

## Publications in peer reviewed International Journals 2010-2021

### ➤ 2021

- 1) Zeng, K.; Yang, X.; Xie, Y.; Yang, H.; Li, J.; Zhong, D.; Zuo, H.; Nzihou, A.; Zhu, Y.; Chen, H. "Molten salt pyrolysis of biomass: The evaluation of molten salt." *Fuel* 302 (October 2021): 121103. <https://doi.org/10.1016/j.fuel.2021.121103>.
- 2) Peter, S.; Lyczko, N.; Gopakumar, D.; Maria, H.J.; Nzihou, A.; Thomas, S. "Chitin and Chitosan Based Composites for Energy and Environmental Applications: A Review." *Waste and Biomass Valorization* 12 (September 2021): 4777–4804. <https://link.springer.com/article/10.1007/s12649-020-01244-6>.
- 3) Ren, B.; Lyczko, N.; Zhao, Y.; Nzihou, A. "Simultaneous hydrogen sulfide removal and wastewater purification in a novel alum sludge-based odor-gas aerated biofilter." *Chemical Engineering Journal* 419 (September 2021): 129558. <https://doi.org/10.1016/j.cej.2021.129558>.
- 4) Nzihou, A.; Gonzalez Martinez, M.; Romero Millan, L. M.; Gourinat, Y. "L'hydrogène vert en aéronautique – Production." *Techniques de l'Ingénieur* (September 2021): TRP4055. <https://dx.doi.org/10.51257/a-v1-trp4055>.
- 5) Mathew, M.; Lyczko, N.; Nzihou, A.; Thomas, S. "Facile One-Step Synthesis of Calcium Phosphate/Cellulose Composite: Synthesis, Morphology, Structure and Properties." *Macromolecular Symposia* 398, no. 1 (August 2021): 2000264. <https://doi.org/10.1002/masy.202000264>.
- 6) Liu, H.; Hu, G.; Alper Basar, I.; Li, J.; Lyczko, N.; Nzihou, A.; Eskicioglu, C. "Phosphorus recovery from municipal sludge-derived ash and hydrochar through wet-chemical technology: A review towards sustainable waste management." *Chemical Engineering Journal* 417 (August 2021): 129300. <https://doi.org/10.1016/j.cej.2021.129300>.
- 7) Zhao, Y.; Nzihou, A.; Ren, B.; Lyczko, N.; Shen, C.; Kang, Ch.; Ji, B. "Waterworks Sludge: An Underrated Material for Beneficial Reuse in Water and Environmental Engineering." *Waste and Biomass Valorization* 12 (August 2021): 4239-4255. <https://link.springer.com/article/10.1007/s12649-020-01232-w>.
- 8) Liu, H.; Alper Basar, I.; Nzihou, A.; Eskicioglu, C. "Hydrochar derived from municipal sludge through hydrothermal processing: A critical review on its formation, characterization, and valorization." *Water Research* 199 (July 2021): 117186. <https://doi.org/10.1016/j.watres.2021.117186>.
- 9) Romero Millán, L. M.; Sierra Vargas, F. E.; Nzihou, A. "Characterization of Steam Gasification Biochars from Lignocellulosic Agrowaste Towards Soil Applications." *Waste and Biomass Valorization* 12 (July 2021): 4141-4155. <https://link.springer.com/article/10.1007/s12649-020-01241-9>.
- 10) Osei, G. K.; Nzihou, A.; Yaya, A.; Pham Minh, D.; Onwona-Agyeman, B. "Catalytic Pyrolysis of Waste Engine Oil over Y Zeolite Synthesized from Natural Clay." *Waste and Biomass Valorization* 12 (July 2021): 4157-4170. <https://link.springer.com/article/10.1007/s12649-020-01282-0>.
- 11) Martínez Aguilar, M., Duret, X.r; Ghislain, T.; Pham Minh, D.; Nzihou, A.; Lavoie, J.-M. "Production of fuel additives by direct conversion of softwood bark using a cheap metal salt." *Energy Conversion and Management* 10 (June 2021): 100049. <https://doi.org/10.1016/j.ecmx.2020.100049>.
- 12) Ji, B.; Zhao, Y.; Esteve-Núñez, A.; Liu, R.; Yang, Y.; Nzihou, A.; Tai, Y.; Wei, T.; Shen, C.; Yan, Y.; Ren, B.; Wang, X.; Wang, Y. "Where do we stand to oversee the coronaviruses in aqueous and aerosol environment? Characteristics of transmission and possible curb strategies." *Chemical Engineering Journal* 413 (June 2021): 127522. <https://doi.org/10.1016/j.cej.2020.127522>.
- 13) Ghogia, A. C.; Machado, B. F; Cayez, S.; Nzihou, A.; Serp, P.; Soulantica, K.; Pham Minh, D. "Beyond confinement effects in Fischer-Tropsch Co/CNT catalysts." *Journal of Catalysis* 397 (May 2021): 156-171. <https://doi.org/10.1016/j.jcat.2021.03.027>.
- 14) Li, J.; Xiong, Z.; Zeng, K.; Zhong, D.; Zhang, X.; Chen, W.; Nzihou, A.; Flamant, G.; Yang, H.; Chen, H. "Characteristics and Evolution of Nitrogen in the Heavy Components of Algae Pyrolysis Bio-Oil."

- Environmental Science & Technology 55, no. 9 (April 2021). 6373–6385. <https://doi.org/10.1021/acs.est.1c00676>.
- 15) Romero Millán, L. M.; Sierra Vargas, F. E.; Nzihou, A. “Unraveled mechanisms in energy production from bioresources using steam gasification.” *Fuel* 287 (March 2021): 119527. <https://doi.org/10.1016/j.fuel.2020.119527>.
  - 16) Zhong, D.; Zeng, K.; Li, J.; Yang, X.; Song, Y.; Zhu, Y.; Flamant, G.; Nzihou, A.; Yang, H.; Chen, H. “3E analysis of a biomass-to-liquids production system based on solar gasification.” *Energy* 217, no. 15 (February 2021): 119408. <https://doi.org/10.1016/j.energy.2020.119408>.
  - 17) Ghogia, A. C.; Nzihou, A.; Serp, P.; Soulantica, K.; Pham Minh, D. “Cobalt catalysts on carbon-based materials for Fischer-Tropsch synthesis: a review.” *Applied Catalysis A: General* 609 (January 2021): 117906. <https://doi.org/10.1016/j.apcata.2020.117906>.

## ➤ 2020

- 18) Gopakumar, D. A; Pai, A. R; Beeran Pottathara, Y.; Pasquini, D.; de Moraes, L. C.; Khalil H.P.S., A.; Nzihou, A.; Thomas, S. “Flexible Papers Derived from Polypyrrole Deposited Cellulose Nanofibers for Enhanced Electromagnetic Interference Shielding in Gigahertz Frequencies.” *Journal of Applied Polymer Science* 138, no. 16 (November 2020): 50262. <https://doi.org/10.1002/app.50262>.
- 19) Pham Sy, H.; Pham Minh, D; Sane, A.R.; Xuan, H.N.; Semlal, N; Boulif, R.; Germeau, A.; Toussaint, C.; Sharrock, P.; Nzihou, A. “Binary and ternary alkali polyphosphates (MPO<sub>3</sub>, M = Li, Na, K) for thermal energy storage.” *Journal of Thermal Analysis and Calorimetry* 146 (October 2020): 2027-2033. <https://doi.org/10.1007/s10973-020-10346-1>.
- 20) Zeng, K.; Rui, L.; Pham Minh, D.; Weiss-Hortala, E.; Nzihou, A.; Zhong, D.; Flamant, G. “Characterization of char generated from solar pyrolysis of heavy metal contaminated biomass.” *Energy* 206 (September 2020) :118128. <https://doi.org/10.1016/j.energy.2020.118128>.
- 21) Commeh, M.; Dodoo-Arhin, D.; Acquaye, E.; Nimako Baah, I.; Kwabla Amoatey, N.; Hawkins Ephraim, J.; Obada, D. D; Pham Minh, D.; Nzihou, A. “Plastic Fuel Conversion and Characterisation: A Waste Valorization Potential for Ghana.” *MRS Advances* 5, no. 26 (September 2020): 1349-1356. <https://doi.org/10.1557/adv.2020.127>.
- 22) Ephraim, A.; Pozzobon, V.; Lebonnois, D.; Peregrina, C.s; Sharrock, P.; Nzihou, A.; Pham Minh, D. “Pyrolysis of wood and PVC mixtures: thermal behaviour and kinetic modelling. Biomass Conversion and Biorefinery.” *Biomass Conversion and Biorefinery* (August 2020). <https://doi.org/10.1007/s13399-020-00952-2>.
- 23) Tang, Y.; Dong, J.; Li, G.; Zheng, Y.; Chi, Y.; Nzihou, A.; Weiss-Hortala, E.; Ye, C. “Environmental and exergetic life cycle assessment of incineration- and gasification-based waste to energy systems in China.” *Energy* 205 (August 2020): 118002. <https://doi.org/10.1016/j.energy.2020.118002>.
- 24) Lopez Ferber, N.; Pham Minh, D.; Falcoz, Q.; Meffre, A.; Tessier-Doyen, N.; Nzihou, A.; Goetz, V. « Ceramics from Municipal Waste Incinerator Bottom Ash and Wasted Clay for Sensible Heat Storage at High Temperature.” *Waste and Biomass Valorization* 11 (July 2020): 3107–3120. <https://doi.org/10.1007/s12649-019-00617-w>.
- 25) Dong, J.; Tang, Y.; Nzihou, A.; Weiss-Hortala, E. “Effect of steam addition during carbonation, calcination or hydration on reactivation of CaO sorbent for CO<sub>2</sub> capture.” *Journal of CO<sub>2</sub> Utilization* 39 (July 2020): 101167. <https://doi.org/10.1016/j.jcou.2020.101167>.
- 26) Romero, L. M.; Lyczko, N.; Nzihou, A.; Antonini, G.; Moreau, E.; Richardeau, H.; Coste, Ch.; Madoui, S.; Durécu, S. “New Insights on Mercury Abatement and Modeling in a Full-Scale Municipal Solid Waste Incineration Flue Gas Treatment Unit.” *Waste Management* 113 (July 2020): 270-279. <https://doi.org/10.1016/j.wasman.2020.06.003>.
- 27) Munirathinam, R.; Pham Minh, D.; Nzihou, A. “Hydroxyapatite as a new support material for cobalt-based catalysts in Fischer-Tropsch synthesis.” *International Journal of Hydrogen Energy* 45, no. 36 (July 2020): 18440-18451. <https://doi.org/10.1016/j.ijhydene.2019.09.043>.

- 28) Nigay, P.-M.; Salifu, A.; Obayemi, J.; White, C.; Nzihou, A.; Soboyejo, Wi. "Assessment of Ceramic Water Filters for the Removal of Bacterial, Chemical, and Viral Contaminants." *Journal of Environmental Engineering* 146, no. 7 (July 2020): 04019066. <https://ascelibrary.org/doi/10.1061/%28ASCE%29EE.1943-7870.0001749>.
- 29) Rego de Vasconcelos, B.; Pham Minh, D.; Martins, E.; Germeau, A.; Sharrock, P.; Nzihou, A. "Highly efficient hydroxyapatite-supported nickel catalysts for dry reforming of methane." *International Journal of Hydrogen Energy* 45, no. 36 (July 2020): 18502-18518. <https://doi.org/10.1016/j.ijhydene.2019.08.068>.
- 30) Galera Martinez, M.; Pham Minh, D.; Nzihou, A.; Sharrock, P. "Valorization of calcium carbonate-based solid wastes for the treatment of hydrogen sulfide in a semi-continuous reactor: Part II - Slurry bubble column pilot." *Chemical Engineering Journal* 390 (June 2020): 124576. <https://doi.org/10.1016/j.cej.2020.124576>.
- 31) Maria, H. J.; Thomas, M. H.; Morreale, M.; La Mantia, F. P.; Nzihou, A.; Joseph, K.; Rouxel, D.; Fernandes, S. C.M; Kalarikkal, N.; Thomas, . "Gas Barrier, rheological and mechanical properties of Immiscible Natural Rubber/ Acrylonitrile Butadiene Rubber (NR/NBR) Blend Nanocomposites." *Materials* 13, no. 11 (June 2020): 2654. <https://doi.org/10.3390/ma13112654>.
- 32) Dong, J.; Jeswanic, H. K.; Nzihou, A.; Azapagic, A. "The environmental cost of recovering energy from municipal solid waste." *Applied Energy* 267 (June 2020): 114792. <https://doi.org/10.1016/j.apenergy.2020.114792>.
- 33) Ren, B.; Lyczko, N.; Nzihou, A.; Zhao, Y. "Alum sludge as an efficient sorbent for hydrogen sulfide removal: Experimental, mechanisms and modeling studies." *Chemosphere* 248 (June 2020): 126010. <https://doi.org/10.1016/j.chemosphere.2020.126010>.
- 34) Martinez Aguilera, M.; Duret, X.; Ghislain, T.; Pham Minh, D.; Nzihou, A.; Lavoie, J. M. "A simple process for the production of fuel additives using residual lignocellulosic biomass." *Fuel* 264 (March 2020): 116702. <https://doi.org/10.1016/j.fuel.2019.116702>.
- 35) Nizam, P.A; Arumughan, V.; Baby, A.; Sunil, M.A; Pasquini, D.; Nzihou, A.; Thomas, S.; Gopakumar, D. A. "Mechanically Robust Antibacterial Nanopapers Through Mixed Dimensional Assembly for Anionic Dye Removal." *Journal of Polymers and the Environment* 28, no. 4 (February 2020): 1279-1291. <https://doi.org/10.1007/s10924-020-01681-3>.
- 36) Ren, B.; Lyczko, N.; Nzihou, A.; Zhao, Y. "Integrating alum sludge with waste-activated sludge in co-conditioning and dewatering: A case study of a city in south France." *Environmental Science and Pollution Research* 27 (February 2020): 14863–14871. <https://doi.org/10.1007/s11356-020-08056-0>.
- 37) Lopez Ferber, N.; Pham Minh, D.; Falcoz, Q. ; Meffre, A.; Tessier-Doyen, N.; Nzihou, A.; Goetz, V. "Development of a Thermal Energy Storage Pressed Plate Ceramic Based on Municipal Waste Incinerator Bottom Ash and Waste Clay." *Waste and Biomass Valorization* 11, no. 2 (February 2020): 689-699. <https://doi.org/10.1007/s12649-019-00629-6>.
- 38) Onwona-Agyeman, B.; Lyczko, N.; Pham Minh, D.; Nzihou, A.; Yaya, A. "Characterization of some selected Ghanaian clay minerals for potential industrial applications." *Journal of Ceramic Processing Research* 21, no. 1 (January 2020): 35-41. <https://doi.org/10.36410/jcpr.2020.21.1.35>.
- 39) Rego de Vasconcelos, B.; Pham Minh, D.; Martins, E.; Germeau, A.; Sharrock, P.; Nzihou, A.. "A comparative study of hydroxyapatite- and alumina-based catalysts in dry reforming of methne." *Chemical Engineering & Technology* 43, no. 4 (January 2020): 698-704. <https://doi.org/10.1002/ceat.201900461>.
- 40) Ghogia, A. C; Cayez, S.; Machado, B. F; Nzihou, A.; Serp, P.; Soulantica, K.; Pham Minh, D. "Hydrogen spillover in the Fischer-Tropsch synthesis on carbon-supported cobalt catalysts." *ChemCatChem* 12, no. 4 (January 2020): 1117–1128. <https://doi.org/10.1002/cctc.201901934>.

➤ **2019**

- 41) Sane, A.R.; Nigay, P.-M.; Pham Minh, D.; Toussaint, C.; Germeau, A.; Semlal, N.; Boulif, R.; Nzihou, A. "An investigation of the physical, thermal and mechanical properties of fired clay/SiC ceramics

- for thermal energy storage." *Journal of Thermal Analysis and Calorimetry* 140, no. 5 (November 2019): 2087-2096. <https://doi.org/10.1007/s10973-019-08964-5>.
- 42) Zeng, K.; Li, R.; Pham Minh, D.; Weiss-Hortala, E.; Nzihou, A.; He, X.; Flamant, G. "Solar pyrolysis of heavy metal contaminated biomass for gas fuel production." *Energy* 187 (November 2019): 116016. <https://doi.org/10.1016/j.energy.2019.116016>.
  - 43) Ephraim, A.; Ngo, L.D.; Pham Minh, D.; Lebonnois, D.; Peregrina, C.; Sharrock, P.; Nzihou, A. "Valorization of Waste-Derived Inorganic Sorbents for the Removal of HCl in Syngas." *Waste and Biomass Valorization* 10 (November 2019): 3435–3446. <https://doi.org/10.1007/s12649-018-0355-1>.
  - 44) Ampaw, E.; Owosenia, T. A.; Dub, F.; Pinilla, N.; Obayemi, J.; Hu, J.; Nigay, P.-M.; Nzihou, A.; Uzonwanne, V.; Zebaze-Kana, M. G.; Dewoolkar, M.; Tan, T.; Soboyejo, W. "Compressive Deformation and Failure of Trabecular Structures in A Turtle Shell." *Acta Biomaterialia* 97 (October 2019): 535-543. <https://doi.org/10.1016/j.actbio.2019.07.023>.
  - 45) Dong, J.; Tang, Y.; Nzihou, A.; Chi, Y. "Key factors influencing the environmental performance of pyrolysis, gasification and incineration Waste-to-Energy technologies." *Energy Conversion and Management* 196 (September 2019): 497-512. <https://doi.org/10.1016/j.enconman.2019.06.016>.
  - 46) Dia, M.; Zentar, R.; Abriak, N.; Nzihou, A.; Depelsenaire, G.; Germeau, A. "Effect of phosphatation and calcination on the environmental behaviour of sediments." *International Journal of Sediment Research* 34, no. 5 (October 2019): 486-495. <https://doi.org/10.1016/j.ijsrc.2018.10.002>.
  - 47) He, X.; Zeng, K.; Xie, Y.; Flamant, G.; Yang, H.; Yang, X.; Nzihou, A.; Zheng, A.; Ding, Z.; Chen, H. "The effects of temperature and molten salt on solar pyrolysis of lignite." *Energy* 181 (August 2019): 407-416. <https://doi.org/10.1016/j.energy.2019.05.181>.
  - 48) Romero Millan, L. M.; Sierra Vargas, F.E.; Nzihou, A. "Catalytic Effect of Inorganic Elements on Steam Gasification Biochar Properties from Agrowastes." *Energy & Fuels* 33, no. 9 (July 2019): 8666-8675. <https://doi.org/10.1021/acs.energyfuels.9b01460>.
  - 49) Xie, Y.; Zeng, K.; Flamant, G.; Yang, H.; Liu, N.; He, X.; Yang, X.; Nzihou, A.; Chen, H. "Solar pyrolysis of cotton stalk in molten salt for bio-fuel production." *Energy* 179 (July 2019): 1124-1132. <https://doi.org/10.1016/j.energy.2019.05.055>.
  - 50) Ducouso, M.; Weiss-Hortala, E.; Lyczko, N.; Nzihou, A.; Castaldi, M. "110th Anniversary: Syngas production enhancement using calcium and potassium impregnated chars." *Industrial & Engineering Chemistry Research* 58, no. 33 (July 2019): 15134-15141. <https://doi.org/10.1021/acs.iecr.9b02238>.
  - 51) Jain, S.; Newman, D.; Nzihou, A.; Dekker, H.; Le Feuvre, P.; Richter, H.; Gobe, F.; Morton, C.; Thompson, R. "Global Potential of Biogas Report. World Biogas Association." (June 2019). <https://www.worldbiogasassociation.org/global-potential-of-biogas/>.
  - 52) Ren, Baiming; Zhao, Yaqian; Lyczko, Nathalie; Nzihou, A.. "Current Status and Outlook of Odor Removal Technologies in Wastewater Treatment Plant. Review." *Waste and Biomass Valorization* 10 (June 2019): 1443-1458. <https://doi.org/10.1007/s12649-018-0384-9>.
  - 53) Gopakumar, D.A.; Arumukhan, V.; Gelamo, R. V.; Pasquini, D.; de Moraes, L. C.; Rizal, S.; Hermawan, D.; Nzihou, A.; Abdul Khalil, H.P.S. "Carbon dioxide plasma treated PVDF electrospun membrane for the removal of crystal violet dyes and iron oxide nanoparticles from water." *Nano-Structures & Nano-Objects* 18 (April 2019): 100268. <https://doi.org/10.1016/j.nanoso.2019.100268>.
  - 54) Hasan, M.I.; Gopakumar, D.A.; Arumughan, V.; Pottathara, Y. B.; Sidhardhan, S. K.; Pasquini, D.; Bračič, M.; Seantier, B.; Nzihou, A.; Thomas, S.; Rizal, S.; H.P.S., A.I K. "Robust Superhydrophobic Cellulose Nanofiber Aerogel for multifunctional Environmental Applications." *Polymers* 11, no. 3 (March 2019): 495. <https://www.mdpi.com/2073-4360/11/3/495>.
  - 55) Block, C.; Ephraim, A.; Weiss Hortala, E.; Pham Minh, D.; Nzihou, A.; Vandecasteele, C. "Co-pyrogasification of Plastics and Biomass, a Review." *Waste and Biomass Valorization* 10 (March 2019): 483-509. <https://doi.org/10.1007/s12649-018-0219-8>.
  - 56) Galera Martínez, M.; Pham Minh, D.; Nzihou, A.; Sharrock, P. "Valorization of calcium carbonate-based solid wastes for the treatment of hydrogen sulfide in a semi-continuous reactor." *Chemical Engineering Journal* 360 (March 2019): 1167-1176. <https://doi.org/10.1016/j.cej.2018.10.169>.

- 57) Hervy, M.; Weiss-Hortala, E.; Pham Minh, D.; Dib, H.; Villot, A.; Gerente, C.; Berhanu, S.; Chesnaud, A.; Thorel, A.; Le Coq, L.; Nzihou, A. "Reactivity and deactivation mechanisms of pyrolysis chars from bio-waste during catalytic cracking of tar." *Applied Energy* 237 (March 2019): 487-499. <https://doi.org/10.1016/j.apenergy.2019.01.021>.
- 58) Nzihou, A.; Stanmore, B.; Lyczko, N.; Pham Minh, D. "The Catalytic Effect of Inherent and Adsorbed Metals on the Fast/Flash Pyrolysis of Biomass: A Review." *Energy* 170 (March 2019): 326-337. <https://doi.org/10.1016/j.energy.2018.12.174>.
- 59) Lopez Ferber, N.; Falcoz, Q.; Pham Minh, D.; Hoffman, J.-F.; Meffre, A.; Nzihou, A.; Goetz, V. "Flexibility and robustness of a high-temperature air/ceramic thermocline heat storage pilot." *Journal of Energy Storage* 21 (February 2019): 393-404. <https://doi.org/10.1016/j.est.2018.11.034>.
- 60) Romero Millan, L.M.; Sierra Vargas, F. E.; Nzihou, A. "Steam gasification behavior of tropical agrowastes: a new modeling approach based on the inorganic composition." *Fuel* 239 (January 2019) : 45-53. <https://doi.org/10.1016/j.fuel.2018.07.053>.

## ► 2018

- 61) Awe, Olumide W.; Lu, J.; Wu, S.; Zhao, Y. ; Nzihou, A.; Lyczko, N.; Pham Minh, D. "Effect of Oil Content on Biogas Production, Process Performance and Stability of Food Waste Anaerobic Digestion." *Waste and Biomass Valorization* 9 ( December 2018): 2295–2306. <https://doi.org/10.1007/s12649-017-0179-4>.
- 62) Nigay, P.-M.; Nzihou, A.; White, C. E; Soboyejo, W. O. "Removal Mechanisms of Contaminants in Ceramic Water Filters." *Journal of Environmental Engineering* 144, no. 12 (December 2018). <https://ascelibrary.org/doi/10.1061/%28ASCE%29EE.1943-7870.0001471>.
- 63) Dong, J.; Tang, Y.; Nzihou, A.; Chi, Y.; Weiss-Hortala, E.; Ni, M.; Zhou, Z. "Comparison of Waste-to-Energy technologies of gasification and incineration using life cycle assessment: case studies in Finland, France and China." *Journal of Cleaner Production* 203 (December 2018): 287-300. <https://doi.org/10.1016/j.jclepro.2018.08.139>.
- 64) Munirathinam, R.; Pham Minh, D.; Nzihou, A. "Effect of the Support and Its Surface Modifications in Cobalt-Based Fischer–Tropsch Synthesis." *I&EC research* 57, no.48 (November 2018): 16137–16161. <https://doi.org/10.1021/acs.iecr.8b03850>.
- 65) Ephraim, A.; Pham Minh, D.; Lebonnois, D.; Peregrina, C.; Sharrock, P.; Nzihou, A. "Co-pyrolysis of wood and plastics: Influence of plastic type and content on product yield, gas composition and quality." *Fuel* 231 (November 2018): 110-117. <https://doi.org/10.1016/j.fuel.2018.04.140>.
- 66) Hervy, M.; Villot, A.; Gerente, C.; Pham Minh, D.; Le Coq, L.; Weiss-Hortala, E.; Nzihou, A. "Catalytic cracking of ethylbenzene as tar surrogate using pyrolysis chars from wastes". *Biomass and Bioenergy* 117 (October 2018): 86-95. <https://doi.org/10.1016/j.biombioe.2018.07.020>.
- 67) Rego de Vasconcelos, B.; Pham Minh, D.; Lyczko, N.; Phan, T. S.; Sharrock, P.; Nzihou, A. "Upgrading greenhouse gases (methane and carbon dioxide) into syngas using nickel-based catalysts." *Fuel* 226 (August 2018):195-203. <https://doi.org/10.1016/j.fuel.2018.04.017>.
- 68) Daouk, E.; Sani, R.; Pham minh, D.; Nzihou, A. "Thermo-conversion of solid recovered fuels under inert and oxidative atmospheres: gas composition and chlorine distribution." *Fuel* 225 (August 2018): 54-64. <https://doi.org/10.1016/j.fuel.2018.03.136>.
- 69) Phan, T. S.; Pham Minh, D.; Grouset, D.; Nzihou, A. "Thermodynamic Equilibrium Study of Methane Reforming with Carbon Dioxide, Water and Oxygen." *Journal of Clean Energy Technologies* 6, no. 4 (July 2018): 309-313. <https://doi.org/10.18178/JOCET.2018.6.4.480>.
- 70) Rego de Vasconcelos, B.; Pham minh, D.; Nzihou, A.; Sharrock, P. "Regeneration study of Ni/hydroxyapatite spent catalyst from dry reforming." *Catalysis* 310 (July 2018): 107-115. <https://doi.org/10.1016/j.cattod.2017.05.092>.
- 71) Dong, J.; Tang, Y.; Nzihou, A.; Chi, Y.; Weiss-Hortala, E.; Ni, M. "Life cycle assessment of pyrolysis, gasification and incineration waste-to-energy technologies: theoretical analysis and case study of commercial plants." *Science of the Total Environment* 626 (June 2018): 744-753.

- <https://doi.org/10.1016/j.scitotenv.2018.01.151>.
- 72) Son Phan, T. S.; Sane, A. R.; Rêgo de Vasconcelos, B.; Pham Minh, D.; Sharrock, P.; Grouset, D.; Nzihou, A. "Hydroxyapatite supported bimetallic cobalt and nickel catalysts for syngas production from dry reforming of methane." *Applied Catalysis B: Environmental* 224 (May 2018): 310-321. <https://doi.org/10.1016/j.apcatb.2017.10.063>.
- 73) Nigay, P.-M.; Nzihou, A.; Cutard, T. "The impact of the particle size distribution of organic additives on the microstructure of a clay ceramic and its thermal and mechanical properties." *Journal of Materials in Civil Engineering* 30, no. 4 (April 2018): 04018044. [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0002221](https://doi.org/10.1061/(ASCE)MT.1943-5533.0002221).
- 74) Berhanu, S.; Hervy, M.; Weiss-Hortala, E.; Proudhon, H.; Berger, M.-H.; Chesnaud, A.; Faessel, M.; King, A.; Pham Minh, D.; Villot, A.; Gérente, C.; Thorel, A.; Le Coq, L.; Nzihou, A. "Advanced characterization unravels the structure and reactivity of wood-based chars." *Journal of Analytical and Applied Pyrolysis* 130 (March 2018):79-89. <https://doi.org/10.1016/j.jaap.2018.01.024>.
- 75) Hervy, M.; Pham Minh, D.; Gerente, C.; Weiss-Hortala, E.; Nzihou, A.; Villot, A.; Le Coq, L. "H<sub>2</sub>S removal from syngas using wastes pyrolysis chars." *Chemical Engineering Journal* 334 (February 2018): 2179-2189. <https://doi.org/10.1016/j.cej.2017.11.162>.
- 76) Said, M.; Cassayre, L.; Dirion, J.-L.; Nzihou, A.; Joulia, X. "Influence of nickel on biomass pyro-gasification: coupled thermodynamic and experimental investigations." *I&EC Research* 57, no. 30 (February 2018): 9788-9797. <https://doi.org/10.1021/acs.iecr.7b05201>.

#### ➤ [2017](#)

- 77) Castaldi, M.; van Deventer, J.; Lavoie, J.-M.; Legrand, J.; Nzihou, A.; Pontikes, Y.; Py, X.; Vandecasteele, C.; Vasudevan, P.T. V.; Verstraete, W. "Progress and Prospects in the Field of Biomass and Waste to Energy and Added-Value Materials". *Waste and Biomass Valorization* 8 (December 2017): 1875–1884. <https://doi.org/10.1007/s12649-017-0049-0>.
- 78) Nigay, P.-M.; Sani, R.; Cutard, T.; Nzihou, A. "Modeling of the thermal and mechanical properties of clay ceramics incorporating organic additives." *Materials Science & Engineering A* 708 (December 2017):75-382. <https://doi.org/10.1016/j.msea.2017.09.131>.
- 79) Lyczko, N.; Sebei, H.; Nzihou, A.; Sharrock, P. "Treatment of municipal wastewater with calcium phosphate: a new physicochemical purification step." *Environmental Engineering and Management Journal* 16, no. 11 (November 2017): 2573-2580. <https://doi.org/10.30638/eemj.2017.267>.
- 80) Pham Minh, D.; Sane, A. R., Nawal, N.; Sharrock, P.; Nzihou, A. "Alkali polyphosphate as new potential materials for thermal energy storage." *Solar Energy* 157 (November 2017): 277-283. <https://doi.org/10.1016/j.solener.2017.08.030>.
- 81) Sani, R.; Nzihou, A. "Production of clay ceramics using agricultural wastes: study of properties, energy savings and environmental indicators." *Applied Clay Science* 146 (September 2017): 106-114. <https://doi.org/10.1016/j.clay.2017.05.032>.
- 82) Dong, J.; Nzihou, A.; Chi, Y.; Weiss-Hortala, E.; Ni, M.; Lyczko, N.; Tang, Y.; Ducouso, M. "Hydrogen-rich gas production from steam catalytic gasification of bio-char." *Waste and Biomass Valorization* 8 (August 2017): 1875–1884. <https://doi.org/10.1007/s12649-016-9784-x>.
- 83) Said, M.; Cassayre, L.; Dirion, J.-L.; Joulia, X.; Nzihou, A. "Effect of Nickel Impregnation on Wood Gasification Mechanism." *Waste and Biomass Valorization* 8, no. 8 (August 2017): 2843-2852. <https://doi.org/10.1007/s12649-017-9911-3>.
- 84) Nigay, P.-M.; Nzihou, A.; White, C. E; Soboyejo, W.O. "Structure and Properties of Clay Ceramics for Thermal Energy Storage." *Journal of the American Ceramic Society* 100, no. 10 (June 2017): 4748-4759. <https://doi.org/10.1111/jace.15014>.
- 85) Romero Millan, L. M.; Nzihou, A.; Sierra Vargas, F. E. "Kinetic analysis of tropical lignocellulosic agrowastes pyrolysis." *BioEnergy Research* 10 (June 2017): 832-845. <https://doi.org/10.1007/s12155-017-9844-5>.
- 86) Awe, O.W.; Pham Minh, D.; Lyczko, N.; Nzihou, A.; Zhao, Y. "Laboratory-scale investigation of the

- removal of hydrogen sulfide from biogas and air using industrial waste-based sorbents." *Journal of Environmental Chemical Engineering* 5, no. 2 (April 2017): 1809-1820. <https://doi.org/10.1016/j.jece.2017.03.023>.
- 87) Stanmore, B.; Nzihou, A. "Can biomass be satisfactorily gasified under pressure using an aqueous slurry feed: Examination by simulation." *Biomass and Bioenergy* 97 (February 2017): 108-115. <https://doi.org/10.1016/j.biombioe.2016.12.026>.
- 88) Nigay, P.-M.; Cutard, T.; Nzihou, A. "The impact of heat treatment on the microstructure of a clay ceramic and its thermal and mechanical properties." *Ceramics International* 43, no. 2 (February 2017): 1747-1754. <https://doi.org/10.1016/j.ceramint.2016.10.084>.
- 89) Hervy, M.; Berthau, S.; Weiss-Hortala, E.; Chesnaud, A.; Gerente, C.; Villot, A.; Pham Minh, D.; Thorel, A.; Le Coq, L.; Nzihou, A. "Multi-scale characterisation of chars mineral species for tar cracking." *Fuel* 189 (February 2017): 88-97. <https://doi.org/10.1016/j.fuel.2016.10.089>.
- 90) Awe, O. A.; Zhao, Y.; Nzihou, A.; Pham Minh, D.; Lyczko, N. "A Review of Biogas Utilisation, Purification and Upgrading Technologies." *Waste and Biomass Valorization* 8, (January 2017): 267-283. <https://doi.org/10.1007/s12649-016-9826-4>.
- 91) Zeng, K.; Gauthier, D.; Pham Minh, D.; Weiss-Hortala, E.; Nzihou, A.; Flaman, G. "Characterization of solar fuels obtained from beech wood solar pyrolysis." *Fuel* 188 (January 2017): 285-293. <https://doi.org/10.1016/j.fuel.2016.10.036>.

#### ► **2016**

- 92) Sebei, H.; Pham Minh, D.; Lyczko, N.; Sharrock, P.; Nzihou, A. "Hydroxyapatite-based sorbents: Elaboration, characterization and application for the removal of catechol from the aqueous phase." *Environmental Technology* 38, no. 20 (December 2016): 2611-2620. <https://doi.org/10.1080/09593330.2016.1271829>.
- 93) Rego de Vasconcelos, B.; Zhao, L.; Sharrock, P.; Nzihou, A.; Pham Minh, D. "Catalytic transformation of carbon dioxide and methane into syngas over ruthenium and platinum supported hydroxyapatites." *Applied Surface Science* 390 (December 2016): 141-156. <https://doi.org/10.1016/j.apsusc.2016.08.077>.
- 94) Korah, L.V.; Nigay, P.-M.; Cutard, T.; Nzihou, A.; Thomas, S. "The impact of the particle shape of organic additives on the anisotropy of a clay ceramic and its thermal and mechanical properties." *Construction and Building Materials* 125 (October 2016): 654-660. <https://doi.org/10.1016/j.conbuildmat.2016.08.094>.
- 95) Ephraim, A.; Pozzobon, V.; Louisnard, O.; Pham Minh, D.; Nzihou, A.; Sharrock, P. "Simulation of biomass char gasification in a downdraft reactor for syngas production." *AIChE Journal* 62, no. 4 (April 2016): 1079-109. <https://doi.org/10.1002/aic.15111>.
- 96) Chen, S.; Wang, F.; Milhé, M.; Arlabosse, P.; Liang, F.; Chi, Y.; Nzihou, A.; Yan, J. "Experimental and theoretical research on agitated contact drying of sewage sludge in a continuous paddle dryer." *Drying Technology* 364, no. 16 (March 2016): 1979-1990. <https://doi.org/10.1080/07373937.2016.1147457>.
- 97) Dong, J.; Chi, Y.; Tang, Y.; Nzihou, A.; Weiss-Hortala, E.; Huang, Q. "Effect of operating parameters and moisture content on municipal solid waste pyrolysis and gasification." *Energy & Fuels* 30, no. 5 (April 2016): 3994-4001. <https://doi.org/10.1021/acs.energyfuels.6b00042>.
- 98) Macedo Portela da Silva, N.; Espitalier, F.; Nzihou, A. "Precipitation Process of Calcium Phosphate from Calcium Carbonate Suspension." *KONA Powder and Particle Journal* 33 (February 2016) 219-227, 2016. <https://doi.org/10.14356/kona.2016002>.

#### ► **2015**

- 99) Sebei, H.; Pham Minh, D.; Nzihou, A.; Sharrock, P. "Sorption behavior of Zn(II) ions on synthetic apatitic calcium phosphates." *Applied Surface Science Part: B* 357 (December 2015): 1958-1966. <https://doi.org/10.1016/j.apsusc.2015.09.158>.
- 100) Pham Minh, D.; Nzihou, A.; Sharrock, P. "Sodium dihydrogen phosphate starting from sodium

- chloride and orthophosphoric acid via cation resin exchA..” Phosphorus, Sulfur, and Silicon and the Related Elements 190, no. 11 (November 2015): 1743-1748. <https://doi.org/10.1080/10426507.2015.1024314>.
- 101) Ducouso, M.; Weiss-Hortala, E.; Nzihou, A.; Castaldi, M. “Reactivity enhancement of gasification biochars for catalytic applications.” Fuel 1 (November 2015): 491-499, 2015. <https://doi.org/10.1016/j.fuel.2015.06.100>.
- 102) Klinghoffer, N.; Castaldi, M.; Nzihou, A. “Influence of char composition and inorganics on catalytic activity of char from biomass gasification”. Fuel 157 (October 2015): 37-47. <https://doi.org/10.1016/j.fuel.2015.04.036>.
- 103) Dong, J.; Chi, Y.; Tang, Y.; Nzihou, A.; Weiss-Hortala, Elsa; Hunag, Q. “Partitioning of Heavy Metals in Municipal Solid Waste Pyrolysis, Gasification, and Incineration.” Energy & Fuels 29, no. 11 (October 2015): 7516-7525. <https://doi.org/10.1021/acs.energyfuels.5b01918>.
- 104) Nasri, K.; El Feki, H.; Sharrock, P.; Fiallo, M.; Nzihou, A. “Spray-Dried Monocalcium Phosphate Monohydrate for Soluble Phosphate Fertilizer.” Industrial & Engineering Chemistry Research 54, no. 33 (August 2015): 8043-8047. <https://doi.org/10.1021/acs.iecr.5b02100>.
- 105) Said, M.; Cassayre, L.; Dirion, J.-L.; Nzihou, A.; Joulia, X. “Behavior of heavy metals during gasification of phytoextraction plants: thermochemical modelling.” Computer Aided Chemical Engineering 37 (June 2015): 341-346. <https://doi.org/10.1016/B978-0-444-63578-5.50052-9>.
- 106) Nzihou, A.; Stanmore, B. “The formation of Aerosols during the co-combustion of coal and biomass.” Waste and Biomass Valorization 6 (June 2015): 947-957. <https://doi.org/10.1007/s12649-015-9390-3>.
- 107) De Vasconcelos, B.; Dung Tran, N.; Pham Minh, D.; Nzihou, A.; Sharrock, P. “Synthesis of carbon nanotubes/hydroxyapatite composites using catalytic methane cracking.” Composite Interfaces 22, no. 7 (June 2015): 673-687. <https://doi.org/10.1080/09276440.2015.1060055>.
- 108) Stita, S.; Galera Martinez, M.; Pham Xuan, H.; Pham Minh, D.; Nzihou, A.; Sharrock, P. “Metal-doped apatitic calcium phosphates: preparation, characterization, and reactivity in the removal of hydrogen sulfide from gas phase.” Composite Interfaces 22, no. 6 (June 2015): 503-515. <https://doi.org/10.1080/09276440.2015.1049096>.
- 109) Pham Xuan, H.; Pham Minh, D.; Galera Martinez, M.; Nzihou, A.; Sharrock, P. “Valorization of Calcium Carbonate-Based Solid Wastes for the Treatment of Hydrogen Sulfide from the Gas Phase.” Industrial & Engineering Chemistry Research 54, no. 18 (April 2015): 4915-4922. <https://doi.org/10.1021/acs.iecr.5b00764>.
- 110) Zeng, K.; Pham Minh, D.; Gauthier, D.; Weiss-Hortala, E.; Nzihou, A.; Flamant, G. “The effect of temperature and heating rate on char properties obtained from solar pyrolysis of beech wood.” Bioresource Technology 182 (April 2015): 114-119. <https://doi.org/10.1016/j.biortech.2015.01.112>.
- 111) Daniels, Y.; Lyczko, N.; Nzihou, A.; Alexandratos, S. D. « Modification of hydroxyapatite with ion-selective complexants:1-Hydroxyethane-1,1-diphosphonic acid.” Industrial & Engineering Chemistry Research 54, no. 2 (February 2015): 585-596. <https://doi.org/10.1021/ie504181z>.
- **2014**
- 112) Pham Minh, D.; Sharrock, P.; Nzihou, A. “Carbonated hydroxyapatite starting from calcite and different orthophosphates under moderate hydrothermal conditions: synthesis and surface reactivity in simulated body fluid.” Materials Research Bulletin 60 (December 2014): 292-299. <https://doi.org/10.1016/j.materresbull.2014.08.052>.
- 113) Lyczko, N.; Nzihou, A.; Sharrock, P. “Calcium phosphate sorbent for environmental application.” Procedia Engineering 83 (November 2014): 423-431. <https://doi.org/10.1016/j.proeng.2014.09.051>.
- 114) Raii, M.; Pham Minh, D.; Escudero Sanz, F. J.; Nzihou, A. “Lead and cadmium removal from aqueous solution using an industrial gypsum by-product.” Procedia Engineering 83 (November 2014): 415-422. <https://doi.org/10.1016/j.proeng.2014.09.050>.



- 115) Kemiha, M.; Pham Minh, D.; Lyczko, N.; Nzihou, A.; Sharrock, P. "Highly porous calcium hydroxyapatite-based composites for air pollution control." *Procedia Engineering* 83 (November 2014): 394–402. <https://doi.org/10.1016/j.proeng.2014.09.044>.
- 116) Dia, M.; Ramaroson, J.; Nzihou, A.; Zentar, R.; Abriak, N.; Depelsenaire, G.; Germeau, A. "Effect of chemical and thermal treatment on the geotechnical properties of dredged sediment." *Procedia Engineering* 83 (November 2014): 159-169. <https://doi.org/10.1016/j.proeng.2014.09.034>.
- 117) Lemlikchi, W.; Sharrock, P.; Fiallo, M.; Nzihou, A., Mecherri, M.-O. "Hydroxyapatite and Alizarin sulfonate ARS modeling interactions for textile dyes removal from wastewaters." *Procedia Engineering* 83 (November 2014): 378-385. <https://doi.org/10.1016/j.proeng.2014.09.032>.
- 118) Belaicha, N.; Lemlikchi, W.; Mecherri, M.-O.; Sharrock, P.; Nzihou, A. "Composite material with calcium sulfate and calcium phosphate for heavy metals retention." *Procedia Engineering* 83 (November 2014): 403-406. <https://doi.org/10.1016/j.proeng.2014.09.048>.
- 119) Nasri, K.; Chtara, C.; Hassen, C.; Fiallo, M.; Sharrock, P.; Nzihou, A.; El Feki, H. "Recrystallization of Industrial Triple Super Phosphate Powder". *Industrial & Engineering Chemistry Research* 53, no. 37 (August 2014):14446–14450. <https://doi.org/10.1021/ie502033j>.
- 120) Pham Minh, D.; Dung Tran, N.; Nzihou, A.; Sharrock, P. "Calcium phosphate-based materials starting from calcium carbonate and orthophosphoric acid for the removal of lead(II) from an aqueous solution." *Chemical Engineering Journal* 243 (May 2014): 280-288. <https://doi.org/10.1016/j.cej.2014.01.032>.
- 121) Pham Minh, D.; Rio, S.; Sharrock, P.; Sebei, H.; Lyczko, N.; Dung Tran, N.; Raii, M.; Nzihou, A. "Hydroxyapatite starting from calcium carbonate and orthophosphoric acid: synthesis, characterization and applications." *Journal of Materials Science* 49 (March 2014): 4261-4269. <https://doi.org/10.1007/s10853-014-8121-7>.
- 122) Phan Minh, D.; Dung Tran, N.; Nzihou, A.; Sharrock, P. "Novel one-step synthesis and characterization of bone-like carbonated apatite from calcium carbonate, calcium hydroxide and orthophosphoric acid as economical starting materials." *Materials Research Bulletin* 51 (March 2014) 236-243, 2014. <https://doi.org/10.1016/j.materresbull.2013.12.020>.
- 123) Maria, H. J.; Lyczko, N.; Nzihou, A.; Joseph, K.; Mathew, C.; Thomas, S. "Stress Relaxation Behavior of Organically Modified Montmorillonite Filled Natural Rubber/Nitrile Rubber Nanocomposites." *Applied Clay Sciences* 87 (January 2014): 120-128. <https://doi.org/10.1016/j.clay.2013.10.019>.
- 124) El Feki, H.; Chaabouni, A.; Chtara, C.; Nzihou, A. "Study the nature and the effects of the impurities of phosphate rock in the plants of production of phosphoric acid." *Journal of advances in chemistry* 7; no. 2 (January 2014): 1296-1299. <https://doi.org/10.24297/jac.v7i2.5560>.
- 125) Lemlikchi, W.; Sharrock, P.; Mecherri, M.-O.; Fiallo, M.; Nzihou, A. "Reaction of calcium phosphate with textile dyes for purification of wastewaters." *Desalination and Water Treatment* 52, no. 7-9 (January 2014): 1669-1673. <http://dx.doi.org/10.1080/19443994.2013.807008>.

### ➤ **2013**

- 126) Pham Minh, D.; Dung Tran, N.; Nzihou, A.; Sharrock, P. "Hydroxyapatite gel for the improved removal of Pb<sup>2+</sup> ions from aqueous solution." *Chemical Engineering Journal* 232 (October 2013): 128-138. <https://doi.org/10.1016/j.cej.2013.07.086>.
- 127) Galera Martínez, M.; Pham Minh, D.; Weiss-Hortala, E.; Nzihou, A.; Sharrock, P. "Synthesis, characterization and thermo-mechanical properties of copper loaded apatitic calcium phosphates." *Composite Interfaces* 20, no. 8 (September 2013): 647-660. <https://doi.org/10.1080/15685543.2013.834208>.
- 128) Nzihou, A.; Stanmore, B.; Sharrock, P. "A review of catalysts for the gasification of biomass char, with some reference to coal." *Energy* 58 (September 2013): 305-317. <https://doi.org/10.1016/j.energy.2013.05.057>.
- 129) Maria, H.M.; Lyczko, N.; Nzihou, A.; Cherian, M.; George, S. C.; Joseph, K.; Sabu, T. "Transport of organic solvents through natural rubber/nitrile rubber/organically modified montmorillonite nanocomposites." *Journal of Material Science* 48, no. 15 (August 2013), 5373-5386.

- <https://doi.org/10.1007/s10853-013-7332-7>.
- 130) Pham Minh, D.; Dung Tran, N.; Nzihou, A.; Sharrock, P. "Carbonate-containing apatite (CAP) synthesis under moderate conditions starting from calcium carbonate and orthophosphoric acid." *Materials Science & Engineering C* 33, no. 5 (July 2013): 2971-2980. <https://doi.org/10.1016/j.msec.2013.03.023>.
- 131) Nzihou, A.; Stanmore, B. "The fate of heavy metals during combustion and gasification of contaminated biomass - A brief review." *Journal of Hazardous Materials* 256 (July 2013): 56-66. <https://doi.org/10.1016/j.jhazmat.2013.02.050>.

➤ **2012**

- 132) Pham Minh, D.; Dung Tran, N.; Nzihou, A.; Sharrock, P. "One-Step Synthesis of Calcium Hydroxyapatite from Calcium Carbonate and Orthophosphoric Acid under Moderate Conditions." *Industrial & Engineering Chemistry Research* 52, no. 4 (December 2012): 1439-1447. <https://doi.org/10.1021/ie302422d>.
- 133) Nzihou, A.; Themelis, N.; Kemiha, M.; Benhamou, Y. "Dioxin emissions from municipal solid waste incinerators (MSWIs) in France." *Waste Management* 32, no. 12 (December 2012): 2273-2277. <https://doi.org/10.1016/j.wasman.2012.06.016>.
- 134) Kribi, S.; Ramarosan, J.; Nzihou, A.; Sharrock, P.; Depelsenaire, G. "Laboratory scale study of an industrial phosphate and thermal treatment for polluted dredged sediments". *International Journal of Sediment Research* 27, no. 4 (December 2012): 1-9. [http://dx.doi.org/10.1016/S1001-6279\(13\)60011-6](http://dx.doi.org/10.1016/S1001-6279(13)60011-6).
- 135) Pham Minh, D.; Galera Martínez, M.; Nzihou, A.; Sharrock, P. "Thermal behavior of apatitic calcium phosphates synthesized from calcium carbonate and orthophosphoric acid or potassium dihydrogen orthophosphate." *Journal of Thermal Analysis and Calorimetry* 112, no. 3 (October 2012): 1145-1155. <https://doi.org/10.1007/s10973-012-2695-6>.
- 136) Klinghoffer, N.; Castaldi, M.; Nzihou, A. "Catalyst properties and catalytic performance of char from biomass gasification." *Industrial & Engineering Chemistry Research* 51, no. 40 (September 2012): 13113-13122. <http://dx.doi.org/10.1021/ie3014082>.
- 137) Pham Minh, D.; Lyczko, N.; Sebei, H.; Nzihou, A.; Sharrock, P. "Synthesis of calcium hydroxyapatite from calcium carbonate and different orthophosphate sources: A comparative study." *Materials Science & Engineering B* 177, no. 13 (August 2012): 1080-1089. <https://doi.org/10.1016/j.mseb.2012.05.007>.
- 138) Raii, M.; Escudero Sanz, F. J.; Nzihou, A. "Rheological behavior of gypsum, plaster, and hydroxyapatite gel blends." *Industrial & Engineering Chemistry Research* 51, no. 34 (August 2012): 11163-11169. <https://doi.org/10.1021/ie301154d>.
- 139) Pham Minh, D.; Sebei, H.; Nzihou, A.; Sharrock, P. "Apatitic calcium phosphates: synthesis, characterization and reactivity in the removal of lead(II) from aqueous solution." *Chemical Engineering Journal* 198-199 (August 2012): 180-190. <https://doi.org/10.1016/j.cej.2012.05.083>.
- 140) Pham Minh, D.; Nzihou, A.; Sharrock, P.; Ramarosan, J. "A new route for the synthesis of alkali polyphosphate from economical starting materials: influence of reaction conditions." *Phosphorus, Sulfur, and Silicon and the Related Elements* 187 (July 2012): 1132-1140. <https://doi.org/10.1080/10426507.2012.668989>.
- 141) Nzihou, A.; Flamant, G.; Stanmore, B. "Synthetic fuels from biomass using concentrated solar energy - A review." *Energy* 42, no. 1 (June 2012): 121-131. <https://doi.org/10.1016/j.energy.2012.03.077>.
- 142) Ramarosan, J.; Dia, M.; Dirion, J.-L.; Nzihou, A.; Depelsenaire, G. « Thermal treatment of dredged sediment in a rotary kiln: Investigation of structural chA.s." *Industrial & Engineering Chemistry Research* 51, no. 21 (May 2012): 7146-7152. <https://doi.org/10.1021/ie203023k>.
- 143) Pham Minh, D.; Ramarosan, J.; Nzihou, A.; Sharrock, P. "One-step synthesis of sodium trimetaphosphate (Na<sub>3</sub>P<sub>3</sub>O<sub>9</sub>) from sodium chloride and orthophosphoric acid." *Industrial & Engineering Chemistry Research* 51, no. 10 (February 2012): 3851-3854.

<https://doi.org/10.1021/ie201085b>.

- 144) Lemlikchi, W.; Sharrock, P.; Mechherri, M.-O.; Fiallo, M.; Nzihou, A. "Treatment of textile waste waters by hydroxyapatite co-precipitation with adsorbent regeneration and reuse." *Waste Biomass Valorization* 3 (January 2012): 75-79. <https://doi.org/10.1007/s12649-011-9096-0>.
- 145) Pham Minh, D.; Ramarason, J.; Nzihou, A.; Sharrock, P.; Depelsenaire, G. "A new route for the synthesis of alkali polyphosphate from economical starting materials: preparation and characterization of sodium cyclotriphosphate." *Phosphorus, Sulfur, and Silicon and the Related Elements* 187 (January 2012): 112-120. <https://doi.org/10.1080/10426507.2011.590950>.
- 146) Lyczko, N.; Nzihou, A.; Sharrock, P.; Germeau, A.; Toussaint, C. « Characterization of  $\text{LiFePO}_4/\text{C}$  cathode for lithium-ion batteries". *Industrial & Engineering Chemistry Research* 51, no. 1 (January 2012): 292-300. <https://doi.org/10.1021/ie201799x>.

#### ➤ [2011](#)

- 147) Gargouri, M.; Chtara, C.; Sharrock, P.; Nzihou, A.; El Feki, H. "Synthesis and physicochemical characterization of pure diammonium phosphate from industrial fertilizer." *Industrial & Engineering Chemistry Research* 50, no. 11 (April 2011): 6580-6584. <https://doi.org/10.1021/ie102237n>.
- 148) Kemiha, M.; Nzihou, A.; Mateos, D. « Thermal valorization of wood waste by pyrolysis at low temperature." *Chemical Engineering Transactions* 25 (April 2011): 545-550. <https://doi.org/10.3303/CET1125091>.
- 149) Tribout, C.; Husson, B.; Nzihou, A. 'Use of treated dredged sediments as road base materials: environmental assessment.' *Waste and Biomass Valorization* 2 (March 2011): 337-346. <https://doi.org/10.1007/s12649-011-9068-4>.
- 150) Klinghohher, N.; Castaldi, M. J; Nzihou, A. "Beneficial use of ash and char from biomass gasification." *Proceeding of the NAWTEC19* ( January 2011): 13-17. <http://dx.doi.org/10.1115/NAWTEC19-5421>.

#### ➤ [2010](#)

- 151) Nzihou, A.; Lifset, R. "Waste valorization, loop-closing, and industrial ecology." *Journal of Industrial Ecology* 14, no. 2 (April 2010): 196-199. <https://doi.org/10.1111/j.1530-9290.2010.00242.x>.
- 152) Nzihou, A.; Sharrock, P. "Role of phosphate in the remediation and reuse of heavy metal polluted wastes and sites." *Waste Biomass Valorization* 1 (March 2010): 163-174. <http://dx.doi.org/10.1007/s12649-009-9006-x>.
- 153) Nzihou, A. "Toward the valorization of waste and biomass." *Waste Biomass Valorization* 1 (February 2010): 3-7. <https://doi.org/10.1007/s12649-010-9014-x>.