

PUBLICATIONS REMERCIANT LE PROJET CLIMIBIO

2017

1. LAMOUREUX N., MARCHALLEK-WATROBA K., DESGROUX P., PAUWELS J-F., SYLLA M.D., GASNOT L., Measurements and modelling of nitrogen species in CH₄/O₂/N₂ flames doped with NO, NH₃ or NH₃+NO, *Combust. Flame*, 176, 2017, pp. 48-59
2. SYLLA M.D., LAMOUREUX N., GASNOT L., Impact of methylbutanoate oxidation on NO formation in laminar low pressure flames, *Fuel*, 207, 2017, pp. 801-813
3. DESGROUX P., FACCINETTO A., MERCIER X., MOUTON T., AUBAGNAC KARKAR D., El Bakali A, Comparative Study of the soot formation process in a “nucleation” and a “sooting” low pressure premixed methane flame, *Combustion and Flame* 184, 2017, pp153-166
4. BETRANCOURT C., FENGSHAN L., DESGROUX P., MERCIER X., FACCINETTO A., SALAMANCA M., LENA R., KOHSE-HOINGHAUS K., EMMRICH D., BEYER A., GOLZHAUSER A., TORSTEN T., Investigation of the size of the incandescent incipient soot particles in premixed sooting and nucleation flames of n-butane using LII, HIM, and 1 nm-SMPS, *Aerosol Sci. Technol.*, 51, 2017, pp 916-935
5. FENARD, Y., M.A. BOUMEHDI, and G. VANHOVE. Experimental and Kinetic Modeling Study of 2-Methyltetrahydrofuran Oxidation under Engine-Relevant Conditions., *Combustion and Flame* 178, 2017, pp168–81
6. VANHOVE, G., M. -A. BOUMEHDI, S. SHCHERBANEV, Y. FENARD, P. DESGROUX, and S. M. STARIKOVSKAIA. “A Comparative Experimental Kinetic Study of Spontaneous and Plasma-Assisted Cool Flames in a Rapid Compression Machine.” *Proceedings of the Combustion Institute* 36 (3), 2017, pp4137–43
7. LEFEBVRE B., GUTIERREZ-MARCO J.C., LEHNERT O., MARTIN E.L.O., NOWAK H., AKODAD M., EL HARIRI K., SERVAIS T., Age calibration of the Lower Ordovician Fezouata Lagerstätte, Morocco. *Lethaia*, sous-*presse*
8. NOWAK H., HARVEY T.H.P., LIU H.P., MCKAY R.M. , SERVAIS T., Exceptionally preserved arthropodan microfossils from the Middle Ordovician Winneshiek Lagerstätte, Iowa, USA, *Lethaia*, sous-*presse*.
9. SERVAIS T., MOLYNEUX S.G. , LI J., NOWAK H., RUBINSTEIN C.V. , VECOLI M., WANG V.K.Y., First Appearance Datums (FADs) of selected acritarch taxa and correlation between Lower and Middle Ordovician Stages. *Lethaia*, sous-*presse*.
10. FAUCHER L., HÉNOCCQ L., VANAPPELGHEM C., RONDEL S., QUEVILLART R., GALLINA S., GODÉ C., JAQUIÉRY J. ARNAUD, J.-F., When new human-modified habitats favor the expansion of an amphibian pioneer species: evolutionary history of the natterjack toad (*Bufo calamita*) in a coal basin. *Molecular Ecology*, 26, 2017, pp. 4434-4451.

11. TSUCHIMATSU T., GOUBET P.M., GALLINA S., HOLL A.C., FOBIS-LOISY I., BERGES H., MARANDE W., PRAT E., MENG D., LONG Q., PLATZER A., NORDBORG M., VEKEMANS X., CASTRIC V., Patterns of Polymorphism at the Self-Incompatibility Locus in 1,083 *Arabidopsis thaliana* Genomes,. *Molecular Biology And Evolution*, 34 (8), 2017, pp. 1878-1889
12. CHANTHA S.C., HERMAN A.C., CASTRIC V., VEKEMANS X., MARANDE W., SCHOEN D.J., The unusual S locus of *Leavenworthia* is composed of two sets of paralogous loci, *The New Phytologist*, 2016 (4), 2017, pp. 1247–1255
13. NEEMAN E. M., AVILES MORENO J.-R., HUET T. R., The gas phase structure of α -pinene, a main biogenic volatile organic compound, *J. Chem. Phys.*, 2017, sous presse. *Communiqué de presse de J. Chem. Phys. en preparation.*
14. POPOVICHEVA O., IRIMIEA C., CARPENTIER Y., ORTEGA I. K., KIREEVA E., SHONIJA N., SCHWARZ J., VOJTISEK M., C. FOCSA, Chemical Composition of Diesel/Biodiesel Particulate Exhaust by FTIR Spectroscopy and Mass Spectrometry: Impact of Fuel and Driving Cycle, *Aerosol and Air Quality Research*, 17, 2017, pp 1717-1734 http://www.aaqr.org/files/article/3492/3_AAQR-17-04-OA-0127_1717-1734.pdf
15. NEEMAN E. M., AVILES MORENO J.-R., HUET T. R., The quasi-unchanged gas-phase molecular structures of the atmospheric aerosol precursor β -pinene and its oxidation product nopinone, *Phys. Chem. Chem. Phys.*, 19, 2017, pp. 13819-13827, DOI: <https://doi.org/10.1039/c7cp01298e>.
16. CHRAYTEH M., DREAN P., HUET T. R., Structure determination of myrtenal by microwave spectroscopy and quantum chemical calculations, *J. Mol. Spectrosc.*, 336, 2017, pp. 22-28, DOI: <https://doi.org/10.1016/j.jms.2017.04.005>.
17. HOSHINO M., DUFLOT D., LIMA-VIEIRA P., OHTOMO S., TANAKA H.: Experimental scaling of plane-Born cross sections and ab initio calculations for electron-impact excitation of XF_4 (X = C, Si, and Ge) molecules, *J. Chem. Phys.*, 146 (14), 2017, pp 144306 1–16. DOI: <http://dx.doi.org/10.1063/1.4979299>.
18. SAAB, M.; REAL, F.; SULKA, M.; CANTREL, L.; VIROT, F.; VALLET, V.: Facing the challenge of predicting the standard formation enthalpies of n-butyl-phosphate species with ab initio methods, *J. Chem. Phys.*, 146, 2017, pp 244312. DOI: <http://dx.doi.org/10.1063/1.4986953>.
19. BOGUSLAWSKI, K.; REAL, F.; TECMER, P.; DUPERROUZEL, C.; GOMES, A. S. P.; LEGEZA, Ö.; AYERS, P. W.; VALLET, V.: On the Multi-Reference Nature of Plutonium Oxides: PuO_2^{2+} , PuO_2 , PuO_3 and $\text{PuO}_2(\text{OH})_2$. *Phys. Chem. Chem. Phys.*, 19, 2017, pp 4317–4329. DOI: <http://dx.doi.org/10.1039/C6CP05429C>.
20. OLEJNICZAK, M; BAST, R.; GOMES, A. S. P: On the calculation of second-order magnetic properties using subsystem approaches in the relativistic framework, *Phys. Chem. Chem. Phys.*, 19, 2017, pp 8400–8415. DOI: <http://dx.doi.org/10.1039/C6CP08561J>.
21. MARSAC, R.; BANIK, N. L.; PÉROT, M.; RÉAL, F.; VALLET, V.: Aqueous chemistry of Ce(IV): estimations using actinide analogues *Dalton Trans.* 46, 2017, pp 13553–13561. DOI: <http://dx.doi.org/10.1039/C7DT02251D>

22. CRIQUET, J., DUMOULIN, D., HOWSAM, M., MONDAMERT, L., GOOSSENS, J.-F., PRYGIEL, J., BILLON, G., 2017. Comparison of POCIS passive samplers vs. composite water sampling: A case study. *Science of The Total Environment* (609) 2017, pp. 982–991. doi:10.1016/j.scitotenv.2017.07.22
23. LESVEN, L., BILLON, G. Capteurs et suivi sur site de la pollution des eaux. *L'actualité Chimique* (420) 2017, 23-28.
24. CHBIB, C., NET, S., HAMZEH, M., DUMOULIN, D., OUDDANE, B., BAROUDI, M. Assessment of pesticides contamination in groundwater of Akkar (Northern- Lebanon) 2015. *Environmental Science and Pollution Research*, 2017, DOI 10.1007/s11356-017-8568-6.
25. BEN SGHAIER R, I. TLILI, L. LATROUS-EL ATRACHE, S NET, I GHORBEL-ABID, B. OUDDANE D. BEN HASSAN-CHEHIMI, M. TRABELSI-AYADI, A Combination of Factorial Design, Off-line SPE and GC–MS Method for Quantifying Seven Endocrine Disrupting Compounds in Water. *International Journal of Environmental Research* (2017), DOI: 10.1007/s41742-017-0054-y.
26. BRUN M., DE MANINCOR N., FISOGNI A., STORDEUR B., Nature en ville : faites circuler la biodiversité !, *The Conversation*, septembre 2017, [en ligne](#)
27. LECLERCQ B., KLUZA J., ANThERIEU S., SOTTY J., ALLEMAN L. Y., LOYENS A., CODDEVILLE P., LO GUIDICE J-M., MARCHETTI P., GARÇON G. Mitochondrion: a sensitive target for the toxicity of healthy and chronic obstructive pulmonary diseased human bronchial epithelial cells repeatedly exposed to air pollution-derived PM2.5. *Part Fibre Toxicol*, en révision.
28. Clement G, Giovannelli J, Cotel D, Montaye M, Ciuchete A, Dallongeville J, Amouyel P, Dauchet L., Changes over time in the prevalence and treatment of cardiovascular risk factors, and contributions to time trends in coronary mortality over 25 years in the Lille urban area (northern France). *Arch Cardiovasc Dis*. 2017 Sep 22. pii: S1875-2136(17)30158-4
29. Giovannelli J, Trouiller P, Hulo S , Chérot-Kornobis N, Ciuchete A, Edmé JL, Matran R, Amouyel P, Meirhaeghe A, Dauchet L, Clement G, Giovannelli J, Cotel D, Montaye M, Ciuchete A, Dallongeville J, Amouyel P, Dauchet L., Lower pulmonary volumes in diabetes mellitus: to what extent low-grade systemic inflammation could explain this association? . *Ann. Epidemiol.* 2017 accepté.
30. Cécile VIGNAL, Muriel PICHAVANT, Laurent Y ALLEMAN, Madjid DJOUINA, Florian DINGREVILLE, Esperanza PERDRIX, Christophe WAXIN, Adil OUALI ALAMI, Corinne GOWER-ROUSSEAU, Pierre DESREUMAUX, Mathilde BODY-MALAPEL. Effects of Urban Coarse Particles Inhalation on Oxidative and Inflammatory Parameters in the Mouse Lung and Colon. *Particle and Fiber toxicology*, accepted
31. L. ASLAN, H. LAVERSIN¹, E. ROTH², P. CODDEVILLE, C. FITTSCHEN³, A. CHAKIR², A. TOMAS, Gas-phase UV absorption cross-sections and photolysis kinetics of 4-hydroxy-3-hexanone : Atmospheric implications, *Chemical Physics Letters*, Vol 688, pp 43-46, 2017. DOI: 10.1016/j.cplett.2017.09.051
32. C. DEBEVEC, S. SAUVAGE, V. GROS, J. SCIARE, M. PIKRIDAS, I. STAVROULAS, T. SALAMEH, T. LEONARDIS, V. GAUDION, L. DEPELCHIN, I. FRONVAL, R. SARDA-ESTEVE, D. BAISNEE, B. BONSANG, C. SAVVIDES, M. VREKOUSSIS, N. LOCOGE, Origin and variability in volatile organic compounds observed at an Eastern Mediterranean background site (Cyprus), *Atmospheric Chemistry and Physics*, Vol 17, pp 11355-11388, 2017. DOI: 10.5194/acp-17-11355-2017

33. P. ESPINA, E. PERDRIX, P. CODDEVILLE, Factors influencing secondary inorganic aerosols in a rural area of northern France, The Voltaire Atmospheric Chemistry Summer School: Fundamentals for Atmospheric Chemistry, Orléans, France, 2-8 July, 2017.
34. W. AHMAD, C. COEUR-TOURNEUR, A. CUISSET, P. CODDEVILLE, A. TOMAS, Effects of Scavengers of Criegee Intermediates and OH Radical on the Formation of Secondary Organic Aerosol in the Ozonolysis of Limonene, *Journal of Aerosol Science*, Vol 110, pp 70–83, 2017. DOI: 10.1016/j.jaerosci.2017.05.010
35. E. STRATIGOU, S. DUSANTER, V. RIFFAULT, Qualité de l'air intérieur dans un bâtiment à énergie positive : Caractérisation de la dynamique en lien avec les concentrations en particules, Colloque Adebitech « QALsir - La qualité de l'air intérieur », Romainville, 27-28 juin 2017.
36. W. AHMAD, C. COEUR, A. TOMAS, T. FAGNIEZ, J.B. BRUBACH, A. CUISSET, Infrared spectroscopy of secondary organic aerosol precursors and investigation of the hygroscopicity of SOA formed from the OH reaction with guaiacol and syringol, *Applied Optics*, 56 (11), E116 – E122, 2017.
37. S. SOBANSKA, G. BILLON, P. CODDEVILLE, J.-P. CORNARD, P. DESGROUX, A. EL-BAKALI, V. NOLLET, S. FOURMENTIN, D. LANDY, L. LESVEN, F. LOUIS, J. LOVRIC, X. MERCIER, A. MONCOMBLE, E. THERSEN, A. TOMAS, C. TOUBIN, La chimie en Hauts-de-France : Chimie et environnement, *L'Actualité Chimique*, N°420, pp 23-28, juillet-août 2017.
38. Ahmad W., C. Coeur, A. Tomas, T. Fagniez, J-B Brubach, A. Cuisset, Infrared spectroscopy of secondary organic aerosol precursors and investigation of the hygroscopicity of SOA formed from the OH reaction with guaiacol and syringol, *Applied Optics*, 56(11) 2017, E116-E122.
39. Ahmad W., C. Coeur, A. Cuisset, P. Coddeville, A. Tomas, Effects of scavengers of Criegee intermediates and OH radicals on the formation of secondary organic aerosol in the ozonolysis of limonene, *J. Aerosol Sci.* 110 (2017) 70-83
40. Bray C., A. Cuisset, F. Hindle, R. Bocquet, G. Mouret, B.J. Drouin, CH₃D photomixing spectroscopy up to 2.5 THz: New set of rotational and dipole parameters, first THz self-broadening measurements, *J. Quant. Spectros. & Radiat. Transfer* 189 (2017) 198–205
41. Bray C., A. Cuisset, F. Hindle, G. Mouret, R. Bocquet, V. Boudon, Spectral lines of methane measured up to 2.6 THz at sub-MHz accuracy with a CW-THz photomixing spectrometer: Line positions of rotational transitions induced by centrifugal distortion, *J. Quant. Spectros. & Radiat. Transfer* 203 (2017) 349–354.
42. Hindle F., C. Bray, K. Hickson, D. Fontanari, M. Mouelhi, A. Cuisset, G. Mouret, R. Bocquet, Chirped Pulse Spectrometer Operating at 200 GHz, *Journal of Infrared, Millimeter, and Terahertz Waves*, 2017, - Article in press - doi.org/10.1007/s10762-017-0445-3
43. M. AL ZALLOUHA, Y. LANDKOCZ, J. BRUNET, R. COUSIN, E. GENTY, D. COURCOT, S. SIFFERT, P. SHIRALI, S. BILLET., Usefulness of toxicological validation of VOCs catalytic degradation by air-liquid interface exposure system. *Environmental Research*, 152, (2017) pp. 328-335.
44. F. LEDOUX, A. KFOURY, G. DELMAIRE, G. ROUSSEL, A. EL ZEIN, D. COURCOT., Contributions of local and regional anthropogenic sources of metals in PM_{2.5} at an urban site in northern France. *Chemosphere*, 181 (2017) pp. 713-724.

45. P. N. MELKI, F. LEDOUX, S. AOUAD, S. BILLET, B. EL KHOURY, Y. LANDKOCZ, R. M. ABDEL-MASSIH, D. COURCOT. Physicochemical characteristics, mutagenicity and genotoxicity of airborne particles under industrial and rural influences in Northern Lebanon. *Environ. Sci. Pollut. Res.* 2017 DOI 10.1007/s11356-017-9389-3.
46. F. LEDOUX, C. ROCHE, F. CAZIER, C BEAUGARD, D. COURCOT. Influence of ships emissions on NO_x, SO₂ O₃ and PM concentrations in a North-Sea harbour in France. *Journal of Environmental Sciences*, (2017)
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