

Publications of the Unit "Numerical Ecology"

2022

Computer developments/Textual, factual or bibliographical database

- Grosjean, P., & Engels, G. (2022). "Biological data science courses at UMONS, Belgium: Activity for 2018-2019". doi:10.5281/zenodo.6420347
- Grosjean, P., Engels, G., & Conotte, R. (2022). "Biological data science courses at UMONS, Belgium: student's activity for 2019-2020". doi:10.5281/zenodo.6420878
- Grosjean, P., Engels, G., & Conotte, R. (2022). "Biological data science courses at UMONS, Belgium: student's activity for 2020-2021". doi:10.5281/zenodo.6420917

Scientific conferences in universities or research centers/Scientific conference in universities or research centers

- Grosjean, P.* , & Engels, G.*. (18 May 2022). "Rapport de progression en évaluation continue". Paper presented at Journée des Enseignants, Mons, Belgium.

2021

Scientific congresses and symposiums/Unpublished conference/Abstract

- Engels, G., & Grosjean, P. (13 July 2021). "Retour d'expérience sur l'enseignement de la science des données biologiques en classe inversée". Paper presented at Rencontres R 2021, Paris, France.
Full Text : [RRparis2021_engels_presentation.pdf](#) (Open Access)
- Grosjean, P., & Engels, G. (13 July 2021). "Perception de R et RStudio par des apprenants dans des cours de science des données biologiques". Paper presented at Rencontres R 2021, Paris, France.
Full Text : [RRparis2021_grosjean_presentation.pdf](#) (Open Access)
- Grosjean, P., & Engels, G. (08 July 2021). "An integrated teaching environment for R with {learnitdown}". Paper presented at UseR!2021, Zurich, Switzerland.
Full Text : [User2021_learnitdown.html](#) (Open Access)

Scientific congresses and symposiums/Poster

- Engels, G., & Grosjean, P. (08 July 2021). "Teaching Biology students to code smoothly with learnR and gradethis". Poster session presented at UseR!2021, Zurich, Switzerland.
Full Text : [engels_technical_note.html](#) (Open Access)

2020

Scientific journals/Article

- Fullgrabe, L., Grosjean, P., Gobert, S., Lejeune, P., Leduc, M., Engels, G., Dauby, P., Boissery, P., & Richir, J. (23 July 2020). Zooplankton dynamics in a changing environment: A 13-year survey in the northwestern Mediterranean Sea. "Marine Environmental Research, 159".
Full Text : [pagination_MERE_104962_Final_V21.pdf](#) (Open Access)
- Richir, J., Champenois, W., Engels, G., Abadie, A., Gobert, S., Lepoint, G., Santos, R. O., Silva, J., Sirjacobs, D., & Borges, A. V. (2020). A 15-month survey of dimethylsulfoniopropionate and dimethylsulfoxide content in *Posidonia oceanica*. "Frontiers in Ecology and Evolution". doi:10.3389/fevo.2019.00510

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P. (24 November 2020). "Use of machine learning to (semi)-automatically analyse plankton digital images". Paper presented at International Coastal Buoys Network Workshop, Paris, France.

Scientific congresses and symposiums/Paper published in a journal

- Wacquet, G., Lefebvre, A., Blondel, C., Louchart, A., Grosjean, P., Neaud-Masson, N., Belin, C., & Artigas, L. F. (2020). "Combination of 'machine learning' methodologies and imaging- in-flow system to detect Harmful Algae semi-automatically". Paper presented at 18th International Conference on Harmful Algae, Nantes, France.
Full Text : [ICHA2018_proceedings_46-50.pdf](#) (Open Access)

Computer developments/Software

- Grosjean, P., & Engels, G. (2020). "BioDataScience3: A Series of Learnr Documents for Biological Data Science course 3: An R package for e-learning package for teaching biological data science".
Full Text : [BioDataScience3_2020.0.0.tar.gz](#) (Open Access)
- Grosjean, P. (2020). "BioDataScience2: A Series of Learnr Documents for Biological Data Science course 2: An R package for e-learning package for teaching biological data science".
Full Text : [BioDataScience2_2020.0.0.tar.gz](#) (Open Access)
- Grosjean, P., Engels, G., & Conotte, R. (2020). "BioDataScience1: A Series of Learnr Documents for Biological Data Science course 1: An R package for teaching biological data science".
Full Text : [BioDataScience1_2020.0.0.tar.gz](#) (Open Access)
- Grosjean, P., & Engels, G. (2020). "BioDataScience - Initialize R environment for BioDataScience courses: An R package for teaching biological data science".
Full Text : [BioDataScience_2020.0.0.tar.gz](#) (Open Access)
- Grosjean, P. (2020). "Learndown: Use R markdown and bookdown for e-learning with h5p & Shiny/learnr apps: An R package for e-learning".
Full Text : [learndown_1.1.8.tar.gz](#) (Open Access)

2019

Scientific journals/Article

- Rouabhi, Y. L., Grosjean, P., Zitouni, B., Hacene, O. R., & Richir, J. (07 June 2019). Reproductive cycle and follicle cleaning process of *Mytilus galloprovincialis* (Mollusca: Bivalvia) from a polluted coastal site in Algeria. "Invertebrate Reproduction and Development, 63" (4), 255-267. doi:10.1080/07924259.2019.1631221
Full Text : [Rouabhi2015_InvertReprodDevel.pdf](#) (Open Access)
- Decan, A., Mens, T., & Grosjean, P. (01 February 2019). An empirical comparison of dependency network evolution in seven software packaging ecosystems. "Empirical Software Engineering, 24" (1), 381-416. doi:10.1007/s10664-017-9589-y
Full Text : [EMSE-2018.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Poster

- Engels, G., & Grosjean, P. (09 July 2019). "Better learning of data science in a biology curriculum by using R, Studio, learnr & Github Classroom". Poster session presented at useR, Toulouse, France.
Full Text : [poster_user_2019.pdf](#) (Open Access)

- Engels, G., Georges, N., Conotte, R., Batigny, A., & Grosjean, P. (05 March 2019). "Réponses écophysiologicals de *Seriatopora hystrix* (Dana, 1846) lors de stress hypo- et hypersalin". Poster session presented at Mardi des Chercheurs, Mons, Belgium.
- Engels, G., & Grosjean, P. (05 March 2019). "Classe inversée et outils interactifs : les clés de la motivation des étudiants en apprentissage de la science des données". Poster session presented at 3ème Journée des Enseignants de l'UMONS, Mons, Belgium.
Full Text : [poster_jde_ge1.pdf](#) (Open Access)
- Engels, G., & Grosjean, P. (03 March 2019). "Amélioration de l'apprentissage via l'analyse des résultats de quiz interactifs". Poster session presented at 3ème Journée des Enseignants de l'UMONS, Mons, Belgium.
Full Text : [poster_jde_ge2.pdf](#) (Open Access)

 2018

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., & Engels, G. (04 June 2018). "Est-il possible d'améliorer encore la courbe d'apprentissage de R au delà de tidyverse? Les packages flow et chart". Paper presented at Septièmes rencontres R, Rennes, France.
Full Text : [RRRennes2018_presentation.pdf](#) (Open Access)
- Fullgrabe, L., Grosjean, P., & Richir, J. (11 April 2018). "Evolution et variations à long terme du mésozooplancton de la Baie de Calvi". Paper presented at Workshop STARECAPMED, Calvi, France.
Full Text : [3-Fullgrabe.pdf](#) (Open Access)[abstract book.pdf](#) (Open Access)
- Rouabhi, L., Grosjean, P., Rouane Hassene, O., & Richir, J. (21 March 2018). "Suivi de la bioaccumulation de métaux traces dans la moule *Mytilus galloprovincialis* dans la région ouest algérienne". Paper presented at Septième Colloque International Sciences & Environnement, Bizerte, Tunisia.
Full Text : [2018_présentation 7CISE.pdf](#) (Open Access)[2018_livre-des-resumes-7ecise-bizerte.pdf](#) (Open Access)

Scientific congresses and symposiums/Poster

- Engels, G., Georges, N., Conotte, R., Batigny, A., & Grosjean, P. (14 December 2018). "Ecophysiological responses of *Seriatopora hystrix* (Dana, 1846) to short-term hypo- and hypersaline stress". Poster session presented at The 25th Benelux congress of Zoology, 'Zoology in the Anthropocene', Anvers, Belgium.
Full Text : [poster_antwerpen_ge.pdf](#) (Open Access)
- Wacquet, G., Lefebvre, A., Blondel, C., Louchart, A., Grosjean, P., & Artigas, L. F. (23 October 2018). "Combination of 'machine learning' methodologies and imaging- in-flow system to detect Harmful Algae semi-automatically". Poster session presented at 18th International Conference on Harmful Algae, Nantes, France.
Full Text : [2018_ICHA_Abstract_Wacquet.pdf](#) (Open Access)[2018_ICHA_ProgrammeFinal_BD_19.10.pdf](#) (Open Access)
- Engels, G., & Grosjean, P. (04 July 2018). "Introduction de nouveaux outils (learn, GitHub Classroom,...) dans les cours de Science des données en biologie". Poster session presented at Septièmes rencontres R, Rennes, France.
Full Text : [poster_rennes_ge.pdf](#) (Open Access)

 2017

Scientific journals/Article

- Todinanahary, G., Lavitra, T., Puccini, N., Grosjean, P., & Eeckhaut, I. (03 July 2017). Community-based coral aquaculture in Madagascar: A profitable economic system for a simple rearing technique? "Aquaculture, 467", 225-234.
Full Text : [2017_Todinanahary_Aquaculture.pdf](#) (UMONS staff members only)

- Damsiri, Z., Natij, L., Khalil, K., Loudiki, M., Richir, J., El Himer, H., & Elkalay, K. (01 January 2017). Seasonal characterization of the nutrients state in Oualidia Lagoon (Moroccan Atlantic coast). "Journal of Materials and Environmental Science, 8" (1), 76-77.
Full Text : [Damsiri et al. \(2017\) - J. Mater. Environ. Sci.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a journal

- Constantinou, E., & Mens, T. (2017). "Socio-Technical Evolution of the Ruby Ecosystem in GitHub". Paper presented at IEEE International Conference on Software Analysis, Evolution, and Reengineering, Klagenfurt, Austria.
Full Text : [SANER2017-ConstantinouMens-RubyGithub.pdf](#) (Open Access)
- Decan, A., Mens, T., & Claes, M. (2017). "An Empirical Comparison of Dependency Issues in OSS Packaging Ecosystems". Paper presented at IEEE International Conference on Software Analysis, Evolution, and Reengineering, Klagenfurt, Austria.
Full Text : [SANER2017-DecanMensClaes-DeplIssues.pdf](#) (Open Access)

Dissertations and theses/Master's dissertation

- Engels, G. (2017). "Etude du diméthylsulfonylpropionate et du diméthylsulfoxyde chez *Posidonia oceanica* (L.) Delile (1813) : cycle saisonnier naturel et bio marqueur de réponse au stress oxydatif induit par le cuivre. : Mémoire présenté en vue de l'obtention du grade de Master en Biologie des Organismes et Ecologie sous la direction des docteurs Richir Jonathan et Borges Alberto". Unpublished master thesis, Université de Mons. Jury: Richir, J. (Promotor), & Borges, A. (Promotor).
Full Text : [ENGELS_DMSP_DMSO_POSIDONIA_FINAL.pdf](#) (Open Access)

2016

Scientific journals/Article

- Richir, J., & Gobert, S. (2016). Trace Elements in Marine Environments : Occurrence, Threats and Monitoring with Special Focus on the Costal Mediterranean. "Journal of Environmental and Analytical Toxicology".
Full Text : [Richir and Gobert \(2016\) - JEAT.pdf](#) (Open Access)
- Richir, J., & Gobert, S. (2016). An ecophysiological discussion of trace element bioaccumulation in cultured *Mytilus galloprovincialis*. "Belgian Journal of Zoology".
Full Text : [Richir and Gobert \(2016\) - BJZ.pdf](#) (Open Access)
- Gobert, S., Lepoint, G., Pelaprat, C., Remy, F., Lejeune, P., Richir, J., & Abadie, A. (2016). Temporal evolution of sand corridors in a *Posidonia oceanica* seascape: a 15-years study. "Mediterranean Marine Science".
Full Text : [Gobert et al. \(2016\) - Mediterranean Marine Science.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Rouabhi, L., Rouanne, H. O., Benkrama, H., Zitouni, B., Grosjean, P., & Richir, J. (16 December 2016). "Bioaccumulation of trace metals in *Mytilus galloprovincialis* from the Algerian west coast". Paper presented at Benelux Congress of Zoology, Antwerp, Belgium.
Full Text : [poster_printed.pdf](#) (Open Access)
- Georges, N., Richir, J., Batigny, A., Borges, A., Champenois, W., Gobert, S., Roberty, S., & Grosjean, P. (16 December 2016). "Copper toxicity on coral holobiont photosynthetic processes". Paper presented at Benelux Congress of Zoology, Antwerp, Belgium.
Full Text : [Poster congrès_printed.pdf](#) (Open Access)
- Fullgrabe, L., Richir, J., Batigny, A., Goffart, A., Lejeune, P., Gobert, S., & Grosjean, P. (16 December 2016). "Long-term changes of the zooplankton community in the Bay of Calvi (Corsica, France)". Paper presented at Benelux Congress of Zoology, Antwerp, Belgium.
Full Text : [2016_Zoology Lovina Fullgrabe poster.pdf](#) (Open Access)

- Lapeyra, J., Abadie, A., Lejeune, P., Sturaro, N., Michel, L., Lepoint, G., Richir, J., & Gobert, S. (15 December 2016). "Assessing edge-effects in *Posidonia oceanica* seagrass meadows: A multidisciplinary approach". Paper presented at Benelux Congress of Zoology, Antwerp, Belgium.
Full Text : [Presentation jonlapeyra ZOOLOGY 2016.compressed.pdf](#) (Open Access)
- Richir, J., Batigny, A., Georges, N., Fullgrabe, L., Suvarov, P., Gobert, S., Lepoint, G., Borges, A., Champenois, W., Franck, F., Roberty, S., Lejeune, P., Abadie, A., Leduc, M., Boissery, P., Rigaud, V., Andral, B., Lefebvre, A., Belin, C., & Grosjean, P. (27 October 2016). "EcoNum, a research unit devoted to marine environment monitoring". Paper presented at 2ème workshop 'Environnement Marin et Développement Durable: Quels enjeux pour demain?', Essaouira, Morocco.
Full Text : [Richir_Grosjean_EcoNum.odp](#) (Open Access)[2017_Essaouira_RichirEtAl_EcoNum_summary.doc](#) (Open Access)[2017_Essaouira_Programme Workshop-EMDD 2016.pdf](#) (Open Access)
- Richir, J., Abadie, A., Grosjean, P., Franck, F., Lepoint, G., Lejeune, P., Silva, J., Santos, R., & Gobert, S. (18 October 2016). "A one year survey of seagrass primary productivity using the diving-PAM technique". Paper presented at International Seagrass Biology Workshop 12, Nant Gwrtheyrn, United Kingdom.
Full Text : [PAM_poster_printed.pdf](#) (Open Access)[PAM_poster_printed.pub](#) (Open Access)
- Grosjean, P., Denis, K., Wacquet, G., Rousseau, V., Parent, J.-Y., Lancelot, C., Hamad, D., Artigas, L. F., Lefebvre, A., Naud-Masson, N., Maurer, D., Tunin-Ley, A., Colas, F., & Belin, C. (31 May 2016). "Semi-automatic analysis of FlowCAM phytoplankton data using Zoo/Phytolmage". Paper presented at JERICO-Next, Wimereux, France.
Full Text : [2016_Wimereux_Jerico-Next_GrosjeanEtAl.pdf](#) (Open Access)[2016_Wimereux_Jerico-Next Agenda.pdf](#) (Open Access)
- Elkalay, K., Frangoulis, C., Richir, J., Damsiri, Z., Natij, L., & Khalil, K. (11 May 2016). "Modelling nitrogen incorporation by primary producers of a Mediterranean coastal area". Paper presented at The International Society for Ecological Modelling Global Conference 2016, Baltimore, United States - Maryland.
- Richir, J., Gobert, S., Lejeune, P., Watson, G., & Grosjean, P. (13 April 2016). "Environmental monitoring: between science and decision-making". Paper presented at CIBIM (Centre Interuniversitaire de Biologie Marine), Mons, Belgium.
Full Text : [Richir et al._CIBIM.pdf](#) (Open Access)
- Richir, J., & Grosjean, P. (28 January 2016). "Effets anthropiques sur les écosystèmes marins". Paper presented at Institut Energie - Institut Complexys - Journées thématiques: Modéalisation/Simulation, Mons, Belgium.
Full Text : [Richir_Grosjean_complexys.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a journal

- Decan, A., Mens, T., & Claes, M. (2016). "On the Topology of Package Dependency Networks: A Comparison of Three Programming Language Ecosystems". Paper presented at European Conference on Software Architecture Workshops, Copenhagen, Denmark. doi:10.1145/2993412.3003382
Full Text : [WEA2016_Decan_OnTheTopologyOfPackageDependencyNetworks.pdf](#) (Open Access)
- Ghribi, F., Richir, J., Boussafa, D., El Cafsi, M., & Gobert, S. (2016). "Trace metals in soft tissue of marine bivalve Noah's ark (*Arca noao*) from Bizerte lagoon (Northern Tunisia)". Paper presented at 41st CIESM Congress, Kiel, Germany.
Full Text : [Ferial et al. \(4016\) - 41st CIESM Congress.pdf](#) (Open Access)[GHRIBI_Ferial-CIESM 1_talk.pdf](#) (Open Access)[Ferial CIESM 1_poster.pdf](#) (Open Access)
- Decan, A., Mens, T., Claes, M., & Grosjean, P. (2016). "When GitHub meets CRAN: An Analysis of Inter-Repository Package Dependency Problems". Paper presented at IEEE International Conference on Software Analysis, Evolution, and Reengineering, Osaka, Japan.
Full Text : [PID4053843.pdf](#) (Open Access)

Scientific congresses and symposiums/Poster

- Abadie, A., Richir, J., Pieraccini, R., Velimirov, B., Leduc, M., Lepoint, G., & Gobert, S. (18 October 2016). "Investigating the potential of *Cymodocea nodosa* (Ucria) Ascherson as a coastal carbon sink coupling marine habitat cartographies and in situ nondestructive sampling". Poster session presented at International Seagrass Biology Workshop 12, Nant Gwrtheyrn, United Kingdom.
Full Text : [Abadie_Richir_et_al_ISBW12_poster_printed.pdf](#) (Open Access)

Computer developments/Software

- Koenker, R., Pin Tian, N., Zeileis, A., Grosjean, P., & Ripley, B. D. (2016). "Package 'quantreg'".
Full Text : [quantreg.pdf](#) (Open Access)

Diverse speeches and writings/Article for a general audience

- Brihaye, T., Boulanger, N., Grosjean, P., & Mens, T. (2016). COMPLEXYS - Research Institute for Complex Systems: Multidisciplinarity serving society. "Belgian Research in Belgium".
Full Text : [COMPLEXYS - BAT 3.pdf](#) (Open Access)

2015

Scientific journals/Article

- Mens, T., & Grosjean, P. (01 October 2015). The Ecology of Software Ecosystems. "Computer, 48" (10), 85-87.
doi:10.1109/MC.2015.298
Full Text : [ieeecomputer-ecology.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Richir, J., Lepoint, G., Donnay, A., Lejeune, P., Das, K., & Gobert, S. (01 October 2015). "DGTs, a complementary tool towards more efficient biomonitoring practices". Paper presented at DGT Conference 2015, Donostia-San-Sebastian, Spain.
Full Text : [DGT2015_talk.pdf](#) (Open Access)[DGT congress 2015_abstract book.pdf](#) (Open Access)
- Lefebvre, A., Neaud-Masson, N., Maurer, D., Wacquet, G., Grosjean, P., Colas, F., Tardivel, M., Artigas, L. F., & Belin, C. (02 April 2015). "Optimisation of the monitoring strategy for the French National Phytoplankton and Phytotoxins Network (REPHY) using semi-automated digital images analysis". Paper presented at Conférence GDR PhycoTox / GIS Cyrano, Brest, France.
- Wacquet, G., Grosjean, P., Hamad, D., Lefebvre, A., Neaud-Masson, N., Colas, F., Maurer, D., & Artigas, L. F. (02 April 2015). "Zoo/Phytoimage: current advances in the semi-automated classification of plankton digital images". Paper presented at Conférence GDR PhycoTox / GIS Cyrano, Brest, France.
- Grosjean, P., Denis, K., Wacquet, G., Ali, N., Rousseau, V., Parent, J.-Y., Lancelot, C., Hamad, D., Artigas, L. F., Lefebvre, A., & Belin, C. (25 February 2015). "Towards a better classification of plankton digital images: suspect detection, error correction and real-time". Paper presented at ASLO Aquatic Sciences Meeting, Granada, Spain.
Full Text : [2015_ASLOGranada_GrosjeanEtAl.pdf](#) (Open Access)
- Leblud, J., Moulin, L., Batigny, A., Dubois, P., & Grosjean, P. (24 February 2015). "Ecophysiological changes of a simplified coral reef community facing ocean acidification: A one year study in artificial reef mesocosms". Paper presented at ASLO Aquatic Sciences Meeting, Granada, Spain.
Full Text : [2015ASLOGranada_LebludEtAl.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Paper published in a journal

- Decan, A., Mens, T., Claes, M., & Grosjean, P. (2015). "On the Development and Distribution of R Packages: An Empirical Analysis of the R Ecosystem". Paper presented at International Workshop on Software Ecosystems (IWSECO), .
Full Text : [IWSECO2015_recosystem.pdf](#) (UMONS staff members only)
- Mens, T., Claes, M., Tabout, N., & Grosjean, P. (2015). "An Empirical Study of Identical Function Clones in CRAN". Paper presented at IEEE International Conference on Software Analysis, Evolution, and Reengineering, Montréal, Canada.
Full Text : [iwsc15-CR.pdf](#) (Open Access)

Scientific congresses and symposiums/Poster

- Richir, J., Abadie, A., Binard, M., Biondo, R., Boissery, P., Borges, A., Cimiterra, N., Collignon, A., Champenois, W., Donnay, A., Fréjefond, C., Goffart, A., Hecq, J.-H., Lejeune, P., Lepoint, G., Michel, L., Pelaprat, C., Pere, A., Sirjacobs, D., & Gobert, S. (08 November 2015). "STAtion of Reference and rEsearch on Change of local and global Anthropogenic Pressures on Mediterranean Ecosystems Drifts: The STARECAPMED project". Poster session presented at 5th Annual World Congress of Aquaculture and Fisheries, Qingdao, China.
Full Text : [Richir et al._WCAF2015.pdf](#) (Open Access)[Richir et al._STARECAPMED_abstract book.doc](#) (Open Access)
- Richir, J., & Gobert, S. (07 November 2015). "The trace element contamination of coastal waters: A holistic approach to environmental monitoring surveys". Poster session presented at 4th Annual International Congress of Ocean (WCO), Qingdao, China.
Full Text : [Richir and Gobert_WCO 2015.pdf](#) (Open Access)[Richir and Gobert_WCO2015_abstract book.doc](#) (Open Access)
- Richir, J., Lejeune, P., Lepoint, G., Das, K., & Gobert, S. (07 November 2015). "The spatial variability of trace element bioaccumulation processes: Tools to environmental management". Poster session presented at 5th Annual World Congress of Marine Biotechnology (WCMB), Qingdao, China.
Full Text : [Richir et al._WCMB 2015.pdf](#) (Open Access)[Richir et al._WCMB 2015_abstract book.doc](#) (Open Access)
- Richir, J., Lepoint, G., Donnay, A., Lejeune, P., Gonzales, J.-L., Bouchoucha, M., Chiffolleau, J.-F., Andral, B., & Gobert, S. (29 September 2015). "Trace metal speciation? An essential aspect of biomonitoring to avoid wrong conclusions". Poster session presented at DGT Conference 2015, Donostia-San-Sebastian, Spain.
Full Text : [DGT2015 final.pdf](#) (Open Access)[DGT congress 2015_abstract book.pdf](#) (Open Access)
- Leblud, J., Moulin, L., Batigny, A., Dubois, P., & Grosjean, P. (10 March 2015). "Ecophysiological changes of a simplified coral reef community facing ocean acidification: a one year study in artificial reef mesocosms". Poster session presented at 8ème édition de la Matinée des Chercheurs 2015 (MdC2015), Mons, Belgium.
Full Text : [Leblud_Mdc2015.pdf](#) (Open Access)

Reports/Internal report

- Wacquet, G., & Grosjean, P. (2015). "Projet FlowCAM/ZooPhytoImage : Rapport d'avancement juin 2015".
Full Text : [Rapport avancement - 30062015.pdf](#) (UMONS staff members only)
- Wacquet, G., & Grosjean, P. (2015). "Projet FlowCAM/ZooPhytoImage : Rapport d'avancement mars 2015".
Full Text : [Rapport avancement - 31032015.pdf](#) (UMONS staff members only)
- Wacquet, G., Grosjean, P., Colas, F., Hamad, D., & Artigas, L. F. (2015). "Version évolutive de l'outil opérationnel de numérisation et d'analyse semi-automatique d'images de phytoplancton, utilisant le matériel FlowCAM et le logiciel ZooPhytoImage. Nouvelles perspectives".
Full Text : [ONEMA2015Livvable1 final.pdf](#) (UMONS staff members only)

Computer developments/Software

- Grosjean, P., Denis, K., Wacquet, G., Irigoien, X., Boyra, G., Arregi, I., Lopez-Urrutia, A., Sieracki, M. E., & Tupper, B. (2015). "Zoo/PhytoImage version 5.4-0 : Analyse d'images de plancton assistée par ordinateur".
Full Text : [ZoolImageManual_french.pdf](#) (Open Access)

2014

Parts of books/Contribution to collective works

- Mens, T., Claes, M., Grosjean, P., & Serebrenik, A. (2014). Studying Evolving Software Ecosystems based on Ecological Models. In T. Mens, A. Serebrenik, A. Cleve, T. Mens (Ed.), A. Serebrenik (Ed.), & A. Cleve (Ed.), "Evolving Software Systems" (pp. 297-326). Springer.
Full Text : [chapter10.pdf](#) (UMONS staff members only)
- Grosjean, P., & Denis, K. (2014). Supervised classification of images, applied to plankton samples using R and Zooimage. In "Data mining applications with R" (pp. 331-366). Elsevier.
Full Text : [Data mining with R.pdf](#) (UMONS staff members only)

Scientific journals/Article

- Moulin, L., Grosjean, P., Leblud, J., Batigny, A., Collard, M., & Dubois, P. (20 November 2014). Long-term mesocosms study of the effects of ocean acidification on growth and physiology of the sea urchin *Echinometra mathaei*. "Marine Environmental Research, 103", 103-114.
- Leblud, J., Moulin, L., Batigny, A., Dubois, P., & Grosjean, P. (2014). Technical note: Artificial coral reef mesocosms for ocean acidification investigations. "Biogeosciences Discussions".
Full Text : [bg-2014-459-discussions-typeset_manuscript-version1.pdf](#) (Open Access)
- Sheridan, C., Grosjean, P., Leblud, J., Palmer, C. V., Kushmaro, A., & Eeckhaut, I. (22 August 2014). Sedimentation rapidly induces an immune response and depletes energy stores in a hard coral. "Coral Reefs, 33" (4), 1067-1076.
Full Text : [Sheridan2014_CoralReefs_SedimentationInducesImmuneResponseDepletes EnergyCoral.pdf](#) (UMONS staff members only)
- Moulin, L., Grosjean, P., Leblud, J., Batigny, A., & Dubois, P. (01 August 2014). Impact of elevated pCO₂ on acid-base regulation of the sea urchin *Echinometra mathaei* and its relation to resistance to ocean acidification: a study in mesocosms. "Journal of Experimental Marine Biology and Ecology, 457", 97-104.
Full Text : [Moulin2014_JEMBE_ImpactElevatedpCO2EchinometraMathaeiMEsocosm.pdf](#) (UMONS staff members only)

Books/Book published as author, translator, etc.

- Faria, J. C., Grosjean, P., Jelihovschi, E. G., & Pietrobon, R. (2014). "Tinn-R Editor (2nd ed.)". Editus.
Full Text : [Tinn-R ebook2.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P. (30 October 2014). "Zoo/PhytoImage version 5. Simplification de l'interface pour utilisation REPHY en routine". Paper presented at Journées REPHY 2014, Nantes, France.
Full Text : [Presentation ZooPhytoImage Nantes Journees REPHY.pdf](#) (UMONS staff members only)
- Grosjean, P. (25 August 2014). "Do software evolve too fast? A biologist's point of view". Paper presented at 2nd International Workshop on Ecosystem Architectures, Vienna, Austria.
Full Text : [WEA2014keynoteAbstract.pdf](#) (UMONS staff members only)[WEA2014keynote.pdf](#) (UMONS staff members only)

- Moulin, L., Leblud, J., Batigny, A., Dubois, P., & Grosjean, P. (10 July 2014). "Effects of ocean acidification on the bioerosion by the sea urchin *Echinometra mathaei* in coral reefs". Paper presented at Gordon Research Conference on Ocean Global Change Biology, Waterville Valley, United States - New Hampshire.
Full Text : [Gordon Research Conference 2014OGCB_Poster version finale.pdf](#) (UMONS staff members only)
- Wacquet, G., Lefebvre, A., Neaud-Masson, N., Belin, C., & Grosjean, P. (13 June 2014). "Etude et caractérisation de la dynamique et de la diversité phytoplanctonique par analyse d'images et classification semi-automatisée". Paper presented at Instrumentation haute fréquence pour l'observation et la surveillance de l'environnement marin, Boulogne-sur-mer, France.
Full Text : [Resume_WacquetEtAl_FlowCam_13062014.doc](#) (UMONS staff members only)
- Claes, M., Mens, T., & Grosjean, P. (30 May 2014). "Beyond R CMD check: Helping R developers to detect CRAN package conflicts". Paper presented at useR! 2014, Los Angeles, United States.
Full Text : [UseR2014-Claes.pdf](#) (UMONS staff members only)
- Grosjean, P. (04 February 2014). "Using biology and ecology as inspiration for software maintenance". Paper presented at IEEE CSMR-WCRE 2014 Software Evolution Week, Antwerpen, Belgium.
Full Text : [CSMR2014keynote.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a journal

- Claes, M., Mens, T., & Grosjean, P. (2014). "maintaineR: A web-based dashboard for maintainers of CRAN packages". Paper presented at IEEE International Conference on Software Maintenance and Evolution, Victoria, Canada. doi:10.1109/ICSME.2014.104
Full Text : [icsme2014tool.pdf](#) (Open Access)
- Claes, M., Mens, T., & Grosjean, P. (2014). "On the maintainability of CRAN packages". Paper presented at IEEE CSMR-WCRE 2014 Software Evolution Week, Antwerpen, Belgium. doi:10.1109/CSMR-WCRE.2014.6747183
Full Text : [csmrwcre14era-er5-p-19868-993946c-19632-preprint.pdf](#) (UMONS staff members only)
- Mens, T., Claes, M., & Grosjean, P. (2014). "ECOS: Ecological Studies of Open Source Software Ecosystems". Paper presented at IEEE CSMR-WCRE 2014 Software Evolution Week, Antwerpen, Belgium. doi:10.1109/CSMR-WCRE.2014.6747205
Full Text : [csmrwcre14projects-pr30-p-19868-993946c-19632-preprint.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Poster

- Sheridan, C., Kushmaro, A., Baele, J.-M., Grosjean, P., Raymundo, L. J., & Eeckhaut, I. (24 August 2014). "Sedimentation influences on coral microbial communities". Poster session presented at ISME 15, Séoul, South Korea.

Dissertations and theses/Doctoral thesis

- Denis, K. (2014). "Improvement and use of supervised classification applied to plankton digital images in Zoo/PhytoImage: (real-time) study of plankton communities in the North Sea". Unpublished doctoral thesis, Université de Mons. Jury: Grosjean, P. (Promotor), Eeckhaut, I., Artigas, L. F., Lancelot, C., Flammang, P., & Wattiez, R.
Full Text : [These-K.Denis.pdf](#) (UMONS staff members only)
- Moulin, L. (2014). "Impact de l'acidification des océans sur l'oursin *Echinometra mathaei* et son activité bioérosive des récifs coralliens : étude en mésocosmes artificiels". Unpublished doctoral thesis, Université de Mons. Jury: Dubois, P. (Promotor), Grosjean, P. (Promotor), Chou, L., Flammang, P., De Ridder, C., & Gazeau, F.
Full Text : [These_Moulin Laure_Version finale.pdf](#) (UMONS staff members only)

Computer developments/Software

- Grosjean, P., & Denis, K. (2014). "Package 'zooimage'".
Full Text : [zooimage.pdf](#) (UMONS staff members only)

- Grosjean, P. (2014). "Package 'mlearning'".
Full Text : [mlearning.pdf](#) (Open Access)

Diverse speeches and writings/Other

- Grosjean, P. (2014). "R pour qui et pourquoi?"
Full Text : [WAJUG2014_R.txt](#) (UMONS staff members only)[WAJUG2014_R.pdf](#) (UMONS staff members only)
- Wacquet, G., Lefebvre, A., Colas, F., & Grosjean, P. (2014). "Finalisation d'un outil préopérationnel FlowCAM / ZooPhytoImage".
Full Text : [FA-9 L3 2013 - fiche flowcam zoophytoimage - livrable 3 outil preoperationnel - version finale.pdf](#) (UMONS staff members only)
- Grosjean, P. (2014). "Guide méthodologique. Version actualisée de ZooPhytoImage avec refonte de l'interface graphique".
Full Text : [FA-9 L1 2013 - fiche flowcam phytoimage - livrable 1 guide methodo - version finale.pdf](#) (UMONS staff members only)
- Ali, N., Wacquet, G., Didry, M., Hamad, D., & Grosjean, P. (2014). "Utilisation conjointe de FlowCAM / ZooPhytoImage et de la cytométrie en flux. Premiers résultats et perspectives".
Full Text : [FA-9 L4 2013 - fiche flowcam phytoimage - livrable 4 cytometrie - version finale.pdf](#) (UMONS staff members only)

2013

Scientific journals/Article

- Hocking, T. D., Wutzler, T., Ponting, K., & Grosjean, P. (31 August 2013). Sustainable, extensible documentation generation using inlinedocs. "Journal of Statistical Software, 54" (6), 1-20.
Full Text : [2013JSS_Inlinedocs.pdf](#) (UMONS staff members only)
- Collard, M., Laitat, K., Moulin, L., Catarino, A., Grosjean, P., & Dubois, P. (07 June 2013). Buffer capacity of the coelomic fluid in echinoderms. "Comparative Biochemistry and Physiology. Part A, Molecular and Integrative Physiology, 166", 199-206.
Full Text : [2013_Collard, Laitat et al.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., Denis, K., & Ali, N. (03 December 2013). "Zoo/PhytoImage: reconnaissance automatique du plancton par analyse d'image et classification supervisée". Paper presented at Dymaphy / Resomar, Boulogne-sur-mer, France.
Full Text : [2013_Boulogne_RESOMAR.pdf](#) (UMONS staff members only)
- Grosjean, P., Denis, K., & Ali, N. (02 December 2013). "Real-time and semi-automatic classification of phytoplankton using Zoo/PhytoImage". Paper presented at Dymaphy / Resomar, Boulogne-sur-mer, France.
- Pascal, B., Lavitra, T., Dubois, P., Lepoint, G., Grosjean, P., Todinanahary, G., Tsiresy, G., & Eeckhaut, I. (21 April 2013). "Presentation of the 'polyaquaculture in Madagascar': A research program to ensure sustainable coastal livelihoods in southwestern and northern regions of the Red Island". Paper presented at 21st International Seaweed Symposium, Bali, Indonesia.
- Moulin, L., Dubois, P., & Grosjean, P. (04 January 2013). "Impact de l'acidification sur la bioérosion des coraux hermatypiques par les oursins: étude en mésocosme". Paper presented at CIBIM, Mons, Belgium.
- Leblud, J., Grosjean, P., Moulin, L., & Batigny, A. (04 January 2013). "Changements écophysologiques des scléractiniaires hermatypiques sous l'augmentation de la pCO₂: étude en chemostats". Paper presented at CIBIM, Mons, Belgium.
Full Text : [Leblud_20120223_CIBIM.pdf](#) (UMONS staff members only)
- Claes, M., Mens, T., & Grosjean, P. (2013). "Towards an empirical analysis of the maintainability of CRAN packages". Paper presented at BENEVOL 2013, Mons, Belgium.

Scientific congresses and symposiums/Paper published in a book

- Mens, T., Claes, M., Drobisz, S., & Goeminne, M. (2013). "Proceedings of BENEVOL 2013 Software Evolution Research Seminar: Extended Abstracts of the Research Presentations". Paper presented at BENEVOL 2013, Mons, Belgium.
Full Text : [BENEVOL_2013_Abstracts.pdf](#) (Open Access)

Scientific congresses and symposiums/Paper published in a journal

- Claes, M., Mens, T., Grosjean, P., & Serebrenik, A. (2013). "Modeling software evolution using biological evolution theories". Paper presented at ICSE-NIER, San Francisco, United States.
Full Text : [ICSE-NIER-BIO2013.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Poster

- Ali, N., Grosjean, P., Hamad, D., & Artigas, L. F. (31 March 2013). "Optimisation de l'application de l'analyse d'image, combinée à la cytométrie en flux, pour l'étude et le suivi de communautés phytoplanctoniques des eaux côtières". Poster session presented at 7ième Matinée des Chercheurs, Mons, Belgium.
- Laghdass, M., Leblud, J., Moulin, L., Gillan, D., Grosjean, P., & Wattiez, R. (31 March 2013). "Effect of ocean acidification on coral-associated bacterial communities in artificial mesocosms by metaproteogenomic approach". Poster session presented at 7ième Matinée des Chercheurs, Mons, Belgium.

Patents/Patent

- Grosjean, P., Leblud, J., & Batigny, A. (24 January 2013). "Methods and apparatus for analysis of aquatic chemical and/or biological systems".
Full Text : [WO 2013010764 A1.pdf](#) (UMONS staff members only)

Diverse speeches and writings/Other

- Denis, K., & Grosjean, P. (2013). "Amélioration de la validation partielle des suspects et de la correction statistique de l'erreur dans Zoo/PhytoImage pour les échantillons REPHY".
Full Text : [RapportIFREMER2013CorrectionDErreur.pdf](#) (UMONS staff members only)

2012

Scientific journals/Article

- Lancelot, C., Grosjean, P., Rousseau, V., Breton, E., & Glibert, P. M. (01 March 2012). Rejoinder to 'Perils of correlating CUSUM-transformed variables to infer ecological relationships (Breton et al., 2006; Glibert 2010)'. "Limnology and Oceanography, 57" (2), 669-670. doi:10.4319/lo.2012.57.2.0669
Full Text : [Lancelot2012_LimnolOceanogr_RejoinderToPerilsOfCorrelatingCUMSUM.pdf](#) (UMONS staff members only)
- Gillan, D., Baeyens, W., Bechara, R., Billon, G., Denis, K., Grosjean, P., Leermakers, M., Lesven, L., Pede, A., Sabbe, K., & Gao, Y. (26 January 2012). Links between bacterial communities in marine sediments and trace metal geochemistry as measured by in situ DET/DGT approaches. "Marine Pollution Bulletin, 64", 353-362. doi:10.1016/j.marpolbul.2011.11.001
Full Text : [Gillan et al. 2012a.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Sheridan, C., Grosjean, P., & Eeckhaut, I. (19 October 2012). "How annoying dirt can be - a coral immunity perspective". Paper presented at 19th Benelux Congress of Zoology, Brussels, Belgium.
Full Text : [Sheridan_19thBCZ.pdf](#) (UMONS staff members only)
- Dubois, P., Catarino, A., Collard, M., Dery, A., Laitat, K., Moulin, L., & Grosjean, P. (27 September 2012). "Adult echinoderms from fluctuating environments: Scope for adaptation or acclimatization to ocean acidification?" Paper presented at Third International Symposium on the Ocean in a High CO₂ World, Monterey, United States - California. doi:10.1088/1748-0221/5/03/T03014
Full Text : [Abstract_High-CO2_PhD.pdf](#) (Open Access)
- Leblud, J., Grosjean, P., & Batigny, A. (25 September 2012). "Ecophysiological Changes of Hermatypic Scleractinians in High PCO₂ Chemostat". Paper presented at Third International Symposium on the Ocean in a High CO₂ World, Monterey, United States - California.
Full Text : [201209_Abstract_HCO2W.pdf](#) (Open Access)
- Moulin, L., Leblud, J., Batigny, A., Dubois, P., & Grosjean, P. (25 September 2012). "Impact of ocean acidification on the sea urchin *Echinometra Mathaei* and its roles as grazer and bioeroder in coral reefs". Paper presented at Third International Symposium on the Ocean in a High CO₂ World, Monterey, United States - California.
Full Text : [Moulin et al_Abtract_high_CO2_world.pdf](#) (Open Access)
- Moulin, L., Dubois, P., & Grosjean, P. (21 August 2012). "Impact of ocean acidification on growth and physiology of the sea urchin *Echinometra mathaei*: a study in mesocosms". Paper presented at 14th International Echinoderm Conference, Brussels, Belgium.
Full Text : [14IEC presentation.ppt](#) (UMONS staff members only)
- Fransolet, D., Ugille, A., Roberty, S., Grosjean, P., & Plumier, J.-C. (11 July 2012). "Increased cell proliferation in *Seriatopora hystrix* following heat-induced bleaching". Paper presented at 12th International Coral Reef Symposium, Cairns, Australia.
- Mens, T., Claes, M., Grosjean, P., & Serebrenik, A. (09 July 2012). "Applying Biological Evolution to Software Ecosystems: A Case study with Gnome". Paper presented at BENEVOL, Delf, Netherlands.

2011

Books/Book published as author, translator, etc.

- Lancelot, C., Rousseau, V., Lacroix, G., Denis, K., Gypens, N., Grosjean, P., Van Nieuwenhove, K., Parent, J.-Y., Ruddick, K., & Delbare, D. (2011). "Combined effects of changing hydroclimate and human activity on coastal ecosystem health - AMORE III". Belgian Science Policy.
Full Text : [AMORE III-final report 2011.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Moulin, L., Grosjean, P., & Dubois, P. (30 September 2011). "Impact of ocean acidification on growth and physiology of *Echinometra mathaei*: a mesocosm study". Paper presented at World conference on marine biodiversity, Aberdeen, United Kingdom.
Full Text : [Moulin2011Aberdeen Summary.pdf](#) (UMONS staff members only)
- Tunin-Ley, A., Maurer, D., Denis, K., Belin, C., & Grosjean, P. (15 February 2011). "Coupling optical detection by FlowCAM to automatic classification by the software Zoo/Phytolmage for automation of phytoplankton community identification". Paper presented at ASLO Aquatic Sciences Meeting, San Juan, Unknown/unspecified.
Full Text : [ASLO_TuninLey_Abstract.pdf](#) (UMONS staff members only)[ASLO_TuninLey_S64.pdf](#) (UMONS staff members only)
- Maurer, D., Tunin-Ley, A., Denis, K., Barbier, C., Pouvreau, S., & Grosjean, P. (15 February 2011). "Semi-automated identification of planktonic larvae of the oyster *Crassostrea gigas* using FlowCAM coupled to the image analysis software Zoo/Phytolmage". Paper presented at ASLO Aquatic Sciences Meeting, San Juan, Unknown/unspecified.
Full Text : [ASLO_Maurer_Abstract.pdf](#) (UMONS staff members only)[ASLO_Maurer_S64.pdf](#) (UMONS staff members only)

- Denis, K., Tunin-Ley, A., Maurer, D., & Grosjean, P. (15 February 2011). "Statistical error correction of Zoo/Phytolmage identification by partial manual validation of suspect particles". Paper presented at ASLO Aquatic Sciences Meeting, San Juan, Unknown/unspecified.
Full Text : [ASLO_Denis_Abstract.pdf](#) (UMONS staff members only)[ASLO_Denis_S64.pdf](#) (UMONS staff members only)

 2010

Books/Book published as author, translator, etc.

- Faria, J. C., Grosjean, P., Jelihovschi, E. G., & Pietrobon, R. (2010). "Tinn-R Editor". Rmetrics Association.
Full Text : [Tinn-R ebook.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Leblud, J., Batigny, A., & Grosjean, P. (09 December 2010). "Study of hermatypic scleractinian Seriatomora hystrix in high pCO₂ chemostats". Paper presented at Euro ISRS Symposium, Wageningen, Netherlands.
Full Text : [2010ISRS_abstract.pdf](#) (UMONS staff members only)[2010ISRS_poster.pdf](#) (UMONS staff members only)
- Denis, K., & Grosjean, P. (10 June 2010). "Original method to optimize groups in automatic plankton classification, applied to North Sea phytoplankton using Zoo/Phytolmage". Paper presented at Joint meeting ASLO & NABS. Aquatic sciences: global changes from the center to the edge, Santa Fe, United States.
Full Text : [2010SantaFe_Abstract.pdf](#) (UMONS staff members only)[2010SantaFe_Presentation.pdf](#) (UMONS staff members only)

Diverse speeches and writings/Other

- Grosjean, P. (2010). "svUnit: A framework for unit testing in R".
Full Text : [svUnit.pdf](#) (UMONS staff members only)

 2009

Scientific journals/Article

- Irigoien, X., Fernandes, J. A., Grosjean, P., Denis, K., Albaina, A., & Santos, M. (01 January 2009). Spring zooplankton distribution in the Bay of Biscay from 1998 to 2006 in relation with anchovy recruitment. "Journal of Plankton Research, 31" (1), 1-17. doi:10.1093/plankt/fbn096
Full Text : [Irigoien2009_31JPlanktonRes.pdf](#) (Open Access)
- Lavitra, T., Rasolofonirina, R., Grosjean, P., Jangoux, M., & Eeckhaut, I. (01 January 2009). The effect of food quality and rearing density on growth and survival of epibenthic juveniles of the sea cucumber *Holothuria scabra*. "Western Indian Ocean J. Mar. Sci, 8" (1), 87-95.
Full Text : [Eeckhaut2009\(4\) WIOMSA-20100831125646.pdf](#) (UMONS staff members only)
- Bailly, P., Grosjean, P., & Flammang, P. (01 January 2009). Measurement of the attachment strength of brachiolaria larvae and metamorphic individuals of the sea star *Asterina gibbosa* by centrifugation method. "Journal of Experimental Marine Biology and Ecology, 372" (1-2), 82-90. doi:10.1016/j.jembe.2009.02.011
Full Text : [Bailly2009_372JExpMarBiolEcol.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., Romain, F., & Barton, K. (10 July 2009). "SciViews-K and Komodo Edit, a new platform-independent GUI/IDE for R". Paper presented at UseR!2009, Rennes, France.
Full Text : [UseR2009_SciViewsK.pdf](#) (UMONS staff members only)

- Denis, K., Irigoien, X., Romain, F., Rousseau, V., Parent, J.-Y., Lancelot, C., & Grosjean, P. (09 July 2009). "Zoo/PhytoImage, a software for automatic analysis of plankton samples based on R and ImageJ". Paper presented at UseR!2009, Rennes, France.
Full Text : [UseR2009_ZooPhytoImage.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Poster

- Denis, K., Parent, J.-Y., Rousseau, V., Lancelot, C., & Grosjean, P. (24 June 2009). "Near real-time monitoring of plankton in the Belgian Coastal Zone using Zoo/PhytoImage and the FlowCAM". Poster session presented at 3rd GLOBEC Open Science Meeting, Victoria, Canada.
Full Text : [2009Victoria_Abstract.pdf](#) (UMONS staff members only)[2009Victoria_Poster.pdf](#) (UMONS staff members only)

Patents/Patent

- Gorsky, G., Picheral, M., & Grosjean, P. (30 June 2009). "Optical scanning device for liquid biological samples, process of operation and computer program for a computer connected to said device".
Full Text : [US7555144.pdf](#) (UMONS staff members only)

2008

Scientific congresses and symposiums/Unpublished conference/Abstract

- Leblud, J., Batigny, A., & Grosjean, P. (07 October 2008). "Effect of high CO₂ on the physiology and growth of the hermatypic coral *Seriatopora hystrix* in nano-sized chemostat". Paper presented at 2nd Symposium on the Ocean in a High-CO₂ World, Monaco, Monaco.
Full Text : [2008_Monaco_Abstract.doc](#) (UMONS staff members only)[2008_Monaco_Poster.pdf](#) (UMONS staff members only)

2007

Scientific journals/Article

- Kell, L. T., Mosqueria, I., Grosjean, P., Fromentin, J.-M., Garcia, D., Hillary, R., Jardim, E., Mardle, S., Pastoors, M., Poos, J. J., Scott, F., & Scott, R. D. (02 January 2007). FLR: an open-source framework for the evaluation and development of management strategies. "ICES Journal of Marine Science, 64" (4), 640-646.
doi:10.1093/icesjms/fsm012
Full Text : [Kell2007_64ICESJMarSci.pdf](#) (UMONS staff members only)
- Benfield, M. C., Grosjean, P., Culverhouse, P., Irigoien, X., Sieracki, M. E., Lopez-Urrutia, A., Dam, H. G., Hu, Q., Davis, C. S., Hansen, A., Pilskaln, C. H., Riseman, E., Schultz, H., Utgoff, P. E., & Gorsky, G. (01 January 2007). RAPID : Research on Automated Plankton Identification. "Journal of Oceanography, 20" (2), 172-187.
Full Text : [Benfield2007_20Oceanography.pdf](#) (Open Access)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., & Denis, K. (28 May 2007). "The computer does the hard work: (semi)-automatic classification of zooplankton". Paper presented at 4th International Zooplankton Production Symposium, Hiroshima, Japan.
Full Text : [2007_Hiroshima Abstract.pdf](#) (UMONS staff members only)[2007_Hiroshima Presentation.pdf](#) (UMONS staff members only)

Reports/Internal report

- Lancelot, C., Rousseau, V., Lacroix, G., Denis, K., Gypens, N., Grosjean, P., Van Nieuwenhove, K., Parent, J.-Y., Ruddick, K., & Delbare, D. (2007). "Combined effects of changing hydroclimate and human activity on coastal ecosystem health - AMORE III: Final report phase I - Summary". Belgian Science Policy.
Full Text : [2007_AMORE_III summary.pdf](#) (UMONS staff members only)

2006

Scientific congresses and symposiums/Unpublished conference/Abstract

- Kell, L., Grosjean, P., Mosquera, I., Fromentin, J.-M., Jardim, E., Hillary, R., Mardle, S., Poos, J. J., & Scott, R. (27 June 2006). "FLR: an open source fisheries library or framework for the evaluation of management strategies". Paper presented at ICES Symposium on Management Strategies, Galway, Ireland.
Full Text : [2006_GalwayAbstractFLR.pdf](#) (UMONS staff members only)
- Grosjean, P., Hillary, R., Jardim, E., Kell, L., Mosqueira, I., Poos, J. J., Scott, R., & Thompson, H. S. (16 June 2006). "Fisheries modelling in R: the FLR (Fisheries Library in R) project". Paper presented at User!2006, Vienna, Austria.
Full Text : [2006_Vienna_UseR_FLR abstract.pdf](#) (UMONS staff members only)[2006_Vienna_UseR FLR presentation.pdf](#) (UMONS staff members only)
- Short, T., & Grosjean, P. (15 June 2006). "Online applications with Rpad". Paper presented at User!2006, Vienna, Austria.
Full Text : [2006_Vienna_UseR Rpad abstract.pdf](#) (UMONS staff members only)[2006_Vienna_UseR Rpad presentation.pdf](#) (UMONS staff members only)
- Grosjean, P. (15 June 2006). "Collaborative writing of R documentation using a Wiki". Paper presented at User!2006, Vienna, Austria.
Full Text : [2006_Vienna_UseR RWiki abstract.pdf](#) (UMONS staff members only)[2006_Vienna_UseR RWiki presentation.pdf](#) (UMONS staff members only)

Diverse speeches and writings/Other

- Grosjean, P. (2006). "Introduction à R pour biologiste".
Full Text : [Introduction à R.pdf](#) (UMONS staff members only)

2005

Parts of books/Contribution to collective works

- Vaitilingon, D., Jangoux, M., & Grosjean, P. (2005). Cultured aquatic animal species: The european edible echinoid *Paracentrotus lividus*. In "Aquaculture Compendium". Wallingford, United Kingdom: CAB International.
Full Text : [Vaitilingon2005_AquacultureCompendium.pdf](#) (UMONS staff members only)

Scientific journals/Article

- Haesaerts, D., Finlay, J. A., Callow, M. E., Callow, J. A., Grosjean, P., Jangoux, M., & Flammang, P. (14 October 2005). Evaluation of the attachment strength of individuals of *Asterina gibbosa* (Asteroidea, Echinodermata) during the perimetamorphic period. "Biofouling, 21" (5-6), 229-235. doi:10.1080/08927010500414901
Full Text : [Haesaerts2005_21Biofouling.pdf](#) (Open Access)
- Warembourg, C., Grosjean, P., Picheral, M., Ibanez, F., & Gorsky, G. (01 January 2005). Le ZOOSCAN: un système d'imagerie rapide pour la mesure et la classification automatique du zooplankton. "Journal de Recherche Océanographique, 30", 1-12.
Full Text : [Warembourg2005_JResOceano.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P. (02 November 2005). "The ZoolImage framework". Paper presented at GLOBEC / SPACC workshop on image analysis to count and identify zooplankton, San Sebastian, Spain.
Full Text : [ZoolImage_Workshop ZoolImage framework.pdf](#) (UMONS staff members only)
- Grosjean, P. (01 November 2005). "Introduction to the workshop on image analysis to count and identify zooplankton". Paper presented at GLOBEC / SPACC workshop on image analysis to count and identify zooplankton, San Sebastian, Spain.
Full Text : [ZoolImage_Workshop Introduction Abstract.pdf](#) (UMONS staff members only)[ZoolImage_Workshop Introduction Irigoien.pdf](#) (UMONS staff members only)

Diverse speeches and writings/Other

- Grosjean, P. (2005). "R: introductory course for biologists".
Full Text : [RIntroEnglish.pdf](#) (UMONS staff members only)
- Grosjean, P., Lecoutre, E., Faria, J. C., & Rufino, M. (2005). "SciViews-R: A GUI API and a suite of applications for R. Version 0.8-9".
Full Text : [SciViews R 0.8.9 Manual.doc](#) (UMONS staff members only)

2004

Scientific journals/Article

- Grosjean, P., Picheral, M., Warembourg, C., & Gorsky, G. (01 January 2004). Enumeration, measurement, and identification of net zooplankton samples using the ZOOSCAN digital imaging system. "ICES Journal of Marine Science, 61" (4), 518-525. doi:10.1016/j.icesjms.2004.03.012
Full Text : [Grosjean2004_61ICESJMarSci.pdf](#) (UMONS staff members only)

Diverse speeches and writings/Other

- Grosjean, P. (2004). "Getting started with SciViews, R and R Commander".

2003

Scientific journals/Article

- Gorsky, G., & Grosjean, P. (01 April 2003). Qualitative and quantitative assessment of zooplankton samples. "GLOBEC International Newsletter, 9" (1), 5.
Full Text : [GorskyGrosjean2003_Globec.pdf](#) (UMONS staff members only)
- Grosjean, P., Spirlet, C., & Jangoux, M. (01 January 2003). A functional growth model with intraspecific competition applied to a sea urchin, *Paracentrotus lividus*. "Canadian Journal of Fisheries and Aquatic Sciences, 60", 237-246.
Full Text : [2003_CJFAS.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., Picheral, M., Warembourg, C., & Gorsky, G. (21 May 2003). "Enumeration, measurement and identification of net zooplankton samples using the ZOOSCAN digital imaging system". Paper presented at 3rd Zooplankton Production Symposium, Gijon, Spain.
Full Text : [2003_Gijon Session 6.pdf](#) (UMONS staff members only)[2003_Gijon Zooscan.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Paper published in a journal

- Grosjean, P. (2003). "SciViews: an object-oriented abstraction layer to design GUIs on top of various calculation kernels". Paper presented at Distributed Statistical Computing, Vienna, Austria.
Full Text : [2003_OnlineDSC.pdf](#) (UMONS staff members only)

2002

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., Picheral, M., Warembourg, C., & Gorsky, G. (20 October 2002). "New methods for treatment of net samples and for underwater imaging of zooplankton". Paper presented at PICES 11th Annual Meeting, Qingdao, China.
Full Text : [2002_China Zooscan.pdf](#) (UMONS staff members only)

2001

Scientific journals/Article

- Vaitilingon, D., Morgan, R., Grosjean, P., Gosselin, P., & Jangoux, M. (28 April 2001). Effects of delayed metamorphosis and food rations on the perimetamorphic events in the echinoid *Paracentrotus lividus* (Lamarck, 1816) (Echinodermata). "Journal of Experimental Marine Biology and Ecology, 262", 41-60.
Full Text : [2001_JEMBE.pdf](#) (UMONS staff members only)
- Spirlet, C., Grosjean, P., & Jangoux, M. (01 January 2001). Cultivation of *Paracentrotus lividus* (Echinodermata: Echinoidea) fed extruded feeds: digestion efficiency, somatic production and gonadal growth. "Aquaculture Nutrition, 7", 91-99.
Full Text : [2001_AquacultureNutrition.pdf](#) (UMONS staff members only)

Dissertations and theses/Doctoral thesis

- Grosjean, P. (2001). "Growth model of the reared sea urchin *Paracentrotus lividus* (Lamarck, 1816)". Unpublished doctoral thesis, Université de Mons. Jury: Jangoux, M. (Promotor), Josens, G., Dubois, P., Lancelot, C., Deneubourg, J. L., & Russell, M.
Full Text : [These_GrosjeanPhilippe.pdf](#) (UMONS staff members only)

2000

Scientific journals/Article

- Van Osselaer, C., & Grosjean, P. (01 January 2000). Suture and location of the coiling axis in gastropod shells. "Paleobiology, 26" (2), 238-257.
Full Text : [VanOsselaer2000_Paleobiology_SutureAndLocationOfTheCoilingAxisInGastropodShells.pdf](#) (UMONS staff members only)
- Spirlet, C., Grosjean, P., & Jangoux, M. (01 January 2000). Optimization of gonad growth by manipulation of temperature and photoperiod in cultivated sea urchin, *Paracentrotus lividus* (Lamarck) (Echinodermata). "Aquaculture, 185", 85-99.
Full Text : [2000_Aquaculture.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Paper published in a journal

- Grosjean, P., & Jangoux, M. (2000). "Growth of reared sea urchin, *Paracentrotus lividus* (Lamarck): model and optimization". Paper presented at Green sea urchin workshop, Moncton, Canada.
Full Text : [2000_OnlineMoncton.pdf](#) (UMONS staff members only)

1999

Scientific congresses and symposiums/Paper published in a journal

- Grosjean, P., Spirlet, C., & Jangoux, M. (1999). "Comparison of three body-size measurements for echinoids". Paper presented at 5th European Echinoderm Colloquium, Milano, Italy.
Full Text : [1999_EchinodermResearch.pdf](#) (UMONS staff members only)

1998

Scientific journals/Article

- Spirlet, C., Grosjean, P., & Jangoux, M. (01 January 1998). Reproductive cycle of the echinoid *Paracentrotus lividus*: analysis by means of the maturity index. "Invertebrate Reproduction and Development, 34" (1), 69-81.
Full Text : [Spirlet1998_InvertReprodDevelop_ReproductiveCycleOfParacentrotusLividusAnalysisByMeansOfMaturityIndex.pdf](#) (UMONS staff members only)
- Spirlet, C., Grosjean, P., & Jangoux, M. (01 January 1998). Optimizing food distribution in closed-circuit cultivation of edible sea urchins (*Paracentrotus lividus*: Echinoidea). "Aquatic Living Resources, 11" (4), 273-277.
Full Text : [1998_AquatLivingRes.pdf](#) (UMONS staff members only)
- Grosjean, P., Spirlet, C., Gosselin, P., Vaitilingon, D., & Jangoux, M. (01 January 1998). Land-based closed cycle echiniculture of *Paracentrotus lividus* (Lamarck) (Echinoidea: Echinodermata): a long term experiment at a pilot scale. "Journal of Shellfish Research, 17" (5), 1523-1531.
Full Text : [1998_JSR.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., Spirlet, C., & Jangoux, M. (17 February 1998). "Is land-based closed cycle echiniculture (sea urchin aquaculture) a viable alternative to fisheries today?" Paper presented at International Aquaculture Conference, Las Vegas, United States - Nevada.
Full Text : [1998_LasVegas Abstract.pdf](#) (UMONS staff members only) [1998_LasVegas Presentation.pdf](#) (UMONS staff members only)

1997

Scientific journals/Article

- Duchamps, R., Grosjean, P., & Van Osselaer, C. (01 January 1997). Quelques anomalies dans le genre *Nautilus*. "Arion, 22" (4), 133-135.

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., Spirlet, C., Lawrence, J., & Jangoux, M. (01 March 1997). "Optimizing somatic growth of the edible sea urchin (*Paracentrotus lividus* Lmk) (Echinodermata: Echinoidea) in closed-circuit cultivation with artificial diet". Paper presented at 3rd International Symposium on Nutritional Strategies and Management of Aquaculture Waste, Porto, Portugal.
Full Text : [1997_Porto Abstract.pdf](#) (UMONS staff members only)

1996

Scientific journals/Article

- Grosjean, P., Spirlet, C., & Jangoux, M. (01 January 1996). Experimental study of growth in the echinoid *Paracentrotus lividus* (Lamarck, 1816) (Echinodermata). "Journal of Experimental Marine Biology and Ecology, 201", 173-184.
Full Text : [1996_JEMBE.pdf](#) (UMONS staff members only)

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., Spirlet, C., & Jangoux, M. (07 August 1996). "Closed-circuit cultivation of the edible sea urchin *Paracentrotus lividus*: optimization of somatic growth through the control of abiotic environment". Paper presented at 9th International Echinoderm Conference, San Francisco, United States.
Full Text : [1996_SanFrancisco Abstract.pdf](#) (UMONS staff members only)

1995

Scientific congresses and symposiums/Poster

- Grosjean, P., Spirlet, C., & Jangoux, M. (11 April 1995). "Establishment and presumed causes of the trimodal distribution commonly observed in cultivated populations of juvenile *Paracentrotus lividus*". Poster session presented at 4th European Echinoderms Colloquium, London, United Kingdom.
Full Text : [1995_London abstract.pdf](#) (UMONS staff members only)

1994

Scientific congresses and symposiums/Unpublished conference/Abstract

- Kocal, E. B., Yuksel, K., & Wuilpart, M. (01 January 1994). "First approach of the performances of a closed-circuit sea urchin rearing structure". Paper presented at 3rd European Aquaculture Symposium, Bordeaux, France.
doi:10.1364/ofs.2020.t3.40

Scientific congresses and symposiums/Paper published in a journal

- Spirlet, C., Grosjean, P., & Jangoux, M. (1994). "Differentiation of the genital apparatus in a juvenile echinoid (*Paracentrotus lividus*)". Paper presented at Eighth International Echinoderm Conference, Dijon, France.

1993

Scientific congresses and symposiums/Unpublished conference/Abstract

- Grosjean, P., & Jangoux, M. (01 January 1993). "Effect of light on feeding in cultivated echinoids (*Paracentrotus lividus*)". Paper presented at Eighth International Echinoderm Conference, Dijon, France.