

Curriculum Vitae Europass

Personal information

Surname Name **Marzola Pasquina**
MRZ PQN 61M41F462Z

Affiliation Department of Engineering for Innovation Medicine
University of Verona, Verona, Italy

Work Address Strada Le Grazie 15, 37134, Verona, Italy

Telephones Office +39 (0) 45 8027614/7816

Fax +39 (0) 45 8027163

E-mail pasquina.marzola@univr.it

Citizenship Italian

Gender Female

Professional experience

From July 1991 to May 1996. Senior Researcher in the Department of Imaging, Pre-clinical Research, Bracco Spa, Milano. Responsible for preclinical research programmes on contrast agents for magnetic resonance Tomography.

Since June 1996, conducts research activity in Biomedical Imaging at the University of Verona.

Present Position

ACADEMIC POSITION

- Full Professor in Applied Physics (FIS/07) at the Department of Engineering for Innovation Medicine (previously at the Department of Computer Science), from 12/1/2019.
- Associate Professor in Applied Physics (FIS/07) at the Department of Computer Science, from 10/1/2015.
- Associate Professor in Experimental Physics (FIS/01) at the Faculty of Sciences of the University of Verona, from 1/1/2011. Associate Professor in Experimental Physics (FIS/01) at the Department of Computer Science of the University of Verona, from 10/1/2012.
- Researcher in Applied Physics (FIS/07) at the Faculty of Medicine of the University of Verona, from 11/1/2002.

NATIONAL SCIENTIFIC QUALIFICATION

- Granted the National Scientific Qualification (Abilitazione Scientifica Nazionale, ASN) for the role of Full Professor in APPLIED PHYSICS (02/B3) by Italian Ministry of Education, University and Research on the 18th of December 2014.
- Granted the National Scientific Qualification (Abilitazione Scientifica Nazionale, ASN) for the role of Full Professor in EXPERIMENTAL PHYSICS OF MATTER (02/B1) by Italian Ministry of Education, University and Research on the 13th of October 2014.

Main activities and responsibilities

- Since November 2020 until October 2022, President of the School of Science and Engineering of the University of Verona.
- Former member of the Committee (Collegio dei docenti) for PhD in "Nanotechnologies

Scientific Activity

- and Nanomaterials for Biomedical Applications”, currently member of the Committee (Collegio dei docenti) for PhD in “Nanosciences and Advanced Technologies”.
- Member of the “Commissione Paritetica” of the Department of Computer Science (2015-2017).
- Member of the “Commissione Paritetica” of the School of Science and Engineering (2018).
- Chairperson of the “Commissione Paritetica” of the School of Science and Engineering (since April 2019-November 2020).
- Member of the Disciplinary Committee of the University of Verona (2014-2017).
- Member of the Scientific and Technical Committee of CIRSAL, Centro Interdipartimentale di Servizio alla Ricerca Sperimentale, (2011-2019).
- Member of the Committee for the preparation of the admission test for Health Professions (since 2016).

Main research topics

- **Neuroimaging:** Optimisation of acquisition techniques for the study of cerebral ischemia and brain diseases through diffusion weighed sequences and localized Proton Spectroscopy (Sbarbati et al., *Acta Anatomica* (1998); Reggiani et al., *European J Pharmacology* (2001); Sbarbati et al., *Magnetic resonance imaging*, (2002); Fabene et al., *NeuroImage* (2003); Fabene, et al., *Neurobiol Dis.* (2006); Tambalo et al., *Magn Reson Med.* (2009), Bontempi et al., *Magn Reson Med* (2018)). In addition, she is developing projects aimed at studying brain plasticity by functional MRI funded by Italian F ondatation for Multiple Sclerosis (Tambalo et al., *J. of Neuroscience* (2015)); Bontempi et al., *Exp Gerontol* (2021).
- **Image analysis.** Development of software to obtain parametric images (maps of ADC, maps of relaxation times, etc) and cluster analysis algorithms (Marzola et al., *Magnetic Resonance Materials in Physics, Biology and Medicine* (1998); Castellani et al., *Artificial Intelligence in Medicine* (2008); Castellani et al., *Methods Inf Med.* (2009))
- **MRI techniques for the assessment of cerebral blood volume and blood flow** in laboratory animal (Fabene et al., *NeuroImage* (2003); Calderan et al., *Neurosci Lett.* (2005); Fabene et al., *Neurobiol Dis* (2006); Fabene et al., *PLoS ONE.* (2007); Fabene et al., *Nat Med.* (2008); Norwood et al., *J Comp Neurol.* (2010)).
- **Development of Dynamic-Contrast-Enhanced MRI (DCE-MRI)**, image acquisition and analysis, for the quantitative assessment of tumor vasculature and applications to early assessment of therapeutic efficacy of antiangiogenesis drugs (Marzola et al., *International J Cancer* (2003). Marzola, et al., *Clinical Cancer Research* (2004); Galiè et al., *J Magnetic Resonance Imaging* (2004); Marzola et al., *Clin Cancer Res.* (2005); Galie et al., *. Carcinogenesis* (2005); Marzola et al., *Invest Radiol* (2005); Galie et al, *Neoplasia* (2005); Galiè et al., *Oncogene* (2008); Boschi et al., *Magnetic Resonance Materials in Physics, Biology and Medicine* (2008); Galiè et al., *Microvasc Res.* (2009); Farace et al., *J Magn Reson Imaging* (2011); Bontempi et al., *Contrast Media Mol Imaging*, 2019).
- **Molecular and Cell Imaging.** MRI techniques to study in vivo homing and fate of stem cells, pancreatic islets and exosomes labelled with iron oxide nanoparticles (Neri et al., *Stem Cells*, (2008); Marzola et al., *Contrast Media Mol Imaging.*(2009); Busato et al., *Int J Nanomedicine* (2016); Bonafede et al., *Int J Mol Sci.* (2020)).
- **Multimodal Imaging.** Prof. Marzola is focussing on the is new perspectives offered by multimodal imaging approach (MRI, PET, Ultrasounds and Optical Imaging). In collaboration with the St. Orsola Hospital, Bologna, she is studying the correlation between metabolism, studied by FDG-PET, and tumor vasculature, studied via DCE-MRI (Galiè et al., *Neoplasia* (2007); Farace et al., *Eur J Nucl Med Mol Imaging.* (2009)). In addition, she is developing projects aimed at studying the application of optical and magnetic resonance imaging in brain and pancreatic tumor detection.
- **Nanotechnology for Diagnosis and Therapy.** Prof. Marzola is exploiting her previous experience in the field of Contrast Agents to study innovative diagnostic and therapeutic approaches based on nanoparticles containing iron-oxide nanocrystals. Prof. Marzola is involved in the following projects: FIRB-RINAME (2012-2015); “Magnetosomes as nanotechnology platform for thermotherapy of tumours” funded by AIRC (Italian Association for Cancer Research), Rif. 11993, Call 2011, PI Prof. A. Sbarbati, Università di Verona. (Publications: Masotti et al., *Magnetic Resonance Materials in Physics Biology and Medicine* (2009); Valero et al., *J Am Chem Soc* (2011), Passuello et al., *Nanoscale* (2012), Valero et al., *J Med Chem* (2014), Mannucci et al., *PLoS One* (2014), Arosio et al., *RCS Advances* (2015); Torresan et al, *ACS Nano* 2020; Gerosa et al., *Nanotheranostics* (2021); Vurro et al., *Cancer* (2022))

Scientific Societies	<ul style="list-style-type: none"> • Member of GIDRM (Gruppo Italiano Discussion Risonanze Magnetiche). • Vice-President of the Board of the Italian Chapter of ISMRM (2018-2021).
International Collaborations	<ul style="list-style-type: none"> • Prof. Jose Dominguez-Vera, Departamento de Química Inorgánica, Universidad de Granada, Spain. Magnetic nanoparticles (see Valero et al., J Am Chem Soc, 2011; Valero et al. J Med Chem (2014)). • Prof. Sabine Van Huffel, Department of Electrical Engineering, SCD-SISTA, Katholieke Universiteit Leuven. Quantitative analysis of proton localized spectra (see Mosconi et al., J Lipid Res. 2011; Mosconi, et al, NMR in Biomedicine, (2014)). • Dr. Claudio Vinegoni, Center for System Biology, Massachusetts General Hospital, Harvard Medical School, Boston, United States. K-space sampling schemes applied to optical microscopy (see Vinegoni et al., Biomedical Optics Express, 2013). • Prof. Fernando Palacio, instituto de Ciencia de Materiales de Aragón, CSIC - Universidad de Zaragoza, Spain. Magnetic nanoparticles (see Ali et al., Future Science OA (2017)). • Dr. Stefano Pluchino, Department of Clinical Neurosciences, Cambridge Center for Brain Repair, Cambridge UK. Functional Imaging in experimental model of multiple sclerosis (see Tambalo et al., J Neuroscience (2015)). • Dr. Nicolau Beckman, Novartis Institutes for BioMedical Research, Analytical Sciences & Imaging, Basel, Switzerland. • Prof. Alonso Ramirez Manzanares, Centro de Investigación en Matemáticas (CIMAT), Messico.
Teaching Activity	<ul style="list-style-type: none"> • PHYSICS (mechanics and thermodynamics), Degree Course in Computer Science (University of Verona). • APPLIED PHYSICS, Degree Course in Medicine (University of Verona). • APPLIED PHYSICS, Degree course in Physiotherapy (University of Verona). • ACQUISITION AND ANALYSIS OF BIOMEDICAL IMAGES, Degree in Human Centered Medical System Engineering (University of Verona). • MEDICAL IMAGING TECHNIQUES: PRINCIPLES AND APPLICATIONS, Master Degree in Medical Bioinformatics (University of Verona).
Funding and Projects	<p>2005 Grant of 53,000 Euros obtained from Cassa di Risparmio di Verona, for the project "Trattamento di patologie autoimmuni neurologiche con cellule staminali mesenchimali".</p> <p>2006 Projects of national interest (Progetti di Ricerca di Interesse Nazionale - PRIN). Grant of 35,750 Euros for the project: "Homing e destino di isole pancreatiche trapiantate nel ratto studiato in vivo tramite Tomografia a Risonanza Magnetica". Grant of 23,000 Euros obtained from Nerviano Medical Sciences (NMS) for the research project: "Valutazione tramite tecniche di Risonanza Magnetica in vivo dell'efficacia di farmaci antitumorali target specifici sviluppati in NMS" (2006).</p> <p>2007 Grant of 25,000 Euros obtained from Siena Biotech for the project: "Tracciabilità in vivo di cellule di glioblastoma umane usando tecniche di luminescenza e risonanza magnetica" del quale è responsabile scientifico. Grant of 25,000 Euros obtained from Italian Multiple Sclerosis Foundation (FISM, call 2007) for the pilot project "Functional Imaging of neuronal plasticity in the study in an experimental model of Multiple Sclerosis".</p> <p>2008 Grant of 19,000 Euro obtained from the University of Verona, Joint Projects 2007, for the project entitled " Interfaccia web-based ai dati di Tomografia a Risonanza Magnetica Bruker ParaVision®" in collaboration with Bruker s.r.l., Milan. Grant of 23,000 Euros obtained from Nerviano Medical Sciences for the project entitled "Search for spectroscopic and/or imaging markers for the characterisation of the efficacy of innovative therapies in experimental models of glioma". Projects of national interest (Progetti di Ricerca di Interesse Nazionale - PRIN) Grant of 38,571 Euros for the project: "Homing and Fate of pancreatic islets and mesenchymal stem cells transplanted in rat studied in vivo using magnetic resonance Tomography and Optical Imaging". Grant of 25,000 Euros obtained from Siena Biotech for the project entitled "Evaluation of efficacy</p>

of Siena Biotech experimental drug in human glioma model by optical and magnetic resonance imaging”.

2009 Financing of 30,300 Euro obtained from Chiesi Pharmaceuticals for the project "Characterisation of experimental models of pulmonary diseases by optical and magnetic resonance imaging".

2012 Grant of 50,000 Euro obtained from Italian Multiple Sclerosis Foundation (FISM) as scientific responsible for the project "Imaging funzionale nello studio della plasticità neuronale in un modello sperimentale di sclerosi multipla su ratto".

Grant of 106,000 Euro from Italian Ministry of Research, MIUR, for the project: "Rete integrata per la Nanomedicina" RBAP114AMK-RI.NA.ME.

Internal collaborator in the project: "Magnetosomes as nanotechnology platform for thermotherapy of tumour", funded by AIRC-Italian Association for Cancer Research with 450,000 Euro. Prof. Andrea Sbarbati, Principal Investigator.

2013 Participant in the project "Verona Nanomedicine Initiative", WP1: piattaforme tecnologiche (<http://www.veronanomedicine.it>).

2015 Grant of 27,600 Euro obtained from the University of Verona, Joint Projects 2015, for the project entitled "Tumor metabolism and response to therapies using innovative MRI techniques" in collaboration with Nerviano MS.

2017 Grant of 13,600 Euro obtained from University of Verona, Joint Project 2017, for the project "DCE-MRI per discriminare i linfonodi normali da quelli metastatici in un modello sperimentale" in collaboration with "Centro per Protonterapia"-Trento.

Participant in the project "Exosomes from mesenchymal stem cells as innovative therapeutic approach for ALS (EXOALS)", PI Dr. Raffaella Mariotti, funded by ARISLA (Fondazione Italiana di Ricerca per la Sclerosi Laterale Amiotrofica).

Participant in the project "Homing e target cellulare di esosomi isolati da cellule staminali mesenchimali in un modello sperimentale di encefalomielite autoimmune" PI Prof. Bruno Bonetti, funded by FISM (Fondazione Italiana Sclerosi Multipla).

2018 Co-PI of the project "Nanomateriali magnetici per applicazioni di ipertermia-trattamento localizzato" funded by "Fondazione di Ricerca Nanoteranostica per la cura del Cancro RNC" with 38,000 Euro.

2019 Grant of 11,900 Euro from Fondazione "Brain Research Foundation Verona ONLUS", for the project "Identification of MRI biomarkers for disease progression in an experimental model of juvenile Epileptic encephalopathies".

University internationalization program 2019. Grant of 8,000 euros to support the stay of Prof. Ramirez-Manzanares Alonso Research Center en Matemáticas (CIMAT), Mexico, at the University of Verona.

Funding of 56,000 Euro, for the project "Sviluppo e Ingegnerizzazione di materiali magnetici "Smart"" 1695-0010-1463-2019 funded by D.G.R. n. 1463 del 08/10/2019 e D.D.R. n. 231 del 10/03/2020. Bando regionale "Innovazione e ricerca per un Veneto più competitivo. ASSEgni DI RICERCA - ANNO 2019" - POR FSE 2014-2020 - Ob. "Investimenti a favore della crescita e dell'occupazione".

2020 Funding of 30,000 Euro for the pilot project "Validation of rsfMRI as innovative biomarker for disease progression in an experimental model of multiple sclerosis" funded by Italian Multiple Sclerosis Foundation (FISM).

Funding of 95,000 Euro for the project, "Nanomateriali magnetici per applicazioni di ipertermia-trattamento sistemico", funded by "Fondazione di Ricerca Nanoteranostica per la cura del Cancro RNC".

2022 Funding of 210,000 Euro for the project "Nanoparticles exhibiting self-regulating temperature: a major step forward in Magnetic Fluid Hyperthermia" funded by "AIRC Italian Association for Cancer Research". IG-2022

2023 PRIN-Bando 2022 PNRR, Funding of 89,531 Euro for the project "Advanced nanotechnology and multimodal physical imaging platform for in vivo visualization of extracellular vesicles as cell-free therapy in neurodegenerative diseases".

2024 PRIN-Bando 2022, Funding of 67,135 Euro for the project "Effect of transient reprogramming of Yamanaka factors associated with senolytic therapy on neurodegeneration in senescent mice".

Other Activities Served as referee of scientific projects for:
 Università di Milano, Dutch Cancer Society, Israel Science Foundation, ANR-Agence Nationale de la Recherche, FISM-Fondazione Italiana Sclerosi Multipla, Fondazione CARIGE (Scientific Area- Applied Physics).

Editorial Activity Served as referee for the following international journals (selection):
 Journal of Colloid and Interface Science
 Contrast Media and Molecular Imaging
 Brain Research Bull
 Pharmaceutical Research
 European Journal of Cancer
 British Journal of Pharmacology
 European Journal of Radiology
 European Journal of Nuclear Medicine and Molecular Imaging
 MAGMA (Magnetic Resonance Materials in Physics, Medicine and Biology)
 Journal of Neuroscience Methods.
 PlosOne
 Nanomedicine
 World Scientific Journal (section Radiology)
 BioMed Research International
 Journal of Nanoparticles Research
 Dalton Transactions
 Pharmaceutical Nanotechnology
 Biomaterials
 Artificial Intelligence in Medicine.
 Neuroscience.
 ACS Chemical Neuroscience
 ACS Nano
 Journal of Oncology.

Education and training
 •Degree in Physics with full honours (110/110 cum laude) from the University of Perugia, April 1986. Discussed the thesis "Accomplishing a low-resolution NMR spectrometer and applications to systems of biological interest "
 •Higher degree in Chemistry (equivalent to PhD) at the Scuola Normale Superiore of Pisa with full honours (70/70 cum laude), July 1992. Discussed the thesis "Protein dynamics in water restricted environments".

Native language Italian

Other languages

	Comprehension		Spoken		Written
	Listenig	Reading	Oral interaction	Oral production	
English	Excellent	Excellent	Excellent	Excellent	Excellent

**Most relevant recent publication
(last 10 years)**

Bibliometric Indices: Number of citations, 3768, h-index=33 (Web of Science); number of citations 3908, h-index=33; (Scopus); number of citations 5119, h-index=39 (Google Scholar).

Full length papers

1. Cressoni C, Vurro F, Milan E, Muccilli M, Mazzer F, Gerosa M, Boschi F, Spinelli AE, Badocco D, Pastore P, Delgado NF, Collado MH, Marzola P, Speghini A. From Nanothermometry to Bioimaging: Lanthanide-Activated KY3F10 Nanostructures as Biocompatible Multifunctional Tools for Nanomedicine. *ACS Appl Mater Interfaces*. 15(9):12171-12188(2023)
2. Basagni A, Torresan V, Marzola P, Fernández van Raap MB, Nodari L, Amendola V. Structural evolution under physical and chemical stimuli of metastable Au-Fe nanoalloys obtained by laser ablation in liquid. *Faraday Discuss*. 242(0):286-300 (2023).
3. Di Cicco C, Vecchione R, Quagliariello V, Busato A, Tufano I, Bedini E, Gerosa M, Sbarbati A, Boschi F, Marzola P, Maurea N, Netti PA. Biocompatible, photo-responsive layer-by-layer polymer nanocapsules with an oil core: in vitro and in vivo study. *J R Soc Interface*. 19(187):20210800 (2022).
4. Vurro F, Gerosa M, Busato A, Muccilli M, Milan E, Gaudet J, Goodwill P, Mansfield J, Forlin E, Negri A, Gherlinzoni F, Morana G, Gottardi M, Matteazzi P, Wintermark M, Speghini A, Marzola P. Doped Ferrite Nanoparticles Exhibiting Self-Regulating Temperature as Magnetic Fluid Hyperthermia Antitumoral Agents, with Diagnostic Capability in Magnetic Resonance Imaging and Magnetic Particle Imaging. *Cancers (Basel)*.;14(20):5150. (2022).
5. Canese R, Vurro F, Marzola P. Iron Oxide Nanoparticles as Theranostic Agents in Cancer Immunotherapy. *Nanomaterials (Basel)*;11(8):1950. (2021).
6. Amendola V, Guadagnini A, Agnoli S, Badocco D, Pastore P, Fracasso G, Gerosa M, Vurro F, Busato A, Marzola P. Polymer-coated silver-iron nanoparticles as efficient and biodegradable MRI contrast agents. *J Colloid Interface Sci*. ;596:332-341 (2021).
7. Wachsmuth L, Mensen A, Barca C, Wiart M, Tristão-Pereira C, Busato A, Waiczies S, Himmelreich U, Millward JM, Reimann HM, Jelescu I, Marzola P, Pradier B, Viola A, Faber C. Contribution of preclinical MRI to responsible animal research: living up to the 3R principle. *MAGMA*.;34(4):469-474. (2021).
8. Torresan V, Guadagnini A, Badocco D, Pastore P, Muñoz Medina GA, Fernández van Raap MB, Postuma I, Bortolussi S, Bekić M, Čolić M, Gerosa M, Busato A, Marzola P, Amendola V. Biocompatible Iron-Boron Nanoparticles Designed for Neutron Capture Therapy Guided by Magnetic Resonance Imaging. *Adv Healthc Mater*.;10(6):e2001632 (2021)
9. Gerosa M, Grande MD, Busato A, Vurro F, Cisterna B, Forlin E, Gherlinzoni F, Morana G, Gottardi M, Matteazzi P, Speghini A, Marzola P. Nanoparticles exhibiting self-regulating temperature as innovative agents for Magnetic Fluid Hyperthermia. *Nanotheranostics*. 15;5(3):333-347 (2021).
10. Bontempi P, Podda R, Daducci A, Sonato N, Fattoretti P, Fiorini S, Tambalo S, Mosconi E, Merigo F, Ballelli M, Marzola P. MRI characterization of rat brain aging at structural and functional level: Clues for translational applications. *Exp Gerontol*. 152:111432. (2021)
11. Chisté E, Ischia G, Gerosa M, Marzola P, Scarpa M, Daldosso N. Porous Si Microparticles Infiltrated with Magnetic Nanospheres. *Nanomaterials (Basel)*. 2020;10(3):463 (2020).
12. Torresan V, Forrer D, Guadagnini A, Badocco D, Pastore P, Casarin M, Selloni A, Coral D, Ceolin M, Fernández van Raap MB, Busato A, Marzola P, Spinelli AE, Amendola V. 4D Multimodal Nanomedicines Made of Nonequilibrium Au-Fe Alloy Nanoparticles. *ACS Nano*. 14(10):12840-12853.(2020).
13. Bonafede R, Turano E, Scambi I, Busato A, Bontempi P, Virla F, Schiaffino L, Marzola P, Bonetti B, Mariotti R. ASC-Exosomes Ameliorate the Disease Progression in SOD1(G93A) Murine Model Underlining Their Potential Therapeutic Use in Human ALS. *Int J Mol Sci*.; 21(10):3651. (2020)
14. Accardo A, Mannucci S, Nicolato E, Vurro F, Diaferia C, Bontempi P, Marzola P, Morelli G. Easy formulation of liposomal doxorubicin modified with a bombesin peptide analogue for selective targeting of GRP receptors overexpressed by cancer cells. *Drug Deliv Transl Res*., 9:215-226 (2019).

15. Bontempi P, Busato A, Conti G, Della Sala SW, Marzola P, Farace P. Heterogeneous Enhancement Pattern in DCE-MRI Reveals the Morphology of Normal Lymph Nodes: An Experimental Study. *Contrast Media Mol Imaging*. 2019 Apr 4;2019:4096706. doi: 10.1155/2019/4096706. eCollection 2019.
16. Gorrini F, Giri R, Avalos CE, Tambalo S, Mannucci S, Basso L, Bazzanella N, Dorigoni C, Cazzanelli M, Marzola P, Miotello A, Bifone A. Fast and Sensitive Detection of Paramagnetic Species Using Coupled Charge and Spin Dynamics in Strongly Fluorescent Nanodiamonds. *ACS Appl Mater Interfaces*. 11:24412-24422 (2019).
17. Calcagno V, Vecchione R, Quagliariello V, Marzola P, Busato A, Giustetto P, Profeta M, Gargiulo S, Cicco CD, Yu H, Cassani M, Maurea N, Mancini M, Pellegrino T, Netti PA. Oil Core-PEG Shell Nanocarriers for In Vivo MRI Imaging. *Adv Healthc Mater*. 8(3):e1801313. (2019).
18. Bontempi P, Busato A, Bonafede R, Schiaffino L, Scambi I, Sbarbati A, Mariotti R, Marzola P. MRI reveals therapeutical efficacy of stem cells: An experimental study on the SOD1(G93A) animal model. *Magn Reson Med*. 79:459-469 (2018).
19. Mannucci S, Tambalo S, Conti G, Ghin L, Milanese A, Carboncino A, Nicolato E, Marinuzzi MR, Benati D, Bassi R, Marzola P, Sbarbati A. Magnetosomes Extracted from *Magnetospirillum gryphiswaldense* as Theranostic Agents in an Experimental Model of Glioblastoma. *Contrast Media Mol Imaging*. 2018 Jul 11;2018:2198703. doi: 10.1155/2018/2198703. eCollection 2018.
20. Colecchia D, Nicolato E, Ravagli C, Faraoni P, Strambi A, Rossi M, Doumett S, Mosconi E, Locatelli E, Comes Franchini M, Balzi M, Baldi G, Marzola P, Chiariello M. EGFR-Targeted Magnetic Nanovectors Recognize, in Vivo, Head and Neck Squamous Cells Carcinoma-Derived Tumors. *ACS Med Chem Lett*. 8:1230-1235 (2017).
21. Busato A, Bonafede R, Bontempi P, Scambi I, Schiaffino L, Benati D, Malatesta M, Sbarbati A, Marzola P, Mariotti R. Magnetic resonance imaging of ultrasmall superparamagnetic iron oxide-labeled exosomes from stem cells: a new method to obtain labeled exosomes, *Int J Nanomedicine* 11:2481-90 (2016).
22. Busato A, Fumene Feruglio P, Parnigotto PP, Marzola P, Sbarbati A. In vivo imaging techniques: a new era for histochemical analysis. *Eur J Histochem*. 60:2725 (2016).
23. Ritelli R, Ngalani Ngaleu R, Bontempi P, Dandrea M, Nicolato E, Boschi F, Fiorini S, Calderan L, Scarpa A, Marzola P. Pancreatic cancer growth using magnetic resonance and bioluminescence imaging. *Magn Reson Imaging* 33(5):592-9 (2015).
24. Tambalo S., Peruzzotti-Jametti L, Rigolio R., Fiorini S, Bontempi P, Mallucci G, Marmioli P, Sbarbati A, Cavaletti G., Pluchino S, Marzola P, Functional Magnetic Resonance Imaging of Rats with Experimental Autoimmune Encephalomyelitis Reveals Brain Cortex Remodelling, *Journal of Neuroscience* 35:10088-100 (2015).
25. Mosconi E, Sima DM, Osorio Garcia MI, Fontanella M, Fiorini S, Van Huffel S, Marzola P, Different quantification algorithms may lead to different results: a comparison using proton MRS lipid signals, *NMR Biomed*. 27:431-43 (2014).
26. Daducci A, Tambalo S, Fiorini S, Osculati F, Teti M, Fabene PF, Corsi M, Bifone A, Sbarbati A, Marzola P, Manganese-enhanced magnetic resonance imaging investigation of the Interferon- α model of depression in rats, *Magnetic Resonance Imaging* 32:529-34 (2014).
27. Amendola V, Scaramuzza S, Litti L, Meneghetti M, Zuccolotto G, Rosato A, Nicolato E, Marzola P, Fracasso G, Pinto M, Colombatti M, Magneto-Plasmonic Au-Fe Alloy Nanoparticles Designed for Multimodal SERS-MRI-CT Imaging, *Small* 32:529-34 (2014).
28. Valero E, Fiorini S, Tambalo S, Busquier H, Callejas-Fernandez J, Marzola P, Gálvez N, Dominguez-Vera JM. In vivo long-term MRI activity of ferritin-based magnetic nanoparticles versus a standard contrast agent. *J Med Chem*. 57:5686-92 (2014).
29. Mannucci S, Ghin L, Conti G, Tambalo S, Lascialfari A, Orlando T, Benati D, Bernardi P, Betterle N, Bassi R, Marzola P, Sbarbati A. Magnetic Nanoparticles from *Magnetospirillum gryphiswaldense* Increase the Efficacy of Thermotherapy in a Model of Colon Carcinoma. *PLoS One* 9(10):e108959 (2014).
30. Cantarelli I, Pedroni M, Piccinelli F, Marzola P, Boschi F, Conti G, Sbarbati A, Bernardi P, Mosconi E, Perbellini L, Marongiu L, Donini M, Dusi S, Sorace L, Innocenti C, Fantechi E,

Sangregorio C, Speghini A, Biomaterials Science 2: 1158-1171 (2014).

Chapters in books

1.Tsenov G, Bertini G, Pellitteri M, Nicolato E, Marzola P, Fabene P, Van Luijteleaar G, Imaging Neural Excitability and Networks in Genetic Absence Epilepsy Models, In A. Bernasconi, N. Bernasconi, & M. Koepp (Eds.), Imaging Biomarkers in Epilepsy (pp. 181-192). Cambridge: Cambridge University Press. doi:10.1017/9781316257951.018 (2019)

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize the use and process of my personal details contained in this document.

Verona, April 2026

Prof. Pasquina Marzola