

Accepted Manuscript

A double-porosity model for water flow in unsaturated concrete

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PII: S0307-904X(17)30573-5
DOI: [10.1016/j.apm.2017.09.022](https://doi.org/10.1016/j.apm.2017.09.022)
Reference: APM 11967

To appear in: *Applied Mathematical Modelling*

Received date: 23 May 2017
Revised date: 12 August 2017
Accepted date: 6 September 2017

Please cite this article as: Dawang Li , Long-yuan Li , Xianfeng Wang , Feng Xing , A double-porosity model for water flow in unsaturated concrete, *Applied Mathematical Modelling* (2017), doi: [10.1016/j.apm.2017.09.022](https://doi.org/10.1016/j.apm.2017.09.022)



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Highlight

- It presents a double-porosity model for describing the moisture transport in concrete.
- The model is applied for predicting the moisture flow in concrete in response to wetting and drying cycles.
- The desaturation zone created in the first cycle is found to expand continuously during the subsequent drying-wetting cycles.
- The wetting and drying cycles can push the desaturation zone from the surface layer into inner concrete.

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