

Short curriculum vitae
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Laboratoire d'Océanographie de Villefranche
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Diplômes universitaires

- 1994 : Habilitation à diriger des recherches, Université de Nice
- 1987 : Doctorat, Océanographie, Université d'Aix-Marseille II
- 1982 : Diplôme d'études approfondies en Océanographie, Université d'Aix-Marseille II

Carrière professionnelle

- 2015-présent : Chercheur associé, Institut du développement durable et des relations internationales, Sciences Po, France
- 2005-présent : Directeur de recherche au CNRS, Laboratoire d'Océanographie de Villefranche
- 2006-2009 : *Research Professor, Marine Biology Institute*, Université de Shantou, Chine
- 2004-2005 : Professeur invité, *Rutgers University* et *National Center for Atmospheric Research*, USA
- 1998-2004 : Responsable d'équipe, Laboratoire d'Océanographie de Villefranche
- 1998-2004 : Directeur de recherche, Centre Scientifique de Monaco, Principauté de Monaco
- 1990-1992 : Chargé de recherche au CNRS, École pratique des hautes études et Université de Perpignan
- 1988-1990 : Chercheur postdoctoral, *Australian Institute of Marine Science*
- 1985-1987 : Assistant, Université de Nice

Distinctions

- Médaille Blaise Pascal, *European Academy of Sciences* (2014)
- Médaille Vladimir Vernadsky, *European Geosciences Union* (2012)
- Prime d'excellence, CNRS (2012)
- *Union Service Award*, *European Geosciences Union* (2005)
- *Outstanding reviewer*, *Limnology & Oceanography* (2002)
- Médaille d'Océanographie, Société d'océanographie de France (2001)

Thèmes de recherche

- Cycle du carbone et des carbonates dans l'océan
- Impacts des changements globaux (température, acidité, pollution) sur les organismes, les écosystèmes et les services écosystémiques

Activités éditoriales

- 2011 : éditeur de l'ouvrage *Ocean acidification* publié par *Oxford University Press*
- 2010-présent : éditeur, *Biogeosciences*
- 2006-présent : éditeur, *The Encyclopedia of Earth*
- 2004-2009 : éditeur-en-chef et fondateur, *Biogeosciences*
- 2002-présent : éditeur, *The Eggs*
- 2002-2004 : éditeur, *Surveys in Geophysics*
- 1997-2005 : éditeur, *Coral Reefs*

Assemblées consultatives nationales et internationales, organisation de congrès

- 2016: Membre, Comité scientifique de la Division Terre et Environnement de l'Académie Européenne des Sciences
- 2015: Président, Programme Acidification des Océans et Biodiversité, Ministère de l'environnement

- 2015: Membre, Comité scientifique de la Plateforme Océan-Climat, Unesco
- 2015: Membre, Conseil scientifique, Chantier Arctique
- 2014: Président, Comité d'organisation international, The Oceans in a High CO₂ World 4, Hobart, 2016
- 2014 : membre élu de l'Académie Européenne des Sciences (EURASC)
- 2013-présent : membre, Conseil scientifique de Office parlementaire d'évaluation des choix scientifiques et technologiques (OPECST)
- 2013-present: Président, Association Monégasque pour l'Acidification des Océans.
- 2012-present: membre, Advisory Board of the Ocean Acidification International Coordination Centre
- 2012 : membre, groupe de travail de l'Académie des sciences américaine sur l'évaluation du Programme national US concernant l'acidification des océans
- 2012-2017 : membre élu, Conseil d'administration de l'Observatoire océanologique de Villefranche
- 2011-présent : membre, Comité scientifique du programme européen CARBOCHANGE
- 2011-2012 : membre, *Belmont Forum Working Group of Ocean Acidification*
- 2011-2012 : membre, Comité scientifique du congrès de la Société américaine de limnologie et océanographie 2012 (Lake Biwa, Japon)
- 2010-2014 : co-auteur de trois chapitres du 5ème rapport du Groupe d'experts intergouvernemental sur l'évolution du climat (GIEC; *Coastal systems and low-lying areas, Ocean systems, Technical summary*) et de trois *cross-chapters boxes* (*Ocean acidification, Coral reefs, Upwellings*)
- 2010-2012 : membre, Comité scientifique du Programme international sur le carbone océanique (IOCCP)
- 2011-2012 : membre, Comité scientifique, The Oceans in a High-CO₂ World III', Monterey, Californie
- 2009-2012 : Président, Groupe de travail SOLAS-IMBER sur l'acidification des océans
- 2009 : Organisateur, Congrès de la Société américaine de limnologie et océanographie à Nice, 2350 participants
- 2009 : Co-organisateur, Congrès des sciences du Pacifique, Tahiti, 881 participants
- 2009-présent : membre, Programme national allemand sur l'acidification des océans (BIOACID)
- 2009-présent : membre, Programme national britannique sur l'acidification des océans (UKOA)
- 2008-2011 : membre, Comité *Ocean acidification* du programme américain sur la carbone et la biogéochimie océanique (OCB)
- 2008-présent : membre, *Comité National Français sur le Changement Global* (French National Committee on Global Change)
- 2008-présent : membre, Comité scientifique du programme IGBP-SCOR *Integrated Marine Biogeochemistry and Ecosystem Research* (IMBER)
- 2008-2012 : Coordinateur du projet européen sur l'acidification des océans (EPOCA)
- 2008-présent : *Comité de sélection UPMC 67ème section*
- 2008 : membre, Comité scientifique du congrès "The Oceans in a High-CO₂ World II", Monaco
- 2006-2011 : membre, Comité scientifique du *Group of Aquatic Productivity*
- 2006-2009 : membre, *Comité scientifique, LEFE-Cycles biogéochimiques, Environnement et Ressources* (INSU-CNRS)
- 2006-2009 : membre, Conseil d'administration du Centre d'Océanologie de Marseille
- 2006 : membre, Comité d'évaluation du *Darwin Center for Biogeology*
- 2001-2005 : Président fondateur de la division Biogéosciences de l'Union Européenne de Géosciences (EGU)
- 2000-2004 : membre, Comité *Biogeosciences* de l'Union américaine de géophysique (AGU)
- 2000-2004 : membre, Comité national de la recherche scientifique, section 30

Contrats de recherche (liste partielle)

- *Southern Ocean pH Monitoring*, Fondation Prince Albert II de Monaco (2017-2018)
- *The Ocean Solutions Initiative*, Veolia Fondation, Fondation Prince Albert II de Monaco, Ocean Acidification International Coordination Centre (2016-2018)
- *Integrated Arctic Observation System* (INTAROS), European Commission (2016-2020)
- HighCO₂Seas, Fondation Total, (2016-2018)
- *Small islands addressing climate change: towards storylines of risk and adaptation* (STORISK),

ANR (2016-2018)

- AWIPEV-CO₂, Institut polaire français Paul Émile Victor (2015, 2016, 2017)
- *The Oceans 2015 Initiative*, Fondation Prince Albert II de Monaco, Ocean Acidification International Coordination Centre, Fondation BNP Paribas (2014)
- *European Ocean Free Carbon Dioxide Enrichment Experiment (eFOCE)*, Fondation BNP Paribas (2011)
- *Mediterranean Sea Acidification in a changing climate (MedSeA)*, Commission européenne (2011)
- Impact de l'acidification des océans dans l'océan Arctique, IPEV Institut polaire français (2009)
- *European Project on Ocean Acidification (EPOCA)*, Commission européenne (2008). J'ai coordonné ce *large-scale integrating project* qui comprenait 32 institutions partenaires et plus de 160 scientifiques
- *Ocean carbon sources and sinks (CARBOOCEAN)*, Commission européenne (2005)
- *EUR-OCEANS European Network of Excellence*, Commission européenne (2005)
- *Biodiversity of Open Ocean Microcalcifiers (BOOM)*, Agence nationale de la recherche (2005)
- *Marine Biodiversity and Ecosystem Function (MARBEF)*, Commission européenne (2004)
- *Metabolic status of coastal European ecosystems (EUROTROPH)*, European Commission (2000)

Sélection d'articles

Une liste complète est disponible ici : http://www.obs-vlfr.fr/~gattuso/jpg_papers.php

- < **2010** Frankignoulle M., Canon C. & Gattuso J.-P., 1994. Marine calcification as a source of carbon dioxide-Positive feedback of increasing atmospheric CO₂. *Limnology and Oceanography* 39:458-462.
- Gattuso J.-P., Frankignoulle M., Bourge I., Romaine S. & Buddemeier R. W., 1998. Effect of calcium carbonate saturation of seawater on coral calcification. *Global and Planetary Change* 18:37-46.
- Gattuso J.-P., Frankignoulle M. & Wollast R., 1998. Carbon and carbonate metabolism in coastal aquatic ecosystems. *Annual Review of Ecology and Systematics* 29:405-434.
- Kleypas J. A., Buddemeier R. W., Archer D., Gattuso J.-P., Langdon C. & Opdyke B. N., 1999. Geochemical consequences of increased atmospheric CO₂ on coral reefs. *Science* 284:118-120.
- Gattuso J.-P., Allemand D. & Frankignoulle M., 1999. Photosynthesis and calcification at cellular, organismal and community levels in coral reefs: a review on interactions and control by carbonate chemistry. *American Zoologist* 39(1):160-183.
- Gattuso J.-P. & Buddemeier R. W., 2000. Ocean biogeochemistry: calcification and CO₂. *Nature* 407:311-312.
- Kleypas J. A., Buddemeier R. W. & Gattuso J.-P., 2001. The future of coral reefs in an age of global change. *International Journal of Earth Sciences* 90(2):426-437.
- Reynaud S., Leclercq N., Romaine-Lioud S., Ferrier-Pagès C., Jaubert J. & Gattuso J.-P., 2003. Interacting effects of CO₂ partial pressure and temperature on photosynthesis and calcification in a scleractinian coral. *Global Change Biology* 9(11):1660-1668.
- Delille B., Harlay J., Zondervan I., Jacquet S., Chou L., Wollast R., Bellerby R. G. J., Frankignoulle M., Borges A. V., Riebesell U. & Gattuso J.-P., 2005. Response of primary production and calcification to changes of pCO₂ during experimental blooms of the coccolithophorid *Emiliania huxleyi*. *Global Biogeochemical Cycles* 19, GB2023. doi:10.1029/2004GB002318.
- Gattuso J.-P., Gentili B., Duarte C. M., Kleypas J. A., Middelburg J. J. & Antoine D., 2006. Light availability in the coastal ocean: impact on the distribution of benthic photosynthetic organisms and their contribution to primary production. *Biogeosciences* 3:489-513.
- Comeau S., Jeffree R., Teyssié J.-L. & Gattuso J.-P., 2010. Response of the Arctic pteropod *Limacina helicina* to projected future environmental conditions. *PLoS ONE* 5: e11362.
- Nisumaa A.-M., Pesant S., Bellerby R. G. J., Middelburg J. J., Orr J. C., Riebesell U., Tyrrell T., Wolf-Gladrow D. & Gattuso J.-P., 2010. EPOCA/EUR-OCEANS data compilation on the biological and biogeochemical responses to ocean acidification. *Earth System Science Data* 2: 167-175.
- Riebesell U., Fabry V. J., Hansson L. & Gattuso J.-P. (eds.), 2010. *Guide to best practices for ocean acidification research and data reporting*, 260 p. Luxembourg: Publications Office of the European Union.
- Rodolfo-Metalpa R., Martin S., Ferrier-Pagès C. & Gattuso J.-P., 2010. Response of the temperate coral *Cladocora caespitosa* to mid- and long-term exposure to pCO₂ and temperature levels projected for the 2100 AD. *Biogeosciences* 7: 289-300.

- Smith S. V. & Gattuso J.-P., 2010. Balancing the oceanic calcium carbonate cycle: consequences of variable water column. *Aquatic Geochemistry*.
- Turley C., Eby M., Ridgwell A. J., Schmidt D. N., Findlay H. S., Brownlee C., Riebesell U., Fabry V. J., Feely R. A. & Gattuso J.-P., 2010. The societal challenge of ocean acidification. *Marine Pollution Bulletin* 60: 787-792.
- 2011** Martin S., Richier S., Pedrotti M. L., Dupont S., Castejon C., Gerakis Y., Kerros M.-E., Oberhänsli F., Teyssié J.-L., Jeffrey R. & Gattuso J.-P. 2011. Early development and molecular plasticity in the Mediterranean sea urchin *Paracentrotus lividus* exposed to CO₂-driven acidification. *Journal of Experimental Biology* 214:1357-1368.
- Richier S., Fiorini S., Kerros M.-E., von Dassow P. & Gattuso J.-P., 2011. Response of the calcifying coccolithophore *Emiliania huxleyi* to low pH/high pCO₂: from physiology to molecular level. *Marine Biology* 158:551-560.
- Fiorini S., Middelburg J. & Gattuso J.-P., 2011. Testing the effects of elevated pCO₂ on coccolithophores (Prymnesiophyceae): comparison between haploid and diploid life stages. *Journal of Phycology* 47:1281-1291.
- Anthony K., Kleypas J. & Gattuso J.-P., 2011. Coral reefs modify their seawater carbon chemistry – implications for impacts of ocean acidification. *Global Change Biology* 17:3655-3666.
- Comeau S., Gattuso J.-P., Nisumaa A.-M. & Orr J., 2011. Impact of aragonite saturation state changes on migratory pteropods. *Proceedings of the Royal Society of London. Series B: Biological Sciences* 279:732-738.
- Fiorini S., Middelburg J. & Gattuso J.-P., 2011. Testing the effects of elevated pCO₂ on coccolithophores (Prymnesiophyceae): comparison between haploid and diploid life stages. *Journal of Phycology* 47:1281-1291.
- Gattuso J.-P. & Hansson L. (eds.), 2011. *Ocean acidification*, 326 p. Oxford: Oxford University Press.
- Gattuso J.-P., Bijma J., Gehlen M., Riebesell U. & Turley C., 2011. Ocean acidification: knowns, unknowns and perspectives. In: Gattuso J.-P. & Hansson L. (Eds.), *Ocean acidification*. 291-311. Oxford: Oxford University Press.
- Kleypas J. A., Anthony K. R. N. & Gattuso J.-P., 2011. Coral reefs modify their seawater carbon chemistry- Case study from a barrier reef (Moorea, French Polynesia). *Global Change Biology* 17:3667-3678.
- Maier C., Watremez P., Taviani M., Weinbauer M. & Gattuso J.-P., 2011. On board experiments to determine calcification rates and the effect of ocean acidification on Mediterranean cold-water corals. *Proceedings of the Royal Society of London. Series B: Biological Sciences* 279:1734.
- Rodolfo-Metalpa R., Houlbrèque F., Tambutté É., Boisson F., Baggini C., Patti F. P., Jeffrey R., Fine M., Foggo A., Gattuso J.-P. & Hall-Spencer J. M., 2011. Coral and mollusc resistance to ocean acidification adversely affected by warming. *Nature Climate Change* 1:308-312.
- 2012** Comeau S., Alliouane S. & Gattuso J.-P., 2012. Effects of ocean acidification on overwintering juvenile Arctic pteropods *Limacina helicina*. *Marine Ecology Progress Series* 456:279-284.
- Maier C., Watremez P., Taviani M., Weinbauer M. G. & Gattuso J.-P., 2012. Calcification rates and the effect of ocean acidification on Mediterranean cold-water corals. *Proceedings of the Royal Society of London. Series B: Biological Sciences* 279:1716-1723.
- Pedrotti M. L., Fiorini S., Kerros M.-E., Middelburg J. & Gattuso J.-P., 2012. Production of transparent exopolymeric particles by haploid and diploid life stages of three coccolithophores grown under different CO₂ concentrations. *Journal of Plankton Research* 34:388-398.
- Turley C. & Gattuso J.-P., 2012. Future biological and ecosystem impacts of ocean acidification and their socioeconomic-policy implications. *Current Opinion In Environmental Sustainability* 4:278-286.
- 2013** Dorey N., Melzner F., Martin S., Oberhänsli F., Teyssié J.-L., Bustamante P., Gattuso J.-P. & Lacoue-Labarthe T., 2013. Ocean acidification and temperature rise: effects on calcification during early development of the cuttlefish *Sepia officinalis*. *Marine Biology* 160:2007-2022.
- Gattuso J.-P., Mach K. J. & Morgan G. M., 2013. Ocean acidification and its impacts: an expert survey. *Climatic Change* 117:725-738.
- Gazeau F., Parker L. M., Comeau S., Gattuso J.-P., O'Connor W., Martin S., Pörtner H.-O. & Ross P., 2013. Impacts of ocean acidification on marine shelled molluscs. *Marine Biology* 160:2207-2245.
- Kroeker K., Kordas R. C., Ryan, Hendriks I., Ramajo L., Singh G., Duarte C. & Gattuso J.-P., 2013. Impacts of ocean acidification on marine organisms: quantifying sensitivities and interaction with

warming. *Global Change Biology* 19:1884-1896.

Martin S., Cohu S., Vignot C., Zimmerman G. & Gattuso J.-P., 2013. One-year experiment on the physiological response of the Mediterranean crustose coralline alga, *Lithophyllum cabiochae*, to elevated pCO₂ and temperature. *Ecology and Evolution* 3:676-693.

Pretet C., Samankassou E., Felis T., Reynaud S., Böhm F., Eisenhauer A., Ferrier-Pagès C., Gattuso J.-P. & Camoin G., 2013. Constraining calcium isotope fractionation ($\delta^{44/40}Ca$) in modern and fossil scleractinian coral skeleton. *Chemical Geology* 340:49–58.

Tanaka T., Alliouane S., Bellerby R. G. J., Czerny J., de Kluijver A., Riebesell U., Schulz K. G., Silyakova A. & Gattuso J.-P., 2013. Effect of increased pCO₂ on the planktonic metabolic balance during a mesocosm experiment in an Arctic fjord. *Biogeosciences* 10:315-325.

2014 Asnaghi V., Mangialajo L., Gattuso J.-P., Francour P., Privitera D. & Chiantore M., 2014. Effects of ocean acidification and diet on thickness and carbonate elemental composition of the test of juvenile sea urchins. *Marine Environmental Research* 93:78-84.

Field C., Barros V., Mach K., Mastrandrea M., van Aalst M., Adger N., Aldunce P., Arent D., Barnett J., Betts R., Bilir E., Birkmann J., Carmin J., Chadee D., Challinor A., Chatterjee M., Cramer W., Estrada Y., Gattuso J.-P., Hijioka Y., Hoegh-Guldberg O., Huang H.-Q., Insarov G., Jones R., Kovats S., Romero Lankao P., Nymand L. J., Losada I., Marengo J., McLean R., Mearns L., Mechler R., Morton J., Niang I., Oki T., Olwoch J. M., Opondo M., Poloczanska E., Pörtner H.-O., Redster M. H., Reisinger A., Revi A., Schmidt D., Shaw R., Solecki W., Stone J., Strzepek K., Suarez A., Tschakert P., Valentini R., Vicuna S., Villamizar A., Vincent K., Warren R., Wilbanks T., Wong P. P. & Yohe G., 2014. Technical summary. In: Field C. B., Barros V. R., Dokken D. J., Mach K. J., Mastrandrea M. D., Bilir T. E., Chatterjee M., Ebi K. L., Estrada Y. O., Genova R. C., Girma B., Kissel E. S., Levy A. N., MacCracken S., Mastrandrea P. R. & White L. L. (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, pp. 35-94. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

Gattuso J.-P., Brewer P., Hoegh-Guldberg O., Kleypas J. A., Pörtner H.-O. & Schmidt D., 2014. Ocean acidification. In: Field C. B., Barros V. R., Dokken D. J., Mach K. J., Mastrandrea M. D., Bilir T. E., Chatterjee M., Ebi K. L., Estrada Y. O., Genova R. C., Girma B., Kissel E. S., Levy A. N., MacCracken S., Mastrandrea P. R. & White L. L. (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, pp. 129-131. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

Gattuso J.-P., Hansson L. & Gazeau F., in press. Ocean acidification and its consequences. In: Monaco A. & Prouzet P. (Eds.), *Ocean in the Earth System*, pp. London: Hermès Sciences Publishing.

Gattuso J.-P., Hoegh-Guldberg O. & Pörtner H.-O., 2014. Coral reefs. In: Field C. B., Barros V. R., Dokken D. J., Mach K. J., Mastrandrea M. D., Bilir T. E., Chatterjee M., Ebi K. L., Estrada Y. O., Genova R. C., Girma B., Kissel E. S., Levy A. N., MacCracken S., Mastrandrea P. R. & White L. L. (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, pp. 97-100. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

Gattuso J.-P., Kirkwood W., Barry J. P., Cox E., Gazeau F., Hansson L., Hendriks I. E., Kline D. I., Mahacek P., Marker M., Martin S., McElhany P., Peltzer E. T., Reeve J., Roberts D., Saderne V., Tait K., Widdicombe S. & Brewer P., 2014. Free-ocean CO₂ enrichment (FOCE) systems: present status and future developments. *Biogeosciences* 11:4057-4075.

Howes E. L., Bednarsek N., Büdenbender J., Comeau S., Doubleday A., Hopcroft R., Lischka S., Maas A. E., Bijma J. & Gattuso J.-P., 2014. Sink and swim, a status review of thecosome pteropod culture techniques. *Journal of Plankton Research* 36:299-315.

Lluch-Cota S. E., Hoegh-Guldberg O., Karl D., Pörtner H.-O., Sundby S. & Gattuso J.-P., 2014. Uncertain trends in major upwelling ecosystems. In: Field C. B., Barros V. R., Dokken D. J., Mach K. J., Mastrandrea M. D., Bilir T. E., Chatterjee M., Ebi K. L., Estrada Y. O., Genova R. C., Girma B., Kissel E. S., Levy A. N., MacCracken S., Mastrandrea P. R. & White L. L. (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on*

Climate Change, pp. 149-151. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

Pörtner H.-O., Karl D., Boyd P., Cheung W., Lluich-Cota S. E., Nojiri Y., Schmidt D., Zavialov P. et al., 2014. Ocean systems. In: Field C. B., Barros V. R., Dokken D. J., Mach K. J., Mastrandrea M. D., Bilir T. E., Chatterjee M., Ebi K. L., Estrada Y. O., Genova R. C., Girma B., Kissel E. S., Levy A. N., MacCracken S., Mastrandrea P. R. & White L. L. (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, pp. 411-484. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

Pretet C., Samankassou E., Felis T., Reynaud S., Böhm F., Eisenhauer A., Ferrier-Pagès C., Gattuso J.-P. & Camoin G., 2014. Effect of salinity on the skeletal chemistry of cultured scleractinian zooxanthellate corals: Cd/Ca ratio as a potential proxy for salinity reconstruction. *Coral Reefs* 33:169-180.

Wong P. P., Losada I. J., Gattuso J.-P., Hinkel J., Khattabi A., McInnes K., Saito Y. & Sallenger A., 2014. Coastal systems and low-lying areas. In: Field C. B., Barros V. R., Dokken D. J., Mach K. J., Mastrandrea M. D., Bilir T. E., Chatterjee M., Ebi K. L., Estrada Y. O., Genova R. C., Girma B., Kissel E. S., Levy A. N., MacCracken S., Mastrandrea P. R. & White L. L. (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, pp. 361-409. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.

2015 Cox T. E., Schenone S., Delille J., Díaz-Castañeda V., Alliouane S., Gattuso J.-P. & Gazeau F., 2015. Effects of ocean acidification on *Posidonia oceanica* epiphytic community and shoot productivity. *Journal of Ecology* 103:1594-1609.

Gattuso J., Magnan A., Billé R., Cheung W. W. L., Howes E. L., Joos F., Allemand D., Bopp L., Cooley S., Eakin C. M., Hoegh-Guldberg O., Kelly R. P., Pörtner H., Rogers A. D., Baxter J. M., Laffoley D., Osborn D., Rankovic A., Rochette J., Sumaila U. R., Treyer S. & Turley C., 2015. Contrasting futures for ocean and society from different anthropogenic CO₂ emissions scenarios. *Science* 349:aac4722.

Gazeau F., Urbini L., Cox T. E., Alliouane S. & Gattuso J.-P., 2015. Comparison of the alkalinity and calcium anomaly techniques to estimate rates of net calcification. *Marine Ecology Progress Series* 527:1-12.

Howes E. L., Joos F., Eakin C. M. & Gattuso J.-P., 2015. An updated synthesis of the observed and projected impacts of climate change on the chemical, physical and biological processes in the oceans. *Frontiers in Marine Science* 2:36.

Howes E. L., Stemmann L., Assailly C., Irisson J.-O., Dima M., Bijma J. & Gattuso J.-P., 2015. Pteropod time-series from the North Western Mediterranean (1967-2003): impacts of pH and climate variability. *Marine Ecology Progress Series* 531:193-206.

Maugendre L., Gattuso J.-P., Louis J., de Kluijver A., Marro S., Soetaert K. & Gazeau F., 2015. Effect of ocean warming and acidification on a plankton community in the NW Mediterranean Sea. *ICES Journal of Marine Science* 72:1744-1755.

Moya A., Huisman L., Ball E. E., Hayward D. C., Chua C. M., Woo H. N., Gattuso J.-P., Forêt S. & Miller D. J., 2015. Rapid acclimation of juvenile corals to CO₂-mediated acidification by up-regulation of HSP and Bcl-2 genes. *Molecular Ecology* 24:438-452.

Orr J. C., Epitalon J.-M. & Gattuso J.-P., 2015. Comparison of ten packages that compute ocean carbonate chemistry. *Biogeosciences* 12:1483-1510.

Riebesell U. & Gattuso J.-P., 2015. Lessons learned from ocean acidification research. *Nature Climate Change* 5:12-14.

Villar E., Audic S., Bittner L., Blanke B., Brum J. R., Brunet C., Casotti R., Chase A., Dolan J. R., d'Ortenzio F., Farrant G., Garczarek L., Gattuso J.-P., Gorsky G., Grima N., Guidi L., Hill C. N., Jahn O., Lepoivre C., Malviya S., Pelletier E., Romagnan J. B., Roux S., Santini S., Scalco E., Schwenck S. M., Tanaka T., Testor P., Vannier T., Vincent F., Dimier C., Picheral M., Searson S., Kandels-Lewis S., Acinas S. G., Boss E., Bowler C., de Vargas C., Follows M., Ogata H., Pesant S., Speich S., Sullivan M. B., Sunagawa S., Wincker P., Zingone A., Karsenti K., Not F., Hingamp P. & Iudicone D., 2015. Dispersal and remodeling of plankton communities by Agulhas rings. *Science* 348:1261447.

- 2016** Edmunds P. J., Comeau S., Lantz C., Andersson A., Briggs C., Cohen A., Gattuso J.-P., Grady J. M., Gross K., Johnson M., Muller E. B., Ries J. B., Tambutté S., Tambutté E., Venn A. & Carpenter R. C., 2016. Integrating the effects of ocean acidification across functional scales on tropical coral reefs. *BioScience* 66:350-362.
- Magnan A. K., Colombier M., Billé R., Hoegh-Guldberg O., Joos F., Pörtner H.-O., Waisman H., Spencer T. & Gattuso J.-P., 2016. Implications of the Paris Agreement for the ocean. *Nature Climate Change* 6:732-735.
- Maier C., Popp P., Sollfrank N., Weinbauer M. G., Wild C. & Gattuso J.-P., 2016. Effects of elevated pCO₂ and feeding on net calcification and energy budget of the Mediterranean cold-water coral *Madrepora oculata*. *The Journal of Experimental Biology* 219:3208-3217.
- Moya A., Howes E. L., Lacoue-Labarthe T., Forêt S., Hanna B., Medina M., Munday P. L., Ong J.-S., Teyssié J.-L., Torda G., Watson S.-A., Miller D. J., Bijma J. & Gattuso J.-P., 2016. Near-future pH conditions severely impact calcification, metabolism and the nervous system in the pteropod *Heliconoides inflatus*. *Global Change Biology* 22:3888-3900.
- Nash M. C., Martin S. & Gattuso J.-P., 2016. Mineralogical response of the Mediterranean crustose coralline alga *Lithophyllum cabiochae* to near-future ocean acidification and warming. *Biogeosciences* 13:5937-5945.
- Yang Y., Hansson L. & Gattuso J.-P., 2016. Data compilation on the biological response to ocean acidification: an update. *Earth System Science Data* 8:79-87.
- 2017** Cox T., Nash M., Gazeau F., Daniel M., Legrand E., Alliouane S., Mahacek P., Le Fur A., Gattuso J.-P. & Martin S., 2017. Effects of *in situ* CO_{2i}/sub_i enrichment on *Posidonia oceanica* epiphytic community composition and mineralogy. *Marine Biology* 164:103.
- Howes E. L., Eagle R., Gattuso J.-P. & Bijma J., 2017. Comparison of Mediterranean pteropod shell biometrics and ultrastructure from historical (1910 and 1921) and present day (2012) samples provides baseline for monitoring effects of global change. *PLoS ONE* 12:e0167891.
- Howes E. L., Kaczmarek K., Raitzsch M., Mewes A., Bijma N., Horn I., Misra S., Gattuso J.-P. & Bijma J., 2017. Decoupled carbonate chemistry controls on the incorporation of boron into *Orbulina universa*. *Biogeosciences* 14:415-430.
- Kapsenberg L., Alliouane S., Gazeau F., Mousseau L. & Gattuso J.-P., 2017. Coastal ocean acidification and increasing total alkalinity in the northwestern Mediterranean Sea. *Ocean Science* 13:411-426.
- Maugendre L., Gattuso J.-P., de Kluijver A., Soetaert K., van Oevelen D., Middelburg J. J. & Gazeau F., 2017. Carbon-13 labelling shows no effect of ocean acidification on carbon transfer in Mediterranean plankton communities. *Estuarine, Coastal and Shelf Science* 186A:100-111.
- Maugendre L., Gattuso J.-P., Poulton A. J., Dellisanti W., Gaubert M., Guieu C. & Gazeau F., 2017. No detectable effect of ocean acidification on plankton metabolism in the NW oligotrophic Mediterranean Sea: results from two mesocosm studies. *Estuarine, Coastal and Shelf Science* 186A:89-99.
- Maugendre L., Guieu C., Gattuso J.-P. & Gazeau F., 2017. Ocean acidification in the Mediterranean Sea: pelagic mesocosm experiments. A synthesis. *Estuarine, Coastal and Shelf Science* 186A:1-10.
- Riou V., Para J., Garel M., Guigue C., Al Ali B., Santinelli C., Lefèvre D., Gattuso J.-P., Goutx M., Jacquet S., Le Moigne F., Tachikawa K. & Tamburini C., in press. Biodegradation of *Emiliania huxleyi* aggregates by a natural Mediterranean prokaryotic community under increasing hydrostatic pressure. *Progress in Oceanography*.
- Sauzède R., Claustre H., Pasqueron de Fommervault O., Bittig H., Gattuso J.-P., Legendre L. & Johnson K., 2017. Estimates of water-column nutrients concentration and carbonate system parameters in the global ocean: A novel approach based on neural networks. *Frontiers in Marine Science* 4:128.