

PUBLICATIONS

Author of 18 papers published on peer-reviewed international journals (ISI); 1 peer-reviewed book chapters and 19 papers published on the proceedings of Italian and International conferences (ISBN) (From ISI Web of Knowledge (13/12/13). Sum of the Times Cited: 292; Citing Articles: 137; h-index: 9);

Peer reviewed Journal

1. Martini, P., L. Carniello and C. Avanzi (2004). Two dimensional modelling of flood flows and suspended sediment transport: the case of Brenta river, Veneto (Italy), *Natural Hazards and Earth System Sciences*, Vol. 4 Num. 1, 165-181, 2004.
2. Carniello, L.; A. Defina; S. Fagherazzi and L. D'Alpaos (2005). A combined wind wave-tidal model for the Venice lagoon, Italy. *Journal of Geophysical Research – Earth Surface.*, 110, F04007, doi:10.1029/2004JF000232, October 2005.
3. Fagherazzi, S., L. Carniello, L. D'Alpaos and A. Defina (2006). Critical bifurcation of shallow microtidal landforms in tidal flats and salt marshes. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, vol. 103, no. 22, pp. 8337-8341, doi: 10.1073/pnas.0508379103, May 30, 2006.
4. Defina, A.; L. Carniello; S. Fagherazzi and L. D'Alpaos (2007). Self organization of shallow basins in tidal flats and salt marshes. *Journal of Geophysical Research – Earth Surface.*, doi:10.1029/2006JF000550, 2007.
5. Fagherazzi, S., C. Palermo, M.C. Rulli, L. Carniello and A. Defina (2007). Wind Waves in Shallow Microtidal Basins and the Dynamic Equilibrium of Tidal Flats. *Journal of Geophysical Research – Earth Surface.*, doi:10.1029/2006JF000572, 2007.
6. Marani, M., A. D'Alpaos, S. Lanzoni, L. Carniello, and A. Rinaldo (2007). Biologically-controlled multiple equilibria of tidal landforms and the fate of the Venice lagoon. *Geophys. Res. Lett.*, 34, L11402, doi:10.1029/2007GL030178.
7. Rinaldo, A., L. Nicotina, E. Alessi Celegon, F. Beraldin, G. Botter, L. Carniello, G. Cecconi, A. Defina, T. Settin, A. Uccelli, L. D'Alpaos, and M. Marani (2008). Sea level rise, hydrologic runoff, and the flooding of Venice. *Water Resour. Res.*, 44, W12434, doi:10.1029/2008WR007195.
8. Carniello, L., A. Defina and L. D'Alpaos (2009). Morphological evolution of the Venice Lagoon: evidence from the past and trend for the future, *J. Geophys. Res. – Earth Surface*, 114, F04002, doi:10.1029/2008JF001157.
9. Stefanon, L., L. Carniello, A. D'Alpaos and S. Lanzoni (2010). Experimental analysis of tidal network growth and development. *Cont. Shelf Res.* doi:10.1016/j.csr.2009.08.018.
10. Mariotti, G., S. Fagherazzi, P. Wiberg, K. McGlathery, L. Carniello and A. Defina (2010), Influence of storm surges and sea level on shallow tidal basin erosive processes, *J. Geophys. Res. – Oceans*, 115, C11012, doi:10.1029/2009JC005892.
11. Marani M., A. D'Alpaos, S. Lanzoni, L. Carniello, A. Rinaldo (2010), The importance of being coupled: Stable states and catastrophic shifts in tidal biomorphodynamics, *J. Geophys. Res. – Earth Surface*, 115, F04004, doi:10.1029/2009JF001600.
12. Carniello, L., A. D'Alpaos and A. Defina (2011). Modeling wind waves and tidal flows in shallow microtidal basins, *Estuarine, Coastal and Shelf Science*, 114, F04002, doi:10.1016/j.ecss.2011.01.001.
13. D'Alpaos, A., L. Carniello and S.M. Mudd (2011), Dynamic response of marshes to perturbations in suspended sediment concentrations and rates of relative sea level rise, *J. Geophys. Res. - Earth Surface*, 116, F04020, 13 PP., doi:10.1029/2011JF002093.
14. Carniello, L., A. Defina and L. D'Alpaos (2012), Modeling sand-mud transport induced by tidal currents and wind waves in shallow microtidal basins: Application to the Venice Lagoon (Italy), *Estuarine, Coastal and Shelf Science*, doi:10.1016/j.ecss.2012.03.016.

15. Stefanon, L., L. Carniello, A. D'Alpaos and A. Rinaldo (2012). Signatures of sea level changes on tidal geomorphology: Experiments on network incision and retreat. *Geophysical Research Letters*, 39, L12402, doi:10.1029/2012GL051953.
16. Van Oyen, T., S. Lanzoni, A. D'Alpaos, S. Temmerman, P. Troch and L. Carniello (2012). A simplified model for frictionally dominated tidal flows. *Geophysical Research Letters*, 39, L12403, doi:10.1029/2012GL051949.
17. Viero D.P., A. D'Alpaos, L. Carniello, and A. Defina, (2013). Mathematical modeling of flooding due to river bank failure. *Advances in Water Resources*, 59, 82-94, doi:10.1016/j.advwatres.2013.05.011.
18. D'Alpaos, A., L. Carniello, and A. Rinaldo, (2013). Statistical mechanics of wind wave-induced erosion in shallow tidal basins: Inferences from the Venice Lagoon. *Geophysical Research Letters*, 40, doi:10.1002/grl.50666.

Book Chapters

1. D'Alpaos, L., L. Carniello and A. Defina (2009). Mathematical modeling of tidal flow over salt marshes and tidal flats with applications to the Venice lagoon. In *Coastal Wetlands an integrated ecosystem approach*, edited by G.M.E. Perillo, E. Wolanski, D.R. Cahoon and M.M. Brinson, pp. 263-291, Elsevier, The Netherlands.

Other Publications:

1. Carniello, L., L. D'Alpaos, A. Defina and P. Martini (2003). A finite element model for the hydrodynamics of shallow tidal basins based on coupling of 2d and 1d elements. *Proceedings of Scientific Research and Safeguarding of Venice, Co.Ri.La Research Program 2001-2003, Vol. II, 2002 Results*, pp. 465-479, Venezia, 2003.
2. Martini, P., L. D'Alpaos and L. Carniello (2003). Un modello matematico bidimensionale per lo studio dell'idrodinamica e del trasporto di sedimenti nella Laguna di Venezia, *Proceedings of Scientific Research and Safeguarding of Venice, Co.Ri.La Research Program 2001-2003, Vol. II, 2002 Results*, pp. 481-509, Venezia, 2003.
3. Carniello, L., L. D'Alpaos, A. Defina (2004). Un modello di generazione e propagazione del moto ondoso in Laguna di Venezia. *Atti del XXIX Convegno di Idraulica e Costruzioni Idrauliche, Trento, Editorial BIOS, Vol.1, pp 619-626, 2004.*
4. Carniello, L., A. Defina and L. D'Alpaos (2005). Quantifying shear stress due to wind waves and tidal currents in the Venice lagoon. *Proceedings of Scientific Research and Safeguarding of Venice, Co.Ri.La Research Program 2004-2007, Vol.4, Venezia, 2005.*
5. Carniello, L., A. Defina, L. D'Alpaos (2006). Transizione bassofondo-barena nei bacini a marea poco profondi per effetto del moto ondoso da vento. *Atti del XXX Convegno di Idraulica e Costruzioni Idrauliche, Roma, Casa Editrice Università la Sapienza, pag. 113, 2006.*
6. Defina A., L. Carniello, and L. D'Alpaos (2006), Tidal Flat-Salt Marsh transition in the Venice Lagoon, Italy. *Proceedings of the Annual General Meeting of the Scientific Research and Safeguarding of Venice, Co.Ri.La Research Program 2004-2006, Pierpaolo Campostrini Ed., Vol. V, 2005 Results*, pp. 283-296, Venezia, 2006.
7. Tesser G., L. Carniello, A. Defina, S. Lanzoni, F. Susin, and L. D'Alpaos (2007). Experimental analysis of tidal network growth and development. *32° Congress of IAHR, Venice July 1-6, 2007.*
8. Fagherazzi, S., L. Carniello, A. Defina and L. D'Alpaos (2007). Wind waves in shallow microtidal basins and the transition from tidal flats to salt marshes. *32° Congress of IAHR, Venice July 1-6, 2007.*
9. Carniello, L., L. D'Alpaos, S.Fagherazzi, and A. Defina (2007). A conceptual model for the long term evolution of tidal flats in the Venice lagoon. *Proceedings of 5th IAHR Symposium on River, Coastal*

and Estuarine Morphodynamics, Enschede, The Netherlands, 17-21 september 2007, C.M. Dolmen-Janssen & J.M.H. Hulscher Eds. 2008 Taylor & Francis Group, London, ISBN 978-0-415-45363-9, Vol. (1), pp. 137-144.

10. Marani, M., A. D'Alpaos, S. Lanzoni, L. Carniello, and A. Rinaldo (2007). Multiple equilibria in tidal geomorphology. Proceedings of 5th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, Enschede, The Netherlands, 17-21 september 2007, C.M. Dolmen-Janssen & J.M.H. Hulscher Eds. 2008 Taylor & Francis Group, London, ISBN 978-0-415-45363-9, Vol. (1), pp. 263-269.
11. Carniello, L., A. Defina, L. D'Alpaos (2008). Un modello di trasporto solido in sospensione per miscele bigranulari: prime applicazione alla laguna di Venezia. Atti del XXXI Convegno di Idraulica e Costruzioni Idrauliche, Perugia, Morlacchi Editore, pag 204.
12. Marani, M., A. D'Alpaos, C. Da Lio, L. Carniello, S. Lanzoni, and A. Rinaldo (2009). *The importance of being coupled: Stable states, transitions and responses to changing forcings in tidal biomorphodynamics*, in River, Coastal and Estuarine Morphodynamics: RCEM 2009, Vionnet C.A., Garcia M.H., Latrubesse E.M. and Perillo G.M.E. (eds), Taylor & Francis Group, London, ISBN 978-0-415-55426-8, vol. 2 pp. 533-540.
13. Carniello, L., A. D'Alpaos, and A. Defina (2009). *Simulation of wind waves in shallow microtidal basins: application to the Venice Lagoon, Italy*, in River, Coastal and Estuarine Morphodynamics: RCEM 2009, Vionnet C.A., Garcia M.H., Latrubesse E.M. and Perillo G.M.E. (eds), Taylor & Francis Group, London, ISBN 978-0-415-55426-8, vol. 2 pp. 907-912.
14. L. D'Alpaos and L. Carniello (2010). *Sulla reintroduzione di acque dolci nella laguna di Venezia*. XXVI giornata dell'Ambiente. La Salvaguardia di Venezia e della sua Laguna, in ricordo di Enrico Marchi, Roma 5 giugno 2008. ACCADEMIA NAZIONALE DEI LINCEI, Atti dei Convegni - 255 - pp. 113-146.
15. Carniello, L., A. D'Alpaos, and A. Defina (2010). *The effect of Wind-Waves and Tidal Currents on sediment resuspension in shallow microtidal basins*, Atti del XXXII Convegno di Idraulica e Costruzioni Idrauliche, Palermo, 14-17 settembre 2010.
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17. Viero D.P., A. D'Alpaos, L. Carniello, and A. Defina (2012). *Un modello Idrodinamico accoppiato per la simulazione di rotte arginali in contesti fluviali*, Atti del XXXIII Convegno di Idraulica e Costruzioni Idrauliche, Brescia, 10-14 settembre 2012.
18. D'Alpaos, A., S.M. Mudd, and L. Carniello (2012). *Sulla risposta dei sistemi di barena a variazioni della disponibilità di sedimento e del tasso di incremento del livello medio del mare*, Atti del XXXIII Convegno di Idraulica e Costruzioni Idrauliche, Brescia, 10-14 settembre 2012.
19. Carniello, L., A. Defina, and L. D'Alpaos (2012). *Modellazione del trasporto solido in ambito lagunare di sedimenti a comportamento coesivo e incoerente*, Atti del XXXIII Convegno di Idraulica e Costruzioni Idrauliche, Brescia, 10-14 settembre 2012.