Professor, Chemistry Dept. KU Leuven, Belgium (tenure track)

### Postdoctoral research

Dates	Details
01/2019 – 03/2019	Visiting Researcher (EMBO fellowship), Functional Proteomics Unit, Carlos III Health Institute (ISCIII), Madrid, Spain
03/2017 – 06/2017	Visiting Researcher (FWO travel grant), Molecular Materials, Faculty of Science, Radboud University, Nijmegen, The Netherlands
10/2015 – 09/2019	Research Foundation Flanders (FWO) Postdoctoral Researcher, Chemistry Dept. KU Leuven, Belgium
05/2014 - 09/2015	Postdoctoral Researcher, Chemistry Dept. KU Leuven, Belgium

### Education

Dates	Details
10/2006 – 05-2014	Ph.D. in Chemistry, Title: "Single enzyme kinetics" (KU Leuven, Leuven, Belgium; promotor: Prof. Johan Hofkens)
09/2001 – 07/2006	Licenciatura (Bachelor and Master) in Chemistry (classification 17/20, Instituto Superior Técnico, Lisbon, Portugal)

### Research Statement

My research focuses on the development of **advanced fluorescence microscopy methods** to investigate **the complex interactions between materials and biology**.

During my PhD, I established single-particle tracking experimental frameworks and implemented super-resolution fluorescence microscopy (PALM/STORM/PAINT-based approaches) in the Chemistry Department at KU Leuven. More recently, I developed a multi-plane wide-field microscope for fast 3D tracking. My expertise in these advanced techniques has been crucial for securing funding for microscopy infrastructure, including a lattice light sheet microscope with Prof. Pieter Vandenbergh and a single-objective light sheet microscope with Prof. Peter Dedecker (both funded by FWO Medium Infrastructure).

Toward the end of my PhD, I became increasingly interested in biomimetic hydrogels and their applications in 3D cell models. I conducted a research stay in the group of Prof. Paul Kouwer at Radboud University, Nijmegen, a leading group in synthetic biomimetic hydrogels. This experience was a turning point in my career, exposing me to 3D cell culture systems and triggering my interest in how mechanical cues regulate cell behavior.

My research now integrates **fluorescence microscopy, biomimetic hydrogels, and nanoparticle-based approaches to investigate cell-matrix interactions, mechanotransduction, and drug delivery**. My expertise spans structural and mechanical characterization of polymers and hydrogels, development of customized 3D cell models, single-molecule fluorescence microscopy (including single-particle tracking, FRET, and super-resolution microscopy), drug delivery systems, and cell-matrix interactions.

**Collaboration** is a key aspect of my research, and I maintain strong ties with experts across disciplines, including medical sciences (Prof. Sabine Tejpar, Prof. Hugo Vankelecom, Prof. Zeger Debyser, Prof. Marianne Carlon, KU Leuven), materials science (Prof. Patricia Dankers, TU Eindhoven; Prof. Paul Kouwer, Radboud University; Prof. Wim Borggraeve, KU Leuven), and nanotechnology (Prof. Paul

Mulvaney, Melbourne University; Prof. Luis Liz-Marzán, Vigo University; Prof. Lorenzo Albertazzi, TU Eindhoven).

Beyond my research, I am actively involved in **scientific outreach and community-building initiatives**. I organized the Feel the Force summer school, which provided training on fluorescence-based mechanobiology techniques, and have been coordinating the IUPAC Women's Breakfast at KU Leuven for the past two years, promoting gender diversity in science. Additionally, I am part of the scientific committee of CellMech 2025, an international conference on cell mechanics, and I belong to the Belgian Society of Microscopy and BeWiSe (Belgian Women in Science).

### Scientific output and impact

- 83 articles (18 – and 3 submitted – last/corresponding author) in peer-reviewed internationally recognized journals including top journals such as Cell, Nature, Nature Nanotechnology, Nature Metabolism, Langmuir, ACS Nano and PNAS. According to the Web of Science citation report in March 2025, these contributions have been collectively cited over 3100 times, with an average of ca. 38 citations per item. This has resulted in a current h-index of 23. The list of articles published in the last 5 years is at the end of this document. The complete list of publications can be at Google Scholar (<https://scholar.google.be/citations?hl=en&user=OsiAwIYAAAAJ>) or Lirias (<https://lirias.kuleuven.be/cv?Username=U0073916>).
- **Group members:** 5 postdocs; 10 PhD students; 5 master students
- **Alumni:** 1 postdoc; 13 PhD students; 15 master students
- **Fellowships and awards:**
  - 2020, 21, 22 Golden chalk award for teaching activities (Master Nanoscience and Nanotechnology)
  - 2019 EMBO short-term fellowship for a 3-month stay at the Inst. Salud D. Carlos III, Madrid (SP)
  - 2017 Travel grant for a 4-month research stay at Radboud University, Nijmegen (NL), FWO
  - 2016 **Best PhD thesis award** in the area of Life Sciences, Belgian Society of Microscopy
  - 2014 Postdoctoral Fellowship from FWO
  - 2007 Best student talk at Single Molecule Spectroscopy Workshop, PicoQuant
  - 2005 Merit Scholarship for excellence in Chemistry studies, Caixa Geral Depósitos
  - 2004, 2003, 2002 Merit Scholarship for excellence in Chemistry studies, Technical University Lisbon
- Development of freely accessible and user-friendly software for advanced image analysis for different groups within KU Leuven and other universities.
- **Organization of Conferences, Workshops and Summer Schools:** I am the main organizer of the 'Feel the Force' summer school (in 2021 and 2023), focus on disseminating fluorescence microscopy based methods to investigate mechanotransduction. In addition, I have contribute to different workshops (eg. Bio-Inspired Soft Matter in Edinburg, BioNanoTech in Leuven, NanoMacro Microscopy in Hasselt). I was part of the organization committee of the Methods and Applications in Fluorescence (MAF) conference in 2017 and am part of the scientific committee of European Cell Mechanics meeting (CellMech) in 2025.
- **Scientific communication:** 13 invited talks/seminars, 10 abstract-selected talks, 9 abstract-selected poster presentations. I am active in communication for non-expert audiences using LinkedIn, BlueSky (@rochalab.bsky.social) and Twitter (@Rocha\_Lab), and updating my group website ([link](#)).
- **Recent invited talks and seminars**
  - Invited talk at 29<sup>th</sup> PicoQuant Single Molecule Workshop, Imaging Cellular Forces: From Micro to the Nano Scale, October 2024, Berlin (Germany)
  - Invited talk at the Eighth Jornadas Ibéricas de Fotoquímica (8'JIF), Seeing is believing: microscopic techniques to uncover cell-matrix interactions in biomimetic hydrogels, September 2024, Lisbon (Portugal)
  - Invited talk at NWO Physics, Unravelling hydrogel mechanics: from cell to the nano scale, January 2024, Eindhoven (The Netherlands)

- Invited talk at 8<sup>th</sup> EuChemS Chemistry Congress, Imaging the forces driving cellular behaviour: from material characterisation to 3D cell models, August 2020, Lisbon (Portugal)
- Invited talk at 21st RIES-Hokudai International Symposium, Biological applications of new materials: from tissue engineering to drug delivery, December 2020, Hokkaido (Japan, online)
- Invited talk at IV International Caparica Symposium on Nanoparticles/Nanomaterials and Applications 2020, Drug delivery using nanocarriers in 3D cell models, January 2020, Lisbon (Portugal)

- **Commissions of trust**

I review papers on a regular basis for different peer-reviewed scientific journals, such as Nature Methods, Nature Communications, Angewandte Chemie, ACS Omega, Scientific Reports and others.

- **Career breaks:**

2017.07-2017-09: Parental leave (3 months)

2015.07-2015-10: Maternity leave (3.5 months)

2013.02-2013-07: Sick leave (pregnancy complications), followed by a maternity leave (5.5 months)

### List the representative projects obtained within the last five years

More than 8.5 M€ acquiring in different research projects, including:

- Global PhD Partnerships KU Leuven – University of Melbourne: “Nano-Enhanced Hydrogels for Probing Cellular Mechanotransduction”, aprox. **110k€ (promotor)**, 2025-2028
- KU Leuven Internal Funds: “OptoMat: Optical binding of nanoparticles outside the photon beam: creation of primeval optical matter.”, **1151 k€** (promotor: prof. Johan Hofkens, co-promoters: myself), 2022-2026
- FWO medium-scale research infrastructure: “Single-objective light sheet instrument for fast and highthroughput imaging of 3D tissue”, **377 k€** (promotor: prof. Peter Dedecker, several co-promoters), 2022-2028
- FWO project: “Leaky vessels in the brain – unraveling disturbed mechanotransduction in Cerebral Cavernous Malformations”, aprox. **600 k€** (promotor: prof. Hans Van Oosterwyck, KU Leuven, co-promoters: prof. Eva Faurobert, French National Centre for Scientific Research, and myself), 2021-2024
- Interdisciplinary Network, internal KU Leuven funding: “OrganADVANCE: Advanced Organoid assays for modelling human disease”, **700 k€** (promotor: prof. Zeger Debyser, KU Leuven, co-promoters: Dr. Marianne Carlon, Prof. Hugo Vankelecom, Prof. Frederik De Smet, Prof. Peter Dedecker, and myself), 2021-2024
- Global PhD Partnerships KU Leuven – University of Melbourne: “Advanced cell models and multifunctional nanomaterials for light-mediated cancer therapies”, aprox. **110k€ (promotor)**, 2021-2023
- Small research infrastructure, internal KU Leuven funding: “A compact microscope for long term fluorescence imaging of live cells”, **129k€ (promotor)**, 2021-2023
- FWO medium-scale research infrastructure: “A Lattice Light Sheet microscope to image subcellular molecular dynamics, cellular forces, neuroimmune interactions and neuronal activity in 3D”, **485 k€** (promoter: Pieter Vanden Berghe, several co-promoters), 2020-2026
- Marie Skłodowska-Curie Innovative Training Networks (ITN), “SuperCol: Rational design of super-selective and responsive colloidal particles for biomedical applications”, **4059 k€** (leading institution: TU Eindhoven, co-promoters in KU Leuven: Prof. Johan Hofkens, Prof. Hiroshi Uji-i and myself, [website](#)), 2020-2023

## List of publications since 2019

- (1) S. Aytekin, L. Kimps, Q. Coucke, D. Linhares, S. Deodhar, R. Cardinaels, M. Condor, J. Barrasa-Fano, H. Van Oosterwyck\*, **S. Rocha\***, *Linking Molecular Tension and Cellular Traction: A Multiscale Approach to Focal Adhesion Mechanics*, deposited in BioRxiv, <https://doi.org/10.1101/2025.01.09.632081>
- (2) C. Cresens, A. Montero-Calle, G. Solis-Fernandez, B. Shaghghi, L. Gerrits, S. Aytekin, P.H.J. Kouwer, R. Barderas\*, **S. Rocha\***, *Deciphering stiffness-driven changes in colorectal cancer by proteomics*, deposited in BioRxiv, <https://doi.org/10.1101/2024.10.16.618701>
- (3) H. Yuan, **S. Rocha**, M. van Velthoven, J. Kumari, K. Liu, Y. Bao, P. H. J. Kouwer\*, *Fibrous polyisocyanide hydrogels for 3D cell culture applications*, accepted at Nature Protocols.
- (4) S. Pretto, Q. Yu, P. Bourdely, S. T. Cafarello, H. Van Acker, J. Verelst, E. Richiandone, L. Vanheer, A. Roshanzadeh, F. Schneppenheim, C. Cresens, M. L. Sassano, J. Dehairs, M. Carion, S. Ismail, P. Agostinis, **S. Rocha**, T. Bald, J. Swinnen, C. Corbet, S. Y. Lunt, B. Thienpont, M. Di Matteo, M. Mazzone, *A functional single cell metabolic survey identifies Elov1 as a target to enhance CD8+ T cell fitness in solid tumors*, 2025, *Nature Metabolism*, 7, 508–530
- (5) P. Cybulski, M. Bravo, J. J. Chen, I. Van Zundert, S. Krzyzowska, F. Taemaitree, H. Uji-i, J. Hofkens, **S. Rocha\***, B. Fortuni\*, *Nanoparticle accumulation and penetration in 3D tumor models: the effect of size, shape, and surface charge*, 2025, *Frontiers in Cell and Developmental Biology*, 12, 1520078.
- (6) M. Bravo, B. Fortuni, P. Mulvaney, J. Hofkens, H. Uji-i, **S. Rocha\***, J. A. Hutchison\*, *Nanoparticle-mediated thermal cancer therapies: Strategies to improve clinical translatability*, 2024, *Journal of Controlled Release*, 372, 751–777.
- (7) K. Liu, J. Vandaele, H. Yuan, K. G. Blank, R. Hammink\*, P. H. J. Kouwer\*, **S. Rocha\***, *Structure and Applications of PIC-Based Polymers and Hydrogels*, 2024, *Cell Reports Physical Science*, 5, 101834.
- (8) L. Rijns, M. G. T. A. Rutten, R. Bellan, H. Yuan, M. L. Mugnai, **S. Rocha**, E. Del Gado, P. H. J. Kouwer, P. Y. W. Dankers, *Synthetic, Multi-Dynamic Hydrogels by Uniting Stress-Stiffening and Supramolecular Polymers*, 2024, *Science Advances*, 10(47), eadr3209.
- (9) B. Louis, C.-H. Huang, M. Melendez, A. Sánchez-Iglesias, J. Olmos-Trigo, S. Seth, **S. Rocha**, R. Delgado-Buscalioni, L. M. Liz-Marzán, M. I. Marquès, *Unconventional Optical Matter of Hybrid Metal–Dielectric Nanoparticles at Interfaces*, 2024, *ACS Nano*.
- (10) J. Satpathy, J.-K. Chen, G. Wen, H. Masuhara, S. Seth, V. Leen, **S. Rocha**, J. Hofkens, B. Louis, R. Bresolí-Obach, *High-resolution imaging of non-equilibrium colloidal self-assembly enabled by photopolymerization*, 2024.
- (11) D. Herrera-Ochoa, I. Llano, C. Ripoll, P. Cybulski, M. Kreuzer, **S. Rocha**, E. M. García-Frutos, I. Bravo, A. Garzón-Ruiz, *A Fluorescent Probe for Protein Misfolding and Aggregation Due to Oxidative Stress Based on a 7-Azaindole-BODIPY Derivative*, 2024.
- (12) C.-H. Huang, B. Louis, **S. Rocha**, L. M. Liz-Marzán, H. Masuhara, J. Hofkens, R. Bresolí-Obach, *Plasmonic Dipole and Quadrupole Scattering Modes Determine Optical Trapping, Optical Binding, and Swarming of Gold Nanoparticles*, 2024, *The Journal of Physical Chemistry C*, 128(13), 5731–5740.
- (13) C. Cresens, G. Solis-Fernandez, A. Tiwari, R. Nuyts, J. Hofkens, R. Barderas, **S. Rocha\***, *Flat clathrin lattices are linked to metastatic potential in colorectal cancer*, 2023, *iScience*, 26(8).
- (14) H. Yuan, K. Liu, M. Condor, J. Barrasa-Fano, B. Louis, J. Vandaele, P. de Almeida, Q. Coucke, W. Chen, E. Oosterwijk, C. Xing, H. Van Oosterwyck, P. H. J. Kouwer\*, **S. Rocha\***, *Synthetic Fibrous Hydrogels as a Platform to Decipher Cell-Matrix Mechanical Interactions*, 2023, *Proceedings of the National Academy of Sciences*, 120(15), e2216934120.
- (15) V. Tiroille, A. Krug, E. Bokobza, M. Kahi, M. H. Geurts, D. Hendriks, F. Vermeulen, F. Larbret, A. Gutierrez-Guerrero, Y. Chen, I. Van Zundert, **S. Rocha**, et al., *Nanoblades allow high-level genome editing in murine and human organoids*, 2023, *Molecular Therapy-Nucleic Acids*, 33, 57–74.
- (16) B. Fortuni, M. Ricci, R. Vitale, T. Inose, Q. Zhang, J. A. Hutchison, K. Hirai, Y. Fujita, S. Toyouchi, S. Krzyzowska, I. Van Zundert, **S. Rocha**, H. Uji-i, *SERS Endoscopy for Monitoring Intracellular Drug Dynamics*, 2023, *ACS Sensors*, 8(6), 2340–2347.
- (17) Q. Zhang, T. Murasugi, K. Watanabe, H. Wen, Y. Tian, M. Ricci, **S. Rocha**, T. Inose, H. Kasai, F. Taemaitree, H. Uji-i, K. Hirai, B. Fortuni, *Selective Detection of Intracellular Drug Metabolism by Metal-Organic Framework-Coated Plasmonic Nanowire*, 2023, *Advanced Optical Materials*, 2300856.
- (18) I. Aslam, M. Bravo, I. Van Zundert, **S. Rocha**, M. B. J. Roeffaers, *Label-Free Identification of Carbonaceous Particles Using Nonlinear Optical Microscopy*, 2023, *Analytical Chemistry*, 95(20), 8045–8053.
- (19) J. B. F. Vandenwijngaerden, J. Huang, C. Cresens, W. Dehaen, L. Van Meervelt, **S. Rocha**, M. Van der Auweraer, E. Fron, *Synthesis and Photophysical Properties of (Post-) Functionalized BOAHY Dyes with Strong Aggregation-Induced Emission*, 2023, *Materials Advances*, 4(19), 4571–4582.

- (20) I. Van Zundert, N. Maenhoudt, S. De Vriendt, H. Vankelecom, B. Fortuni, **S. Rocha\***, *Fluorescence Imaging of 3D Cell Models with Subcellular Resolution*, 2022, *Bio-protocol*, 12(14), e4469–e4469.
- (21) R. Van Lommel, J. Van Hooste, J. Vandaele, G. Steurs, T. Van der Donck, F. De Proft, **S. Rocha**, D. Sakellariou, M. Alonso, W. M. De Borggraeve, *Does Supramolecular Gelation Require an External Trigger?*, 2022, *Gels*, 8(12), 813.
- (22) V. Lemmens, B. Thevelein, Y. Vella, S. Kankowski, J. Leonhard, H. Mizuno, **S. Rocha**, B. Brône, J. C. Meier, J. Hendrix, *Hetero-Pentamerization Determines Mobility and Conductance of Glycine Receptor  $\alpha 3$  Splice Variants*, 2022, *Cellular and Molecular Life Sciences*, 79(11), 540.
- (23) A. Acke, S. Van Belle, B. Louis, R. Vitale, **S. Rocha**, T. Voet, Z. Debysers, J. Hofkens, *Expansion Microscopy Allows High Resolution Single Cell Analysis of Epigenetic Readers*, 2022, *Nucleic Acids Research*.
- (24) G. Solís-Fernández, A. Montero-Calle, M. Sánchez-Martínez, A. Peláez-García, M. J. Fernández-Aceñero, P. Pallarés, M. Alonso-Navarro, M. Mendiola, J. Hendrix, D. Hardisson, **S. Rocha**, R. Barderas, *Aryl-Hydrocarbon Receptor-Interacting Protein Regulates Tumorigenic and Metastatic Properties of Colorectal Cancer Cells Driving Liver Metastasis*, 2022, *British Journal of Cancer*, 126(11), 1604–1615.
- (25) K. Liu, J. Vandaele, D. Bernhagen, M. van Erp, E. Oosterwijk, P. Timmerman, **S. Rocha**, P. H. J. Kouwer, *Rapid Stem Cell Spreading Induced by High Affinity  $\alpha 5 \beta 1$  Integrin-Selective Bicyclic RGD Peptide in Biomimetic Hydrogels*, 2022, *bioRxiv*.
- (26) H. Wen, T. Inose, K. Hirai, T. Akashi, S. Sugioka, J. Li, W. Peeters, E. Fron, B. Fortuni, Y. Nakata, **S. Rocha**, *Gold-Coated Silver Nanowires for Long Lifetime AFM-TERS Probes*, 2022, *Nanoscale*, 14(14), 5439–5446.
- (27) G. Solís-Fernández, A. Montero-Calle, J. Martínez-Useros, Á. López-Janeiro, V. de los Ríos, R. Sanz, J. Dziakova, E. Milagrosa, M. J. Fernández-Aceñero, A. Peláez-García, J. I. Casal, J. Hofkens, **S. Rocha**, R. Barderas, *Spatial Proteomic Analysis of Isogenic Metastatic Colorectal Cancer Cells Reveals Key Dysregulated Proteins Associated with Lymph Node, Liver, and Lung Metastasis*, 2022, *Cells*, 11(3), 447.
- (28) I. Van Zundert, M. Bravo, O. Deschaume, P. Cybulski, C. Bartic, J. Hofkens, H. Uji-i, B. Fortuni\*, **S. Rocha\***, *Versatile and Robust Method for Antibody Conjugation to Nanoparticles with High Targeting Efficiency*, 2021, *Pharmaceutics*, 13(12), 2153.
- (29) H. Reynders, I. Van Zundert, R. Silva, B. Carlier, O. Deschaume, C. Bartic, **S. Rocha**, S. Basov, M. J. Van Bael, U. Himmelreich, T. Verbiest, A. Zamora, *Label-Free Iron Oxide Nanoparticles as Multimodal Contrast Agents in Cells Using Multi-Photon and Magnetic Resonance Imaging*, 2021, *International Journal of Nanomedicine*, 8375–8389.
- (30) L. De Keer, F. Cavalli, D. Estupiñán, A. J. D. Krüger, **S. Rocha**, P. H. M. Van Steenberge, M. F. Reyniers, L. De Laporte, J. Hofkens, L. Barner, et al., *Synergy of Advanced Experimental and Modeling Tools to Underpin the Synthesis of Static Step-Growth-Based Networks Involving Polymeric Precursor Building Blocks*, 2021, *Macromolecules*, 54(20), 9280–9298.
- (31) Q. Zhang, T. Inose, M. Ricci, J. Li, Y. Tian, H. Wen, S. Toyouchi, E. Fron, A. T. N. Dao, H. Kasai, **S. Rocha**, K. Hirai, B. Fortuni, H. Uji-i, *Gold-Photodeposited Silver Nanowire Endoscopy for Cytosolic and Nuclear pH Sensing*, 2021, *ACS Applied Nano Materials*, 4(9), 9886–9894.
- (32) ‡ D. Laskaratou, G. Solís Fernández, Q. Coucke, E. Fron, **S. Rocha**, J. Hofkens, J. Hendrix, H. Mizuno, *Quantification of FRET-Induced Angular Displacement by Monitoring Sensitized Acceptor Anisotropy Using a Dim Fluorescent Donor*, 2021, *Nature Communications*, 12, 2541.
- (33) C. Ripoll, P. Herrero-Foncubierta, V. Puente-Muñoz, M. C. Gonzalez-Garcia, D. Miguel, S. Resa, J. M. Paredes, M. J. Ruedas-Rama, E. Garcia-Fernandez, M. Roldan, **S. Rocha**, H. De Keersmaecker, J. Hofkens, J. M. Cuerva, A. Orte, *Chimeric Drug Design with a Noncharged Carrier for Mitochondrial Delivery*, 2021, *Pharmaceutics*, 13(2), 254.
- (34)
- (35) I. Van Zundert, B. Fortuni\*, **S. Rocha\***, *From 2D to 3D Cancer Cell Models—The Enigmas of Drug Delivery Research*, 2020, *Nanomaterials*, 10(11), 2236.
- (36) B. Louis, R. Camacho, R. Bresolí-Obach, S. Abakumov, J. Vandaele, T. Kudo, H. Masuhara, I. Scheblykin, J. Hofkens, **S. Rocha\***, *Fast-Tracking of Single Emitters in Large Volumes with Nanometer Precision*, 2020, *Optics Express*, 28(19), 28656–28671.
- (37) J. Vandaele, B. Louis, K. Liu, R. Camacho, P. H. J. Kouwer, **S. Rocha\***, *Structural Characterization of Fibrous Synthetic Hydrogels Using Fluorescence Microscopy*, 2020, *Soft Matter*, 16(17), 4210–4219.

- (38) **S. Rocha\***, J. Hendrix, D. Borrenberghs, Z. Debyser\*, J. Hofkens\*, *Imaging the Replication of Single Viruses: Lessons Learned from HIV and Future Challenges To Overcome*, 2020, ACS Nano, 14(9), 10775–10783.
- (39) M. Ricci, M. G. T. A. Rutten, S. Toyouchi, S. Nanayakkara, B. Fortuni, R. Vitale, **S. Rocha**, D. A. Wilson, J. Hofkens, K. Saito, *Two-Photon-Induced [2+2] Cycloaddition of Bis-Thymines: A Biocompatible and Reversible Approach*, 2020, ACS Omega, 5(20), 11547–11552.
- (40) G. Zhang, **S. Rocha**, G. Lu, H. Yuan, H. Uji-i, G. A. Floudas, K. Müllen, L. Xiao, J. Hofkens, E. Debroye, *Spatially and Temporally Resolved Heterogeneities in a Miscible Polymer Blend*, 2020, ACS Omega, 5(37), 23931–23939.
- (41) ‡ M. Vanheusden, R. Vitale, R. Camacho, K. P. F. Janssen, A. Acke, **S. Rocha**, J. Hofkens, *Fluorescence Photobleaching as an Intrinsic Tool to Quantify the 3D Expansion Factor of Biological Samples in Expansion Microscopy*, 2020, ACS Omega, 5(12), 6792–6799.
- (42) F. de Jong, J. Pokorny, B. Manshian, B. Daelemans, J. Vandaele, J. B. Startek, S. Soenen, M. Van der Auweraer, W. Dehaen, **S. Rocha**, *Development and Characterization of BODIPY-Derived Tracers for Fluorescent Labeling of the Endoplasmic Reticulum*, 2020, Dyes and Pigments, 176, 108200.
- (43) I. Zurnic Bönisch, L. Dirix, V. Lemmens, D. Borrenberghs, F. De Wit, F. Vernailen, **S. Rocha**, F. Christ, J. Hendrix, J. Hofkens, *Capsid-Labelled HIV to Investigate the Role of Capsid During Nuclear Import and Integration*, 2020, Journal of Virology, 94(7), 10–1128.
- (44) O. M. Thirukkumaran, C. Wang, N. J. Asouzu, E. Fron, **S. Rocha**, J. Hofkens, L. D. Lavis, H. Mizuno, *Improved HaloTag Ligand Enables BRET Imaging with NanoLuc*, 2020, Frontiers in Chemistry, 7, 938.
- (45) ‡ F. Taemaitree, B. Fortuni, Y. Koseki, E. Fron, **S. Rocha**, J. Hofkens, H. Uji-i, T. Inose, H. Kasai, *FRET-Based Intracellular Investigation of Nanoprodugs Toward Highly Efficient Anticancer Drug Delivery*, 2020, Nanoscale, 12(32), 16710–16715.
- (46) B. Fortuni\*, T. Inose, M. Ricci, Y. Fujita, I. Van Zundert, A. Masuhara, E. Fron, H. Mizuno, L. Latterini, **S. Rocha\***, H. Uji-i\*, *Polymeric Engineering of Nanoparticles for Highly Efficient Multifunctional Drug Delivery Systems*, 2019, Scientific Reports, 9(1), 2666.
- (47) S. Rodriguez-Mora, F. De Wit, J. Garcia-Perez, M. Bermejo, M. R. Lopez-Huertas, E. Mateos, P. Marti, **S. Rocha**, L. Vigon, F. Christ, et al., *The Mutation of Transportin 3 Gene That Causes Limb Girdle Muscular Dystrophy 1F Induces Protection Against HIV-1 Infection*, 2019, PLoS Pathogens, 15(8), e1007958.