

Producción Científica Laboratorio de Procesos Sostenibles

1. Gómez-Casero, M.A. Pérez-Villarejo, Sánchez-Soto, P.J. L. Eliche-Quesada, D. Comparative study of alkali activated cements based on metallurgical slags, in terms of technological properties developed. *Sustainable Chemistry and Pharmacy*, 29 (2022), 100746. DOI: [10.1016/j.scp.2022.100746](https://doi.org/10.1016/j.scp.2022.100746)
2. Muik, B. Lendl, B. Molina-Díaz, A. Pérez-Villarejo, L. Ayora-Cañada, M.J. Determination of oil and water content in olive pomace using near infrared and Raman spectrometry. A comparative study. *Analytical and Bioanalytical Chemistry*, 379 (2004) 35-41. DOI: [10.1007/s00216-004-2493-5](https://doi.org/10.1007/s00216-004-2493-5).
3. Eliche-Quesada, D. Pérez-Villarejo, L. Iglesias-Godino, F.J. Martínez-García, C. Corpas-Iglesias, F.A. Incorporation of coffee grounds into clay bricks production. *Advances in Applied Ceramics*, 110 (2011) 225-232. DOI: [10.1179/1743676111Y.0000000006](https://doi.org/10.1179/1743676111Y.0000000006).
4. Eliche-Quesada, D. Martínez-García, C. Martínez-Cartas, M.L. Cotes-Palomino, M.T. Pérez-Villarejo, L. Cruz-Pérez, N. Corpas-Iglesias, F.A. The use of different forms of waste in the manufacture of ceramic bricks. *Applied Clay Science*, 52 (2011) 270-276. DOI: [10.1016/j.clay.2011.03.003](https://doi.org/10.1016/j.clay.2011.03.003)
5. Corpas-Iglesias, F.A. Pérez-Villarejo, L. Benítez-Guerrero, M. Artiaga-Díaz, R. Pascual-Cosp, J. Use of mud from metallic Surface treatment industries as additive to ceramic matrices. *Boletín de la Sociedad Española de Cerámica y Vidrio*, 50 (2011) 117-124. DOI: [10.3989/cyv.162011](https://doi.org/10.3989/cyv.162011).
6. Eliche-Quesada, D. Martínez-Martínez, S. Pérez-Villarejo, L. Iglesias-Godino, F.J. Martínez-García, C. Corpas-Iglesias, F.A. Valorization of biodiesel production residues in making porous clay bricks. *Fuel Processing Technology*, 103 (2012) 166-173. DOI: [10.1016/j.fuproc.2011.11.013](https://doi.org/10.1016/j.fuproc.2011.11.013)
7. Martínez-García, C. Eliche-Quesada, D. Pérez-Villarejo, L. Iglesias-Godino, F.J. Corpas-Iglesias, F.A. Sludge valorization from wastewater treatment plant to its application on the ceramic industry. *Journal of Environmental Management*, 95 (2012) S343-S348. DOI: [10.1016/j.jenvman.2011.06.016](https://doi.org/10.1016/j.jenvman.2011.06.016).
8. Pérez-Villarejo, L. Eliche-Quesada, D. Iglesias-Godino, F.J. Martínez-García, C. Corpas-Iglesias, F.A. Recycling of ash from biomass incinerator in clay matrix to produce ceramic bricks. *Journal of Environmental Management*, 95 (2012) S349-S354. DOI: [10.1016/j.jenvman.2010.10.022](https://doi.org/10.1016/j.jenvman.2010.10.022).
9. Eliche-Quesada, D. Corpas-Iglesias, F.A. Pérez-Villarejo, L. Iglesias-Godino, F.J. Recycling of sawdust, spent earth from oil filtration, compost and marble residues for brick manufacturing. *Construction and Building Materials*, 34 (2012) 275-284. DOI: [10.1016/j.conbuildmat.2012.02.079](https://doi.org/10.1016/j.conbuildmat.2012.02.079).
10. Pérez-Villarejo, L. Corpas-Iglesias, F.A. Martínez-Martínez, S. Artiaga, R. Pascual-Cosp, J. Manufacturing new ceramic Materials from clay and red mud derived from the aluminium industry. *Construction and Building Materials*, 35 (2012) 656-665. DOI: [10.1016/j.conbuildmat.2012.04.133](https://doi.org/10.1016/j.conbuildmat.2012.04.133).
11. Ureña, C. Azañón, J.M. Corpas, F. Nieto, F. León, C. Pérez, L. Magnesium hydroxide, seawater and olive mil wastewater to reduce swelling potential and plasticity of bentonite soil. *Construction and Building Materials*, 45 (2013) 289-297. DOI: [10.1016/j.conbuildmat.2013.03.053](https://doi.org/10.1016/j.conbuildmat.2013.03.053).
12. Carrasco-Hurtado, B. Corpas-Iglesias, F.A. Cruz-Pérez, N. Terrados-Cepeda, J. Pérez-Villarejo, L. Addition of bottom ash from biomass in calcium silicate masonry units for use as construction material with thermal insulating properties. *Construction and Building Materials*, 52 (2014) 155-165. DOI: [10.1016/j.conbuildmat.2013.11.018](https://doi.org/10.1016/j.conbuildmat.2013.11.018).
13. Eliche-Quesada, D. Iglesias-Godino, F.J. Pérez-Villarejo, L. Corpas-Iglesias, F.A. Replacement of the mixing fresh water by wastewater olive oil extraction in the extrusion of ceramic bricks. *Construction and Building Materials*, 68 (2014) 659-666. DOI: [10.1016/j.conbuildmat.2014.07.017](https://doi.org/10.1016/j.conbuildmat.2014.07.017).
14. Carrasco-Hurtado, B. Cruz-Pérez, N. Terrados-Cepeda, J. Corpas-Iglesias, F.A. Pérez-Villarejo, L. An evaluation of bottom ash from plant biomass as a replacement for cement in building blocks. *Fuel*, 118 (2014) 272-280. DOI: [10.1016/j.fuel.2013.10.077](https://doi.org/10.1016/j.fuel.2013.10.077).
15. Pérez-Villarejo, L. Martínez-Martínez, S. Carrasco-Hurtado, B. Eliche-Quesada, D. Ureña-Nieto, C. Sanchez-Soto, P.J. Valorization and inertization of galvanic sludge waste in clay bricks. *Applied Clay*

- Science, 105-106 (2015) 89-99. DOI: [10.1016/j.clay.2014.12.022](https://doi.org/10.1016/j.clay.2014.12.022).
16. Cotes-Palomino, M.T. Martínez-García, C. Eliche-Quesada, D. Pérez-Villarejo, L. Production of ceramic material using wastes from brewing industry. *Key Engineering Materials*, 663 (2016) 94-104. DOI: [10.4028/www.scientific.net/KEM.663.94](https://doi.org/10.4028/www.scientific.net/KEM.663.94)
 17. Takabait, F. Mahtout, L. Pérez-Villarejo, L. Carrasco-Hurtado, B. Sánchez-Soto, P.J. Preparation of calcium carbonate as nanoparticles from inorganic precursors and sucrose as additive with potential application as biomaterial. *Boletín de la Sociedad Española de Cerámica y Vidrio*, 55 (2016) 179-184. DOI: [10.1016/j.bsecv.2016.01.006](https://doi.org/10.1016/j.bsecv.2016.01.006).
 18. Martínez-Martínez, S. Pérez-Villarejo, L. Eliche-Quesada, D. Carrasco-Hurtado, B. Sanchez-Soto, P.J. Angelopoulos, G. N. Ceramics from clays and by-product from biodiesel production: Processing, properties and microstructural characterization. *Applied Clay Science*, 121-122 (2016) 119-126. DOI: [10.1016/j.clay.2015.12.003](https://doi.org/10.1016/j.clay.2015.12.003).
 19. Eliche-Quesada, D. Felipe-Sesé, M.A. Martínez-Martínez, S. Pérez-Villarejo, L. Comparative study of the use of different biomass bottom ash in the manufacture of ceramic bricks. *Journal of Materials in Civil Engineering*, 29 (2017) Article number: 04017238. DOI: [10.1061/\(ASCE\)MT.1943-5533.0002078](https://doi.org/10.1061/(ASCE)MT.1943-5533.0002078).
 20. Bouguermouh, K. Bouzidi, N. Mahtout, L. Pérez-Villarejo, L. Martínez-Cartas, M.L. Effect of acid attack on microstructure and composition of metakaolin-based geopolymers: The role of alkaline activator. *Journal of Non-Crystalline Solids*, 463 (2017) 128-137. DOI: [10.1016/j.jnoncrysol.2017.03.011](https://doi.org/10.1016/j.jnoncrysol.2017.03.011).
 21. Eliche-Quesada, D. Sandalio-Pérez, J.A. Martínez-Martínez, S. Pérez-Villarejo, L. Sánchez-Soto, P.J. Eliche-Quesada, D. Sandalio-Pérez, J.A. Martínez-Martínez, S. Pérez-Villarejo, L. Sánchez-Soto, P.J. Investigation of use of coal fly ash in eco-friendly construction material: fired clay bricks and silica-calcareous non fired bricks. *Ceramics International*, 44 (2018) 4400-4412. DOI: [10.1016/j.ceramint.2017.12.039](https://doi.org/10.1016/j.ceramint.2017.12.039).
 22. Pérez-Villarejo, L. Takabait, F. Mahtout, L. Carrasco-Hurtado, B. Eliche-Quesada, D. Sánchez-Soto, P.J. Synthesis of vaterite CaCO_3 as submicron and nanosized particles using inorganic precursors and sucrose in aqueous medium. *Ceramics International*, 44 (2018) 5291-5296. DOI: [10.1016/j.ceramint.2017.12.142](https://doi.org/10.1016/j.ceramint.2017.12.142).
 23. González-Miranda, F.M. Garzón, E. Reca, J. Pérez-Villarejo, L. Martínez-Martínez, S. Sánchez-Soto, P.J. Thermal behaviour of sericite clays as precursors of mullite materials. *Journal of Thermal Analysis and Calorimetry*, 132 (2018) 967-977. DOI: [10.1007/s10973-018-7046-9](https://doi.org/10.1007/s10973-018-7046-9).
 24. Sánchez-Soto, P.J. Eliche-Quesada, D. Martínez-Martínez, S. Garzón-Garzón, E. Pérez-Villarejo, L. Rincón, J.M. The effect of vitreous phase on mullite and mullite-based ceramic composites from kaolin wastes as by-products of mining, sericite clays and kaolinite. *Materials Letters*, 223 (2018) 154-148. DOI: [10.1016/j.matlet.2018.04.037](https://doi.org/10.1016/j.matlet.2018.04.037).
 25. Bonet-Martínez, E. Pérez-Villarejo, L. Eliche-Quesada, D. Carrasco-Hurtado, B. Bueno-Rodríguez, S. Castro-Galiano, E. Inorganic Polymers synthesized using biomass ashes-red mud as precursors based on clay-kaolinite system. *Materials Letters*, 225 (2018) 161-166. DOI: [10.1016/j.matlet.2018.05.012](https://doi.org/10.1016/j.matlet.2018.05.012).
 26. Bouguermouh, K. Bouzidi, N. Mahtout, L. Hassam, T. Mouhoub, S. Pérez-Villarejo, L. Stabilization of flotation wastes resulting from the treatment of Pb/Zn or based on geopolymers. *Materials Letters*, 227 (2018) 221-224. DOI: [10.1016/j.matlet.2018.05.089](https://doi.org/10.1016/j.matlet.2018.05.089).
 27. Pérez-Villarejo, L. Bonet-Martínez, E. Eliche-Quesada, D. Sánchez-Soto, P.J. Rincón-López, J.M. Castro-Galiano, E. Biomass fly ash and aluminium industry slags-based geopolymers. *Materials Letters*, 229 (2018) 6-12. DOI: [10.1016/j.matlet.2018.06.100](https://doi.org/10.1016/j.matlet.2018.06.100).
 28. Bonet-Martínez, E. Pérez-Villarejo, L. Eliche-Quesada, D. Sánchez-Soto, P.J. Carrasco-Hurtado, B. Castro-Galiano, E. Manufacture of sustainable clay ceramic composite with composition $\text{SiO}_2\text{-Al}_2\text{O}_3\text{-CaO-K}_2\text{O}$ materials valuing biomass ash from olive pomace. *Materials Letters*, 229 (2018) 21-25. DOI: [10.1016/j.matlet.2018.06.105](https://doi.org/10.1016/j.matlet.2018.06.105).
 29. Bonet-Martínez, E. Pérez-Villarejo, L. Eliche-Quesada, D. Castro, E. Manufacture of sustainable clay bricks using waste from secondary aluminum recycling as raw material. *Materials*, 11 (2018) Article number 2439. DOI: [10.3390/ma11122439](https://doi.org/10.3390/ma11122439)

30. Cuevas, M. Martínez-Cartas, M.L. Pérez-Villarejo, L. Hernández, L. García Martín, J.F. Sánchez, S. Drying kinetics and effective water diffusivities in olive stone and olive-tree pruning. *Renewable Energy*, 132 (2019) 911-920. DOI: [10.1016/j.renene.2018.08.053](https://doi.org/10.1016/j.renene.2018.08.053).
31. Pérez-Villarejo, L. Eliche-Quesada, D. Martín-Pascual, J. Martín-Morales, M. Zamorano, M. Comparative study of the use of different biomass from olive grove in the manufacture of sustainable ceramic lightweight bricks. *Construction and Building Materials*, 231 (2020) Article number 117103. DOI: [10.1016/j.conbuildmat.2019.117103](https://doi.org/10.1016/j.conbuildmat.2019.117103).
32. Aguado, R. Cuevas, M. Pérez-Villarejo, L. Martínez-Cartas, M.L. Sánchez, S. Upgrading almond-tree pruning as a biofuel via wet torrefaction. *Renewable Energy*, 145 (2020) 2091-2100. DOI: [10.1016/j.renene.2019.07.142](https://doi.org/10.1016/j.renene.2019.07.142).
33. Bonet-Martínez, E. García-Cobo, P. Pérez-Villarejo, L. Castro, E. Eliche-Quesada, D. Effect of olive-pine bottom ash on properties of geopolymers base don metakaolin. *Materials*, 13 (2020), Article number 901. DOI: [10.3390/ma13040901](https://doi.org/10.3390/ma13040901).
34. Garzón, E. Pérez-Villarejo, L. Sánchez-Soto, P.J. Characterization, thermal and ceramic properties of phyllite clays from southeast Spain. *Journal of Thermal Analysis and Calorimetry*, (2020). DOI: [10.1007/s10973-020-10160-9](https://doi.org/10.1007/s10973-020-10160-9).
35. Felipe-Sesé, M.A. Pérez-Villarejo, L. Castro, E. Eliche-Quesada, D. Wood bottom ash and geosilex: A by-product of the acetylene industry as alternative raw materials in calcium silicate units. *Materials*, 13 (2020) Article number 489. DOI: [10.3390/ma13020489](https://doi.org/10.3390/ma13020489).
36. Martínez-Martínez, S. Pérez-Villarejo, L. Eliche-Quesada, D. Sánchez-Soto, P.J. Christogerou, A. Kanellopoulou, D.G. Angelopoulos, G.N. New waste-based clinkers for the preparation of low-energy cements. A step forward toward circular economy. *International Journal of Applied Ceramic Technology*, 17 (2020) 12-21. DOI: [10.1111/ijac.13390](https://doi.org/10.1111/ijac.13390).
37. Eliche-Quesada, D. Ruiz-Molina, S. Pérez-Villarejo, L. Castro, E. Sánchez-Soto, P.J. Dust filter of secondary aluminium industry as raw material of geopolymer foams. *Journal of Building Engineering*, 32 (2020) 101656. DOI: [10.1016/j.jobe.2020.101656](https://doi.org/10.1016/j.jobe.2020.101656).
38. Bonet-Martínez, E. García-Cobo, P. Pérez-Villarejo, L. Castro, E. Eliche-Quesada, D. Effect of olive-pine bottom ash on properties of geopolymers based on metakaolin. *Materials*. 13 (2021) Article number 901. DOI: [10.3390/ma13040901](https://doi.org/10.3390/ma13040901)
39. Sanchez-Soto, P.J. Eliche-Quesada, D. Martínez-Martínez, S. Garzón-Garzón, E. Pérez-Villarejo, L. Rincón, J.M. The effect of vitreous phase on mullite and mullite-based composites from kaolin wastes as by-products of mining, sericite clays and kaolinite. *Materials Letters*. 224 (2018) 154-158. DOI: [10.1016/j.matlet.2018.04.037](https://doi.org/10.1016/j.matlet.2018.04.037)
40. Eliche-Quesada, D. Calero-Rodríguez, A. Bonet-Martínez, E. Pérez-Villarejo, L. Sanchez-Soto, P.J. Geopolymers made from metakaolin sources, partially replaced by Spanish clays and biomass bottom ash. *Journal of Building Engineering*. 40 (2021) Article number 102761. DOI: [10.1016/j.jobe.2021.102761](https://doi.org/10.1016/j.jobe.2021.102761)
41. Martínez-Martínez, S. Pérez-Villarejo, L. Eliche-Quesada, D. Sanchez-Soto, P.J. Christogerou, A. Kanellopoulou, D.G. Angelopoulos, G.N. New Waste-based clinkers for the preparation of low-energy cements. A step forward toward circular economy. *International Journal of Applied Ceramic Technology*. 17 (2021) 12-21. DOI: [10.1111/ijac.13390](https://doi.org/10.1111/ijac.13390)
42. Moreno-Maroto, J.M. Delgado-Plana, P. Cabezas-Rodríguez, R. Mejía de Gutiérrez, R. Eliche-Quesada, D. Pérez-Villarejo, L. Galán-Arboledas, R.J. Bueno, S. Alkaline activation of high-crystalline low-Al₂O₃ construction and demolition wastes to obtain geopolymers. *Journal of Cleaner Production*. 330 (2022) Article number 129770. DOI: [10.1016/j.jclepro.2021.129770](https://doi.org/10.1016/j.jclepro.2021.129770)
43. Gómez-Casero, M.A. Pérez-Villarejo, L. Castro, E. Eliche-Quesada, D. Effect of Steel slag and curing temperature on the improvement in technological properties of biomass bottom ash based alkali-activated materials. *Construction and Building Materials*. 302 (2021) Article number 124205. DOI: [10.1016/j.conbuildmat.2021.124205](https://doi.org/10.1016/j.conbuildmat.2021.124205)

44. Delgado-Plana, P. Rodríguez-Expósito, A. Bueno-Rodríguez, S. Pérez-Villarejo, L. Tobaldi, D.M. Labrincha, J.A. Eliche-Quesada, D. Effect of the activating solution modulus on the synthesis of sustainable geopolymers binders using spent oil bleaching earths as precursor. *Sustainability*. 13 (2021) Article number 7501. DOI: 10.3390/su13137501
45. Sánchez-Soto, P.J. Garzón E. Pérez-Villarejo, L. Eliche-Quesada, D. Sintering behavior of a clay containing pyrophyllite, sericite and kaolinite as ceramic raw materials: looking for the optimum firing conditions. *Journal of the Spanish Ceramic and Glass Society*. In Press. (2021). DOI: 10.1016/j.bsecv.2021.09.001
46. Gómez-Casero, M.A. Moral-Moral, F.J. Pérez-Villarejo, L. Sánchez-Soto, P.J. Eliche-Quesada, D. Synthesis of clay geopolymers using olive pomace fly ash as an alternative activator. Influence of the additional commercial alkaline activator used. *Journal of Materials Research and Technology*. 12 (2021) 1762-1776. DOI: 10.1016/j.jmrt.2021.03.102
47. Sánchez-Soto, P.J. Garzón, E. Pérez-Villarejo, L. Angelopoulos, G.N. Eliche Quesada, D. Mining wastes of an albite deposit as raw materials for vitrified mullite ceramics. *Minerals*. 11 (2021) Article number 232. DOI: 10.3390/min11030232
48. Eliche Quesada, D. Bonet-Martínez, E. Pérez-Villarejo L. Castro, E. Sánchez-Soto, P.J. Effect of an illite clay substitution on geopolymer synthesis as an alternative to metakaolin. *Journal of Materials in Civil Engineering*. 33 (2021) Article number 04021072. DOI: 10.1061/(ASCE)MT.1943-5533.0003690
49. Karamoutsos, S. Tzevelekou, T. Christogerou, A. Grilla, A. Gypakis, A. Pérez-Villarejo, L. Mantzavinos, D. Angelopoulos, G.N. On the industrial symbiosis of alumina and iron/steel production: Suitability of ferroalumina as raw material in iron and steel making. *Waste management and Research*. 39 (2021) 1270-1276. DOI: 10.1177/0734242X21991906
50. Sánchez-Soto, P.J. Eliche-Quesada, D. Martínez-Martínez, S. Pérez-Villarejo, L. Garzón-Garzón, E. Study of waste kaolin as raw material for mullite ceramics and mullite refractories by reaction sintering. *Materials*. 15 (2022), 583. DOI: 10.3390/ma15020583.
51. Rat, E. Martínez-Martínez, S. Sánchez-Garrido, J.A. Pérez-Villarejo, L. Garzón-Garzón, E. Sánchez-Soto, P.J. Characterization, thermal and Ceramic properties of clays from Alhabia (Almería, Spain). *Ceramics International*. In Press. DOI: 10.1016/j.ceramint.2022.05.328
52. Gómez-Casero, M.A. De Dios-Arana, C. Bueno-Rodríguez, J.S. Pérez-Villarejo, L. Eliche-Quesada, D. Physical, mechanical and thermal properties of metakaolin-fly ash geopolymers. *Sustainable Chemistry and Pharmacy*. 26 (2022), 100620. DOI: 10.1016/j.scp.2022.100620
53. Garzón, E. Pérez-Villarejo, L. Eliche-Quesada, D. Martínez-Martínez, S. Sánchez-Soto, P.J. Vitrification rate and estimation of the optimum firing conditions of ceramic materials from raw clays: A review. *Ceramics International*. 48 (2022) 15889-15898. DOI: 10.1016/j.ceramint.2022.02.129
54. Galán-Martín, A. Contreras, María del M. Romero, I. Ruiz, E. Bueno-Rodríguez, S. Eliche-Quesada, D. Castro-Galiano, E. The potential role of olive groves to deliver carbon dioxide removal in a carbon –neutral Europe: Opportunities and challenges. *Renewable and Sustainable Energy Reviews*. 165 (2022) 112609. DOI: 10.1016/j.rser.2022.112609
55. Jurado-Contreras, S. Bonet-Martínez, E. Sánchez-Soto, P.J. Gencel, O. Eliche-Quesada, D. Synthesis and characterization of alkali-activated materials containing biomass fly ash and metakaolin: effect of the soluble salt content of the residue. *Archives of Civil and Mechanical Engineering*. 22 (2022) 121. DOI: 10.1007/s43452-022-00444-2
56. Gencel, O. Kizinievic, O. Sutcu, M. Erdogmus, E. Velasco, P.M. Eliche-Quesada, D. Kizinievic, V. Kurmus, H. Effects of expanded vermiculite on the properties of fired bricks from water treatment sludge. *International Journal of Applied Ceramic Technology*. 19 (2022) 1214-1226. DOI: 10.1111/ijac.13979
57. Baziz, A. Bouzidi, N. Eliche-Quesada, D. Recycling of gold mining reject from Amesmesa mine as Ceramic raw material: microstructure and mechanical properties. *Environmental Science and Pollution Research*. 28 (2021) 46738-46747. DOI: 10.1007/s11356-020-12017-y

58. Eliche-Quesada, D. Felipe-Sesé, M.A. Fuentes-Sánchez, M.J. Biomass bottom ash waste and by-products of the acetylene industry as raw materials for unfired bricks. *Journal of Building Engineering*. 38 (2021) 102191. DOI: 10.1016/j.jobbe.2021.102191
59. Achik, M. Benmoussa, H. Oulmekki, A. Ijjaali, M. El Moudden, N. Touache, A. Álvaro, G. G. Rivera, F.G. Infantes-Molina, A. Eliche-Quesada, D. Kizinievic, O. Evaluation of technological properties of fired clay bricks containing pyrrhotite ash. *Construction and Building Materials*. 269 (2021) 121312. DOI: 10.1016/j.conbuildmat.2020.121312
60. Baziz, A. Bouzidi, N. Eliche Quesada, D. The use of gold ore tailings from Amesmesa mine as raw material in the Ceramic field. *Environmental Science and Engineering*. (2021) 311-315. DOI: 10.1007/978-3-030-51210-1_51
61. Slimanou, H. Eliche-Quesada, D. Kherbach, S. Bouzidi, N. Tahakourt, A.K. Harbor dredged sediment as raw material in fired clay brick production: characterization and properties. *Journal of Building Engineering*. 28 (2020) 101085. DOI: 10.1016/j.jobbe.2019.101085
62. Eliche-Quesada, D. Sánchez-Martínez, J. Felipe-Sesé, M.A. Infantes-Molina, A. Silica-calcareous non fired bricks made of biomass ash and dust filter from gases. *Waste Biomass Valorization*. 10 (2019) 417-431. DOI: 10.1007/s12649-017-0056-1
63. Bueno, S. Durán, E. Gámiz, B. Hermosín, M.C. Formulation low cost modified bentonite with natural binders to remove pesticides in a pilot water filter system. *Journal of Environmental Chemical Engineering*. 9 (2021) 104623. DOI: 10.1016/j.jece.2020.104623
64. Fan, K. Jiang, W. Ruiz-hervias, J. Baudín, C. Fenbg, W. Zhou, H. Bueno, S. Yao, P. Effect of Al₂TiO₅ content and sintering temperature on the microstructure and residual stress of Al₂O₃-Al₂TiO₅ ceramic composites. *Materials*. 14 (2021) 7624. DOI: 10.3390/ma14247624
65. Durán, E. Bueno, S. Hermosín, M.C. Cox, L. Gámiz, B. Optimizing a low added value bentonite as adsorbent material to remove pesticides from water. *Science of the Total Environment*. 672 (2019) 743-751. DOI: 10.1016/j.scitotenv.2019.04.014
66. Galán-Arboledas, R.J. Cotes-Palomino, M.T. Bueno, S. Martínez-García, C. Evaluation of spent diatomite incorporation in clay based materials for lightweight bricks processing. *Construction and Building Materials*. 144 (2017) 327-337. DOI: 10.1016/j.conbuildmat.2017.03.202
67. Galán-Arboledas, R.J. Álvarez de Diego, J. Dondi, M. Bueno, S. Energy, environmental and technical assessment for the incorporation of EAF stainless steel slag in Ceramic building materials. *Journal of Cleaner Production*. 142 (2017) 1778-1788. DOI: 10.1016/j.jclepro.2016.11.110
68. Bueno, S. Micele, L. Melandri, C. Baudín, C. De Portu, G. Improved wear behaviour of alumina-aluminium titanate laminates with low residual stresses and large grained interfaces. *Journal of the European Ceramic Society*. 31 (2011) 475-483. DOI: 10.1016/j.jeurceramsoc.2010.11.002
69. Bueno S. Ferrari, B. Melandri, C. De Portu, G. Baudín, C. Processing of alumina-coated tetragonal zirconia materials and their response to sliding wear. *Ceramics International*. 36 (2010) 1545-1552. DOI: 10.1016/j.ceramint.2010.02.022
70. Ferrari, B. Bueno. S. Baudín, C. Consolidation of flaw-tolerant layered structures by the insertion of reactive layers. *Boletín de la Sociedad Española de Cerámica y Vidrio*. 48 (2009) 261-266.
71. Bueno, S. Baudín, C. Design and processing of a Ceramic laminate with high toughness and strong interfaces. *Composites Part A: Applied Science and Manufacturing*. 40 (2009) 137-143. DOI: 10.1016/j.compositesa.2008.10.012
72. Reduced strength degradation of alumina-aluminium titanate composite subjected to low velocity impact loading. *Journal of the European Ceramic Society*. 28 (2008) 2923-2931. DOI: 10.1016/j.jeurceramsoc.2008.04.024
73. Bueno, S. Berger, M.H. Moreno, R. Baudín, C. Fracture behaviour of microcrack-free alumina-aluminium titanate ceramics with second phase nanoparticles at alumina grain boundaries. *Journal of the European Ceramic Society*. 28 (2008) 1961-1971. DOI: 10.1016/j.jeurceramsoc.2008.01.017

74. Bueno, S Hernández, M.G. Sánchez, T. Anaya, J.J. Baudín, C. Non-destructive characterisation of alumina/aluminium titanate composites using a micromechanical model and ultrasonic determinations. Part I. Evaluation of the effective elastic constants of aluminium titanate. *Ceramics International*. 34 (2008) 181-188. DOI: 10.1016/j.ceramint.2006.09.006
75. Bueno, S Hernández, M.G. Sánchez, T. Anaya, J.J. Baudín, C. Non-destructive characterisation of alumina/aluminium titanate composites using a micromechanical model and ultrasonic determinations. Part II. Evaluation of microcracks. *Ceramics International*. 34 (2008) 189-195. DOI: 10.1016/j.ceramint.2006.09.007
76. Bueno, S. Baudín, C. Mechanical behavior of structural ceramics. *Boletín de la Sociedad Española de Cerámica y Vidrio*. 46 (2007) 103-118. DOI: 10.3989/cyv.2007.v46.i3.241
77. Bueno, S. Baudín, C. Layered materials with high strength and flaw tolerance based on alumina and aluminium titanate. *Journal of the European Ceramic Society*. 27 (2007) 1455-1462. DOI: 10.1016/j.jeurceramsoc.2006.05.054
78. De Portu, G. Bueno, S. Micele, L. Baudín, C. Pezzotti, G. Piezo-spectroscopic characterization of alumina-aluminium titanate laminates. *Journal of the European Ceramic Society*. 26 (2006) 2699-2705. DOI: 10.1016/j.jeurceramsoc.2005.07.060
79. Bueno, S. Baudín, C. In situ developed laminates with large microstructural differences between layers of similar composition. *Journal of Materials Science*. 41 (2006) 3695-3700. DOI: 10.1007/s10853-006-6088-8
80. Bueno, S. Moreno, R. Baudín, C. Design and processing of Al₂O₃-Al₂TiO₅ layered structures. *Journal of the European Ceramic Society*. 25 (2005) 847-856. DOI: 10.1016/j.jeurceramsoc.2004.05.001
81. Bueno, S. Moreno, R. Baudín, C. Reaction sintered Al₂O₃-Al₂TiO₅ microcrack-free composites obtained by colloidal filtration. *Journal of the European Ceramic Society*. 25 (2005) 847-856. DOI: 10.1016/j.jeurceramsoc.2003.08.015