

- ACL1. "Anionic ring-opening polymerization of cyclodisilazanes: 1- General aspects"**
S. Bruzaud, A. Soum, *Macromol. Chem. Phys.* **1995**, 197, 2379-2391
- ACL2. "Ring-opening polymerization of organosilicon cyclic monomers"**
M. Bouquey, C. Brochon, S. Bruzaud, A.-F. Mingotaud, M. Schappacher, A. Soum, *J. Organomet. Chem.* **1996**, 521, 21-27
- ACL3. "Polysilazanes through ring-opening polymerization"**
A. Soum, L. Billon, M. Bouquey, S. Bruzaud, E. Duguet, M. Schappacher, *The Polymeric Materials Encyclopedia: Synthesis, Properties and Applications*, édité par J.C. Salamone, CRC Press, Boca Raton, USA, **1996**, 6747-6757
- ACL4. "Anionic ring-opening polymerization of cyclodisilazanes: 2- Influence of additives on the kinetics of polymerization"**
S. Bruzaud, A.-F. Mingotaud, A. Soum, *Macromol. Chem. Phys.* **1997**, 198, 1873-1884
- ACL5. "Anionic ring-opening polymerization of cyclodisilazanes: Evaluation of the reactivity of active centers"**
S. Bruzaud, A.-F. Mingotaud, A. Soum, *Ionic Polymerizations* **1997**, 13, 261-267
- ACL6. " ω -chloro- α -olefins as comonomers and termonomers for the synthesis of functional polyolefins"**
S. Bruzaud, H. Cramail, L. Duvignac, A. Deffieux, *Macromol. Chem. Phys.* **1997**, 198, 291-303
- ACL7. "Multinucleus NMR characterization of new silylamines and their corresponding lithium silylamides"**
S. Bruzaud, A.-F. Mingotaud, A. Soum, *J. Organomet. Chem.* **1998**, 561, 77-84
- ACL8. "Synthesis and characterization of new functional polymers by polymer-analog reactions on EVOH copolymer"**
S. Bruzaud, G. Levesque, *Macromol. Chem. Phys.* **2000**, 201, 1758-1764
- ACL9. "Polysiloxane-*g*-TiNbO₅ nanocomposites: synthesis via *in situ* intercalative polymerization and preliminary characterization"**
S. Bruzaud, G. Levesque, *Chem. Mater.* **2002**, 14, 2421-2426
- ACL10. "Preparation of polysiloxane-*g*-TiNbO₅ nanocomposites: different routes"**
S. Bruzaud, A. Beigbeder, Y. Grohens, *Chemical Bulletin of "POLITEHNICA" University of Timisoara, Romania* **2003**, 48, 6-11
- ACL11. "Influence of clay nanofiller incorporation on electrical and rheological properties of conductive polymer composite"**
J.F. Feller, S. Bruzaud, Y. Grohens, *Mater. Lett.* **2004**, 58, 739-745
- ACL12. "Elaboration of poly(ϵ -caprolactone)-*g*-TiNbO₅ nanocomposites via *in situ* metal complex initiated intercalative polymerization"**
S. Bruzaud, J.F. Carpentier, Y. Grohens, *Macromol. Mater. Eng.* **2004**, 289, 531-538
- ACL13. "Dynamics and crystallization in polydimethylsiloxane nanocomposites"**
A. Beigbeder, S. Bruzaud, J. Speváček, J. Brus, Y. Grohens, *Macromol. Symp.* **2005**, 222, 225-232
- ACL14. "Syndiotactic polystyrene/organoclay nanocomposites: synthesis via *in situ* coordination-insertion polymerization and preliminary characterization"**
S. Bruzaud, Y. Grohens, S. Ilinca, J.F. Carpentier, *Macromol. Mater. Eng.* **2005**, 290, 1106-1114
- ACL15. "Rheological characterization of polydimethylsiloxane-TiNbO₅ nanocomposites prepared by different routes"**
A. Beigbeder, S. Bruzaud, P. Médéric, T. Aubry, Y. Grohens, *Polymer* **2005**, 46, 12279-12286
- ACL16. "Elaboration and characterization of PDMS/HTiNbO₅ nanocomposite membranes"**
L. Lebrun, S. Bruzaud, Y. Grohens, D. Langevin, *Eur. Polym. J.* **2006**, 42, 1975-1985
- ACL17. "Thermal degradation and (nano)mechanical behaviour of layered silicate reinforced poly(3-hydroxybutyrate-co-3-hydroxyvalerate) nanocomposites"**
S. Bruzaud, A. Bourmaud, *Polym. Test.* **2007**, 26, 652-659
- ACL18. "Effect of gamma irradiation on the structure and properties of polypropylene/clay nanocomposites"**
N. Touati, M. Kaci, H. Ahouari, S. Bruzaud, Y. Grohens, *Macromol. Mater. Eng.* **2007**, 292, 1271-1279

- ACL19. "The *in situ* polymerization for the elaboration of nanocomposites materials with controlled properties"**
S. Bruzaud, Y. Grohens, *Int. J. Nanotechnol.* **2008**, 5, 660-668
- ACL20. "Photo-oxydation of polystyrene/clay nanocomposites under accelerated UV exposure: Effect on the structure and molecular weight"**
C. Remili, M. Kaci, S. Kachbi, S. Bruzaud, Y. Grohens, *J. Appl. Polym. Sci.* **2009**, 112, 2868-2875
- ACL21. "Carbon nanotubes/poly(ϵ -caprolactone) composite vapour sensors"**
M. Castro, J. Lu, S. Bruzaud, B. Kumar, J.F. Feller, *Carbon* **2009**, 47, 1930-1942
- ACL22. "Relationship between structure and rheological, mechanical and thermal properties of polylactide/Cloisite 30B nanocomposites"**
L. Zaidi, S. Bruzaud, A. Bourmaud, P. Médéric, M. Kaci, Y. Grohens, *J. Appl. Polym. Sci.* **2010**, 116, 1357-1365
- ACL23. "Effect of photo-oxydation of polystyrene/Cloisite 15A nanocomposites under accelerated UV exposure"**
M. Kaci, C. Rémi, S. Bruzaud, Y. Grohens, *Acad. J. Manufact. Eng.* **2010**, 8, 61-66
- ACL24. "Structure and thermal behavior of Polyhedral Oligomeric Silsesquioxane modified clay"**
F.X. Perrin, S. Bruzaud, Y. Grohens, *Appl. Clay Sci.* **2010**, 49, 113-119
- ACL25. "Effect of natural weather on the structure and properties of polylactide/Cloisite 30B nanocomposites"**
L. Zaidi, M. Kaci, S. Bruzaud, A. Bourmaud, Y. Grohens, *Polym. Degrad. Stab.* **2010**, 95, 1751-1758
- ACL26. "Characterization of bionanocomposites based on medium-chain-length polyhydroxyalkanoates synthesized by *Pseudomonas oleovorans*"**
S. Chardron, S. Bruzaud, B. Lignot, A. Elain, O. Sire, *Polym. Test.* **2010**, 29, 966-971
- ACL27. "The effects of reprocessing cycles on the structure and properties of isotactic polypropylene/Cloisite 15A nanocomposites"**
N. Touati, M. Kaci, S. Bruzaud, Y. Grohens, *Polym. Degrad. Stab.* **2011**, 96, 1064-1073
- ACL28. "The effects of reprocessing cycles on the structure and properties of polystyrene/Cloisite 15A nanocomposites"**
C. Rémi, M. Kaci, S. Bruzaud, Y. Grohens, *Polym. Degrad. Stab.* **2011**, 96, 1489-1496
- ACL29. "Morphology and functional properties of commercial polyhydroxyalkanoates: a comprehensive and comparative study"**
Y.M. Corre, S. Bruzaud, J.L. Audic, Y. Grohens, *Polym. Test.* **2012**, 31, 226-235
- ACL30. "Recyclability of polystyrene/clay nanocomposites"**
M. Kaci, C. Rémi, A. Benhamida, S. Bruzaud, Y. Grohens, *Mol. Cryst. Liq. Cryst.* **2012**, 556, 94-106
- ACL31. "Influence of loading rates on morphology and mechanical properties of polylactide/clay nanocomposites"**
M. Kaci, L. Zaidi, S. Bruzaud, A. Bourmaud, P. Médéric, Y. Grohens, *Int. J. Microstruct. Mater. Prop.* **2012**, 7, 390-399
- ACL32. "The effects of gamma irradiation on the morphology and properties of polylactide/Cloisite 30B nanocomposites"**
L. Zaidi, S. Bruzaud, M. Kaci, A. Bourmaud, N. Gautier, Y. Grohens, *Polym. Degrad. Stab.* **2013**, 98, 348-355
- ACL33. "A study of mechanical, thermal and flammability properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/polylactide blends"**
I. Zembouai, M. Kaci, S. Bruzaud, A. Benhamida, Y.M. Corre, Y. Grohens, *Polym. Test.* **2013**, 32, 842-851
- ACL34. "Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and poly(propylene carbonate) blends: an efficient method to finely adjust properties of functional materials"**
Y.M. Corre, S. Bruzaud, Y. Grohens, *Macromol. Mater. Eng.* **2013**, 298, 1176-1183
- ACL35. "Poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/polylactide blends: thermal stability, flammability and thermo-mechanical behavior"**
I. Zembouai, S. Bruzaud, M. Kaci, A. Benhamida, Y.M. Corre, Y. Grohens, J.M. Lopez-Cuesta, *J. Polym. Environ.* **2014**, 22, 131-139

- ACL36. "Synergistic effect of compatibilizer and Cloisite 30B on the functional properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/polylactide blends"**
I. Zembouai, S. Bruzaud, M. Kaci, A. Benhamida, Y.M. Corre, Y. Grohens, J.M. Lopez-Cuesta, *Polym. Eng. Sci.* **2014**, 54, 2239-2251
- ACL37. "Accelerated ageing of polylactide in aqueous environments: comparative study between distilled water and seawater"**
M. Deroiné, A. Le Duigou, Y.M. Corre, P.Y. Le Gac, P. Davies, G. César, S. Bruzaud, *Polym. Degrad. Stab.* **2014**, 108, 319-329
- ACL38. "Seawater accelerated ageing of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)"**
M. Deroiné, A. Le Duigou, Y.M. Corre, P.Y. Le Gac, P. Davies, G. César, S. Bruzaud, *Polym. Degrad. Stab.* **2014**, 105, 237-247
- ACL39. "Mechanical recycling of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/polylactide blends"**
I. Zembouai, S. Bruzaud, M. Kaci, A. Benhamida, Y.M. Corre, Y. Grohens, *J. Polym. Environ.* **2014**, 22, 449-459
- ACL40. "Accelerated ageing and lifetime prediction of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) immersed in distilled water"**
M. Deroiné, A. Le Duigou, Y.M. Corre, P.Y. Le Gac, P. Davies, G. César, S. Bruzaud, *Polym. Test.* **2014**, 39, 70-78
- ACL41. "Rapid and qualitative fluorescence-based method for the assessment of PHA production in marine bacteria during batch culture"**
A. Elain, M. Le Fellic, Y.M. Corre, V. Le Tilly, A. Legrand, J.L. Audic, S. Bruzaud, *World J. Microbiol. Biotechnol.* **2015**, 31, 1555-1563
- ACL42. "Natural degradation and biodegradation of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) in liquid and solid marine environments"**
M. Deroiné, G. César, A. Le Duigou, P. Davies, S. Bruzaud, *J. Polym. Environ.* **2015**, 23, 493-505
- ACL43. "A study on the effects of reprocessing cycles on polylactide/poly(3-hydroxybutyrate-co-3-hydroxyvalerate) blends"**
I. Zembouai, M. Kaci, S. Bruzaud, A. Benhamida, Y.M. Corre, Y. Grohens, *Roum. J. Chem.* **2015**, 60, 609-613
- ACL44. "Valorization of local agro-industrial processing waters as growth media for polyhydroxyalkanoates production"**
A. Elain, A. Le Grand, Y.M. Corre, M. Le Fellic, N. Hachet, V. Le Tilly, P. Loulergue, J.L. Audic, S. Bruzaud, *Ind. Crops Prod.* **2016**, 80, 1-5
- ACL45. "Gamma irradiation effects on morphology and properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/polylactide blends in the presence of compatibilizer and Cloisite 30B"**
I. Zembouai, S. Bruzaud, M. Kaci, L. Dumazert, A. Bourmaud, M. Mahlous, J.M. Lopez-Cuesta, Y. Grohens, *Polym. Test.* **2016**, 49, 29-37
- ACL46. "Electron beam radiation effects on properties and eco-toxicity of PHBV/PLA blends in presence of organo-modified montmorillonite"**
I. Zembouai, M. Kaci, I. Pillin, J.L. Audic, S. Shayanfar, S.D. Pillai, S. Bruzaud, *Polym. Degrad. Stab.* **2016**, 132, 117-126
- ACL47. "Microplastics elutriation from sandy sediments: a granulometric approach"**
M. Kedzierski, V. Le Tilly, P. Bourseau, H. Bellegou, G. César, O. Sire, S. Bruzaud, *Mar. Pollut. Bull.* **2016**, 107, 315-323
- ACL48. "Effects of PHBV-g-MA compatibilizer on morphology and properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/olive husk flour composites"**
L. Hassaini, M. Kaci, S. Bruzaud, A. Benhamida, I. Pillin, Y. Grohens, *J. Adhes. Sci. Technol.* **2016**, 30, 2061-2080
- ACL49. "Synergistic effect of compatibilizer and sepiolite on the morphology of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/poly(butylene succinate) blends"**
A. Chikh, A. Benhamida, M. Kaci, I. Pillin, S. Bruzaud, *Polym. Test.* **2016**, 53, 19-28

- ACL50. "Changes in the floating plastic pollution of the Mediterranean Sea in relation to the distance to land"**
M.L. Pedrotti, S. Petit, A. Elineau, S. Bruzaud, J.C. Crébassa, B. Dumontet, E. Marti, G. Gorsky, A. Cozar, *Plos One* **2016**, 11, e0161581
- ACL51. "Efficient microplastics extraction from sand: a cost effective methodology based on sodium iodide recycling"**
M. Kedzierski, V. Le Tilly, G. César, O. Sire, S. Bruzaud, *Mar. Pollut. Bull.* **2017**, 115, 120-129
- ACL52. "Valorization of olive husk flour as a filler for biocomposites based on poly(3-hydroxybutyrate-co-3-hydroxyvalerate): effects of filler silane treatment"**
L. Hassaini, M. Kaci, N. Touati, I. Pillin, A. Kervoelen, S. Bruzaud, *Polym. Test.* **2017**, 59, 430-440
- ACL53. "Microplastics elutriation system. Part A: numerical modeling"**
M. Kedzierski, V. Le Tilly, P. Bourseau, H. Bellegou, G. César, O. Sire, S. Bruzaud, *Mar. Pollut. Bull.* **2017**, 119, 151-161
- ACL54. "Recycling assessment of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/poly(butylene succinate) blends: combined influence of sepiolite and compatibilizer"**
A. Chikh, A. Benhamida, M. Kaci, A. Bourmaud, S. Bruzaud, *Polym. Degrad. Stab.* **2017**, 142, 234-243
- ACL55. "Threat of microplastics induced by plastic ageing in marine environment"**
M. Kedzierski, M. D'Almeida, A. Magueresse, A. Le Grand, H. Duval, G. César, O. Sire, S. Bruzaud, V. Le Tilly, *Mar. Pollut. Bull.* **2018**, 127, 684-694
- ACL56. "Combined effects of Sepiolite and Cloisite 30B on morphology and properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/polylactide blends"**
I. Zembouai, M. Kaci, L. Zaidi, S. Bruzaud, *Polym. Degrad. Stab.* **2018**, 153, 47-52
- ACL57. "Microplastics elutriation system. Part B: insight of the next generation"**
M. Kedzierski, V. Le Tilly, P. Bourseau, G. César, O. Sire, S. Bruzaud, *Mar. Pollut. Bull.* **2018**, 133, 9-17
- ACL58. "Colonization of non-biodegradable and biodegradable plastics by marine microorganisms"**
C. Dussud, C. Hudec, M. George, P. Fabre, P. Higgs, A.M. Delort, B. Eyheraguibel, A.L. Meistertzheim, J. Jacquin, J. Cheng, N. Callac, C. Odobel, S. Rabouille, S. Bruzaud, J.F. Ghiglione, *Front. Microbiol.* **2018**, 9, 1571
- ACL59. "Production of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) using agro-industrial effluents with tunable proportion of 3-hydroxyvalerate monomer units"**
P. Lemechko, M. Le Fellic, S. Bruzaud, *Int. J. Biol. Macromol.* **2019**, 128, 429-434
- ACL60. "Microplastics in Mediterranean Sea: a protocol to robustly assess contamination characteristics"**
M. Kedzierski, M. Falcou-Préfol, J. Villain, M.E. Kerros, M. Henry, M.L. Pedrotti, S. Bruzaud, *Plos One* **2019**, 14, e0212088
- ACL61. "Complete genome sequence of the halophilic PHA-producing bacterium *Halomonas* sp. SF2003: insights into its biotechnological potential"**
T. Thomas, A. Bazire, A. Elain, S. Bruzaud, *World J. Microbiol. Biotechnol.* **2019**, 35, 1-14
- ACL62. "A machine learning algorithm for high throughput identification of FTIR spectra: application on microplastics collected in the Mediterranean Sea"**
M. Kedzierski, M. Falcou-Préfol, M.E. Kerros, M. Henry, M.L. Pedrotti, S. Bruzaud, *Chemosphere* **2019**, 234, 242-251
- ACL63. "Effect of montmorillonite, sepiolite and halloysite clays on morphology and properties of polycaprolactone bionanocomposites"**
A. Kassa, A. Benhamida, M. Kaci, S. Bruzaud, *Polym. Compos.* **2020**, 28, 338-347
- ACL64. "Microplastic contamination of packaged meat: occurrence and associated risks"**
M. Kedzierski, B. Lechat, O. Sire, G. Le Maguer, V. Le Tilly, S. Bruzaud, *Food Packag. Shelf Life* **2020**, 24, 100489
- ACL65. "Effects of various surface treatments on Aloe Vera fibers used as reinforcement in poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) biocomposites"**
N. Dehouche, C. Idres, I. Zembouai, M. Kaci, S. Bruzaud, *Polym. Degrad. Stab.* **2020**, 175, 109131
- ACL66. "PHA production and PHA synthases of the halophilic bacterium *Halomonas* sp. SF2003"**
T. Thomas, K. Sudesh, A. Bazire, A. Elain, H.T. Tan, H. Lim, S. Bruzaud, *Bioengineering* **2020**, 7, 1-22
- ACL67. "Why is there plastic packaging in the natural environment? Understand the roots of our individual plastic waste management behaviours"**

M. Kedzierski, D. Frère, G. Le Maguer, S. Bruzaud, *Sci. Total Environ.* **2020**, 740, 139985

- ACL68. "Microplastics in edible mussels from a southern Mediterranean lagoon: preliminary results on seawater-mussel transfer and implications for environmental protection and seafood safety"**
T. Wakkaf, R. El Zrelli, M. Kedzierski, R. Balti, M. Shaiekh, L. Mansour, S. Tlig-Zouari, S. Bruzaud, L. Rabaoui, *Mar. Pollut. Bull.* **2020**, 158, 111355
- ACL69. "Elaboration and characterization of polyurethane foams based on renewably sourced polyols"**
Z. Kahlerras, R. Irinislimane, S. Bruzaud, N. Belhaneche-Bensemra, *J. Polym. Environ.* **2020**, 28, 3003-3018
- ACL70. "Characterization of microplastics in the surface waters of an urban lagoon (Bizerte lagoon, Southern Mediterranean Sea): composition, density, distribution and influence of environmental factors"**
T. Wakkaf, R. El Zrelli, M. Kedzierski, R. Balti, M. Shaiekh, L. Mansour, S. Tlig-Zouari, S. Bruzaud, L. Rabaoui, *Mar. Pollut. Bull.* **2020**, 160, 111625
- ACL71. "Pre-detection of microplastics using active thermography"**
M. Kedzierski, E. Geslain, M.L. Pedrotti, J.F. Ghiglione, S. Bruzaud, *Chemosphere* **2021**, 262, 127648
- ACL72. "Relative influence of plastic debris size and shape, chemical composition and phytoplankton-bacteria interactions in driving seawater plastisphere abundance, diversity and activity"**
J. Cheng, J. Jacquin, P. Conan, M. Pujo-Pay, V. Barbe, M. George, P. Fabre, S. Bruzaud, A. Ter Halle, A.L. Meistertzheim, J.F. Ghiglione, *Front. Microbiol.* **2021**, 11, 610231
- ACL73. "Filler content effect on water uptake and thermal stability of poly(3-hydroxybutyrate-3-hydroxyhexanoate)/microcrystalline cellulose biocomposites"**
N. Dehouche, M. Kaci, C. Idres, S. Bruzaud, *Macromol. Symp.* **2021**, 396, 2000233
- ACL74. "Microbial diversity and activity during the biodegradation in seawater of various substitutes to conventional plastic cotton swabs sticks"**
J. Jacquin, N. Callac, J. Cheng, C. Giraud, Y. Gorand, C. Denoual, M. Pujo-Pay, P. Conan, A.L. Meistertzheim, V. Barbe, S. Bruzaud, J.F. Ghiglione, *Front. Microbiol.* **2021**, 12, 604395
- ACL75. "Bacterial abundance, diversity and activity during long term colonization of non-biodegradable and biodegradable plastics in seawater"**
C. Odobel, C. Dussud, L. Philip, G. Derippe, M. Lauters, B. Eyheraguibel, G. Burgaud, A. Ter Halle, A.L. Meistertzheim, S. Bruzaud, V. Barbe, J.F. Ghiglione, *Front. Microbiol.* **2021**, 12, 734782
- ACL76. "Design of polyhydroxyalkanoate (PHA) microbeads with tunable functional properties and high biodegradability in seawater"**
C. Volant, E. Balnois, G. Vignaud, A. Magueresse, S. Bruzaud, *J. Polym. Environ.* **2022**, 30, 2254-2269
- ACL77. "Chemical composition of microplastics floating from the surface of the Mediterranean Sea"**
M. Kedzierski, M. Palazot, L. Soccalingame, M. Falcou-Préfol, F. Galgani, G. Gorsky, M.L. Pedrotti, S. Bruzaud, *Mar. Pollut. Bull.* **2022**, 174, 113284
- ACL78. "Characterization of new bio-based and biodegradable blends of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) / poly(butylene-co-succinate-co-adipate)"**
B. Le Delliou, M. Castro, O. Vitrac, S. Bruzaud, S. Domenek, *J. Appl. Polym. Sci.* **2022**, 139, 52124
- ACL79. "A degradation study of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and olive husk flour biocomposites under marine environment"**
L. Hassaini, M. Kaci, N. Dehouche, S. Bruzaud, *Macromol. Symp.* **2022**, 404, 2100353
- ACL80. "Morphological, crystallinity and thermal stability characterization of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)/zinc oxide nanoparticles bionanocomposites: effect of filler content "**
I. Berrabah, N. Dehouche, M. Kaci, S. Bruzaud, C.H. Deguines, C. Delaite, *Mater. Today* **2022**, 53, 223-227
- ACL81. "Biodegradability under marine conditions of bio-based and petroleum-based polymers as substitutes of conventional microparticles"**
J. Cheng, B. Eyheraguibel, J. Jacquin, M. Pujo-Pay, P. Conan, V. Barbe, J. Hoypierres, G. Deligey, A. Ter Halle, S. Bruzaud, J.F. Ghiglione, A.L. Meistertzheim, *Polym. Degrad. Stab.* **2022**, 206, 110159
- ACL82. "Effect of Agave leaves fibers (ALF) content on thermal, mechanical and surface properties of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) (PHBHHx) biocomposites"**
C. Idres, N. Dehouche, M. Kaci, C. Lainé, S. Bruzaud, *Macromol. Symp.* **2022**, 403, 2100272

- ACL83. "Effect of ZnO nanoparticles on tensile and viscoelastic properties of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) bionanocomposites"**
I. Berrabah, N. Dehouche, M. Kaci, S. Bruzaud, C.H. Deguines, C. Delaite, *Macromol. Symp.* **2022**, 403, 2100273
- ACL84. "Seasonal patterns of microplastics in surface sediments of a Mediterranean lagoon heavily impacted by human activities (Bizerte lagoon, Northern Tunisia)"**
T. Wakkaf, R. El Zrelli, L. Yacoubi, M. Kedzierski, Y.J. Lin, L. Mansour, S. Bruzaud, L. Rabaoui, *Environ. Sci. Pollut. Res.* **2022**, 29, 76919-76936
- ACL85. "Microplastic fouling: a gap in knowledge and a research imperative to improve their study by infrared characterization spectroscopy"**
M. Kedzierski, M. Palazot, L. Soccalingame, M.L. Pedrotti, S. Bruzaud, *Mar. Pollut. Bull.* **2022**, 185, 114306
- ACL86. "Effect of Agave Americana fibers content on morphology and mechanical, rheological and thermal properties of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) biocomposites"**
C. Idrès, M. Kaci, N. Dehouche, C. Lainé, S. Bruzaud, *Polym. Renew. Resour.* **2022**, 13, 191-205
- ACL87. "Discussion about suitable applications for biodegradable plastics regarding to their sources, uses and en-of-life"**
I. Paul-Pont, J.F. Ghiglione, E. Gastaldi, A. Ter Halle, A. Huvet, S. Bruzaud, F. Lagarde, F. Galgani, G. Duflos, M. George, P. Fabre, *Waste Manage.* **2023**, 157, 242-248
- ACL88. "A bionanocomposite of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)/ZnO-nanoparticles intended for food packaging"**
I. Berrabah, N. Dehouche, M. Kaci, S. Bruzaud, C. Delaite, C.H. Deguines, M. Bououdina, *Int. J. Biol. Macromol.* **2023**, 238, 124162
- ACL89. "Continents of plastics: an estimate of the stock of microplastics in agricultural soils"**
M. Kedzierski, D. Cirederf, M. Palazot, M. Yvin, S. Bruzaud, *Sci. Total Environ.* **2023**, 880, 163294
- ACL90. "Mission Tara Microplastics: an holistic set of protocols and data resources for the field investigation of plastic pollution along the land-sea continuum in Europe"**
J.F. Ghiglione, V. Barbe, S. Bruzaud, G. Burgaud, J. Cachot, B. Eyheraguibel, F. Lartaud, W. Ludwig, A.L. Meistertzheim, I. Paul-Pont, S. Pesant, A. Ter Halle, O. Thiebeauld, *Environ. Sci. Pollut. Res.* **2023**, <https://doi.org/10.1007/s11356-023-26883-9>
- ACL91. "Effect of chemical composition on molecular mobility and phase coupling in poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) with different comonomer contents"**
C. Fosse, A. Esposito, P. Lemechko, Y.S. Salim, V. Causin, V. Gaucher, S. Bruzaud, K. Sudesh, L. Delbreilh, E. Dargent, *J. Polym. Environ.* **2023**, 31, 4430-4447
- ACL92. "Sunlight and marine weathering of poly(oxyethylene): evolution of the physico-chemical properties"**
L. Soccalingame, M. Palazot, M. Kedzierski, S. Bruzaud, *Mar. Pollut. Bull.* **2023**, 193, 115070
- ACL93. "Marine biodegradation of tailor-made polyhydroxyalkanoates (PHA) influenced by the chemical structure and associated bacterial communities"**
G. Derippe, L. Philip, P. Lemechko, B. Eyheraguibel, A.L. Meistertzheim, M. Pujo-Pay, P. Conan, V. Barbe, S. Bruzaud, J.F. Ghiglione, *J. Hazard. Mater.* **2024**, 462, 132782
- ACL94. "Bioplastic degradation and assimilation processes by a novel bacterium isolated from the marine plastisphere"**
V. Barbe, J. Jacquin, M. Bouzon, A. Wolinski, G. Derippe, J. Cheng, C. Cruaud, D. Roche, J.L. Petit, P. Conan, M. Pujo-Pay, S. Bruzaud, J.F. Ghiglione, *J. Hazard. Mater.* **2024**, 466, 133573
- ACL95. "First national reference of microplastic contamination of French soils"**
M. Palazot, L. Soccalingame, C. Froger, C. Jolivet, A. Bispo, M. Kedzierski, S. Bruzaud, *Sci. Total Environ.* **2024**, 918, 170564
- ACL96. "Generation of synthetic FTIR spectra to facilitate chemical identification of microplastics"**
C. Gicquel, M. Kedzierski, S. Bruzaud, *Mar. Pollut. Bull.* **2024**, 202, 116295

- ACL97. "Niche partitioning and plastisphere core microbiomes in the two most plastic polluted zones of the world Ocean"**
J. Jacquin, M. Budinich, S. Chaffron, V. Barbe, F. Lombard, M.L. Pedrotti, G. Gorsky, A. ter Halle, M. Kedzierski, S. Bruzaud, J.F. Ghiglione, *Environ. Sci. Pollut. Res.* **2024**, 31, 41118-41136
- ACL98. "Effect of PHBV-g-MA compatibilizer on the properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/polylactide blend and Diss fibers biocomposites"**
B. Remila, I. Zembouai, A. Alane, M. Kaci, A. Kervoelen, S. Bruzaud, *J. Polym. Sci.* **2024**, 62, 4587-4598
- ACL99. "Eco-friendly chemical modification of Agave Americana fibers for biocomposite properties enhancement"**
C. Idrès, M. Kaci, N. Dehouche, S. Bruzaud, *Macromol. Symp.* **2024**, 413, 2300250
- ACL100. "Investigations on structure and properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV) reinforced by Diss fibers: effect of various surface treatments"**
B. Remila, I. Zembouai, L. Zaidi, A. Alane, M. Kaci, A. Kervoelen, S. Bruzaud, *Ind. Crops Prod.* **2024**, 221, 119302
- ACL101. "Influence of green chemical treatments on morphology and mechanical properties of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)-Agave Americana fibers biocomposites"**
C. Idrès, M. Kaci, N. Dehouche, S. Bruzaud, *Macromol. Symp.* **2024**, 413, 2400009
- ACL102. "Small microplastics have much higher mass concentrations than large microplastics at the surface of nine major European rivers"**
L. Landebrit, R. Sanchez, L. Soccalingame, M. Palazot, M. Kedzierski, S. Bruzaud, M. Albignac, W. Ludwig, J.F. Ghiglione, A. Ter Halle, *Environ. Sci. Pollut. Res.* **2024**, <https://doi.org/10.1007/s11356-024-34486-1>
- ACL103. "Surface treatment effects on morphological and property enhancements of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/Diss fibers (Ampelodesmos mauritanicus) biocomposites"**
B. Remila, I. Zembouai, L. Zaidi, M. Kaci, A. Kervoelen, S. Bruzaud, *Polym. Compos.* **2024**, xx, xxxx-xxxx

Ouvrages

- OUV1. "Elaboration de matériaux nanocomposites"**, Éditions Universitaires Européennes, ISBN 978-613-1-50681-9, **2010**
S. Bruzaud
- OUV2. "Polyhydroxyalkanoates-based nanocomposites: an efficient and promising way of finely controlling functional material properties"**, in « Handbook of Polymer Nanocomposites: Processing, Performance and Application – Volume A: Layered Silicates », Edited by J.K. Pandey, R. Reddy, A.K. Mohanty and M. Misra, Springer-Verlag Berlin Heidelberg, ISBN 978-3-642-38649-7, **2014**, Chapter 1, pp 1-20
S. Bruzaud
- OUV3. "Polysilazanes through ring-opening polymerization"**, in « Polymeric Materials Encyclopedia, Twelve Volume Set », Edited by J.C. Salomone, CRC Press, Boca Raton (USA), ISBN 978-0-8493-2470-3, **2020**, pp 6747-6757
A. Soum, L. Billon, M. Bouquey, S. Bruzaud, E. Duguet, M. Schappacher
- OUV4. "Chemical composition of microplastics floating on the Mediterranean Sea surface"**, in « Monitoring of Mediterranean Coastal Areas: Problems and Measurement Techniques », Edited by L. Bonora, D. Carboni, M. De Vincenzi and G. Matteucci, Firenze University Press, Firenze (Italy), DOI: [10.36253/979-12-215-0030-1](https://doi.org/10.36253/979-12-215-0030-1), **2022**, pp 484-493
M. Kedzierski, M. Palazot, L. Soccalingame, M. Falcou-Préfol, G. Gorsky, F. Galgani, S. Bruzaud, M.L. Pedrotti
- OUV5. "Extraction and characterization methods for microplastics from estuarine and coastal samplings"**, in « Monitoring of Mediterranean Coastal Areas: Problems and Measurement Techniques », Edited by L. Bonora, D. Carboni, M. De Vincenzi and G. Matteucci, Firenze University Press, Firenze (Italy), DOI: [10.36253/979-12-215-0030-1](https://doi.org/10.36253/979-12-215-0030-1), **2022**, pp 560-567
L. Soccalingame, M. Notheaux, M. Palazot, M. Kedzierski, S. Bruzaud

- OUV6.** "Des polymères biodégradables d'origine marine pour des applications exfoliantes", in « Cosmétique marine : La mer, source d'inspiration », Cosmetic Valley Éditions, Chartres (France), ISBN 978-2-490639-55-7, 2024, pp. 275-290
S. Bruzaud

Articles de vulgarisation

- VUL1.** "Des déchets, des bactéries et des bioplastiques"
S. Bruzaud, *La Recherche* **2015**, 499, 57-60
- VUL2.** "Des polymères bactériens biodégradables obtenus à partir de ressources renouvelables : la biotechnologie au service de la chimie"
P. Lemechko, S. Bruzaud, *L'Actualité Chimique, Numéro spécial « Chimie durable »* **2018**, 427-428, 60-65
- VUL3.** "Les promesses des bioplastiques"
S. Bruzaud, *La Recherche* **2019**, Hors-série n°29, 45-48
- VUL4.** "Pollution des océans par les plastiques et les microplastiques"
F. Galgani, S. Bruzaud, G. Duflos, P. Fabre, E. Gastaldi, J.F. Ghiglione, R. Grimaud, M. George, A. Huvet, F. Lagarde, I. Paul-Pont, A. Ter Halle, *Techniques de l'Ingénieur* **2020**, BIO9300
- VUL5.** "Pollution des environnements terrestres et marins par les plastiques : sources, impacts et solutions"
M. Kedzierski, M. Palazot, L. Soccalingame, S. Bruzaud, *L'Actualité Chimique* **2020**, 456-457-458, 115-120
- VUL6.** "Polyesters biosourcés et/ou biodégradables : de l'élaboration à la fin de vie"
S. Bruzaud, *Techniques de l'Ingénieur* **2021**, CHV4039
- VUL7.** "Contamination des sols par les plastiques et les microplastiques"
M. Palazot, L. Soccalingame, M. Yvin, D. Cirederf, M. Kedzierski, S. Bruzaud, *Techniques de l'Ingénieur* **2022**, AM9010