

Dr. Paolo Bianchini



Current position: Technologist/researcher at Optical Nanoscopy and Nikon Imaging Center@IIT, Nanophysics, Istituto Italiano di Tecnologia, Via Morego 30, 16163 Genova, Italy

email: paolo.bianchini@iit.it

Date of birth 20 March 1978

Fiscal code BNCPLA78C20D969R

Marital status Married and 4 children

PRESENT AND PAST POSITIONS

Since the 1st of January of 2016 Dr. Paolo Bianchini is a technologist and researcher in the Optical Nanoscopy Group, and he is manager of the Nikon Imaging Center, at Fondazione Istituto Italiano di Tecnologia.

2012/01-2015/12 He was a Team Leader researcher in the Optical Nanoscopy Group, Nanophysics Department at Istituto Italiano di Tecnologia.

2010/01-2011/12 He got a postdoc position at Nanophysics Department at Istituto Italiano di Tecnologia.

2009 He was appointed from Istituto Italiano di Tecnologia at department of Neuroscience Brain Technologies Department.

2008/01-2009/12 He got a fellowship from the University of Genova ('Assegno di ricerca'), about "Design, realization and functional evaluation of hybrid nanostructured biosystems" in the framework of PRIN (Anno 2006 - prot. 2006028909_001). He joined also IFOM (Institute for Cancer Research, Milan) and MicroScoBio (Research Center for Correlative Microscopy in Biomedicine and Oncology).

2006 He won a fellowship at the Department of Biomathematics, Institute of Physiology, Academy of Sciences of the Czech Republic, Prague (Cz) in the framework of the "Centre for Advanced Fluorescence Microscopy in Biosciences". There he worked on the development of a second harmonic generation microscope and on the establishment of in situ detection of selected proteins fused with a fluorescent protein in yeast colonies.

RESEARCH ACTIVITY IN BRIEF

His main research activity aims at the biophysical study of biological molecules and macromolecules both in situ and in vitro utilizing almost not perturbative instrumentation and nanostructured model systems. So far, his research deals with the design, realization and utilization of biophysical instrumentation as conventional, confocal and multi-photon fluorescence microscopy, SHG imaging microscopy, FLIM, single molecule imaging, STED nanoscopy. In particular, he developed an original setup for SW 2PE-STED (single wavelength two-photon excitation stimulated emission depletion) super-resolution microscopy and another for SHG (second harmonic generation) combined with 2PEF (2-photon excitation fluorescence) microscopy. He recently applied STED nanoscopy technique to the quantitative study of single molecule diffusion in living cells. Moreover, he is in charge of the scientific management of the Nikon Imaging Center and he is responsible for the partnership with the R&D of Nikon Instruments Japan.

EDUCATION AND EXPERIENCE

2008/04/18 He received the PhD degree in Materials Science from University of Genoa, Italy, with the thesis: "Multimodal characterization of biological/biocompatible systems by means of advanced microscopy methods".

2004/06/09 He received the Master degree in Physics from University of Genoa, Italy, with the thesis: "Design of a nanostructured biological system and study of its biophysical properties by means of advanced microscopy techniques".

Since 2012 He is in charge of R&D relationship between Nanoscopy Group at IIT and Nikon Instruments Japan

2006-2007 He was in charge of testing α - and β - prototypes of the upcoming White Light Laser product for Leica-Microsystems.

PB is Senior Associate Editor of the following Journal:

- Microscopy Research and Technique, Wiley

PB is Associate Editor of the following Journal:

- Frontiers in Bioengineering and Biotechnology – Nanobiotechnology, Frontiers.

PB is Advisory Editor of the following Journal:

- European Biophysical Journal

PB is active member of international scientific societies. Since September 2016 is an elected member of the Advisory Committee of the Italian Society of Pure and Applied Biophysics (SIBPA). Moreover, he has been an elected member for a complete term of the Advisory Committee of SIBPA in 2009 and, of the Italian Society of Cytometry (GIC) in 2008.

2007 He was Visiting Scientist at the Czech Academy of Sciences, Prague (Lucie Kubinova Lab)

Since 2007 He had a fruitful collaboration with the group of I. Panfoli, Department of Biology, University of Genoa about the functional study of the bovine retinal rod outer segment.

2006 He won a fellowship at the Department of Biomathematics, Institute of Physiology, Academy of Sciences of the Czech Republic, Prague (Cz) in the framework of the "Centre for Advanced Fluorescence Microscopy in Biosciences". There he worked on the development of a second harmonic generation microscope and on the establishment of in situ detection of selected proteins fused with a fluorescent protein in yeast colonies.

2006 He had an important collaboration with the group of G. Murtas and P.L. Luisi of Centro Studi e Ricerche "E. Fermi" in Rome about the EGFP (enhanced green fluorescent protein) expression in confined environment.

2005 He got a bursary to attend the XVII Congress of the Italian Society for Pure and Applied Biophysics.

2003 He attended the Summerschool about "Nanocapsules with functionalised surfaces and walls" at the International University of Bremen (IUB), Germany.

PB is an active reviewer of several international scientific journals: Scientific Reports, Biophysical Journal, Optics express, Journal of Biomedical Optics, Microscopy Research and Technique, Photochemical & Photobiological Sciences, Journal of Lightwave Technology.

TEACHING ASSISTANT ACTIVITY

Since 2020 Adjunct Professor of Applied Physics for Biomedicine and Biomaterials at the Department of Physics, University of Genoa, Italy

Since 2019 Adjunct Professor of Advanced Microscopy at the Department of Physics, University of Parma, Italy

Since 2018 Member of the teaching board for the PhD school in Physics University of Parma, Italy

2018 - 2020 Adjunct Professor for the PhD school in Bioengineering and Robotics at Department of Bioengineering, University of Genoa, Italy

2013-2018 Adjunct Professor and member of the teaching board for the PhD school in Bioengineering and Robotics at Department of Bioengineering, University of Genoa, Italy.

2013-03-13 Lesson on "Multiphoton and Super-Resolution Microscopy" in the PhD Program in Cellular and Molecular Biology-School of Molecular Medicine, Università Vita-Salute San Raffaele, Milan, Italy

2011 Teaching assistance for laboratory activity of the course "methods for observation and measurements" at the department of Physics, University of Genoa.

2011-03-04 Lesson on "Methods in optical nanoscopy". Corso di perfezionamento, Università di Firenze, Firenze, Italy.

2009 Teaching assistance for laboratory activity of the course "methods for observation and measurements" at the department of Physics, University of Genoa.

2009 Lesson on "Two-Photon Excitation and Second Harmonic Generation" in the PhD Courses of the European School of Molecular Medicine Campus Ifom-leo, Milano (Italia)

2008 International School Of Biophysics «Antonio Borsellino», 36th Course: multidimensional optical fluorescence microscopy towards nanoscopy. Lesson on Second Harmonic Generation Imaging Microscopy.

2007 Lesson on "Multiphoton excitation fluorescence microscopy: the fundamentals" in the PhD Courses of the European School of Molecular Medicine Campus Ifom-leo, Milano (Italia)

2007 XI School Of Pure And Applied Biophysics, Istituto di Scienze Lettere e Arti (IVSLA), Venice (Italy). Lesson on confocal and nonlinear microscopy.

2006 Principles of fluorescence techniques course. Edition iv. University of Genoa. Laboratory supervisor in fluorescence microscopy.

2005 Principles of fluorescence techniques course. Edition iii. University of Genoa. Laboratory supervisor in fluorescence microscopy.

2005-2006 First level master in "Microscopie ed analisi microscopiche in biologia". Second edition. University of Genoa. Faculty of mathematical, physical and natural science. Laboratory supervisor in fluorescence microscopy.

2004-2005 First level master in "Microscopie ed analisi microscopiche in biologia". First edition. University of Genoa. Faculty of mathematical, physical and natural science. Laboratory supervisor in fluorescence microscopy

FUNDING FOR RESEARCH

Since 2021 Group leader in MOSBRI, European Union's Horizon 2020 grant agreement No 101004806.

2018-2022 He is MC member of the e-COST action CA17121, COMULIS (Correlated Multimodal Imaging in Life Sciences)

2016-2020 He was MC member of the e-COST action CN75T24, NEUBIAS (Network of European Biolmage Analysts)

Since 2015 Since November 2015 is coordinating the 3 years R&D commercial project supported by Nikon Instruments Japan.

Since 2014 Scientific Lab Manager of the IIT international Nikon Imaging Center.

Since 2014 Site manager of ITaBi multisited node of EuroBiolumaging infrastructure.

2012-2015 PB was Task manager of the IIT beneficiary organization in LANIR (FP7/2012-2015) under grant agreement n° 280804.

2012 PB was selected in the Interdepartmental/Interdisciplinary Projects call funded by IIT, for the project entitled "Super-resolution deep-functional brain imaging of cortical layers in vivo"

TECHNOLOGY TRANSFER - PATENTS

(Legend: Title, Docket, Application, Filing date, Inventors, Patent, Issue date, Publication number, Publication date)

TIME-RESOLVED IMAGING METHOD WITH HIGH SPATIAL RESOLUTION, PT170400, EP 19702971.3, 2020-08-20, Vicidomini Giuseppe, Castello Marco, Tortarolo Giorgio, TOSI Alberto, Buttafava Mauro, Villa Federica, Bianchini Paolo, Diaspro Alberto, Sheppard Colin, EP 3743758, 2022-03-02, EP 3743758, 2020-12-02

METODO DI MICROSCOPIA A DEPLEZIONE MEDIANTE EMISSIONE STIMOLATA AD ALTA RISOLUZIONE SPAZIALE, PT170380, IT 102017000118432, 2017-10-19, Lanzano Luca, Bianchini Paolo, Vicidomini Giuseppe, Diaspro Alberto, IT 102017000118432, 2020-01-22, IT 201700118432, 2019-04-19

METHOD OF STIMULATED EMISSION DEPLETION MICROSCOPY HAVING HIGH SPATIAL RESOLUTION, PT170380, PCT/IB2018/058123, 2018-10-19, Lanzano Luca, Bianchini Paolo, Vicidomini Giuseppe, Diaspro Alberto, , WO 2019/077556, 2019-04-25

TIME-RESOLVED IMAGING METHOD WITH HIGH SPATIAL RESOLUTION, PT170400, PCT/IB2019/050595, 2019-01-24, Vicidomini Giuseppe, Castello Marco, Tortarolo Giorgio, TOSI Alberto, Buttafava Mauro, Villa Federica, Bianchini Paolo, Diaspro Alberto, Sheppard Colin, , WO 2019/145889, 2019-08-01

METODO DI IMAGING RISOLTO NEL TEMPO AD ALTA RISOLUZIONE SPAZIALE, PT170400, IT 102018000001891, 2018-01-25, Vicidomini Giuseppe, Castello Marco, Tortarolo Giorgio, TOSI Alberto, Buttafava Mauro, Villa Federica, Bianchini Paolo, Diaspro Alberto, Sheppard Colin, IT 102018000001891, 2020-03-20, IT 2018000001891, 2019-07-25

TIME-RESOLVED IMAGING METHOD WITH HIGH SPATIAL RESOLUTION, PT170400, CN 201980010127.2, 2020-07-25, Vicidomini Giuseppe, Castello Marco, Tortarolo Giorgio, TOSI Alberto, Buttafava Mauro, Villa Federica, Bianchini Paolo, Diaspro Alberto, Sheppard Colin, CN 111971606, 2022-01-18, CN 111971606, 2020-11-20

TIME-RESOLVED IMAGING METHOD WITH HIGH SPATIAL RESOLUTION, PT170400, US 16/961819, 2020-07-13, Vicidomini Giuseppe, Castello Marco, Tortarolo Giorgio, TOSI Alberto, Buttafava Mauro, Villa Federica, Bianchini Paolo, Diaspro Alberto, Sheppard Colin, , US 2020/386974, 2020-12-10

TIME-RESOLVED IMAGING METHOD WITH HIGH SPATIAL RESOLUTION, PT170400, JP 2020-540440, 2020-07-25, Vicidomini Giuseppe, Castello Marco, Tortarolo Giorgio, TOSI Alberto, Buttafava Mauro, Villa Federica, Bianchini Paolo, Diaspro Alberto, Sheppard Colin, , JP 2021-510850, 2021-04-30

METODO DI ILLUMINAZIONE DI UN CAMPIONE BIOLOGICO, METODO DI MICROSCOPIA A DEPLEZIONE AD ELEVATA RISOLUZIONE TRIDIMENSIONALE E CORRISPONDENTE MICROSCOPIO, PT170381, IT 102017000137607, 2017-11-30, Bianchini Paolo, Deguchi Takahiro, Diaspro Alberto, IT 102017000137607, 2020-02-19, IT 201700137607, 2019-05-30

RANDOM ACCESS STIMULATED EMISSION DEPLETION (STED) MICROSCOPY, PT130163, EP 14722337.4, 2015-09-18, Bianchini Paolo, Saggau Peter, Diaspro Alberto, EP 2976670, 2021-06-16, EP 2976670, 2016-01-27

RANDOM ACCESS STIMULATED EMISSION DEPLETION (STED) MICROSCOPY, PT130163, PCT/IB2014/060024, 2014-03-21, Bianchini Paolo, Saggau Peter, Diaspro Alberto, , WO 2014/147590, 2014-09-25

METHOD OF STIMULATED EMISSION DEPLETION MICROSCOPY HAVING HIGH SPATIAL RESOLUTION, PT170380, EP 18815011.4, 2020-05-12, Lanzano Luca, Bianchini Paolo, Vicidomini Giuseppe, Diaspro Alberto, EP 3698124, 2021-07-07, EP 3698124, 2020-08-26

RANDOM ACCESS STIMULATED EMISSION DEPLETION (STED) MICROSCOPY, PT130163, US 14/778217, 2015-09-18, Bianchini Paolo, Saggau Peter, Diaspro Alberto, US 9810966, 2017-11-07, US 2016/274439, 2016-09-22

RANDOM ACCESS STIMULATED EMISSION DEPLETION (STED) MICROSCOPY, PT130163, JP 2016-503770, 2015-09-18, Bianchini Paolo, Saggau Peter, Diaspro Alberto, JP 6511433, 2019-05-15, JP 2016-516219, 2016-06-02

METHOD OF LIGHTENING AT LEAST ONE BIOLOGICAL SAMPLE, THREE-DIMENSIONAL HIGH RESOLUTION DEPLETION MICROSCOPY METHOD AND CORRESPONDING MICROSCOPE, PT170381, PCT/IB2018/059492, 2018-11-30, Bianchini Paolo, Deguchi Takahiro, Diaspro Alberto, , WO 2019/106614, 2019-06-06

METHOD OF LIGHTENING AT LEAST ONE BIOLOGICAL SAMPLE, THREE-DIMENSIONAL HIGH RESOLUTION DEPLETION MICROSCOPY METHOD AND CORRESPONDING MICROSCOPE, PT170381, EP 18836501.9, 2020-06-19, Bianchini Paolo, Deguchi Takahiro, Diaspro Alberto, , EP 3717951, 2020-10-07

METHOD OF LIGHTENING AT LEAST ONE BIOLOGICAL SAMPLE, THREE-DIMENSIONAL HIGH RESOLUTION DEPLETION MICROSCOPY METHOD AND CORRESPONDING MICROSCOPE, PT170381, US 16/766658, 2020-05-30, Bianchini Paolo, Deguchi Takahiro, Diaspro Alberto, US 11092793, 2021-08-17, US 2020/363620, 2020-11-19

METHOD OF STIMULATED EMISSION DEPLETION MICROSCOPY HAVING HIGH SPATIAL RESOLUTION, PT170380, US 16/756281, 2020-04-15, Lanzano Luca, Bianchini Paolo, Vicidomini Giuseppe, Diaspro Alberto, , US 2020/333573, 2020-10-22

IMAGING SIMULTANEO MULTISPECIE IN SUPER-RISOLUZIONE MEDIANTE MULTIPLAZIONE TEMPORALE E ARRAY DI RIVELATORI A FOTONE SINGOLO, PT210587, IT 102021000017018, 2021-06-29, Piazza Simonluca, Vicidomini Giuseppe, Tortarolo Giorgio, Castello Marco, Bianchini Paolo, Diaspro Alberto, , IT 202100017018, 2022-12-29

MICROSCOPIA A DEPLEZIONE MEDIANTE EMISSIONE STIMOLATA (STED) AD ACCESSO CASUALE, PT130163, IT 102013902139833 (TO2013A000229), 2013-03-22, Bianchini Paolo, Saggau Peter, Diaspro Alberto, IT 0001416928, 2015-07-20, IT TO20130229, 2014-09-23

TRAINING OF LABORATORY PERSONNEL

Postdoctoral fellow:

Takahiro Deguchi	currently postdoc under Nikon R&D funds.
Kseniya Korobchevskaya	past junior postdoc under the European Project Lanir, currently senior Postdoc at the Oxford University, UK
Nirmal Mazumder	past postdoc under the IIT interdepartmental project (co-PI is Tommaso Fellin, NBT department). Assistant Professor at department of biophysics, Manipal University, India

Tutoring students:

Simone Civita	currently PhD Student in Physics	2017/07/20	European Biophysical Societies Association (EBSA) satellite meeting: "Biophysical Approaches to Protein Folding and Disease", Edinburgh, United Kingdom. Invited Talk: "Correlative nanoscopy for the analysis of amyloid fibrils formation & NEUBIAS: network of european bioimage analysts"
Chantal Usai	currently PhD Student in Physics		
Matteo Mariangeli	currently PhD Student in Physics		
Elonora Uriati	PhD Student in Physics, currently scientific disseminator.		
Francesco Garzella	PhD Student in Physics, currently postdoc University of Florence	2017/07/18	European Biophysical Societies Association (EBSA) meeting, Edinburgh, United Kingdom. Invited Talk: "Resolution Passion"
Behjat Kariman	PhD Student in Physics, currently postdoc at the Politecnico di Milano	2017/07/09	Frontiers in Materials Characterisation towards Industrial Translation (FRIMACHAT) international workshop, University of Limerick, Ireland. Invited talk: "Super-resolution in NIR transient absorption microscopy exploiting saturation processes"
Marco Cozzolino	PhD Student in Physics, currently Co-Founder e Chairman of Sanchip.		
Luca Pesce	PhD Student in Physics, currently postdoc at LENS, Firenze		
Giulia Zanini	PhD Student in Physics, currently postdoc University of Maryland	2017/03/21	University of Udine, Udine, Italy Invited Seminar: "The diffraction barrier is crumbling: from confocal microscopy to nanoscopy".
Michele Oneto	PhD Student in Bioengineering and Bioelectronics, currently technician at IIT	2016/11/30	"Training on Advanced Optical Microscopy Methods", University of Palermo, Palermo, Italy. Invited Seminar: Stimulated emission depletion (STED) nanoscopy: theory and applications
Giuseppe Sancataldo	PhD Student in Bioengineering and Bioelectronics, currently postdoc at LENS, Firenze		
Chiara Peres	PhD Student in Nanosciences, currently Postdoc at CNR Monterotondo	2016/10/23	International Workshop: "Analysis of image data for diagnostics" Institute of Physiology, Czech Academy of Sciences, Prague, Czech Republic. Invited Seminar: Quantitative STED and new advances towards label free nanoscopy
Francesca D'Autilia	PhD Student in Nanosciences, currently Postdoc at NEST Pisa		
Silvia Galiani	Master and PhD Student in Physics, currently Postdoc at the Oxford University	2015/10/01	Go photon-Lighting the future, Politecnico di Milano, 1 October 2015, Milan, Italy. Invited talk: Nanoscopia
Federica Morotti	Master Thesis Student in Pharmaceutical Chemistry, currently working in a Pharmacy	2015/09/30	Museo delle scienze-MUSE, Trento Italy. Invited talk: "Oltre ogni risoluzione: la frontiera della microscopia"
Dora Mangraviti	Master Thesis Student in Biology. currently working		
Benedetta Pollarolo	Bachelor Thesis Student in Biotechnology	2015/09/30	IBF-CNR, CIBIO - University of Trento, 30 September 2015 Trento Italy. Invited Seminar: Optical Nanoscopy

INVITED TALKS

2019/05/16	Workshop: Celebrating the UNESCO Day Of Light, Organized by IEEE Italy, University of Pavia, Italy. Invited seminar: "Nanoscale imaging by focused visible light"	2015/09/10	"Piero Caldirola" International Centre For The Promotion Of Science And International School Of Plasma Physics International Workshop On Imaging, Varenna, Italy. Invited Seminar: Optical Nanoscopy.
2018/11/29	Workshop: "Nanomedicine", Rome, Italy. Invited seminar: "How Optical Nanoscopy and Super resolution microscopy can fit to Nanomedicine?"	2015/10/12	Coherent Workshop, Genoa Italy. Invited talk: "Single wavelength 2PE_STED super_resolution and SHG non-linear microscopy"
2018/06/21	Workshop: "In vitro disease model", Rome, Italy. Invited seminar: "Optical Nanoscopy in Biomedical Research"	2014/11/06	Nikon Instruments factory, Yokohama, Japan. Invited Seminar: "Super resolution... What else?"
2017/09/21	AIOM (Associazione Italiana di Oncologia Medica) workshop: "La ricerca di nuove terapie contro i tumori". Invited seminar: "La microscopia per lo studio della cellula"	2014/10/22	100° Congresso Nazionale SIF, Pisa, Italia. Invited talk: "Super resolution... What else!?"

2014/09/18	Second National School on Optical Biosensors and Biophotonics, Otranto, Italy. Invited seminar: "Multiphoton nanoscopy and super resolution microscopy of large 3D biological objects"
2014/01/28	International Nanoscopy Symposium, Amsterdam, Netherlands. Invited talk: "Beyond STED nanoscopy"
2013/10/28	Leica School Lousanne 2013 at EPFL, Switzerland. Invited seminar: "STED nanoscopy advances: from gating to two photon excitation"
2013/09/06	European Society for Photobiology annual congress, Liegi, Belgio. Invited talk: "SW 2PE- STED superresolution nanoscopy"
2012/11/20	REMOA congress, Barcellona, Spagna. Lezione su: "Second Harmonic Generation: a smart label free approach"
2010/11/23	Microscopy Workshop, University of Marburg, Marburg, Germany, Invited Seminar: "Applications of multiphoton and white light laser confocal microscopy"
2010/10/09	Invited Seminar at Filarete, Milan, Italy. "Approches to optical nanoscopy"
2010/05/30	Transalp'Nano 2010 Satellite school "Quantum wires, boxes and molecules", Varese, Italia. Lezione su: "Optical nanoscopy"
2008/06/10	VIII Leica Microsystem school on Confocal Microscopy and Applications, Rome, Italy. Invited seminar: "FRET & FRAP: a step towards molecular imaging"
2008/04/19	36 th Course: Multidimensional Optical Fluorescence Microscopy Towards Nanoscopy: International School Of Biophysics «Antonio Borsellino» Erice, Italy. Invited Talk "Second Harmonic Generation Imaging Microscopy"
2007/01/29	XI school of pure and applied Biophysics: "Advanced optical microscopy methods in biophysics" at Istituto Veneto Di Scienze Lettere Ed Arti, Venice, Italy. Invited talk:"Confocal and Two-Photon Excitation notes"

AWARDS

In 2013	Innovators Under 35 Italia, prize by MIT Technology Review
In 2006	Fellow Department of Biomathematics, Institute of Physiology, Academy of Sciences of the Czech Republic, Prague (Cz)
In 2004	Massimo Grattarola Award for the master degree thesis, prize by GIC (Italian Citometry Society)

ORGANIZATION OF EVENTS

2019	He was codirector of the International School Of Nanoscale Optical Microscopy, at IVSLA Venice, Italy
2018	He was director of the 5 th international practical school NIC@IIT at Istituto Italiano di Tecnologia, Genova, Italy
2018	He was codirector of the International School Of Nanoscale Optical Microscopy, at IVSLA Venice, Italy
2017	He was director of the 4 th international practical school NIC@IIT at Istituto Italiano di Tecnologia, Genova, Italy
2016	He was director of the International School Of Biophysics «Antonio Borsellino» 43rd Course: "Nanoscale biophysics: focus on methods and techniques", Erice, Palermo, Italy.
2013	He was chairman of the international conference MAF2013.
2010	He was scientific coordinator of the course CLXXVII at the International School Of Physics "Enrico Fermi" held in Varenna, Italy.

CITATION METRICS

ResearcherID A-9500-2008, Orcid 0000-0001-6457-751X, Scopus Author ID: 14069915000
4179 total citations, h-index: 35; (data from Scholar, updated 04/07/2022)

SELECTED PUBLICATIONS

- Zanini, G., K. Korobchevskaia, T. Deguchi, A. Diaspro, and **P. Bianchini***. (2019) Label-Free Optical Nanoscopy of Single Layer Graphene. ACS Nano.
- Pesce, L., M. Cozzolino, L. Lanzano, A. Diaspro, and **P. Bianchini***. (2019) Measuring expansion from macro-to nanoscale using NPC as intrinsic reporter. J. Biophoton. : e201900018.
- Castello, M., G. Tortarolo, M. Buttafava, T. Deguchi, F. Villa, S. Koho, L. Pesce, M. Oneto, S. Pelicci, L. Lanzano, **P. Bianchini**, C.J.R. Sheppard, A. Diaspro, A. Tosi, and G. Vicidomini. (2019) A robust and versatile platform for image scanning microscopy enabling super-resolution FLIM. Nature Methods. 16: 175–178.
- Vicidomini, G., **Bianchini, P.** & Diaspro, A. (2018). STED super-resolved microscopy. Nature Methods 19, 780.
- Korobchevskaia K., Peres C., Li Z., Antipov A., Sheppard C., Diaspro A. and **Bianchini P.***, (2016) Intensity Weighted Subtraction Microscopy Approach for Image Contrast and Resolution Enhancement. Sci Rep 1–9 (2016). doi:10.1038/srep25816
- Bianchini, P.***, Peres, C., Oneto, M., Galiani, S., Vicidomini, G. & Diaspro, A. (2015). STED nanoscopy: a glimpse into the future. Cell and Tissue Research 360, 143–150.