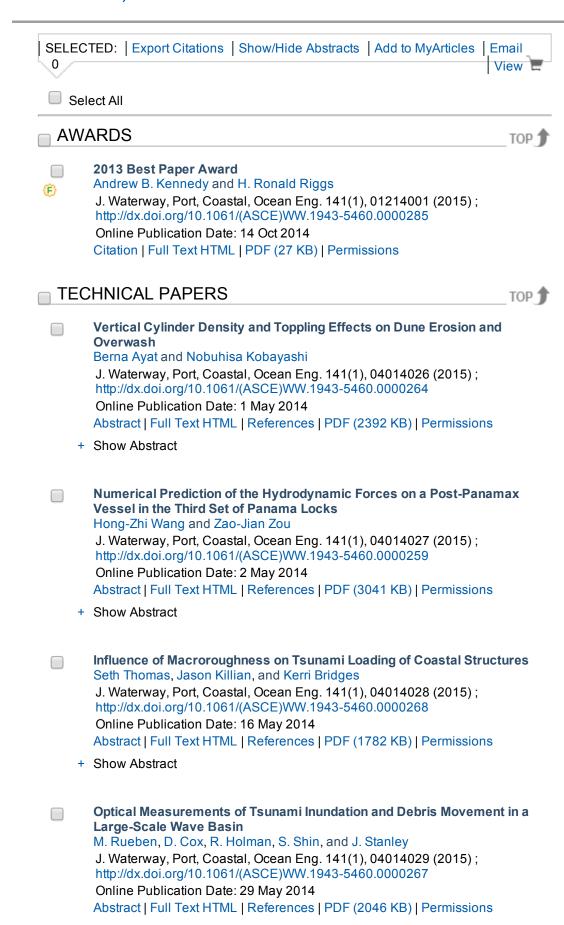
January 2015 Volume 141, Issue 1



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Trapping

Huakun Wang, Feng Si, Gengsheng Lou, Wenyu Yang, and Guoliang Yu

J. Waterway, Port, Coastal, Ocean Eng. 141(1), 04014030 (2015); http://dx.doi.org/10.1061/(ASCE)WW.1943-5460.0000270

Online Publication Date: 29 May 2014

Abstract | Full Text HTML | References | PDF (2760 KB) | Permissions

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CASE STUDIES

Hydrodynamic Behavior and the Effects of Water Pollution from Dalian's Large-Scale Offshore Airport Island in Jinzhou Bay, China Hua-Kun Yan, Nuo Wang, Tiao-Lan Yu, and Nan-Qi Song

J. Waterway, Port, Coastal, Ocean Eng. 141(1), 05014003 (2015); http://dx.doi.org/10.1061/(ASCE)WW.1943-5460.0000261

Online Publication Date: 7 May 2014

Abstract | Full Text HTML | References | PDF (2904 KB) | Permissions

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TECHNICAL NOTES

TOP 1

Semianalytical Solution to the Wave-Induced Dynamic Response of **Saturated Layered Porous Media**

Mehmet Barış Can Ülker

J. Waterway, Port, Coastal, Ocean Eng. 141(1), 06014001 (2015); http://dx.doi.org/10.1061/(ASCE)WW.1943-5460.0000272

Online Publication Date: 30 Jun 2014

Abstract | Full Text HTML | References | PDF (1041 KB) | Permissions

This paper proposes a semianalytical solution to the dynamic response of saturated-layered porous media under harmonic waves. The equations governing the dynamics of porous media are written in their fully dynamic form and possible simplifications are introduced based on the presence of inertial terms associated with both solid and fluid phases, called formulations. The semianalytical solutions to the response of multiple layers with various physical properties are presented in terms of normalized pore pressure and shear stress variations considering a set of nondimensional parameters and their respective ratios. The effects of layering and inertial terms on the response are also presented.