

Publications in peer reviewed International Journals 1993-2009

➤ 2009

- 1) Ramaroson, J.; Dirion, J.-L. ; Nzihou, A.; Depelsenaire, G. « Characterization and kinetics of surface area reduction during the calcination of dredged sediments.” Powder Technology 190, no. 1 (March 2009): 59-64. <http://dx.doi.org/10.1016/j.powtec.2008.04.094>.
- 2) Verwilghen, C.; Chkir, M.; Rio, S.; Nzihou, A.; Sharrock, P.; Depelsenaire, G. “Convenient conversion of calcium carbonate to hydroxyapatite at ambient temperature.” Materials Science & Engineering: C 29, no. 3 (April 2009): 771-773. <http://dx.doi.org/10.1016/j.msec.2008.07.007>.
- 3) Sharrock, P.; Fiallo, M.; Nzihou, A.; Chkir, M. “Hazardous animal waste carcasses transformation into slow-release fertilizers.” Journal of Hazardous Materials 167, no. 1-3 (August 2009): 119-123. <https://doi.org/10.1016/j.jhazmat.2008.12.090>.
- 4) Lyberatos, G.; Nzihou, A. “Biological and pretreatment processes for the valorization of waste and biomass into energy/fuel and useful materials.” Bioresource Technology 100, no. 15 (August 2009): 3689, 2009. <https://doi.org/10.1016/j.biortech.2009.04.034>.
- 5) Yang, Y.-y.; Hu, L.-m.; Nzihou, A.; Yacoubi, N. “Laboratory tests on valorization technique of dredged sediment.” Rock and Soil Mechanics 30, no. 5 (May 2009): 1323-1327. <http://ytlx.whrsm.ac.cn/EN/Y2009/V30/I5/1323>.

➤ 2008

- 6) Kemiha, M.; Nzihou, A.; Mateos, D. “Agglomeration of Metals During Pyrolysis of Chromated Copper Arsenate (CCA) Treated Wood Waste.” High-temperature materials and processesn 27, no. 5 (May 2008): 361-368. <https://doi.org/10.1515/HTMP.2008.27.5.361>.
- 7) Ramaroson, J.; Dirion, J.-L.; Nzihou, A.; Sharrock, P.; Depelsenaire, G. « Calcination of Dredged Sediments: Investigation of the Behavior of Heavy Metals and the Organic Compounds.” High Temperature Materials and Processes 27, no. 5 (May 2008): 327-336. <https://doi.org/10.1515/HTMP.2008.27.5.327>.
- 8) Nzihou, A.; Lyberatos, G.; Baron, M. “Thermal processes for the valorisation of waste and biomass into energy/fuel and useful materials.” Materials and Processes 27, no. 5 (May 2008): 291-292. <https://doi.org/10.1515/HTMP.2008.27.5.291>.

➤ 2007

- 9) Verwilghen, C.; Rio, S.; Nzihou, A.; Gauthier, D.; Flamant, G.; Sharrock, P. “Preparation of high specific surface area hydroxyapatite for environmental applications.” Journal of Materials Science 42, no. 15 (January 2007): 6062-6066. <http://dx.doi.org/10.1007/s10853-006-1160-y>.
- 10) Baillez, S.; Nzihou, A.; Bernache-Assolant, D.; Champion, E.; Sharrock, P. « Removal of aqueous lead ions by hydroxyapatites: Equilibria and kinetic processes.” Journal of Hazardous Materials 139, no. 3 (January 2007): 443-446. <https://doi.org/10.1016/j.jhazmat.2006.02.039>.
- 11) Rio, S.; Verwilghen, C.; Ramaroson, J.; Nzihou, A.; Sharrock, P. “Heavy metal vaporization and abatement during thermal treatment of modified wastes.” Journal of Hazardous Materials 148, no. 3 (September 2007): 521-528. <https://doi.org/10.1016/j.jhazmat.2007.03.009>.
- 12) Kacem, M.; Salvador, S.; Nzihou, A.; Flamant, G. “Particle in box: A cell for in-situ measurements of porosity and effective diffusion coefficient during thermo physical transformations.” Industrial & Engineering Chemistry Research 46, no. 20 (August 2007): 6558-6565. <https://doi.org/10.1021/ie061370k>.
- 13) Commandre, J.-M.; Salvador, S.; Nzihou, A. « Reactivity of laboratory and industrial limes.” Chemical Engineering Research and Design 85, no. 4 (April 2007): 473-480. <https://doi.org/10.1205/cherd06200>.
- 14) Nzihou, A.; Lyberatos, G. “WasteEng2005 Conference 1st International Conference on Engineering for Waste Treatment. Beneficial Use of Waste and by-Products.” Journal of

- Hazardous Materials 139, no. 3, Special Issue (January 2007): 407-408.
<https://doi.org/10.1016/j.jhazmat.2006.05.069>.
- 15) Batton, J.; Kadaksham, A. J.; Nzihou, A.; Singh, P.; Aubry, N. "Trapping Heavy metals by using calcium hydroxyapatite and dielectrophoresis." Journal of Hazardous Materials 139, no. 3 (January 2007): 461-466. <https://doi.org/10.1016/j.jhazmat.2006.02.057>.
- **2006**
- 16) Lecomte, D.; Nzihou, A. "Special Issue—1st International Conference on Engineering for Waste Treatment: Beneficial Use of Waste and by-Products." Process Safety and Environmental Protection 84, no. 4 (July 2006): 235-236. <http://dx.doi.org/10.1205/psep.ed.0604>.
- 17) Kano, J.; Zhang, Q.; Saito, F.; Baron, M.; Nzihou, A. "Synthesis of hydroxyapatite with the mechanochemical treatment products of PVC and CaO." Process Safety and Environmental Protection 84, no. 4(July 2006): 309-312. <https://doi.org/10.1205/psep.05175>.
- 18) Bournonville, B.; Nzihou, A.; Sharrock, P.; Depelsenaire, G. "Stabilization of minerals by reaction with phosphoric acid: evolution of model compounds." Process Safety and Environmental Protection 84, no. 2 (March 2006): 117-124. <https://doi.org/10.1205/psep.04034>.
- **2005**
- 19) Nzihou, A.; Adhikari, B.; Pfeffer, R. "Effect of metal chlorides on the sintering and densification of hydroxyapatite adsorbent." Industrial & Engineering Chemistry Research 44, no. 6 (February 2005): 1787-1794. <https://doi.org/10.1021/ie0306473>.
- **2004**
- 20) Mgaidi, A.; Ben Brahim, F; Oulahna, D.; Nzihou, A.; El Maaoui, M. "Chemical and structural chA.s of raw phosphate during heat treatment." High Temperature Materials and Processes 23, no. 3 (June2004): 185-194. <http://dx.doi.org/10.1515/HTMP.2004.23.3.185>.
- 21) Bailliez, S.; Nzihou, A.; Beche, E.; Flamant, G. « Removal of lead (Pb) by hydroxyapatite sorbent." Process Safety and Environmental Protection 82, no. 2 (May 2004): 175-180. <http://dx.doi.org/10.1205/095758204322972816>.
- 22) Bailliez, S.; Nzihou, A. "The kinetics of surface area reduction during isothermal sintering of hydroxyapatite adsorbent." Chemical Engineering Journal 98, no. 1-2 (March 2004): 141-152. <https://doi.org/10.1016/j.cej.2003.07.001>.
- 23) Nzihou, A.; Bournonville, B.; Marchal, P.; Choplin, L. "Rheology and heat transfer during mineral residue phosphatation in a rheo-reactor." Chemical Engineering Research & Design 82, no. 5 (March 2004): 637-641. <https://doi.org/10.1205/026387604323142694>.
- 24) Nzihou, A.; Adhikari, B. "Effect of oxides and nitrates of lead on the sintering and densification of hydroxyapatite adsorbents." Industrial & Engineering Chemistry Research 43, no. 13 (May 2004): 3325-3335. <https://doi.org/10.1021/ie030645i>.
- 25) Bournonville, B.; Nzihou, A.; Sharrock, P.; Depelsenaire, G. "Stabilisation of heavy metal containing dusts by reaction with phosphoric acid: study of the reactivity of fly ash." Journal of Hazardous Materials 116, no. 1-2 (December 2004): 65-74. <https://doi.org/10.1016/j.jhazmat.2004.07.021>.
- **2002**
- 26) Nzihou, A.; Sharrock, P. "Calcium phosphate stabilization of fly ash with chloride extraction." Waste Management 22, no.2 (February 2002): 235-239. [https://doi.org/10.1016/S0956-053X\(01\)00074-5](https://doi.org/10.1016/S0956-053X(01)00074-5).
- 27) Nzihou, A.; Bailliez, S. "Mechanisms of sintering of macroporous hydroxyapatite adsorbents." High Temperature Materials and Processes 21, no. 5 (May 2002): 281-295. <https://doi.org/10.1515/HTMP.2002.21.5.281>.

- 28) Bournonville, B.; Nzihou, A. "Rheology of non-Newtonian suspensions of fly ash: effect of concentration, yield stress and hydrodynamic interactions." *Powder Technology* 128, no. 2-3 (December 2002): 148-158. [https://doi.org/10.1016/S0032-5910\(02\)00192-4](https://doi.org/10.1016/S0032-5910(02)00192-4).

➤ 1999

- 29) Iretskaya, S.; Nzihou, A.; Zahraoui, C.; Sharrock, P. "Metal leaching from MSW fly ash before and after chemical and thermal treatment." *Environmental Progress* 1, no. 2 (April 1999): 144-148. <https://doi.org/10.1002/ep.670180219>.
- 30) Nzihou, A.; Sharrock, P.; Ricard, A. "Reaction kinetics and heat transfer studies in thermoset resins." *Chemical Engineering Journal* 72, no. 1 (January 1999): 53-61. [https://doi.org/10.1016/S1385-8947\(98\)00137-5](https://doi.org/10.1016/S1385-8947(98)00137-5).

➤ 1998

- 31) Nzihou, A.; Attias, L; Sharrock, P.; Ricard, A. "A rheological, thermal and mechanical study of bone cement - from a suspension to a solid biomaterial." *Powder Technology* 99, no. 1 (September 1998): 60-69. [https://doi.org/10.1016/S0032-5910\(98\)00091-6](https://doi.org/10.1016/S0032-5910(98)00091-6).

➤ 1997

- 32) Nzihou, A.; Ricard, A. "Modeling of liquid-liquid equilibrium and mass transfer. Suspension copolymerization of acrylic acid and methyl methacrylate in water." *Industrial & Engineering Chemistry Research* 36, no. 11 (November 1997): 4815-4820. <https://doi.org/10.1021/ie960788n>.

➤ 1994

- 33) Monfort, J.P.; Nzihou, A. Crystallization of gas hydrates – Experimental Techniques for the kinetic measurement of cyclopropane hydrate crystal-growth. *Annals of the New York Academy of Sciences* 715, no. 1 (October 1994): 555-557. <https://doi.org/10.1111/j.1749-6632.1994.tb38885>.

➤ 1993

- 34) Monfort, J.-P.; Nzihou, A. "Light-scattering kinetics study of cyclopropane hydrate growth." *Journal of Crystal Growth* 128, no. 1-4 (March 1993): 1182-1186. [https://doi.org/10.1016/S0022-0248\(07\)80120-5](https://doi.org/10.1016/S0022-0248(07)80120-5).