

Publications internationales parues en 2010

Thème 1

- 1 Aubert J.-E., Mahieux P.-Y., Husson B., Mineralogical transformations during a stabilization process developed for the valorization of Municipal Solid Waste Incineration (MSWI) fly ash, *Waste and Biomass Valorization*, Vol. 1, Issue 2, 261-270.
- 2 Cassagnabere F., Mouret M., Escadeillas G., Broilliard P., Bertrand A., Metakaolin, a solution for the precast industry to limit the clinker content in concrete: Mechanical aspects, *Construction and Building Materials*, Vol. 24, Issue 7, 1109-1118.
- 3 Kacimi L., Cyr M., Clastres P., Synthesis of alpha '(L)-C2S cement from fly-ash using the hydrothermal method at low temperature and atmospheric pressure, *Journal of Hazardous Materials*, Vol. 181, Issue 1-3, 593-601.
- 4 Magniont C., Escadeillas G., Oms-Multon C., De Caro P., The benefits of incorporating glycerol carbonate into an innovative pozzolanic matrix, *Cement and Concrete Research*, Vol. 40, Issue 7, 1072-1080.
- 5 Mahieux P.-Y., Aubert J.-E., Cyr M., Coutand M., Husson B., Quantitative mineralogical composition of complex mineral wastes-contribution of the Rietveld method, *Waste Management*, Vol. 30, Issue 3, 378-388
- 6 Saiah R., Perrin B., Rigal L., Improvement of thermal properties of fired clays by introduction of vegetable matter, *Journal of Building Physics*, Vol. 34, N°2.

Thème 2

- 7 Bourdarot E., Sellier A., Multon S., Grimal E., A review of continuum damage modelling for dam analysis Main steps of a fruitful university-industry collaboration leading to an integrated model applicable to AAR affected structures, *European Journal of Environmental and Civil Engineering*, Vol. 14, Issue 6-7, 805-822.
- 8 Grimal E., Sellier A., Multon S., Le Pape Y., Bourdarot E., Concrete modelling for expertise of structures affected by alkali aggregate reaction, *Cement and Concrete Research*, Vol. 40, Issue 4, 502-507.
- 9 Hyvert N., Sellier A., Duprat F., Rougeau P., Francisco P., Dependency of C-S-H carbonation rate on CO2 pressure to explain transition from accelerated tests to natural carbonation, *Cement and Concrete Research*, Volume 40, Issue 11, Pages 1582-1589
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- 11 Multon S., Cyr M., Sellier A., Diederich P., Petit, Effects of aggregate size and alkali content on ASR expansion, *Cement and Concrete Research*, Vol. 40, Issue 4, 508-516.
- 12 Multon S., Toutlemonde F., Effect of moisture conditions and transfers on alkali silica reaction damaged structure, *Cement and Concrete Research*, Vol. 40, Issue 6, 924-934.

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- 13 Al-Mahmoud F., Castel A., Francois R., Tourneur C., RC beams strengthened with NSM CFRP rods and modeling of peeling-off failure, *Composites Structures*, Vol. 92, Issue 8, 1920-1930
- 14 Amba J.-C., Balayssac J.-P., Detriche C.-H., Characterisation of differential shrinkage of bonded mortar overlays subjected to drying, *Materials and Structures*, Vol. 43, Issue 1-2, 297-308.
- 15 Castel A., Vidal T., Francois R., Bond and cracking properties of self-consolidating concrete, *Construction and Building Materials*, Vol. 24, Issue 7, 1222-1231.
- 16 Duprat F., Sellier A., Nguyen X.S., Pons G., The projection gradient algorithm with error control for structural reliability, *Engineering Structures*, Volume 32, Issue 11, November 2010, Pages 3725-3733

- 17 Hameed R., Turatsinze A., Duprat F., Sellier A., A study on the reinforced fibrous concrete elements subjected to uniaxial tensile loading, *KSCE Journal of Civil Engineering*, Vol. 14, Issue 4, 547-556.
- 18 Hameed R., Turatsinze A., Duprat F., Sellier A., Study on the flexural properties of metallic-hybrid-fibre-reinforced concrete, *MAEJO International Journal of Science and Technology*, Vol. 4, Issue 2, 169-184.
- 19 Nguyen T.-H., Toumi A., Turatsinze A., Mechanical properties of steel fibre reinforced and rubberised cement-based mortars, *Materials and Design*, Vol. 31, Issue 1, 641-647.

Thème 4

- 20 Balouch S.U., Forth J. P., Granju J.-L., Surface corrosion of steel fibre reinforced concrete, *Cement and Concrete Research*, Vol. 40, Issue 3, 410-414.
- 21 Domede N., Sellier A., Experimental and Numerical Analysis of Behaviour of Old Brick Masonries, *Advanced Materials Research*, Volumes 133 - 134, pp 307-312
- 22 Nasser A., Clement A., Laurens S., Castel A., Influence of steel-concrete interface condition on galvanic corrosion currents in carbonated concrete, *Corrosion Science*, Vol. 52, Issue 9, 2878-2890.
- 23 Vu N.-A., Castel A., Francois R., Response of post-tensioned concrete beams with unbonded tendons including serviceability and ultimate state, *Engineering Structures*, Vol. 32, Issue 2, 556-569.
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- 25 Zhang R.-J., Castel A., Francois R., Effect of steel corrosion pattern on RC-beam performance, *Proceedings of the ICE - Construction Materials*, Vol. 163, Issue 2, 97 –108.

Hors laboratoire

- 26 Guery A.A.C., Cormery F., Shao J.-F., Kondo D., A comparative micromechanical analysis of the effective properties of a geomaterial: Effect of mineralogical compositions, *Computers and Geotechnics*, Vol. 37, Issue 5, 585-593.

Hors thème

- 27 Bejan A., Lorente S., The constructal law of design and evolution in nature, *Philosophical Transactions of the Royal Society B-Biological Sciences*, Vol. 365, Issue 1545, Special Issue: Sp. Iss. SI, 1335-1347.
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- 29 Cetkin E. Lorente S., Bejean A., Natural constructal emergence of vascular design with turbulent flow, *Journal of Applied Physics*, Vol. 107, Issue 11, Article Number 114901.
- 30 Kang D.-H., Lorente S., Bejean A., Constructal dendritic configuration for the radiation heating of a solid stream, *Journal of Applied Physics*, Vol. 107, Issue 11, Article Number 114910
- 31 Kang D.-H., Lorente S., Bejean A., Constructal architecture for heating a stream by convection, *International Journal of Heat and Mass Transfer*, Vol. 53, Issue 9-10, 2248-2255
- 32 Kim Y., Lorente S., Bejean A., Constructal multi-tube configuration for natural and forced convection in cross-flow, *International Journal of Heat and Mass Transfer*, Vol. 53, Issue 23-24, 5121-5128
- 33 Kim Y., Lorente S., Bejan A., Steam generator structure: continuous model and constructal design, *International Journal of Energy Research*, DOI: 10.1002/er.1694

- 34 Koonsrisuk A., Lorente S., Bejan A., Constructal solar chimney configuration, International Journal of Heat and Mass Transfer, Vol. 53, Issue 1-3, 327-333.
- 35 Lorente S., Koonsrisuk A., Bejan A., Constructal distribution of solar chimney power plants: few large and many small, International Journal of Green Energy, Vol. 7, 577-592.
- 36 Lorente S., Lee J., Bejan A., The "flow of stresses" concept: The analogy between mechanical strength and heat convection, International Journal of Heat and Mass Transfer, Vol. 53, Issue 15-16, 2963-2968.
- 37 Rocha L.A.O., Lorente S., Bejan A., Distributed energy tapestry for heating the landscape, Journal of Applied Physics, Vol.108, Article Number 124904.
- 38 Wang K.-M., Lorente S., Bejan A., Vascular structures for volumetric cooling and mechanical strength, Journal of Applied Physics, Vol. 107, Issue 4, Article Number 044901.