

Publications of the Unit "Biomedical Physics"

2025

Scientific journals/Article

- Bernardi, M., de Oliveira Silva, R., Vuong, Q. L., Sakellariou, D., & GOSSUIN, Y. (January 2025). NMR Relaxometry to Monitor In Situ the Loading of Amberlite IR120 and Dowex Marathon MSC Resins With Ni²⁺ and Cu²⁺ During a Column Experiment. "Magnetic Resonance in Chemistry, 63" (1), 62 - 73. doi:10.1002/mrc.5490
Full Text : [Magnetic Reson in Chemistry - 2024 - Bernardi - NMR Relaxometry to Monitor In Situ the Loading of Amberlite IR120 and Dowex.pdf](#) (Open Access)

2024

Scientific journals/Article

- Rousseau, C., Vuong, Q. L., Gossuin, Y., Maes, B., & Rosolen, G. (December 2024). Concurrent photothermal therapy and nuclear magnetic resonance imaging with plasmonic-magnetic nanoparticles: A numerical study. "Computer Methods and Programs in Biomedicine, 257", 108453. doi:10.1016/j.cmpb.2024.108453
Full Text : [Manuscript_reviewed.pdf](#) (Open Access)
- Bernardi, M., Hantson, A.-L., Caulier, G., Eyley, S., Thielemans, W., De Weireld, G., & Gossuin, Y. (September 2024). Ni²⁺ removal by ion exchange resins and activated carbon: a benchtop NMR study. "International Journal of Environmental Science and Technology, 21" (13), 8337 - 8360. doi:10.1007/s13762-024-05547-2
Full Text : [Bernardi-IJEST-2024.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Vuong, Q. L., Gossuin, Y., & Kinet, F. (11 September 2024). "THEORY OF PROTON RELAXATION INDUCED BY SUPERPARAMAGNETIC NANOPARTICLE: A CLASSICAL APPROACH TO NMRD" [Paper presentation]. 13th FFC NMR Conference, Palerme, Italy.
Full Text : [template-13th-ffcrelax_vuong.pdf](#) (Open Access)
- Moké, M., Carette, J., Gossuin, Y., Nsasi, E. B., Mutombo, C. S., Bakari, S. A., Duez, P., Nachtergaele, A., & Kahumba, J. (23 August 2024). "Microscopic, HPTLC and LF-NMR techniques as practical tools for quality assurance and quality control of herbal health products: the case of *Calea urticifolia* (Mill.) DC. authentication" [Paper presentation]. Journée Scientifique - FSP/UNILU.

Scientific congresses and symposiums/Poster

- Martin, E., Gossuin, Y., & Vuong, Q. L. (26 November 2024). "Monte Carlo simulations of transverse relaxation induced by superparamagnetic iron oxide nanoparticles with a semipermeable coating" [Poster presentation]. 20th Young Belgian Magnetic Resonance Scientists conference, Blankenberge, Belgium.
Full Text : [YBMRS_2024.pdf](#) (Open Access)
- Bernardi, M., De Oliveira-Silva, R., Vuong, Q. L., Sakellariou, D., & Gossuin, Y. (25 November 2024). "NMR relaxometry to monitor in situ the loading of ion exchange resins with Ni²⁺ and Cu²⁺ ions during a column experiment" [Poster presentation]. YBMRS.
Full Text : [poster-ffc24.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., & Vuong, Q. L. (10 September 2024). "Monte Carlo simulations of transverse relaxation induced by superparamagnetic iron oxide nanoparticles with a semipermeable coating" [Poster presentation]. 13th Conference on Fast Field Cycling NMR Relaxometry (FFCRelax 2024).
Full Text : [Poster-FFCRelax-2024_corrige.pdf](#) (Open Access)
- Bernardi, M., De Oliveira-Silva, R., Vuong, Q. L., Sakellariou, D., & Gossuin, Y. (09 September 2024). "NMR relaxometry to monitor in situ the loading of ion exchange resins with Ni²⁺ and Cu²⁺ ions during a column experiment" [Poster presentation]. Fast Field Cycling Conference FFC24, Palerme, Italy.

Full Text : [poster-ffc24.pdf](#) (Open Access)

- Fritsche, F., Rosolen, G., De Corte, A., Maes, B., Gossuin, Y., & Vuong, Q. L. (2024). "Monte Carlo Simulations of the relaxation induced by cubic- shaped superparamagnetic nanoparticles" [Poster presentation]. Fast Field Cycling (FFC) 2024, Palermo, Italy.

Full Text : [FRITSCHIE_FFC_2024.pdf](#) (Open Access)[Abstract_FFC2024.pdf](#) (Open Access)

- Fritsche, F., Rosolen, G., De Corte, A., Maes, B., Gossuin, Y., & Vuong, Q. L. (2024). "Monte Carlo Simulations of the relaxation induced by cubic- shaped superparamagnetic nanoparticles" [Poster presentation]. Belgium Physical Society (BPS) 2024, Blankenberge, Belgium.

Full Text : [FRITSCHIE_BPS_2024.pdf](#) (Open Access)[Abstract_BPS_2024.pdf](#) (Open Access)

- Fritsche, F., Rosolen, G., De Corte, A., Maes, B., Gossuin, Y., & Vuong, Q. L. (2024). "Monte Carlo Simulations of the relaxation induced by cubic- shaped superparamagnetic nanoparticles" [Poster presentation]. Young Belgium Magnetic Resonance Scientists (YBMRS) 2024.

Full Text : [FRITSCHIE_YBMRS_2024.pdf](#) (Open Access)

Diverse speeches and writings/Communication in media

- Gossuin, Y. (2024). "Infos de téléMB - "de professeur à animateur climat" - courte interview dans le cadre de ce reportage". Mons, Unknown/unspecified: Télé MB.

2023

Scientific journals/Article

- Gossuin, Y., Vuong, Q. L., & Lascialfari, A. (27 June 2023). Comment on "Structure-Correlated Magnetic Resonance Transverse Relaxivity Enhancement in Superparamagnetic Ensembles with Complex Anisotropy Landscape". "Langmuir, 39" (25), 8935 - 8937. doi:10.1021/acs.langmuir.2c03428
Full Text : [gossuin-et-al-2023-comment-on-structure-correlated-magnetic-resonance-transverse-relaxivity-enhancement-in.pdf](#) (Open Access)
- Gossuin, Y., Duez, P., Blankert, B., Masson, C., Laurent, S., & Rousseau, C. (07 January 2023). NMR relaxometry to monitor chromium (VI) reduction by hydrogen peroxide, ascorbic acid and aluminum powder. "Magnetic Resonance in Chemistry, 61", 284-295. doi:10.1002/mrc.5332
Full Text : [17608240.pdf](#) (Open Access)
- S. Leon-Chaviano, M. Kiseleva, P. Legros, S. Collin, T. Lescot, Henoumont, C., Gossuin, Y., Laurent, S., D. Mayrand, J. Fradette, A. Bégin-Drolet, & J. Ruel, M. A. F. (2023). A Nanoparticle Ink Allowing the High Precision Visualization of Tissue Engineered Scaffolds by MRI. "Small". doi:10.1002/smll.202206644
Full Text : [Small - 2023 - Leon Chaviano - A Nanoparticle Ink Allowing the High Precision Visualization of Tissue Engineered Scaffolds.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Bernardi, M., Hantson, A.-L., & Gossuin, Y. (14 November 2023). "Benchtop NMR Relaxometry for monitoring Cu²⁺ removal using ion exchange resins and commercial activated charcoal" [Paper presentation]. 19th edition of the Young Belgian Magnetic Resonance Scientist symposium (YBMRS), Blankenberge, Belgium.
- Fritsche, F., Rosolen, G., Maes, B., Gossuin, Y., & Vuong, Q. L. (17 May 2023). "Monte Carlo Simulations of the T2 Relaxation induced by Cubic Shaped Superparamagnetic NanoParticles" [Paper presentation]. Belgian Physical Society (BPS), Namur, Belgium.
Full Text : [OralPresentation_BPS.pdf](#) (Open Access)[Abstract_BPS_2023.pdf](#) (Open Access)

Scientific congresses and symposiums/Poster

- Fritsche, F., Rosolen, G., Maes, B., Gossuin, Y., & Vuong, Q. L. (14 November 2023). "Monte Carlo Simulations of the T2 relaxation induced by Cubic Shaped Superparamagnetic Nanoparticles" [Poster presentation]. Young Belgian Magnetic Resonance Scientist symposium (YBMRS), Blankenberge, Belgium.
Full Text : [FRITSCHÉ_YBMRS_2023.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., & Vuong, Q. L. (13 November 2023). "Monte Carlo simulations of transverse relaxation induced by superparamagnetic iron oxide nanoparticles with a semipermeable coating" [Poster presentation]. Young Belgian Magnetic Resonance Scientist, Blankenberge, Belgium.
Full Text : [Abstract_YBMRS.pdf](#) (Open Access)
- Bernardi, M., Hantson, A.-L., & Gossuin, Y. (11 July 2023). "Benchtop NMR relaxometry to monitor Ni (II) removal by resin and activated charcoal" [Poster presentation]. Euromar 2023.
Full Text : [ID283 Paper No - 72_P008-Benchtop NMR relaxometry to monitor Ni\(II\) removal by resin and activated charcoal.pdf](#) (Open Access)
- Fritsche, F., Rosolen, G., Maes, B., Gossuin, Y., & Vuong, Q. L. (July 2023). "NMR transverse relaxation induced by cubic nanoparticles: a Monte Carlo simulation study" [Poster presentation]. Euromar 2023.
Full Text : [ID 549 Paper Number 149 NMR transverse relaxation induced by cubic nanoparticle .pdf](#) (Open Access)
- Gossuin, Y., Duez, L., Blankert, B., Masson, C., Laurent, S., & Rousseau, C. (July 2023). "NMR relaxometry to monitor chromium (VI) reduction by hydrogen peroxide, ascorbic acid and aluminum powder" [Poster presentation]. euromar 2023, Glasgow, United Kingdom.
Full Text : [poster-euromar.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., Kavak, S., Bals, S., & Vuong, Q. L. (17 May 2023). "Monte Carlo and Experimental Study of the Magnetic Behaviour of Superparamagnetic Iron Oxide Nanoparticles" [Poster presentation]. Belgian Physical Society Scientific Meeting 2023, Namur, Belgium.
Full Text : [Poster-BPS-2023.pdf](#) (Open Access)

Diverse speeches and writings/Article for a general audience

- Tessier, L., & Martin, E. (Other coll.). (2023). Ils racontent la face cachée du doctorat : "Mon promoteur a menacé de me virer parce que je demandais cinq jours de congé". "Moustique".
Full Text : [Ils racontent la face cachée du doctorat Mon promoteur a menacé de me virer parce que je demandais cinq jours de congé - Moustique.pdf](#) (Open Access)

Diverse speeches and writings/Other

- Martin, E. (2023). "Erreur 404 : contraste introuvable".
- Gamrath, S., Cimino, L., De corte, A., Lhost, G., & Bernardi, M. (2023). "Table ronde - La vie d'un doctorant en physique".

2022

Scientific journals/Article

- Gossuin, Y., Martin, E., Vuong, Q. L., DELROISSE, J., Laurent, S., Stanicki, D., & Rousseau, C. (June 2022). Characterization of commercial iron oxide clusters with high transverse relaxivity. "Journal of Magnetic Resonance Open, 10-11", 100054. doi:10.1016/j.jmro.2022.100054
Full Text : [Gossuin_et_al_2022.pdf](#) (Open Access)

- Gossuin, Y., & Gallez, B. (2022). Editorial for "Phase I Randomized Trial of 17 O-Labeled Water: Safety and Feasibility Study of Indirect Proton MRI for the Evaluation of Cerebral Water Dynamics": old concepts, new applications. "Journal of Magnetic Resonance Imaging". doi:10.1002/jmri.28209
Full Text : [Magnetic Resonance Imaging - 2022 - Gossuin - Editorial for Phase I Randomized Trial of 17O Labeled Water Safety and.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Bernardi, M. (24 August 2022). "Benchtop NMR relaxometry for the follow-up of Ni(II) removal by three ion exchange resins" [Paper presentation]. the 15th International Bologna Conference on Magnetic Resonance in Porous Media (MRPM15).

Scientific congresses and symposiums/Poster

- Bernardi, M., Hantson, A.-L., & Gossuin, Y. (11 July 2022). "Benchtop NMR relaxometry for the follow-up of Cr(III) and Mn(II) removal by ion exchange resin" [Poster presentation]. EUROMAR 2022.
Full Text : [euromar-abstract-2022.pdf](#) (Open Access)[EUROMAR-2022_Poster-Marie_Bernardi.pdf](#) (Open Access)
- Gossuin, Y., Martin, E., Vuong, Q. L., Delroisse, J., Laurent, S., Stanicki, D., & Rousseau, C. (July 2022). "Characterization of commercial iron oxide clusters as potential Magnetic Resonance Imaging contrast agent" [Poster presentation]. euromar 22.
Full Text : [poster-euromar-2022.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., Bals, S., Kavak, S., & Vuong, Q. L. (15 June 2022). "Monte Carlo and Experimental Study of the Magnetic Behaviour of Superparamagnetic Nanoparticles" [Poster presentation]. Scientific and Clinical Applications of Magnetic Carriers.
Full Text : [Poster SCAMC.pdf](#) (Open Access)[Abstract_SCAMC.pdf](#) (Open Access)
- Bernardi, M., Hantson, A.-L., & Gossuin, Y. (18 May 2022). "Study of Cr(III) and Mn(II) loaded resin by benchtop nuclear magnetic resonance" [Poster presentation]. BPS 2022.
Full Text : [Abstract_BPS_Marie.pdf](#) (Open Access)[SBP-2022_Poster-Marie_Bernardi_final.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., Bals, S., Kavak, S., & Vuong, Q. L. (18 May 2022). "Monte Carlo and experimental study of the magnetic behaviour of superparamagnetic iron oxide nanoparticles" [Poster presentation]. Belgian Physical Society Meeting 2022.
Full Text : [Poster SCAMC.pdf](#) (Open Access)
- Gossuin, Y., Martin, E., Vuong, Q. L., Delroisse, J., Laurent, S., Stanicki, D., & Rousseau, C. (2022). "Characterization of commercial iron oxide clusters as potential Magnetic Resonance Imaging contrast agent" [Poster presentation]. BPS 2022.
Full Text : [poster-2022.pdf](#) (Open Access)

Diverse speeches and writings/Other

- Cimino, L., De Corte, A., Gamrath, S., & Martin, E. (2022). "Un doctorat en physique : Séance d'introduction et table ronde".

2021

Scientific congresses and symposiums/Poster

- Bernardi, M., Hantson, A.-L., & Gossuin, Y. (06 December 2021). "Low resolution nuclear magnetic resonance for the study of nickel (II) and manganese (II) removal by ion exchange resin" [Poster presentation]. YBMRS, Virtual event, Belgium.
Full Text : [poster-mb-YBMRS.pdf](#) (Open Access)

- Martin, E., Gossuin, Y., & Vuong, Q. L. (06 December 2021). "Simulation of Water Nuclear Magnetic Relaxation Induced by Superparamagnetic Nanoparticles Trapped in a Biological Tissue" [Poster presentation]. YBMRS, Virtual event, Belgium.
Full Text : [Video_pitch_YBMRS.mkv](#) (Open Access)[YBMRS_dia_intro.pdf](#) (Open Access)[Poster_YBMRS_Eleonore_Martin.pdf](#) (Open Access)
- Bernardi, M., & Gossuin, Y. (25 August 2021). "Study of heavy metal removal by benchtop NMR" [Poster presentation]. ISMAR-APNMR, Virtual event, Unknown/unspecified.
Full Text : [poster_ISMAR-2021-MB-2021.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., & Vuong, Q. L. (25 August 2021). "Simulation of Water Nuclear Magnetic Relaxation Induced by Superparamagnetic Nanoparticles Trapped in a Biological Tissue" [Poster presentation]. ISMAR-APNMR, Virtual event, Unknown/unspecified.
Full Text : [ISMAR_2021.pdf](#) (Open Access)
- Bernardi, M., Hantson, A.-L., & Gossuin, Y. (05 July 2021). "Study of heavy metal loaded resins by benchtop NMR" [Poster presentation]. euromar, en ligne, Unknown/unspecified.
Full Text : [EUOMAR-Marie-Bernardi.pdf](#) (Open Access)
- Gossuin, Y., Laurent, S., Masson, C., Duez, P., & Blankert, B. (01 July 2021). "Following chromium (IV) reduction by low resolution nuclear magnetic relaxometry" [Poster presentation]. euromar.
Full Text : [poster_euromar-yves-gossuin.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., & Vuong, Q. L. (30 April 2021). "Monte Carlo and Experimental Study of the Magnetic Relaxation of Superparamagnetic Nanoparticle Ensembles" [Poster presentation]. Intermag 2021, Lyon, France.
Full Text : [Intermag_poster.mp4](#) (Open Access)[Poster_Magnet2021_corrige.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., & Vuong, Q. L. (12 February 2021). "Monte Carlo and Experimental Study of the Magnetic Relaxation of Superparamagnetic Nanoparticle ensembles" [Poster presentation]. Magnet 2021, Italy.
Full Text : [Poster_Magnet2021_corrige.pdf](#) (Open Access)

Diverse speeches and writings/Article for a general audience

- Carlot, P., & Martin, E. (Other coll.). (2021). Soapbox Science : une initiative pour mettre les femmes scientifiques en valeur. "Article web RTBF".
Full Text : [Soapbox_Science_une_initiative_pour_mettre_les_femmes_scientifiques_en_valeur.pdf](#) (Open Access)

Diverse speeches and writings/Other

- Chabal, J., Dedier, A. (Other coll.), Mira, S. (Other coll.), & Martin, E. (Other coll.). (2021). "Soapbox part à la rencontre du public pour pousser les femmes à se lancer dans les études scientifiques".

2020

Scientific journals/Article

- Gossuin, Y., Hantson, A.-L., & Vuong, Q. L. (01 February 2020). low resolution benchtop nuclear magnetic resonance for the follow-up of the removal of Cu²⁺ and Cr³⁺ from water by amberlite IR120 ion exchange resin. "Water Research, 33", 101024. doi:10.1016/j.jwpe.2019.101024
Full Text : [amberlite.pdf](#) (Open Access)
- Nicolas, C., Desoil, M., Gossuin, Y., Gillis, P., & Gallez, B. (05 January 2020). Electron Paramagnetic Resonance Imaging of Melanin in Honey Bee. "Cell Biochemistry and Biophysics, 78(2)", 123-126. doi:10.1007/s12013-020-00903-8
Full Text : [Charlier2020_Article_ElectronParamagneticResonanceI.pdf](#) (Open Access)

2019

Scientific journals/Article

- Henrard, D., Vuong, Q. L., Delangre, S., Valentini, X., Nonclercq, D., Gonon, M., & Gossuin, Y. (18 November 2019). Monitoring of Superparamagnetic Particle Sizes in the Langevin Law Regime. "Journal of Nanomaterials, 2019", 6409210. doi:10.1155/2019/6409210
Full Text : [magneto-daniel.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Martin, E., Gossuin, Y., & Vuong, Q. L. (06 June 2019). "Simulation of the Nuclear Magnetic Relaxation Induced by Superparamagnetic Nanoparticles trapped in a biological tissue" [Paper presentation]. 11th conference on fast field cycling NMR relaxometry, Pise, Italy.
- Gossuin, Y., & Vuong, Q. L. (05 June 2019). "NMR relaxometry for adsorption studies: proof of concept with copper adsorption on activated alumina" [Paper presentation]. 11th conference on fast field cycling NMR relaxometry, Pise, Italy.
- Gossuin, Y. (05 June 2019). "Simulation of the Nuclear Magnetic Relaxation Induced by Superparamagnetic Nanoparticles Trapped in a Biological Tissue" [Paper presentation]. 11th conference on fast field cycling NMR relaxometry, Pise, Italy.
- Martin, E., Gossuin, Y., & Vuong, Q. L. (09 May 2019). "Simulation of the Nuclear Magnetic Relaxation Induced by Superparamagnetic Nanoparticles trapped in a biological tissue" [Paper presentation]. Contrast-enhanced biomedical imaging, the 16th biannual conference, Mons, Belgium.
- Gossuin, Y. (09 May 2019). "Simulation of the Nuclear Magnetic Relaxation Induced by Superparamagnetic Nanoparticles Trapped in a Biological Tissue" [Paper presentation]. Contrast-enhanced biomedical imaging, the 16th biannual conference, Mons, Belgium.

Scientific congresses and symposiums/Poster

- Gossuin, Y., & Vuong, Q. L. (22 May 2019). "NMR relaxometry for adsorption studies: proof of concept with copper adsorption on activated alumina" [Poster presentation]. Annual Meeting of the Belgian Physical Society, ULB, Bruxelles, Belgium.
Full Text : [Yves-Gossuin.pdf](#) (Open Access)
- Gossuin, Y., & Vuong, Q. L. (22 May 2019). "NMR relaxometry for the study of paramagnetic ions adsorption on different substrates" [Poster presentation]. Contrast-enhanced biomedical imaging, the 16th biannual conference, Mons, Belgium.
Full Text : [contrast-mons-2019-abstract.pdf](#) (Open Access)
- Martin, E., Gossuin, Y., & Vuong, Q. L. (22 May 2019). "Simulation of Nuclear Magnetic Relaxation Induced by Superparamagnetic Nanoparticles trapped in a biological tissue" [Poster presentation]. Annual Meeting of the Belgian Physical Society, ULB, Bruxelles, Belgium.
- Gossuin, Y. (18 March 2019). "Présentation du service de physique biomédicale" [Poster presentation]. Événement de maillage UHMAP, Mons, Belgium.

2018

Scientific journals/Article

- Gossuin, Y., Vuong, Q. L., Grunin, L., Van Nederveelde, L., & Pietercelie, A. (30 September 2018). Illustration of inversionrecovery and CarrPurcellMeiboomGill sequences by the determination of ethanol content in alcoholic beverages. "Concepts in Magnetic Resonance. Part A, Bridging Education and Research, 46" (a), 21460. doi:10.1002/cmr.a.21460
Full Text : [cmra_21460-corrected.pdf](#) (Open Access)

- Gossuin, Y., & Vuong, Q. L. (09 August 2018). NMR relaxometry for adsorption studies: proof of concept with copper adsorption on activated alumina. "Separation and Purification Technology, 202", 138-143.
- Vuong, Q. L., Rigaut, C., & Gossuin, Y. (09 May 2018). Refraction Law and Fermat Principle: a project using the Ant Colony Optimization algorithm for undergraduate students in physics. "European Journal of Physics, 39", 045806.

Scientific congresses and symposiums/Poster

- Gossuin, Y., & Vuong, Q. L. (06 December 2018). "NMR relaxometry for adsorption studies: proof of concept with copper adsorption on activated alumina" [Poster presentation]. YBMRS, Spa, Belgium.
Full Text : [poster-ybmrs-2018.pdf](#) (Open Access)
- Vuong, Q. L., & Gossuin, Y. (11 April 2018). "Magnetometry of superparamagnetic nanoparticles: influence of size polydispersity, dipolar interaction and anisotropy energy" [Poster presentation]. Meeting of the Belgian Physical Society, Anvers, Belgium.
- Gossuin, Y., Vuong, Q. L., Van Nederveelde, L., & Pietercelie, A. (11 April 2018). "Nuclear Magnetic Resonance (NMR) relaxometry for the determination of ethanol content in alcoholic beverages: a tool for NMR education?" [Poster presentation]. Meeting of the Belgian Physical Society, Anvers, Belgium.
Full Text : [poster-bps2018.pdf](#) (Open Access)

Dissertations and theses/Doctoral thesis

- Henrard, D., Vuong, Q. L., Delangre, S., Valentini, X., Nonclercq, D., & Gossuin, Y. (2018). "Mesure de distribution de taille et d'anisotropie de nanoparticules de magnétite en solution par magnétométrie" [Doctoral thesis, Université de Mons]. ORBi UMONS-University of Mons. <https://orbi.umons.ac.be/handle/20.500.12907/1073>

Diverse speeches and writings/Other

- Gossuin, Y. (2018). "L'université séduit de plus en plus les étudiants: est-elle porteuse en termes d'emplois? RTL".

2017

Scientific journals/Article

- Gossuin, Y., Okusa, P. N., Vuong, Q. L., & Duez, P. (06 November 2017). NMR relaxation properties of the synthetic malaria pigment beta-hematin. "Scientific Reports, 7", 14557. doi:10.1038/s41598-017-15238-3
Full Text : [malaria.pdf](#) (Open Access)
- Bouchoucha, M., Van Heeswijk, R. B., Gossuin, Y., Kleitz, F., & Fortin, M.-A. (08 September 2017). Fluorinated Mesoporous Silica Nanoparticles for Binuclear Probes in ¹H and ¹⁹F Magnetic Resonance Imaging. "Langmuir, 33" (40), 10531-10542. doi:10.1021/acs.langmuir.7b01792
Full Text : [fluorinated-probes-langmuir2017.pdf](#) (Open Access)
- Vuong, Q. L., Gillis, P., Roch, A., & Gossuin, Y. (01 April 2017). Magnetic resonance relaxation induced by superparamagnetic particles used as contrast agents in MRI: a theoretical review. "Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 9" (6). doi:10.1002/wnan.1468
Full Text : [vuong_2017.pdf](#) (Open Access)
- Volatron, J., Kolosnjaj-Tabi, J., Javed, Y., Vuong, Q. L., Gossuin, Y., Neveu, S., Luciani, N., Hémadi, M., Carn, F., alloyeau, D., & Gazeau, F. (09 January 2017). Physiological Remediation of Cobalt Ferrite Nanoparticles by Ferritin. "Scientific Reports, 7", 40075. doi:10.1038/srep40075
Full Text : [volatron_2017.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Gossuin, Y., Okusa, P. N., Vuong, Q. L., & Duez, P. (08 June 2017). "Effect of the synthetic malaria pigment b-hematin on water NMR relaxation times: implications for malaria diagnosis by NMR" [Paper presentation]. 10th Conference on Fast Field-Cycling NMR Relaxometry, Mikolajki, Poland.

Scientific congresses and symposiums/Poster

- Henrard, D., Vuong, Q. L., Delangre, S., Valentini, X., Nonclercq, D., & Gossuin, Y. (04 December 2017). "Anisotropy constant estimation of magnetite nanoparticles via hysteresis curves analysis" [Poster presentation]. YBMRS 16e édition, Blankenberge, Belgium.
- Gossuin, Y. (01 December 2017). "NMR relaxation properties of the synthetic malaria pigment -hematin" [Poster presentation]. YBMRS 16e édition, Blankenberge, Belgium.
Full Text : [poster-bps2017.pdf](#) (Open Access)
- Vuong, Q. L., Rigaut, C., & Gossuin, Y. (17 May 2017). "Finding the refraction law using the ant colony algorithm and the Fermat's principle" [Poster presentation]. General Scientific Meeting of the Belgian Physical Society, Mons, Belgium.
Full Text : [vuong_bps2017.pdf](#) (Open Access)
- Gossuin, Y., Okusa, P. N., Vuong, Q. L., & Duez, P. (08 May 2017). "Effect of the synthetic malaria pigment beta-hematin on water NMR relaxation times: implications for malaria diagnosis by NMR" [Poster presentation]. General Scientific Meeting of the Belgian Physical Society, Mons, Belgium.
Full Text : [poster-bps2017.pdf](#) (Open Access)

2016

Scientific journals/Article

- Volatron, J., Carn, F., Kolosnjaj-Tabi, J., Javed, Y., Vuong, Q. L., Gossuin, Y., Ménager, C., Luciani, N., Charron, G., Hémadi, M., alloyeau, D., & Gazeau, F. (2016). Ferritin Protein Regulates the Degradation of Iron Oxide Nanoparticles. "Small". doi:10.1002/sml.201602030
Full Text : [volatron_2016.pdf](#) (Open Access)
- Delangre, S., Vuong, Q. L., Po, C., Gallez, B., & Gossuin, Y. (30 April 2016). Improvement of the Off-Resonance Saturation, an MRI sequence for positive contrast with SPM particles: Theoretical and experimental study. "Journal of Magnetic Resonance", 265, 99-107. doi:10.1016/j.jmr.2016.02.002
Full Text : [DELANGRE2016.pdf](#) (Open Access)
- Gossuin, Y., Orlando, T., Basini, M., Henrard, D., Lascialfari, A., Mattea, C., Stapf, S., & Vuong, Q. L. (02 March 2016). NMR relaxation induced by iron oxide particles: testing theoretical models. "Nanotechnology", 27. doi:10.1088/0957-4484/27/15/155706
Full Text : [gossuin_2016.pdf](#) (Open Access)
- Gossuin, Y., serhan, Z., sandiford, L., Henrard, D., marquardsen, T., torres de rosales, R., sakellariou, D., & ferrage, F. (01 January 2016). Sample shuttling relaxometry of contrast agents: NMRD profiles above 1 T with a single device. "Applied Magnetic Resonance", 47, 237-247. doi:10.1007/s00723-015-0751-7

Scientific congresses and symposiums/Unpublished conference/Abstract

- Henrard, D., Vuong, Q. L., Delangre, S., Valentini, X., Nonclercq, D., & Gossuin, Y. (05 July 2016). "Characterization of iron oxide nanoparticles by magnetometry : effects of anisotropy" [Paper presentation]. 3rd Researcher's Day of the Materials Research Institute, Mons, Belgium.
- Gossuin, Y. (01 July 2016). "Characterization of superparamagnetic particles with MR relaxometry: good and bad news" [Paper presentation]. Workshop sur la relaxométrie RMN - Phenix, Paris, France.

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