Curriculum Vitae

PAOLO D'ODORICO

Thomas J. Graff Professor of Water Resources
Department of Environmental Science, Policy, and Management
Department of Civil and Environmental Engineering
University of California, Berkeley
133 Mulford Hall #3114, Berkeley, CA94720-3114, USA - E-mail: paolododo@Berkeley.edu

Education

May 1998 Ph.D., Hydraulic Engineering, University of Padova, Italy.
March 1994 M.S. (Laurea), Civil Engineering, University of Padova, Italy.

Academic Appointments

2021- Thomas J. Graff Endowed Chair in the College of Natural Resources, University of California, Berkeley.
2019-2022 Chair, Department of Environmental Science, Policy, Management, University of California, Berkeley, USA.
2018-2019 Chair, Ecosystem Science Division, ESPM Department, University of California, Berkeley, USA.
2021- Professor of Civil & Environmental Engineering, University of California, Berkeley, USA.
2016- Professor, Environmental Science, Policy & Management Dept., University of California, Berkeley, USA.
2010-2016 Ernest H. Ern Professor of Environmental Sciences, University of Virginia, Charlottesville, USA.
2015 Sabbatical Fellow, National Center for Social Environmental Synthesis, University of Maryland USA.
2011 Visiting Professor, Ecole Polytechnique Fédérale de Lausanne – EPFL – Lausanne, Switzerland.
2006-2010 Associate Professor, Department of Environmental Sciences, University of Virginia, USA.
2001-2006 Assistant Professor, Department of Environmental Sciences, University of Virginia, USA.
1999-2001 Assistant Professor, Department of Civil Engineering, Texas A&M University, College Station, USA.
1999 Research Associate, Department of Civil and Operations Research, Princeton University, USA.
1997-1998 Research Associate, Department of Civil Engineering, Texas A&M University, College Station, USA.

Honors and Awards

2024 *Prince Sultan Bin Abdulaziz International Creativity Prize for Water*, PSIPW Council, (ceremony in fall 2024).
2024 *Fellow*, Istituto Veneto di Scienze, Lettere e Arti, Venice.
2023 *Highly Cited Researcher*, Web of Science, Clarivate
2023 *Hydrological Science Medal*, American Meteorological Society
2023 *Fellow*, American Meteorological Society
2022 *Fellow*, American Association for the Advancement of Science.
2016 *Paul Witherspoon Lecture*, American Geophysical Union.
2016 *Fellow*, American Geophysical Union.
2013 *Maury-Tice Environmental Prize*, University of Virginia.
2013 *Distinguished Investigator Award*, University of Virginia
2011 *Guggenheim Fellow*, John Simon Guggenheim Memorial Foundation.
2011 *Fulbright Distinguished Lecturer*, J. William Fulbright Foreign Scholarship Board.
2009 *Sustainability Science Award*, Ecological Society of America.
2004 *Lagrange Fellow*, Fondazione CRT and Fondazione ISI, Torino, Italy.
2003 *University of Virginia Teaching Fellow*, Charlottesville, Virginia.
1998-1999 *Prof. Aldo Gini Fellowship* for studies and research abroad, Gini Foundation, Padua, Italy.
1998 *Prof. Emanuele Guggino Dissertation Prize*, CSEI, Mediterranean Polytechnic Foundation, CT, Italy.
1994 *Magna Cum Laude* distinction, University of Padua, Italy.

Editorial Boards

- **Editor,** *Reviews of Geophysics* (2019-)
- **Editorial Board**, Drylands, Cambridge University Press (2024-)
- **Editor-in-Chief**, *Advances in Water Resources* (2014-2021)

- **Editorial Board**, *Oxford Encyclopedia of Environmental Sciences* (2014-)
- **Associate Editor**, *Frontiers in Sustainable Food Systems* (2017-)
- **Editor,** *Geophysical Research Letters*, 2009-2013
- **Editorial Board,** *Advances in Water Resources*, 2012-
- **Associate Editor**, *Water Resources Research*, 2004-2009

Research Interests

Eco-hydrology, water sustainability, surface hydrology, stochastic modeling of hydrologic processes, soil moisture dynamics, regional water cycle, soil erosion, desertification, water and food security, water justice.

Publications ([*] denotes publications with my advisees)
305 Articles in peer-reviewed journals & **5 Books**
H-Index: *Google Scholar* =96 (29,204 citations); *ISI-Web of Knowledge* =74 (16,883 citations)

Books

P. D'Odorico, A. Porporato, C.W. Runyan (Editors), *Dryland Ecohydrology* 2nd Edition, Springer, 594 pp., 2019.

Runyan, C.W. and **P. D'Odorico**. *Global Deforestation*, Cambridge University Press, New York, 248 pp., 2016.

Hornberger, G. M., P. L. Wiberg, J. Raffensberger, and **P. D'Odorico**. *Elements of Physical Hydrology*, 2nd ed., Baltimore, Maryland: Johns Hopkins Press, 2014.

Ridolfi, L., **P. D'Odorico**, and F. Laio, *Noise-induced Phenomena in the Environmental Sciences*, Cambridge University Press, New York, 314pp., 2011.

P. D'Odorico and A. Porporato (Editors), *Dryland Ecohydrology*, Springer, 2006.

Peer-reviewed journal articles

1. Rulli, M.C., M. Sardo, C. Govoni, N. Galli, D.D. Chiarelli, A. Komarek, **P. D'Odorico** (2024). Meeting the EAT-Lancet 'healthy' diet target while protecting land and water resources, *Nature Sustainability*, in press.
2. Yang, Y, D. Tilman, Z. Jin, P. Smith, C. B. Barrett, Y-G Zhu, J. Burney, **P. D'Odorico**, P. Fantke, J. Fargione, J. C. Finlay, M.C. Rulli, L. Sloat, K. Jan van Groenigen, P.C. West, L. Ziska, A.M. Michalak, the Clim-Ag Team, D.B. Lobell, (2024). "Climate change exacerbates the environmental impacts of agriculture", *Science*, 385(6723), DOI: 10.1126/science.adn3747.
3. Mekonnen, M., M. Kebede, B. Demeke, J. Carr, A. Chapagain, C. Dalin, P. Debaere, **P. D'Odorico**, L. Marston, C. Ray, L. Rosa, and L. Zhuo, (2024). Global Virtual Water Trade Trends, Key Players, and Environmental Impacts, *Nature Reviews Earth & Environment*, in press.
4. Saeedian, M., C. Tu, F. Menegazzo, **P. D'Odorico**, S. Azaele, and S. Suweis, "Modelling co-evolution of resource feedback and social network dynamics in human-environmental systems", *New Journal of Physics*, in press.
5. **D'Odorico, P**., J. Dell'Angelo, and M.C. Rulli (2024). "Appropriation pathways of water grabbing", *World Development*, 181, p.106650.
6. **D'Odorico, P**., J. Dell'Angelo, and M.C. Rulli (2024). "Water commons grabbing and (in)justice". *Nature Water*: 1-3 https://doi.org/10.1038/s44221-024-00231-8.
7. Yu, K., **P. D'Odorico**, A. Novoa, S. L. Collins, S. Hartzell, H. Huang, H. Liu, P. Weigelt, A. Porporato (2024). "Potential expansion of plants with crassulacean acid metabolism in the Anthropocene", *Bioscience*, biae057, https://doi.org/10.1093/biosci/biae057.
8. Ren, N., E. J. Hanan, **P. D'Odorico**, N. Tague, J. P. Schimel, and P. M. Homyak (2024). "Dryland watersheds in flux: How nitrogen deposition and changing precipitation regimes shape nitrogen export" *Earth Future*, 12, e2023EF004120. https://doi.org/10.1029/2023EF004120
9. Khatei, G., T. Rinaldo, S. Van Pelt, **P. D'Odorico**, and S. Ravi (2024). "Wind erodibility and particulate matter emissions of salt-affected soils: The case of dry soils in a low humidity atmosphere", *J. Geophys. Res.*, 129, e2023JD039576. https://doi.org/10.1029/2023JD039576
10. Karimzadeh S., D.D.Chiarelli, S. Hartman, M.C. Rulli, and **P.D'Odorico**, (2024), "The tradeoff between water savings and salinization prevention in dryland irrigation", *Adv. Water Resour. 183, 104604, ISSN 0309-1708, https://doi.org/10.1016/j.advwatres.2023.104604*.

11. Key, P., L. Wang-Erlandsson, M.L. Moore, A. Pranindita, F. Stenzel, O.Varis, R. Warrier, R. B. Wong, **P. D'Odorico**, C. Folke. (2024) "The Dry Sky: Future Scenarios for Humanity's Modification of the Atmospheric Water Cycle", *Global Sustainability*, 7, e11, 1–13. https://doi.org/10.1017/sus.2024.9.
12. Ricciardi, L. **P. D'Odorico**, M.C. Rulli, (2024). "To what extent can agriculture be reshaped to address healthy and sustainable diets by boosting pulse production locally?", *Global Food Security*, 40, 100734.
13. Govoni, C. **P. D'Odorico**, L. Pinotti, and M.C. Rulli (2023), "Preserving global land and water resources through the replacement of livestock feeds with agricultural by-products" *Nature Food*. https://doi.org/10.1038/s43016-023-00884-w
14. Muylaert, R., D.A. Wilkinson, T. Kingston, **P. D'Odorico**, M.C. Rulli, N. Galli, R. R.S. John, P. Alviola, D. S. Hayman (2023), "Using drivers and transmission pathways to identify SARS-like coronavirus spillover risk hotspots", *Nature Comm.* 14: 6854.
15. May Lagunes, G., V. Chau, E. Ellestad, L. Greengard, **P. D'Odorico**, P. Vahabi, A. Todeschini, M. Girotto (2023). "Forecasting Groundwater Levels Using Machine Learning Methods: The Case of California's Central Valley", *J. Hydrol.*, 21, 100161.
16. Dell'Angelo, J., M.C. Rulli, and **P. D'Odorico** (2023). "Will war in Ukraine escalate the global land rush?", *Science*, 379(6634), 752-755.
17. Wolde S.G., **P. D'Odorico**, and M.C. Rulli (2023). "Environmental drivers of human migration in Sub-Saharan Africa", *Global Sustainability*, y 6, e9, 1–33. https://doi.org/10.1017/sus.2023.5.
18. Sardo, M., I. Epifani, **P. D'Odorico**, N. Galli, and M.C. Rulli (2023). "Exploring the water-food nexus reveals the interlinkages with urban human conflicts in Central America", *Nature Water*, doi 10.1038/s44221-023-00053-0.
19. Tu, C., **P. D'Odorico**, Z. Li, S. Suweis (2023). "The emergence of cooperation from shared goals in the governance of common pool resources", *Nature Sustainability*, https://doi.org/10.1038/s41893-022-01008-1.
20. Hartman, S., M. Farfan, J. Hoogesteger, **P. D'Odorico** (2022), "Mapping the widespread expansion of berry greenhouses onto Mexico's ejido lands", *Environmental Research Letters*, 17 (2022) 115004, doi.org/10.1088/1748-9326/ac9ac8.
21. Wang, L., W. Jiao, N. MacBean, M.C. Rulli, S. Manzoni, G. Vico, and **P. D'Odorico** (2022), "Dryland productivity under a changing climate", *Nature Climate Change*, Nature Climate Change, 12, 981–994 (2022). https://doi.org/10.1038/s41558-022-01499-y.
22. Beltran- Peña, A. and **P. D'Odorico** (2022). "Future Food Security in Africa under Climate Change", *Earth's Future*, 10, e2022EF002651, https://doi.org/10.1029/2022EF002651.
23. Ricciardi, L., **P. D'Odorico**, N. Galli, D.D. Chiarelli, M.C. Rulli (2022). "Hydrological implications of large-scale afforestation in tropical biomes for climate change mitigation". *Phil. Trans. R. Soc. B* 377: 20210391. https://doi.org/10.1098/rstb.2021.0391.
24. Tatlhego, M., D.D. Chiarelli, M.C. Rulli, **P. D'Odorico** (2022). "The value generated by irrigation in the command areas of new agricultural dams in Africa ", *Agric. Water. Management.*, 264, 107517, doi.org/10.1016/j.agwat.2022.107517.
25. Bhattachan, A, K. Dintwe, M. Tatlhego, **P. D'Odorico**, and G.S. Okin (2022), "Evaluation of dust production efficiencies in sandy sediments", *Earth Surface Processes and Landforms*, 1–9. https://doi.org/10.1002/esp.5312
26. Chiarelli, D.D., **P. D'Odorico,** M. Müller , N. Mueller , K. Davis , J. Dell'Angelo , G. Penny , M.C. Rulli (2022), "Competition for water induced by transnational land acquisitions for agriculture", *Nature Communications*, **13,** 505. *https://doi.org/10.1038/s41467-022-28077-2.*
27. Hartman, S., D.D. Chiarelli, M.C. Rulli, and **P. D'Odorico** (2022), "A Growing Produce Bubble: United States produce tied to Mexico's unsustainable agricultural water use", *Environm. Res. Lett.*, 16, 105008.
28. Abolhasani, A., Zehtabian, G., Khosravi, H., Rahmati, O., Alamdarloo, E. H., and **D'Odorico, P.** (2022). A new conceptual framework for spatial predictive modelling of land degradation in a semiarid area. Land Degradation & Development, 33(17), 3358– 3374. https://doi.org/10.1002/ldr.4391
29. Tatlhego, M., and **P. D'Odorico**, (2022). "Are African irrigation dam projects for large-scale agribusiness or small-scale farmers?", *Environm. Res, Comm.*, 4, 015005.
30. Zhang, X., G. Yao, S. Vishwakarma, C. Dalin, Adam M. Komarek, D. R. Kanter, K.F. Davis, K. Pfeifer, J. Zhao, T. Zou, **P. D'Odorico**, C. Folberth, F. Galeana, J. Fanzo, L. Rosa, W. Dennison, M. Musumba, A. Heyman, E. A. Davidson (2021), "Tracking global agricultural sustainability at the national scale", *One Earth*, 4 (9), 1262-1277.
31. Huang, H., C. Tu, and **P. D'Odorico** (2021), "Ecosystem complexity enhances the resilience of plant-pollinator systems", *One Earth*, 4 (9), 1286-1296.
32. Jenkins, W., L. Rosa, J. Schmidt, L. Band, A. Beltran-Peña, A. Clarens, S. Doney, R. Emanuel, A. Glassie, J. Quinn, M. C. Rulli, W. Shobe, L. Szeptycki, and **P. D'Odorico** (2021), "Values-Based Scenarios of Water Security: Rights to Water, Rights of Waters, and Commercial Water Rights", *Bioscience, 20*, biab088, https://doi.org/10.1093/biosci/biab088
33. Jiao, W., L. Wang, W. K. Smith, Q. Chan, H. Wang, **P. D'Odorico** (2021), "Observed increasing water constraint on vegetation growth over the last three decades", *Nature Communications*, doi: 10.1038/s41467-021-24016-9.
34. Huang, H., P.A. Tuley, J. Zinnert, I. Rodriguez-Iturbe, **P. D'Odorico** (2021), "Microclimate feedbacks sustain power law clustering of encroaching coastal woody vegetation", *Comm. Biol.*, 4:745, https://doi.org/10.1038/s42003-021-02274-z, www.nature.com/commsbio.

35. Nagaraj, D., E. Proust, A. Todeschini, M.C. Rulli, and **P. D'Odorico** (2021). "A new dataset of global irrigation areas from 2001 to 2015", *Adv. Water. Resour. 152*, 103910, https://doi.org/10.1016/j.advwatres.2021.103910.
36. Rulli, M.C., **P. D'Odorico**, N. Galli, and D.T. Hayman (2021). "Land use change and livestock revolution as contributors to Coronavirus emergence risk", *Nature Food*, https://doi.org/10.1038/s43016-021-00285-x.
37. Rosa, L., M.C. Rulli, S. Ali, D. Chiarelli, J. Dell'Angelo, N. Mueller, A. Scheidel, G. Siciliano, and **P. D'Odorico**, (2021). "Energy implications of the 21st century agrarian transition", *Nature Communications*, 12 (1), 1-9.
38. Müller M., G. Penny, M. T. Niles, V. Ricciardi, D. D. Chiarelli, K.F. Davis, J. Dell'Angelo, **P. D'Odorico**, L. Rosa, M.C. Rulli, N. D. Mueller (2021). "Impact of Transnational Land Acquisitions on Local Food Security and Dietary Diversity", *Proc. Natnl. Acad. Sci. USA*, 118 (4) e2020535118; DOI: 10.1073/pnas.2020535118.
39. Tu, C., **P. D'Odorico**, and S. Suweis (2021). "Dimensionality reduction of complex dynamical systems", *iScience*, 24, 101912.
40. Rosa, L., D.L. Sanchez, G. Realmonte, D. Baldocchi, **P. D'Odorico** (2021). "The water footprint of carbon capture and storage technologies", *Renewable & Sustainable Energy Reviews*, 138, https://doi.org/10.1016/j.rser.2020.110511.
41. Chiarelli, D.D., **P. D'Odorico**, K.F. Davis, R. Rosso, and M.C. Rulli, (2020) "Large scale land acquisition as a potential driver of slope instability", *Land Degradation & Development*, 1-13, doi.org/10.1002/ldr.3826.
42. Rosa, L., D.D. Chiarelli, M. Sangiorgio, A.A. Beltran-Peña, M.C. Rulli, **P. D'Odorico**, and I. Fung (2020). "Potential for sustainable irrigation expansion in a 3C warmer climate", *Proc. Natnl. Acad. Sci. USA*, https://doi.org/10.1073/pnas.2017796117.
43. **D'Odorico, P.**, D.D. Chiarelli, L. Rosa, A. Bini, D. Zilberman, and M.C. Rulli (2020). "The global value of water in agriculture", *Proc. Natnl. Acad. Sci. USA*,17(36) 21985-21993, www.pnas.org/cgi/doi/10.1073/pnas.2005835117.
44. Chiarelli, D.D., C. Passera, L. Rosa, K. F. Davis, **P. D'Odorico**, and M. C. Rulli (2020). Global gridded dataset of crop-specific green and blue water requirements, the WATNEEDS model. *Scientific Data*. 7, 273.
45. Davis, K., H Koo, J. Dell'Angelo, **P. D'Odorico**, L. Estes, L. Kehoe, M. Kharratzadeh, T. Kuemmerle, D. Machava, A. Pais, N. Ribeiro, M.C. Rulli, and M. Tatlhego (2020). "Tropical forest loss enhanced by large-scale land acquisitions", *Nature Geosciences*, 13, 482–488.
46. Beltran-Peña, A. A., L. Rosa, and **P. D'Odorico**, (2020). "Global food self-sufficiency in the 21st century under sustainable intensification of agriculture", *Environm. Res. Lett.*, 15(9) 095004.
47. Huang, H., L.D.L. Anderegg, T.E. Dawson, M. Mote, and **P. D'Odorico** (2020). "Critical transition to woody plant dominance through microclimate feedbacks in North American coastal ecosystems", *Ecology*, 101(9): e03107. 10.1002/ecy.3107
48. Rosa, L., J.A. Reimer, M. Went, and **P. D'Odorico** (2020). *"*Hydrological limits to carbon capture and storage", *Nature Sustainability*, https://doi.org/10.1038/s41893-020-0532-7.
49. Brelsford, C., M. Dumas, E. Schlager, B. Dermody, M. Aiuvalasit, M. Allen-Dumas, J. Beecher, U. Bhatia, **P. D'Odorico**, M. Garcia, P. Gober, D. Groenfeldt, S. Lansing, K. Madani, L. E. Méndez-Barrientos, E. Mondino, M. Müller, F. O'Donnell, P. Mbullo Owuor, J. Rising, M. Sanderson, F. Arguello de Souza, S. Zipper (2020), Developing a sustainability science approach for water systems, *Ecology and Society*, 25(2):23. https://doi.org/10.5751/ES-11515-250223.
50. Kinnunen, P., J. H. A. Guillaume, M. Taka, **P. D'Odorico**, S. Siebert, M. J. Puma, M. Jalava, M. Kummu (2020). "Local food crop production can fulfil demand for less than one-third of population", *Nature Food*, *1*, 229-237.
51. Rosa, L., D.D. Danilo Chiarelli, M.C. Rulli, J. Dell'Angelo, and **P. D'Odorico** (2020). "Global agricultural economic water scarcity", *Science Advances*, 6: eaaz6031.
52. Chiarelli, D., C. Passera, M.C. Rulli, L. Rosa, and **P. D'Odorico** (2020), "Hydrological consequences of natural rubber plantations in Southeast Asia", *Land Degradation and Development, 31:2060–2073.* https://doi.org/10.1002/ldr.3591.
53. Tu, C., S. Suweis, and **P. D'Odorico**, "Critical slowing down associated with critical transition and risk of collapse in cryptocurrency", *Royal Society Open Science*, 7: 191450. http://dx.doi.org/10.1098/rsos.191450.
54. Heslin, A., M. Puma, P. Marchand, J.A. Carr, J. Dell'Angelo, **P. D'Odorico**, J. A. Gephart, M. Kummu, M. Porkka, M.C. Rulli, D. A. Seekell, S. Suweis, A. Tavoni, "Simulating the cascading effects of an extreme agricultural production shock: global implications of a contemporary US Dust Bowl event", *Frontiers in Sustainable Food Systems*, 4(26).
55. Huang, H., Y. Feng, K. Yu, and **P. D'Odorico** (2020). "CAM plant expansion favored indirectly by asymmetric climate warming and increased rainfall variability", *Oecologia*, 193, 1-13.
56. Borsato, E., L. Rosa, P. Tarolli, F. Marinello, and **P. D'Odorico**, (2020). "Weak and Strong Sustainability of Irrigation: A Framework for Irrigation Practices Under Limited Water Availability", *Front. Sustain. Food Syst.* 4:17. doi: 10.3389/fsufs.2020.00017
57. Huang, H., **P. D'Odorico**, (2020) "Critical transitions in plant-pollinator systems induced by positive inbreeding-reward-pollinator feedbacks", *iScience* (2020), doi: https://doi.org/10.1016/j.isci.2020.100819.
58. Tatlhego M., A. Bhattachan, G. S. Okin, **P. D'Odorico** (2020). "Mapping areas of the Southern Ocean where productivity likely depends on dust-delivered iron", *J. Geophys. Res.–Atmospheres, 125, e2019JD030926; doi.org/10.1029/2019JD030926*.

59. Hassani A., A. Azapagic, **P. D'Odorico**, A. Keshmiri , N. Shokri, (2020). "Desiccation crisis of saline lakes: A new decision-support framework for building resilience to climate change", *Science of Total Environment*, 703(10), 134718.
60. Wang, L., and **P. D'Odorico** (2019). "Water limitations to large-scale desert agroforestry projects for carbon sequestration", *Proceedings of the National Academy of Science U.S.A., pnas.org/cgi/doi/10.1073/pnas.1917692116.*
61. Rosa, L., D. Chiarelli, C. Tu, M.C. Rulli, and **P. D'Odorico**, (2019). "Global unsustainable virtual water flows in agricultural trade", *Environm. Res. Lett.*, 14, 114001.
62. Webb, N., G.S. Okin, A. Bhattachan, **P. D'Odorico**, K. Dintwe, M. Tatlhego (2019), " Ecosystem dynamics and aeolian sediment transport in the southern Kalahari" *African Journal of Ecology*, 2019;00:1–8. https://doi.org/10.1111/aje.12700.
63. Huang, H., K. Yu, Y. Fan, and **P. D'Odorico** (2019), "The competitive advantage of C4 grasses over CAM plants under increased rainfall variability", *Plant and Soil*, 442(1–2), 483–495.
64. Tu, C., S. Suweis, and **P. D'Odorico**, (2019). "Impact of globalization on the resilience and sustainability of natural resources", *Nature Sustainability*, 2, 283–289.
65. Meyer, T., P. Holloway, T.B. Christiansen, J.A. Miller, **P. D'Odorico**, and G. S. Okin, (2019). "An Assessment of Multiple Drivers Determining Woody Species Composition and Structure: A Case Study from the Kalahari, Botswana", *Land*, 8(8), 122; https://doi.org/10.3390/land8080122.
66. Saha, M.V., **P. D'Odorico**, and T.M. Scanlon, (2019). "Kalahari wildfires drive continental post-fire brightening in sub-Saharan Africa", *Remote Sens.* 2019, 11, 1090; doi:10.3390/rs11091090.
67. Yu, K., **P. D'Odorico**, S. L. Collins, D. Carr, A. Porporato, W. R. L. Anderegg, W. P. Gilhooly III, L. Wang, A. Bhattachan, M. Bartlett, S. Hartzell, J. Yin, Y. He, W. Li, M. Tatlhego, and J. D. Fuentes (2019). The competitive advantage of a constitutive CAM species over a C4grass species under drought and CO_2 enrichment, *Ecosphere* 10(5):e02721. 10.1002/ecs2.272.
68. **D'Odorico P.,** J.A. Carr, K. F. Davis, J. Dell'Angelo, DA Seekell (2019). "Food inequality, injustice, and rights", *BioScience*, 69(3), 180-190, https://doi.org/10.1093/biosci/biz002.
69. **D'Odorico, P.**, J.A. Carr, C. Dalin, J. Dell'Angelo, M. Konar, F. Laio, L. Ridolfi, L. Rosa, S. Suweis, M. Tuninetti, (2019). Global virtual water trade and the hydrological cycle: Patterns, drivers, and socio-environmental impacts, *Environmental research Letters*, 14, 053001. https://doi.org/10.1088/1748-9326/ab05f4.
70. Rulli, M.C., S. Casirati, J. Dell'Angelo, K.F. Davis, C. Passera, **P. D'Odorico**, (2019). "Interdependencies and telecoupling of oil palm expansion at the expense of Indonesian rainforest", (2019). *Renewable & Sustainable Energy Reviews*, 105: 499-512, https://doi.org/10.1016/j.rser.2018.12.050.
71. Fan, Y., X. Li, H. Huang, X. Wu, K. Yu, J. Wei, Junqi, C. Zhang, P. Wang, Pei, X. Hu, **P. D'Odorico**, (2019). "Does phenology play a role in the feedbacks underlying shrub encroachment?", *Science of Total Environment*, 657: 1064-1073, 10.1016/j.scitotenv.2018.12.125.
72. Rosa, L and **P. D'Odorico** (2019). "The water-energy-food nexus of unconventional oil and gas extraction in the Vaca Muerta Play, Argentina", *J. Cleaner Production*, 207:743-750. https://doi.org/10.1016/j.jclepro.2018.10.039 .[*]
73. Saha, M., T.M. Scanlon, and **P. D'Odorico**, (2019). "Climate seasonality as an essential predictor of global fire activity", *Global Ecol. Biogeogr*. 29(2), 198-210. DOI: 10.1111/geb.12836. [*]
74. Pivato, M., L. Carniello, I. Moro, and **P. D'Odorico**, (2019). "On the feedback between water turbidity and microphyto-benthos growth in shallow tidal environments", *Earth Surface Processes & Landforms*, 44, 1192–1206, https://doi.org/10.1002/esp.4567.
75. **D'Odorico, P.** (2018), The challenges of meeting future food, energy, and water needs, Eos, 99, https://doi.org/10.1029/2018EO098891.
76. Seekell, D.A., **P. D'Odorico**, and G.K. MacDonald, 2018. "Food, trade, and the environment", *Environm. Res. Lett.*, 13(10), 100201.
77. Rosa., L., M.C. Rulli, K.F. Davis, D. Chiarelli, C. Passera, **P. D'Odorico**, 2018. "Closing the yield gap while ensuring water sustainability", *Environm. Res. Lett.*, 13 104002.[*]
78. Dell'Angelo, J., **P. D'Odorico**, and M.C. Rulli, (2018). "The neglected costs of water peace", *WIREs Water*, 5(6), e1316. https://doi.org/10.1002/wat2.1316.
79. Huang, H., J.C. Zinnert, L.K. Wood, D.R. Young, and **P. D'Odorico**, 2018. "A non-linear shift from grassland to shrubland in temperate barrier islands", *Ecology*, 99(7): 1671-1681, ECY2383, doi: 10.1002/ecy.2383.[*]
80. Davis, K.F., A. Bhattachan, **P. D'Odorico**, and S. Suweis, 2018, "A universal model for predicting human migration under climate change: Examining future sea level rise in Bangladesh", *Environm. Res. Lett., 13, 064030*, https://doi.org/10.1088/1748-9326/aac4d4.
81. Yu, K., D. Carr, W. Anderegg, K. Tully, and **P. D'Odorico**, 2018. "Response of a facultative CAM plant and its competitive relationship with a grass to changes in rainfall regime", *Plant and Soil*, 427:321–333, https://doi.org/10.1007/s11104-018-3657-y.[*]
82. **D'Odorico, P.**, K.F. Davis, L. Rosa, J.A. Carr, D. Chiarelli, J. Dell'Angelo, J.A. Gephart, G.K. MacDonald, D.A. Seekell, S Suweis, M.C. Rulli, 2018. "The global food-energy-water nexus", *Reviews of Geophysics*, 56, 456–531, https://doi.org/10.1029/2017RG000591

83. Okin, G., **P. D'Odorico**, and J. Liu, 2018. "A mechanism of land degradation in turf-mantled slopes of the Tibetan Plateau", *Geophys. Res. Lett*. 45(9), 4041-4048.
84. Rosa, L., K.F. Davis, M.C. Rulli, and **P. D'Odorico**, 2018. "The water-energy nexus of hydraulic fracturing: a global hydrologic analysis for shale oil and gas extraction", *Earth's Future,* 6, https://doi.org/10.1002/2018EF000809.[*]
85. Getz, W., C. Marshall, C. Carlson, L. Giuggioli, S. Ryan, S. Romanach, C. Boettiger, S. Chamberlian, L. Larsen, **P. D'Odorico**, D. O'Sullivan, 2018. "Making ecosystems models adequate", *Ecology Letters*, DOI: 10.1111/ele.12893.
86. Chiarelli, D., L. Rosa, M.C. Rulli, and **P. D'Odorico**, 2018. "The water-food nexus of natural rubber production", *J. Clearner Production*, 172, 1739-1747.
87. Dell'Angelo, J., **P. D'Odorico**, and M.C. Rulli, 2018. "The Global Water Grab Syndrome", *Ecological Economics*, 143, 276-285.
88. Calabrese, S., A. Porporato, F. Laio, **P. D'Odorico**, and L. Ridolfi, 2017. "Age distribution dynamics with stochastic jumps in mortality", *Proc. R. Soc. Lond. A*, 473(2207), DOI: 10.1098/rspa.2017.0451.
89. Davis, K.F., M.C. Rulli, A. Seveso, and **P. D'Odorico**, 2017. "Increase in food production and reduction in water use through optimized crop distribution", *Nature Geosciences*, doi.org/10.1038/s41561-017-0004-5.[*]
90. **D'Odorico P.,** J.L. Natyzak, E. A. Castner, K. F. Davis, K. Emery, J.A. Gephart, A. Leach, M.L. Pace, and J N. Galloway, 2017. "Ancient water supports today's energy needs", *Earth's Future,* 5(5), 515-519, doi:10.1002/2017EF000544.
91. Natyzak, J.L., E.A. Castner, **P. D'Odorico**, J.N. Galloway, 2017. "Virtual Water as a Metric for Institutional Sustainability", *Sustainability The Journal of Record*, 10(4), 238-245.[*]
92. Siciliano G., M.C. Rulli, and **P. D'Odorico**, 2017. "European large-scale farmland investments and the water, energy, food nexus", *Adv. Water Resour.*, doi.org/10.1016/j.advwatres.2017.08.012.
93. Yu, K., **P. D'Odorico**, D. Carr, A. Personius, S.L. Collins, 2017. "The effect of nitrogen availability and water conditions on competition between a facultative CAM plant and an invasive grass", *Ecology & Evolution*, 1–11. https://doi.org/10.1002/ece3.3296.[*]
94. **D'Odorico P**., M.C. Rulli, J. Dell'Angelo, K.F. Davis, 2017. "New frontiers of land and water commodification: socioenvironmental controversies of large-scale land acquisitions", *Land Degradation & Development*, DOI: 10.1002/ldr.2750.
95. Dell'Angelo, J., M.C. Rulli, and **P. D'Odorico**, 2017. "Land and water grabbing threats to sustainable development", *Current Opinions in Environment and Sustainability*, 26, 120-128.[*]
96. Saha, M. V., **P. D'Odorico**, and T. M. Scanlon, 2017. Albedo changes after fire as an explanation of fire-induced rainfall suppression, *Geophys. Res. Lett.*, 44, doi:10.1002/2017GL073623.[*]
97. Yu, K., **P. D'Odorico**, W. Li, Y. He, 2017. "Effects of competition on induction of crassulacean acid metabolism in a facultative CAM plant". *Oecologia*, 184(2), 351-361, DOI: 10.1007/s00442-017-3868-6.[*]
98. S. Van Pelt, Baddock, M. T.M. Zobeck, S. Ravi, A. Bhattachan, and **P. D'Odorico**, 2017. "Total vertical sediment flux and PM10 emissions from disturbed Chihuahuan Desert surfaces", *Geoderma*, 293, 19-25.
99. Rosa, L., K.F. Davis, M.C. Rulli, and **P. D'Odorico**, 2017. "Environmental consequences of oil production from oil sands", *Earth's Future, 5, doi:10.1002/2016EF000484*.[*]
100. Seekell, D.A., J. Carr, J. Dell'Angelo, **P. D'Odorico**, M. Fader, J. Gephart, R.P. Korzeniewicz, M. Kummu, N. Magliocca, M. Porkka, C. Prell, M. Puma, Z. Ratajczak, M.C. Rulli, S. Suweis, A Tavoni, 2017, "Resilience in the global food system", *Envionm. Res. Lett., 12, http://iopscience.iop.org/1748-9326/12/2/025010*.
101. Rulli, M.C., M. Santini M., **P. D'Odorico**, 2017. "The nexus between forest fragmentation in Africa and Ebola virus disease outbreaks", *Sci. Rep.*, 7: 41613.
102. Davis, K.F., A. Seveso, M.C. Rulli, and **P. D'Odorico**, 2017, "Water savings of crop redistribution in the United States", *Water*, 9, 83; doi:10.3390/w9020083. [*]
103. Dell'Angelo, J., M.C. Rulli, P. Marchand, and **P. D'Odorico**, 2017. "The tragedy of the grabbed commons", *World Development, 92*, 1-12, 2017. http://dx.doi.org/10.1016/j.worlddev.2016.11.005.
104. Guo H., C. Weaver, S. Charles, A. Whitt, S. Dastidar, **P. D'Odorico**, J.D. Fuentes, J.S. Kominoski, A. R. Armitage and S. C. Pennings, 2017, *"*Coastal regime shifts: Rapid responses of coastal wetlands to changes in mangrove cover*",* *Ecology*, 98(3), 762–772.
105. Ratajczak, Z., **D'Odorico, P.,** Collins, S. L., Bestelmeyer, B. T., Isbell, F. I. and Nippert, J. B., 2017. "The interactive effects of press/pulse intensity and duration on regime shifts at multiple scales". *Ecol Monogr*. 87(2), 2017, pp. 198–218, doi:10.1002/ecm.1249.
106. Ratajczak, Z., K. Yu, and **P. D'Odorico**, 2017. "The enemy of my enemy hypothesis: why coexisting with grasses may be an adaptive strategy for savanna trees". *Ecosystems*, 20(7): 1278–1295, doi:10.1007/s10021-017-0110-7.
107. Ratajczak, Z., **P. D'Odorico**, J.B. Nippert, S. Collins, N.A. Brunsell, S. Ravi, 2017. "Changes in spatial variance during a grassland to scrubland state transition". *J. Ecol.*, 105(3), 750-760, http://dx.doi.org/10.1111/1365-2745.12696.
108. Davis, K.F., M.C. Rulli, F. Garrassino, A. Seveso, and **P. D'Odorico**, "Water limits to closing yield gaps", *Adv. Water Resour.*, 99, 67-75, 2016. [*]

109. Yu, K., M.J. Saha, and **P. D'Odorico**, "The effects of interannual rainfall variability on tree/grass composition along Kalahari rainfall gradient". *Ecosystems*, 20(5), 975-988, doi:10.1007/s10021-016-0086-8, 2016.[*]
110. Carr, J.A., **P. D'Odorico**, S. Suweis, D. Seekell, "What commodities and countries impact inequality in the global food system?", *Environm. Res. Lett.*, 11, 095013, doi:10.1088/1748-9326/11/9/095013, 2016.
111. Saha, MV, **P. D'Odorico**, T.M. Scanlon, "Fire Suppresses Rainfall in African Drylands", *Geophys. Res. Lett.*, 43, doi:10.1002/2016GL069855, 2016.[*]
112. Marchand P., J. A. Carr, J. Dell'Angelo, M. Fader, J.A. Gephart, M. Kummu, N. R. Magliocca, M. Porkka, M. J. Puma, Z. Ratajczak, M. C. Rulli, D.A. Seekell, S. Suweis, A. Tavoni, **P. D'Odorico**, Reserves and trade jointly determine exposure to food supply shocks, *Environm. Res. Lett.*, 11, 095009, doi:10.1088/1748-9326/11/9/095009, 2016.
113. Bhattachan, A., I. Reche, and **P. D'Odorico**, "Soluble ferrous iron (Fe (II)) enrichment in airborne dust", *J. Geophys. Res. (Atmospheres)*, 121, doi:10.1002/2016JD025025, 2016.
114. MacDonald, G.K., **P. D'Odorico**, and D.A. Seekell, "Pathways to sustainable intensification through crop water management". *Environm. Res. Lett.*, 11, 091001, 2016.
115. Yu, K and **P. D'Odorico,** "From facilitative to competitive interactions between woody plants and plants with Crassulacean Acid Metabolism (CAM): the role of hydraulic descent", *Ecohydrology*, DOI: 10.1002/eco.1742, 2016 [*].
116. Davis, K.F., J.A. Gephart, K. A. Emery, A.M. Leach, J.N. Galloway, **P. D'Odorico**, "Meeting future crop demand with current agricultural resources: Required changes in dietary trends and production efficiencies", *Global Environmental Change, 39*, 125-132, 2016 [*].
117. Chiarelli, D.D., F.K. Davis, M.C. Rulli, **P. D'Odorico**, "Climate change and Large Scale Land Acquisitions in Africa: Quantifying the future impact on acquired water resources". *Adv. Water. Resour.* 94, 231-237, 2016.
118. Fader, M., M.C. Rulli, J. Carr, J. Dell'Angelo, **P. D'Odorico**, J. Gephart, M. Kummu, N. Magliocca, M. Porkka, C. Prell, M. Puma, Z. Ratajczak, D.A. Seekell, S. Suweis, A. Tavoni, "Past and present biophysical redundancy of countries as a buffer to changes in food supply". *Environm. Res. Lett.*,11, 055008, 2016.
119. Leach, A., K.A Emery; J. Gephart; K.F. Davis; J.W. Erisman; A. Leip; M.L. Pace; **P. D'Odorico**; J. Carr; L. Cattell Noll; E. Castner; J. N. Galloway, "Environmental impact food labels combining carbon, nitrogen, and water footprints", *Food Policy,* 61, 213-223, 2016.
120. Carr, JA, **P. D'Odorico,** V. Engel, J. Redwine, "Tree island pattern formation in the Florida Everglades". *Ecological Complexity,* 26, 37-44, 2016.
121. Carr J.A., **P. D'Odorico**, K. McGlathery, and P. Wiberg, "Spatially explicit feedbacks between seagrass meadow structure, sediment and light: habitat suitability for seagrass growth", *Adv. Water Resour.* 93, 315-325, 2016.
122. Yu, K., G.S., Okin, S. Ravi, **P. D'Odorico**, "Potential of grass invasions in desert shrublands to create novel ecosystem states under variable climate", *Ecohydrology,* DOI: 10.1002/eco.1742, 2016 [*].
123. Rulli, M.C., D. Bellomi, A. Cazzoli, G. De Carolis, and **P. D'Odorico**, "The water-energy-food nexus of first-generation biofuels", *Sci. Rep.,* 6:22521 doi:10.1038/srep22521, 2016.
124. Laio F., L. Ridolfi, and **P. D'Odorico**, "Past and future of food stocks", *Environm. Res. Lett.*, 11, 035010, 2016.
125. Crouzy, B., F. Baerenbold, **P. D'Odorico**, P. Perona, "Ecomorphodynamic approaches to river anabranching patterns", *Adv. Water. Res.* 93B, 156-165, 2016.
126. Davis, K.F., K. Yu, M. Herrero, P. Havlik, J. A. Carr, **P. D'Odorico**, "Historical trade-offs of livestock's environmental impacts", *Environm. Res. Lett.*, 10, 125013, 2015.
127. Runyan C.W., W. M. Shobe, and **P. D'Odorico**, "The economic impacts of positive feedbacks resulting from deforestation", *Ecol. Economics,* 120, 93-99, 2015.
128. Vandecar, K.L., C. Runyan, D. Lawrence, B. Schmook, R. Das, and **P. D'Odorico**, "Phosphorus input through occult deposition in a dry tropical forest", *J. Geophys. Res.*, 120(12), 2493-2504, 2015.
129. Yu K., **P. D'Odorico**, A. Bhattachan, G. Okin, and A. Evan., "Dust-rainfall feedback in West African Sahel", *Geophys. Res. Lett.*, 42,doi:10.1002/2015GL065533, 2015 [*].
130. Tuninetti, M., S. Tamea, **P. D'Odorico**, F. Laio, L. Ridolfi, "Global sensitivity of high-resolution estimates of crop water footprint", *Water Resour. Res.*, 10.1002/2015WR017148, 2015.
131. Davis, K.F., and **P. D'Odorico**, "Livestock intensification and the influence of dietary change: A calorie-based assessment of competition for crop production", *Science of Total Environment*, 538, 817-823, 2015 [*].
132. Palmer M.A., J. Lee, J.H. Matthews, and **P. D'Odorico**, "Building Water Security: the role of natural systems", *Science*. 349(6248), 584-585, 2015.
133. Davis K.F., K. Yu, M.C. Rulli, L. Pichdara, and **P. D'Odorico**, "Accelerated deforestation by large-scale land acquisitions in Cambodia", *Nature Geoscience*, 8, 772-775, DOI: 10.1038/NGEO2540, 2015 [*].
134. Suweis, S., J.A. Carr, A. Rinaldo, A. Maritan, and **P. D'Odorico**, "Resilience and reactivity of global food security", *Proc. Natnl. Acad. Sci., USA, PNAS*, doi: 10.1073/pnas.1507366112, 2015.
135. Davis, K.F., M.C. Rulli, **P. D'Odorico**, "The Global Land Rush and Climate Change", *Earth's Future*, 3, 298-311, doi:10.1002/2014EF000281, 2015 [*].

136. Yu, K and **P. D'Odorico**, "Hydraulic lift as a determinant of tree-grass coexistence in savannas", *New Phytol.*, 10.1111/nph.13431, 2015[*].
137. Saha, M.V., T.M. Scanlon, and **P. D'Odorico**, "Examining the linkage between shrub encroachment and recent greening in water-limited Southern Africa" *Ecosphere,* 6(9), 156, http://dx.doi.org/10.1890/ES15-00098.1, 2015 [*].
138. Yu, K. and **P. D'Odorico**, "Direct and indirect facilitation of plants with Crassulacean Acid Metabolism (CAM)", *Ecosystems*, 10.1007/s10021-015-9877-6, 2015 [*].
139. O'Donnell, F.C., K.K. Caylor, A. Bhattachan, K. Dintwe, **P. D'Odorico**, G. S. Okin, "Species-level diversity of below-ground structure in savanna woody plants", *Ecosphere,* 6(9), 154, 2015.
140. Carr, J.A., D.A. Seekell, and **P. D'Odorico**, "Inequality or injustice in water use for food?" *Environm. Research Lett.,* 10, 024013, doi:10.1088/1748-9326/10/2/024013, 2015.
141. Bhattachan, A., L. Wang, M. F. Miller, K. J. Licht, and **P. D'Odorico** (2015), "Antarctica's Dry Valleys: A potential source of soluble iron to the Southern Ocean?" *Geophys. Res. Lett.*, 42, 1912–1918. doi: 10.1002/2015GL063419, 2015.
142. Bhattachan, A., **P. D'Odorico**, and G.S. Okin, "Biogeochemistry of Dust Sources in Southern Africa", *Journal of Arid Environments.*, 117: 18-27, 2015.
143. He, Y. **P. D'Odorico**, S. DeWekker, "The role of vegetation-microclimate feedback in promoting shrub encroachment in the northern Chihuahuan desert", *Global Change Biology*, doi: 10.1111/gcb.12856, 2015. [*]
144. Ridolfi, L., **P. D'Odorico** and F. Laio, "Indicators of collapse in systems undergoing unsustainable growth", *Bull. Math. Biol., 77:339–347*DOI 10.1007/s11538-013-9922-6, 2015.
145. **D'Odorico P.,** J.A. Carr, F. Laio, S. Vandoni, L. Ridolfi, "Feeding humanity through the food and water trade networks". *Earth's Future,* 2, doi:10.1002/2014EF000250, 2014.
146. Dintwe, K., G.S. Okin, **P. D'Odorico**, K.K. Caylor, T. Hrast, N. Mladenov, A. Handorean, A. Bhattachan, F.C. O'Donnell, "Soil Organic Carbon and Total Nitrogen Pools in the Kalahari: Potential Impacts of Climate Change on Carbon Sequestration in Savannas", *Plant and Soil*, 10/2014; DOI: 10.1007/s11104-014-2292-5, 2014.
147. Davis, K.F., M.C. Rulli, and **P. D'Odorico**, "Moderating diets to feed the future", *Earth's Future, 2*, doi:10.1002/2014EF000254, 2014. [*]
148. **D'Odorico P.** and M.C. Rulli, "International land grabbing", *Oxford Bibliography in Environmental Sciences*, New York, 2014.
149. Bhattachan, A. and **P. D'Odorico**, "Can land use intensification in the Mallee, Australia increase the supply of soluble iron to the Southern Ocean?", *Sci. Rep*. 4, 6009; DOI:10.1038/srep06009, 2014.
150. Rulli, M.C. and **P. D'Odorico**, "Food appropriation through large scale land acquisitions", *Environm. Res. Lett.* 9, 064030, doi:10.1088/1748-9326/9/6/064030, 2014.
151. Suweis S. and **P. D'Odorico**, "Early warning signs in social-ecological networks", *PLoS-One*, 9(7): e101851. doi:10.1371/journal.pone.0101851, 2014.
152. Davis, K.F., **P. D'Odorico**, and M.C. Rulli, "Land grabbing: Quantifying economic impacts on rural livelihoods", *Population and Environment,* DOI: 10.1007/s11111-014-0215-2, 2014 [*]
153. Collins, S.L., J. Belnap, C.N. Dahm, **P. D'Odorico**, N.B. Grimm, M. Litvak, D.O. Natvig, D.C. Peters, W.T. Pockman, J.A. Rudgers, R.L. Sinsabaugh, B.O. Wolf, "A multi-scale, hierarchical model of pulse dynamics in aridland ecosystems", *Ann. Rev. Ecol. Syst, 45*:397–419, 2014.
154. **D'Odorico P.** and M.C. Rulli, "The land and its people", *Nature Geoscience*, 4: 324-325, 2014.
155. He, Y. **P. D'Odorico**, and S. F. DeWekker, "On the relative importance of climate change and shrub encroachment on nocturnal warming in the Southwestern U.S", *Int. J. Climatol.* DOI: 10.1002/joc.3992, 2014 [*]
156. Yu, K. and **P. D'Odorico**, "An ecohydrological framework for grass displacement by woody plants in grasslands and savannas", *J. Geophys. Res.,* DOI: 10.1002/2013JG002577, 2014. [*].
157. Yu, K. and **P. D'Odorico**, "Climate, vegetation, and soil controls on hydraulic redistribution in shallow tree roots", *Adv. Water Resour.,* 66, 70-80, 2014. [*].
158. Runyan C.W. and **P. D'Odorico**, "Bistable dynamics between forest removal and landslide occurrence", *Water Resour. Res.,* 50(2), 1112-1130, DOI: 10.1002/2013WR014819, 2014. [*].
159. O'Bannon, C., J.A. Carr, D.A. Seekell, and **P. D'Odorico**, "Globalization of agricultural pollution due to international trade", *Hydrol. Earth Syst. Sci., 18, 503–510,* doi:10.5194/hess-18-503-2014, 2014 [*].
160. Bhattachan, A., **P. D'Odorico**, K. Dintwe, G.S. Okin, and S.L. Collins, "Resilience and Recovery of the Kalahari dunes", *Ecosphere, 5*(2): 1-14, 2014 [*].

161. Gephart, J., M.L. Pace, **P. D'Odorico**. "Freshwater savings from marine protein consumption", *Environ. Res. Lett.* 9: 014005, 2014.
162. Meyer, T., **P. D'Odorico**, G.S. Okin, H.H. Shugart, K.K. Caylor, F.C. O'Donnell, A. Bhattachan, K. Dintwe. "An analysis of structure: biomass structure relationships for characteristic species of the western Kalahari, Botswana", *Afr. Jour. Ecol.*, 52(1), 20-29. doi: 10.1111/aje.12086, 2014 [*].
163. Rulli, M.C. and **P. D'Odorico**, "The water footprint of land grabbing", *Geophys. Res. Lett.* 40, 1–6, doi:10.1002/2013GL058281, 2013.
164. Runyan, C.W., **P. D'Odorico**, R Das, B. Schmook, and D. Lawrence, "Positive feedbacks between phosphorus deposition and forest canopy trapping: evidence from Southern Mexico", *J. Geophys Res. (Biogeosciences),* 118, 1–11, doi:10.1002/2013JG002384, 2013.
165. Rulli, M.C. and **P. D'Odorico**. "The science of evidence: the value of global studies on land rush", *Journal of Paesant Studies,* 40(5): 907-907, doi 10.1080/03066150.2013.853044, 2013.
166. **D'Odorico P.** and M.C. Rulli, "The fourth food revolution", *Nature Geoscience*, 6, 417-418, doi 10.1038/ngeo1842, 6(6), 417-418, 2013.
167. McGlathery, K.L., M.A. Reidenbach, **P. D'Odorico**, S. Fagherazzi, M.L. Pace, J.H. Porter, "Nonlinear Dynamics and Alternative Stable States in Shallow Coastal Systems", *Oceanography,* 26(3), 220-23, 2013.
168. **D'Odorico P**., L. Ridolfi and F. Laio, "Precursors of state transitions in stochastic systems with delay", *Theor. Ecol.* 6(3), 265-270, *Doi:* 10.1007/s12080-013-0188-2, 2013.
169. Rulli, M.C., A. Saviori, and **P. D'Odorico**, "Global land and water grabbing", *Proc. Natnl Acad. Sci, USA*, PNAS, doi: 10.1073/pnas.1213163110, 2013.
170. Suweis, S., A. Rinaldo, A. Maritan, and **P. D'Odorico**, "Water-controlled wealth of nations", *Proc. Natnl Acad. Sci, USA*, PNAS, 110(11), 4230-4233, doi: 10.1073/pnas.1222452110, 2013.
171. Carr, J.A., **P. D'Odorico**, F. Laio, L. Ridolfi, "Recent history and geography of virtual water trade", *PLoS-ONE,* /8(2): e55825. doi:10.1371/ journal.pone.0055825, 2013.
172. Bhattachan, A., **P. D'Odorico**, K. Dintwe, and G.S. Okin, "Potential dust emissions from the Southern Kalahari's dunelands", *J. Geophys Res. Earth Surface,* 118, 1–8, doi:10.1002/jgrf.20043, 2013 [*].
173. **D'Odorico P.**, Y. He, S.L. Collins, S.F.J. De Wekker, V. Engel, and J.D. Fuentes, "Vegetation-microclimate feedbacks in correspondence to woodland-grassland ecotones", *Global Ecology and Biogeography,* 22, 364-379, 2013.
174. Runyan, C.W. and **P. D'Odorico** *"*Positive feedbacks and bistability associated with phosphorus-vegetation-microbial interactions", *Adv. Water Resour.*, 52, 151-164, doi:10.1016/j.advwatres.2012.09.004, 2013[*].
175. **D'Odorico P.,** A. Bhattachan, K.F. Davis, S. Ravi, C.W. Runyan, "Global desertification: drivers and feedbacks", *Adv. Water Res.*, 51, 326-344, 2013 [*].
176. Davis, K., **P. D'Odorico**, F. Laio, L. Ridolfi, "Human migration in a globalizing world" PLoS ONE 8(1): e53723. doi:10.1371/journal.pone.0053723, 2013 [*].
177. DeLonge, M., K.L. Vandecar, D. Lawrence, and **P. D'Odorico**, "The impact of changing moisture conditions on short-term P availability in weathered soils", *Plant and Soil,* 10.1007/s11104-012-1373-6, 2012 [*].
178. Runyan, C.W., **P. D'Odorico**, and D. Lawrence, "Physical and Biological Feedbacks on Deforestation", *Rev. Geophys*., 50, RG4006, doi:10.1029/2012RG000394, 2012 [*].
179. Gentine, P., **P. D'Odorico**, B. R. Lintner, G. Sivandran, and G. Salvucci, "Interdependence of climate, soil, and vegetation as constrained by the Budyko curve", *Geophys. Res. Lett*., 39, L19404, doi:10.1029/2012GL053492, 2012
180. Wang, L., G.S. Okin, **P. D'Odorico**, K.K. Caylor, and S.A. Macko, "Landscape-scale spatial heterogeneity of stable isotopes of soil nitrogen in African savannas", *Landscape Ecology,* DOI 10.1007/s10980-012-9776-6, 2012.
181. Wang L., **P D'Odorico**, J. P. Evans, D. Eldridge, M. F. McCabe, K. K. Caylor, E. G. King, "Dryland ecohydrology and climate change: critical issues and technical advances", *Hydrol. Earth Syst. Sci*., 16, 2585–2603, doi:10.5194/hess-16-2585-2012, 2012.
182. Runyan, C.W., K. Vandecar, **P. D'Odorico**, and D. Lawrence "Experimental evidence for limited leaching of phosphorus from canopy leaves in a tropical dry forest", *Ecohydrology,* DOI: 10.1002/eco.1303, 2012 [*].
183. Runyan, C.W. and **P. D'Odorico**, "Ecohydrological feedbacks between permafrost and vegetation dynamics", *Adv. Water Resour., 49,* 1-12, DOI: 10.1016/j.advwatres.2012.07.016, 2012. [*].
184. **D'Odorico P**., J. A. Carr, F. Laio, and L. Ridolfi, "Spatial organization and drivers of the virtual water trade: A community-structure analysis", *Environm. Res. Lett.,* 7, 034007, doi:10.1088/1748-9326/7/3/034007, 2012.

185. Carr, J.A., **P. D'Odorico**, F. Laio, L. Ridolfi, and D. Seekell, "Inequalities in the networks of virtual water flow", *EOS,Transactions,* 93(32), 309-310, 2012.

186. **D'Odorico P.** and A. Bhattachan, "Hydrologic variability in dryland regions: impacts on ecosystem dynamics and food security", *Phyl. Trans. R. Soc. B,* 367, 3145–3157 doi:10.1098/rstb.2012.0016, 2012 [*].

187. **D'Odorico P.**, F. Laio, and L. Ridolfi, "Noise-sustained fluctuations in stochastic dynamics with a delay", *Phys. Rev. E.,* **85**, 041106, 2012.

188. Bhattachan, A., **P. D'Odorico**, M.C. Baddock, T.M. Zobeck, G.S. Okin, N. Cassar, "The Southern Kalahari: A potential new dust source in the southern hemisphere?", *Environm. Res. Lett.,* 7, 024001, 2012 [*].

189. Carr, J.A., **P. D'Odorico,** F. Laio, and L. Ridolfi, "On the Temporal variability of the virtual water network", *Geophys. Res. Lett.* doi: 39, L06404, doi:10.1029/2012GL051247, 2012.

190. Wang, L., M. Katjiua, **P. D'Odorico**, and G. S. Okin, "The interactive nutrient and water effects on vegetation biomass at two African savannah sites with different mean annual precipitation", *African Journal of Ecology,* doi: 10.1111/j.1365-2028.2012.01339.x, 50, 446–454. 2012.

191. **D'Odorico, P,** G.S. Okin, and B.T. Bestelmeyer. "A synthetic review of feedbacks and drivers of shrub encroachment in arid grasslands", *Ecohydrology,* 5(5), 520–530 doi : 10.1002/eco.259. 2012.

192. Bhattachan, A., M. Tatlhego, K. Dintwe, K. K. Caylor, F.C. O'Donnell, G. S. Okin, D. O. Perrot, S. Ringrose, **P. D'Odorico**, "Evaluating ecohydrological theories of woody root distribution in the Kalahari", *PLoS ONE* 7(3): e33996. doi:10.1371/journal.pone.0033996, 2012 [*].

193. Runyan, C., **P. D'Odorico**, and D. Lawrence, "The effect of repeated deforestation on vegetation dynamics for phosphorus limited tropical forests", *JGR-Biogeociences. 117,* G01008 DOI: 10.1029/2011JG001841, 2012 [*].

194. Carr, J. A., **P. D'Odorico**, K. McGlathery, P. Wiberg, "Modeling the effects of climate change on seagrass stability and resilience: future scenarios and leading indicators of collapse", *Marine Ecology Progress Series*, 448: 289–301, doi: 10.3354/meps09556, 2012 [*].

195. Carr, J. A., **P. D'Odorico**, K. J. McGlathery, and P. L. Wiberg (2012), "Stability and resilience of seagrass meadows to seasonal and interannual dynamics and environmental stress", *J. Geophys. Res.*, 117, G01007, doi:10.1029/2011JG001744.[*]

196. Scarsoglio, S., **P. D'Odorico,** F. Laio, L, Ridolfi. "Spatio-temporal stochastic resonance induces patterns in wetland vegetation dynamics", *Ecological Complexity,* doi: 10.1016/j.ecocom.2011.11.003, 2012.

197. Dakos, V., E.H. van Nes, **P. D'Odorico,** and M. Scheffer. "How robust are variance and autocorrelation as early-warning signals for critical transitions?", *Ecology,* 93(2), 264–271, 2012.

198. Runyan, C. and **P. D'Odorico**. "Hydrologic controls on phosphorus dynamics: a modeling framework", *Adv. Water Resour,* 35, 94-109,doi: 10.1016/j.advwatres.2011.10.004, 2012 [*].

199. Borgogno, F., **P. D'Odorico**, F. Laio, and L. Ridolfi, "Stochastic resonance and coherence resonance in groundwater-dependent plant ecosystems", *J. Theor. Biol.*, 293, 65–73, doi:10.1016/j.jtbi.2011.09.015, 2012.

200. Turnbull L., B.P. Wilcox, J Belnap, S Ravi, **P. D'Odorico**, D Childers, W. Gwenzi, G Okin, J Wainwright, K. Caylor, T. Sankey, "Understanding the role of ecohydrological feedbacks in ecosystem-state change in drylands", *Ecohydrology,* DOI: 10.1002/eco.265, 2011.

201. He, Y., S.F. De Wekker, J.D. Fuentes, and **P. D'Odorico**, "Coupled land-atmosphere modeling of the effects of shrub encroachment on nighttime temperatures", *Agric. For. Meteorol.* 151, 1690– 1697, doi:10.1016/j.agrformet.2011.07.005, 2011[*].

202. **D'Odorico P.,** V. Engel, J. Carr, S.F. Oberbauer, M.S. Ross, and J.P. Sah, "Tree-grass coexistence in the Everglades freshwater system", *Ecosystems,* 14: 298–310. DOI: 10.1007/s10021-011-9412-3, 2011. [*].

203. Ridolfi, L. C. Camporeale, **P. D'Odorico,** and F. Laio, "Transient growth induces unexpected spatial patterns in the Turing process", *Europhys. Lett.*, 95, 18003, doi: 10.1209/0295-5075/95/18003, 2011.

204. Rigon, R., **P. D'Odorico**, and G. Bertoldi, "The geomorphic structure of the runoff peak", *Hydrol. Earth Syst. Sci.*, 15, 1–11, 2011.

205. Seekell, D.A., **P. D'Odorico**, M.L. Pace, "Virtual water transfers unlikely to redress inequality in global water use", *Environm. Res. Lett.*, **6,** 024017, doi:10.1088/1748-9326/6/2/024017, 2011.

206. Ravi, S., **P. D'Odorico**, D. D. Breshears, J. P. Field, A. S. Goudie, T. E. Huxman, J. Li, G.S. Okin, R. J. Swap, A.D. Thomas, S. Van Pelt, J.J. Whicker, and T.M. Zobeck, "Aeolian processes and the biosphere", *Rev. of Geophys.* doi:10.1029/2010RG000340, 2011.

207. Kathilankal, J. C., T. J. Mozdzer, J. D Fuentes, K. J. McGlathery, **P. D'Odorico**, and J. C. Zieman, "Physiological responses of *Spartina alterniflora* to varying environmental conditions in Virginia marshes", *Hydrobiologia*, DOI 10.1007/s10750-011-0681-9, 2011.

208. Das, R., D. Lawrence, **P. D'Odorico** and M. DeLonge, "Impact of Land Use Change on Atmospheric P Inputs in a Tropical Dry Forest", *J. Geophys. Res* (*Biogeosci.*) 116, G01027, doi:10.1029/2010JG001403, 2011.

209. Scarsoglio, S., F. Laio, **P. D'Odorico,** and L. Ridolfi, "Spatial pattern formation induced by Gaussian white noise", *Mathematical Biosciences*, 229, 174-184, 2011.

210. Brandimarte, L., G. Di Baldassarre, G. Bruni, **P. D'Odorico**, and A. Montanari, "Relation between the North-Atlantic Oscillation and hydroclimatic conditions in Mediterranean areas". *Water Resour. Management.,* 25:1269–1279, DOI 10.1007/s11269-010-9742-5, 2011.

211. Calais, E., N. Diffenbaugh, **P. D'Odorico**, R. Harris, W. Knorr, B. Lavraud, A. Mueller, W. Peterson, E. Rignot, M. Srokosz, P. Strutton, P. Tyndall, M. Wysession, and P. Williams. Geophysical Research Letters: New Policies Improve Top-Cited Geosciences Journal. *Eos*, 91(38):337–338, 2010

212. **D'Odorico P.,** J. D. Fuentes, W.T. Pockman, S.L. Collins, Y. He, J.S. Medeiros, S. DeWekker, M.E. Litvak, "Positive feedback between microclimate and shrub encroachment in the northern Chihuahuan desert", *Ecosphere,* 1(6): art17. doi:10.1890/ES10-00073.1, 2010.

213. **D'Odorico P.,** F. Laio, A. Porporato, L. Ridolfi, A. Rinaldo, and I. Rodriguez-Iturbe, "Ecohydrology of terrestrial ecosystems". *Bioscience*, 60(11): 898–907, 2010.

214. Runyan, C.W. and **P. D'Odorico**, "Ecohydrological feedbacks between salt accumulation and vegetation dynamics: the role of vegetation-groundwater interactions", *Water Resour Res.,* 46, W11561, doi:10.1029/2010WR009464, 2010 [*].

215. Emanuel, R.E., H.E. Epstein, B.L. McGlynn, D.L. Welsch, D.J. Muth, and **P. D'Odorico**, "Spatial and temporal controls on watershed ecohydrology in the northern Rocky Mountains", *Water Resour Res.* 46, W11553, doi:10.1029/2009WR008890, 2010 [*].

216. Bartolini, E., P. Claps, and **P. D'Odorico,** "Connecting European snow cover variability to large-scale atmospheric patterns", *Adv. Geosci.*, 26, 93-97, doi:10.5194/adgeo-26-93-2010 2010.

217. He, Y., **P. D'Odorico**, S. F.J. DeWekker, J. D. Fuentes, M. Litvak, "On the impact of shrub encroachment on microclimate conditions in the Northern Chihuahuan desert", *J. Geophys. Res (Atmospheres)*, doi:10.1029/2009JD013529, 2010 [*].

218. **D'Odorico P.,** F. Laio, L. Ridolfi, "Does globalization of water reduce societal resilience to drought?", *Geophys. Res. Lett.* 37, L13403, doi:10.1029/2010GL043167, 2010.

219. Carr, J., **P. D'Odorico**, K. McGlathery, P. Wiberg, "Stability and bistability of seagrass ecosystems in shallow coastal lagoons", *J. Geophys. Res.-Biogeosci.,* 115, G03011, doi:10.1029/2009JG001103, 2010 [*].

220. Borgogno, F., **P. D'Odorico,** F. Laio, and L. Ridolfi, "A stochastic model for vegetation water stress", *Ecohydrology*, **3**, 177–188, DOI: 10.1002/eco.120, 2010.

221. Ravi, S., D.D. Breshears, T.E. Huxman, and **P. D'Odorico**, "Land degradation in drylands: interactions among hydrologic-aeolian erosion and vegetation dynamics", *Geomorphology*, 216, 236-245, 2010.

222. Ravi, S., T.E. Huxman, S.L. Collins, and **P. D'Odorico**, "Interactions between Soil Erosion Processes and Fires: Implications for Rangeland Management in Arid and Semi Arid Regions", *Rangeland Ecology and Management*, 63(3) 267-274, 2010.

223. Wang L., S.A. Macko, **P. D'Odorico**, and L. Ries, "Pattens and implications of plant-soil $\delta^{13}C$ and $\delta^{15}N$ values in African savanna ecosystems", *Quaternary Research*, 73, 77-83, doi:10.1016/j.yqres.2008.11.004, 2010. [*].

224. **D'Odorico, P.,** T. M. Scanlon, C. W. Runyan, K. Abshire, P. Barrett, A. Bhattachan, J.J. Coloso, A. Erler, J. Miller, N. Mitchell, J. Mobley, D. Van Vleet, E. Whitman, "Dryland Ecohydrology: Research perspectives", *Annals of Arid Zone*, 48(3-4), 1-29, 2009 [*].

225. Wang, L., **P. D'Odorico**, L. Ries, K. Caylor, and S. Macko, "Combined effect of soil moisture and nitrogen availability variations on grass productivity in African Savannas", *Plant and Soil.,* DOI 10.1007/s11104-009-0085-z, 2009. [*]

226. Ravi. S., **P. D'Odorico**, L. Wang, C.S. White, G.S. Okin, S.A. Macko and S.L. Collins, "Post-fire resource redistribution in desert grasslands: A possible negative feedback on land degradation", *Ecosystems*, 12(3), 434-444, doi 10.1007/s10021-009-9233-9, 2009 [*].

227. Wang, L., **P. D'Odorico**, S. Manzoni, A. Porporato, and S. Macko, "Soil carbon and nitrogen dynamics in southern African savannas: the effect of vegetation-induced patch-scale heterogeneities and large scale rainfall gradients", *Climatic Change*, doi10.1007/s10584-009-9548-8, 2009 [*].

228. Laio, F. S. Tamea, L. Ridolfi, **P. D'Odorico**, and I. Rodriguez-Iturbe, "Ecohydrology of groundwater-dependent ecosystems: 1. Stochastic water table dynamics", *Water Resour. Res.,* doi:10.1029/2008WR007292, 2009.

229. Tamea, S., F. Laio, L. Ridolfi, **P. D'Odorico**, and I. Rodriguez-Iturbe, "Ecohydrology of groundwater-dependent ecosystems: 2. Stochastic soil moisture dynamics", *Water Resour. Res.,* doi:10.1029/2008WR007293, 2009.

230. Bartolini, E., P. Claps, and **P. D'Odorico**, "Interannual variability of winter precipitation in the European Alps: relations with the North Atlantic Oscillation", *Hydrol. Earth Syst. Sci*., 13, 17-25, 2009.

231. Okin, G.S., **P. D'Odorico**, and S. Archer, "Impact of feedbacks on Chihuahuan desert grasslands: Transience and metastability", *J. Geophys. Res.*, 114, G01004, doi:10.1029/2008JG000833, 2009.

232. Ravi, S., **P. D'Odorico**, S. Collins, and T.E. Huxman, "Can biological invasions induce desertification?", *New Phytologist*, 181 (3): 512-515, 2009.

233. Wang L., **P. D'Odorico,** G.S. Okin, and S.A. Macko, "Isotope composition and anion chemistry of soil profiles along the Kalahari Transect", *J. Arid Environm.*, 73(4-5), 480-486, 2009 [*].

234. Borgogno, F., **P. D'Odorico,** F. Laio and L. Ridolfi, "Mathematical models of vegetation pattern formation in Ecohydrology", *Reviews of Geophysics*, 47, RG1005, doi:10.1029/2007RG000256, 2009 [*].

235. Ravi. S. and **P. D'Odorico**, "Post-Fire Resource Redistribution and Fertility Island Dynamics In Shrub-Encroached Desert Grasslands: A Modeling Approach", *Landscape Ecology*, DOI: 10.1007/s10980-008-9307-7, 2009. [*].

236. Ravi, S. **P. D'Odorico,** T.M. Zobeck, and T.M Over, "The effect of fire-induced hydrophobicity on wind erosion in a semiarid grassland: experimental observations and theoretical framework", *Geomorphology*, 105, 80-86, 2009 [*].

237. Kathilankal, J.C., T. J. Mozdzer, J. D. Fuentes, **P. D'Odorico**, K. J. McGlathery, J. C. Zieman, **"**Tidal influences on carbon assimilation by a salt marsh", *Envirn. Res. Lett.*, 3, 044010, 2008.

238. Ravi, S, **P. D'Odorico**, L. Wang, and S. Collins, "Form and function of grass ring patterns in arid grasslands: the role of abiotic controls", *Oecologia* 158, 545-555, doi:10.1007/s00442-008-1164-1, 2008 [*].

239. Laio, F. L. Ridolfi and **P. D'Odorico**, "Noise-induced transitions in state-dependent dichotomous processes", *Physical Review E*, 78 (3), 031137, DOI: 10.1103/PhysRevE.78.031137, 2008.

240. **D'Odorico P**., F. Laio. L. Ridolfi, M.T. Lerdau, "Biodiversity enhancement induced by environmental noise", *J. Theor. Biol.*, 255, 332-337, DOI: 10.1016/j.jtbi.2008.09.007, 2008.

241. Wang, L., B. Kgope, **P. D'Odorico**, and S.A. Macko, "Carbon and nitrogen parasitism by xylem-tapping mistletoe (Tapinanthus oleifolius) along the Kalahari Transect: a stable isotope study", *Afr. J. of Ecol.*, 46, 540-546, 2008 [*].

242. Wang, L., and **P. D'Odorico**, "The limits of water pumps", *Science*, Vol. 321. no. 5885, pp. 36 - 37 DOI: 10.1126/science.321.5885.36c, 2008.

243. Hui, W. J., B. I. Cook, S. Ravi, J. D. Fuentes, and **P. D'Odorico**, "Dust-rainfall feedbacks in the West African Sahel", *Water Resour. Res.*, 44, W05202, doi:10.1029/2008WR006885, 2008 [*].

244. DeLonge, M., **P. D'Odorico**, and D. Lawrence, "Feedbacks between phosphorous deposition and canopy cover: the emergence of multiple stable states in dry tropical forests", *Global Change Biology*, 14 (1), 154–160. doi:10.1111/j.1365-2486.2007.01470.x, 2008 [*].

245. Ridolfi, L., F. Laio, and **P. D'Odorico,** "Fertility island formation and evolution in dryland ecosystems", *Ecology & Society*, 13 (1): 5, 2008. [online] URL: http://www.ecologyandsociety.org/vol13/iss1/art5/

246. Fagherazzi, S., **P. D'Odorico**, and M. Hannion, "Geomorphic Structure of Tidal Hydrodynamics in Salt Marsh Creeks", *Water Resour. Res.*, 44, W02419, doi:10.1029/2007WR006289, 2008.

247. Ridolfi., L., **P. D'Odorico**, F. Laio, S. Tamea, and I. Rodriguez-Iturbe, "Coupled stochastic dynamics of water table and soil moisture in bare soil conditions", *Water Resour Res.*, 44, W01435, doi:10.1029/2007WR006707, 2008.

248. Alfieri. L., P. Claps, **P. D'Odorico**, F. Laio, and T.M. Over, "An analysis of the soil moisture feedback on convective and stratiform precipitation", *J. Hydrometeorol.*, 9(2): 280-291, doi: 10.1175/2007JHM863.1, 2008.

249. Fuentes, J.D., T. Dejene, B. Geerts, **P. D'Odorico**, and E. Joseph, "Vertical attributes of precipitation systems in West Africa and adjacent Atlantic Ocean", *Theor. Appl. Climatol.*, 92(3-4), 181-193, doi: 1-.1007/s00704-007-0318-0, 2008. [*]

250. Lawrence, D., **P. D'Odorico,** L. Diekmann, M. DeLonge, R. Das and J. Eaton, "Ecological feedbacks following deforestation create the potential for a catastrophic ecosystem shift in tropical dry forest", *Proc. Natnl Acad. Sci, USA*, PNAS, vol. 104, no. 52, 20696-20701, 2007.

251. Ravi, S., **P. D'Odorico**, and G.S. Okin "Hydrologic and aeolian controls on vegetation patterns in arid landscapes", *Geophys. Res. Lett.*, 34, L24S23, doi:10.1029/2007GL031023, 2007. [*]

252. **D'Odorico, P**., K. Caylor, G. S. Okin, and T M. Scanlon, "On soil moisture–vegetation feedbacks and their possible effects on the dynamics of dryland ecosystems", *J. Geophys. Res.*, 112, G04010, doi:10.1029/2006JG000379. 2007.

253. Ravi, S. **P. D'Odorico,** T.M. Zobeck,, T.M Over, and S. Collins. "Feedbacks between fires and wind erosion in heterogeneous arid lands", *J. Geophys Res. (Biogeosciences)*, 112, G04007, doi:10.1029/2007JG000474.2007 [*].

254. Rodriguez-Iturbe, I., **P. D'Odorico**, F. Laio. L. Ridolfi, and S. Tamea, "Challenges in humid land ecohydrology: interactions of water table and unsaturated zone with climate, soil, and vegetation", *Water Resour Res.*, *43*, W09301, doi:10.1029/2007WR006073, 2007.

255. Borgogno, F., **P. D'Odorico**, F. Laio, and L. Ridolfi, "Effect of rainfall interannual variability on the stability and resilience of dryland plant ecosystems", *Water Resour. Res.*, 43, W06411, doi:10.1029/ 2006WR005314, 2007.

256. Ridolfi, L, **P. D'Odorico**, and F. Laio, "Vegetation dynamics induced by phreatophyte-aquifer interactions", *J. Theor. Biol.*, 248: 301-310, 2007.

257. **D'Odorico, P**, F. Laio, A. Porporato, L. Ridolfi, and N. Barbier, "Noise-induced vegetation patterns in fire-prone savannas", *J. Geophys. Res.* (Biogeosciences), 112, G02021, doi:10.1029/2006JG000261, 2007.

258. Wang, L., **P. D'Odorico**, S. Macko, S. Ringrose, and S. Coetzee, "Biogeochemistry of Kalahari sands", *J. Arid. Environm.*,71, 259-279, 2007 [*].

259. Emanuel, R. **P. D'Odorico**, and H.E. Epstein, "A Dynamic Soil Water Threshold for Vegetation Water Stress Derived from Stomatal Conductance Models", *Water Resour. Res., 43,* W03431, doi:10.1029/2005WR004831, 2007[*].

260. Briaud, JL, L. Brandimarte, J. Wang, and **P. D'Odorico,** "Probability of scour depth exceedance owing to hydrologic uncertainty", *Georisk,*1(2), 77-88, 2007.

261. Emanuel, R., **P. D'Odorico,** and H.E. Epstein, "Evidence of optimal water use by vegetation across a range of North-American ecosystems". *Geophys. Res. Lett.*, 34, L07401, doi: 101029/2006GL028909, 2007 [*].

262. **D'Odorico, P.** , F. Laio, and Ridolfi, L.,, "A probabilistic analysis of fire-induced tree-grass coexistence in savannas", *American Naturalist,* 167(3), E79-E87, 2006.

263. Ravi, S., T.M. Zobeck, G.S. Okin, T.M. Over, and **P. D'Odorico**, "On the effect of wet-bonding forces in air-dry soils on the threshold friction velocity of wind erosion", *Sedimentology*, 1-13, 2006 [*].

264. Ridolfi, L, **.**F. Laio, and **P. D'Odorico**, "Effect of vegetation-water table feedbacks on the stability and resilience of plant ecosystems", *Water Resour. Res*., 42, W01201, doi:10.1029/2005WR004444, 2006.

265. Brandimarte, L., A. Montanari, JL Briaud, and **P. D'Odorico**, "Stochastic flow analysis for predicting river scour in cohesive soils", *ASCE Journal of. Hydraulic Engineering*, ASCE Journal of. Hydraulic Engineering, 132:5 (493), 2006.

266. Brandimarte, L., **P. D'Odorico and** A. Montanari, "Scour risk analysis in river contractions", *Journal of Hydraulic Research*, 44(5), 2006.

267. Ravi, S., **P. D'Odorico**, B. Herbert, T.M. Zobeck, and T.M. Over, "Enhancement of wind erosion by fire-induced water repellency", *Water Resour. Res.* 42, W11422, doi:10.1029/2006WR004895, 2006 [*].

268. **D'Odorico, P.**, F. Laio, and Ridolfi, L., "Vegetation patterns induced by random climate fluctuations", *Geophys. Res. Lett.*, 33, L19404, doi:10.1029/2006GL027499, 2006.

269. Laio, F., **P. D'Odorico**, and Ridolfi, L., "An analytical model to relate vertical root distribution to climate and soil properties", *Geophys. Res. Lett.*, 33, L18401, doi:10.1029/2006GL027331, 2006.

270. **D'Odorico, P.**, F. Laio, and Ridolfi, L., "Patterns as indicators of productivity enhancement by facilitation and competition in dryland vegetation", *J. Geophys. Res.* (Biogeosciences), 111, G03010, doi:10.1029/2006JG000176, 2006.

271. Caylor, K. K., **P. D'Odorico** , and I. Rodriguez-Iturbe, "On the ecohydrology of structurally heterogeneous semiarid landscapes", *Water Resour. Res.*, 42, W07424, doi:10.1029/2005WR004683, 2006.

272. **D'Odorico P.** F. Laio, and L. Ridolfi, "Noise-induced stability in dryland plant ecosystems", *Proc. Natnl. Acad. Sci. USA*, 102(31), 10819-10822, 2005.

273. Ravi, S. and **P. D'Odorico,** "A field-scale analysis of the dependence of wind erosion threshold velocity on air humidity", *Geophys. Res. Lett.* 32(21) L21404 10.1029/2005GL0236 75, 2005 [*].

274. Fagherazzi, S., G. Fosser, L. D'Alpaos, and **P. D'Odorico**, "Climate oscillations influence the flooding of Venice", *Geophys. Res. Lett.*, 32, L19710,doi: 10.1029/2005GL023758, 2005.

275. **D'Odorico P.,** S. Fagherazzi, and R. Rigon, "Potential for landsliding: dependence on hyetograph characteristics" *J. Geophys. Res. (Earth Surface)*, 110, F01007, 2005.

276. Manzoni, S., A. Porporato, **P. D'Odorico**, F. Laio, and I. Rodriguez-Iturbe, "Soil nutrient cycles as a non-linear dynamical system", *Nonlinear Processes in Geophysics*, 11(5), 589-598, 2004.

277. **D'Odorico, P.,** A. Porporato, F. Laio, L. Ridolfi, and I. Rodriguez-Iturbe "Probabilistic modeling of nitrogen and carbon dynamics in water-limited ecosystems", *Ecol. Modelling*, 179(2): 205-219, 2004.

278. Cook, B.J., M.E. Mann, **P. D'Odorico**, and T.M. Smith, "Statistical simulation of the influence of the NAO on European winter surface temperatures: Applications to phenological modeling, *J. Geophys. Res. (Atmosphere)*, doi: 0.1029/2003JD004305/2004.

279. **D'Odorico, P**. and A. Porporato, "Preferential states in soil moisture and climate dynamics", *Proc. Natnl. Acad. Sci. U.S.A.*, 101: 8848-8851, 10.1073/pnas.0401428101, 2004.

280. Ravi, S., **P. D'Odorico**, T.M. Over, and T.M. Zobeck, "On the effect of air humidity on soil susceptibility to wind erosion: The case of air-dry soils", *Geophys. Res. Lett*., 31, Lo9501, doi: 10.1029/2004GL019485, 2004. [*].

281. Porporato A. and **P. D'Odorico**, "Phase Transitions Driven by State-Dependent Poisson Noise", *Phys. Rev. Lett.*, 92(11), 110601, 2004.

282. Ridolfi, L., **P. D'Odorico**, A. Porporato, and I. Rodriguez-Iturbe, "The influence of stochastic soil moisture dynamics on gaseous nitrogen emissions of NO, N_2O and N_2", *Hydrol. Sci. J.* 48(5), 781-798, 2003.

283. **D'Odorico, P**., and S. Fagherazzi, "A probabilistic model of rainfall-triggered shallow landslides in hollows: A long-term analysis", *Water Resour. Res.* 39(9), 1262, 2003.

284. **D'Odorico, P.**, and R. Rigon, "Hillslope and channel contributions to the hydrologic response", *Water Resour. Res*. 39(5), 1: 1-9, 2003.

285. Ridolfi, L., **P. D'Odorico**, A. Porporato, and I. Rodriguez-Iturbe, "Stochastic soil moisture dynamics along a hillslope", *J. Hydrol*., 272, 264-275, 2003.

286. **D'Odorico, P**., F. Laio, A. Porporato, and I. Rodriguez-Iturbe, "Hydrologic controls of soil carbon and nitrogen cycles II. A case study", *Adv. Water Resour.* 26(1), 59-70, 2003.

287. Porporato, A., **P. D'Odorico**, F. Laio, and I. Rodriguez-Iturbe, "Hydrologic controls of soil carbon and nitrogen cycles I. Modelling scheme", *Adv. Water Resour*. 26(1), 45-58, 2003.

288. Porporato, A., **P. D'Odorico**, F. Laio, L. Ridolfi, and I. Rodriguez-Iturbe, "Ecohydrology of water-controlled ecosystems", *Adv. Water Resour.* 25(8-12), 1335-1348, 2002.

289. **D'Odorico, P.,** and JC. Yoo, "Spring Phenology and the North Atlantic Oscillation", *B. Am. Meteorol. Soc*. 83, 1465-1466, 2002 [*].

290. Yoo, JC, and **P. D'Odorico**, "Trends and fluctuations in the dates of ice break-up of lakes and rivers in Norther Europe: the effect of the North Atlantic Oscillation", *J. Hydrol.* 268(1-4), 100-112, 2002 [*].

291. **D'Odorico, P**., JC. Yoo, and S. Jager, "Changing seasons: an effect of the North Atlantic Oscillation?", *J. Clim*., 15(4), 435-445, 2002 [*].

292. Perona, P., **P. D'Odorico**, A. Porporato, and L. Ridolfi, "Reconstructing the temporal dynamics of snow cover from observations", *Geophys. Res. Lett*., 28(15), 2975-2979, 2001.

293. **D'Odorico, P**., J.C. Yoo and T.M. Over, "An assessment of ENSO-Induced Patterns of Rainfall Erosivity in the Southwestern United States", *J. Clim*., 14, 4230-4242, 2001 [*].

294. **D'Odorico, P.,** A. Porporato and L. Ridolfi, "Transition between stable states in the dynamics of soil development", *Geophys. Res. Lett.*, 28(4), 595-598, 2001.

295. **D'Odorico, P.,** "A possible bistable evolution of soil thickness", *J. Geophys. Res. (Solid Earth)*, 105 (B11), 25,927-25,935, 2000.

296. Ridolfi, L., **P. D'Odorico**, A. Porporato and I. Rodriguez-Iturbe, "Duration and frequency of water stress in vegetation: an analytical model", *Water Resour. Res*., 36(8), 2297-2307, 2000.

297. **D'Odorico, P.,** L. Ridolfi, A. Porporato and I. Rodriguez-Iturbe, "Preferential states of seasonal soil moisture: the impact of climate fluctuations", *Water Resour. Res.*, 36(8). 2209-2219, 2000.

298. **D'Odorico, P.,** R. Revelli and L. Ridolfi, "On the use of neural networks for dendroclimatic reconstructions", *Geophys. Res. Lett*., 27(6) , 791-793, 2000.

299. Ridolfi, L., **P. D'Odorico**, A. Porporato and I. Rodriguez-Iturbe, "Impact of climate variability on the vegetation water stress", *J. Geophys. Res. (Atmospheres)*, 105(D14), 18013-18025, 2000.

300. Porporato, A., **P. D'Odorico**, L. Ridolfi and I. Rodriguez-Iturbe, "A spatial model for soil-atmosphere interaction: model construction and linear stability analysis", *J. Hydrometeorol.*, 1(1), 61-74, 2000.

301. **D'Odorico P.** and I. Rodriguez-Iturbe, "Space-time fractal organization of mesoscale rainfall and soil moisture", *Adv. Water Resour*., 23(4), 349-357, 2000.

302. Rodriguez-Iturbe, I, **P. D'Odorico**, A. Porporato and L. Ridolfi, "On the spatial and temporal links between vegetation, climate and soil moisture", *Water Resour. Res*., 35(12), 3709-3722, 1999.

303. Rodriguez-Iturbe, I, **P. D'Odorico**, A. Porporato and L. Ridolfi, "Tree-Grass coexistence in savannas: the role of spatial dynamics and climate fluctuations", *Geophys. Res. Lett*., 26(2), 247-250, 1999.

304. Rodriguez-Iturbe, I, M. Marani, **P. D'Odorico** and A. Rinaldo, "On space-time scaling of rainfall cumulated fields", *Water Resour Res*., 34(12), 3461-3469, 1998.

305. Rodriguez-Iturbe, I, **P. D'Odorico** and A. Rinaldo, "Possible self-organizing dynamics for land-atmosphere interactions", *J. Geophys. Res*., 103(D18), 23,071-23,077, 1998.

306. Rodriguez-Iturbe, I, **P. D'Odorico** and A. Rinaldo, "Configuration entropy of fractal landscapes", *Geophys. Res. Lett*., 25(7), 1,015-1,018, 1998.

Book Chapters

1. Rosa L., M.C. Rulli, and P. D'Odorico, (2020). "Water Stranding in the Energy and Agriculture Sectors: The Case of Hydraulic Fracturing in Water Scarce Irrigated Regions", *Water Resources and Economic Processes*, 98-114.
2. J Yin, A Porporato, P D'Odorico, I Rodríguez-Iturbe, 2019. Ecohydrology, *Encyclopedia of Water: Science, Technology, and Society*, 1-21
3. Dell'Angelo, J., MC Rulli, P. D'Odorico (2021), "Global water grabbing and food insecurity", in *Food Insecurity: A matter of justice, sovereignty, and survival,* T. Mayer and M.D. Anderson Editors, Routledge.
4. D'Odorico, P., and I. Rodriguez-Iturbe, Sustaining Water Resources, invited chapter, in "Health of People, Health of Planet, and Our Responsibility", to be published Pontifical Academy of Sciences, 2018.
5. Carr, J. A., & D'Odorico, P. (2017). The water–food nexus and virtual water trade. In: S. Islam and K. Madani, Eds. Water Diplomacy in Action: Contingent Approaches to Managing Complex Water Problems, 95-109. Anthem Press, London.
6. D'Odorico, P., Ravi, S., 2016. "Land Degradation and Environmental Change". In: Shroder, J.F., Sivanpillai, R. (Eds.), *Biological and Environmental Hazards, Risks, and Disasters*. Elsevier, pp. 219–227. ISBN: 9780123948472.
7. Crouzy B, D'Odorico P, Perona P. Ecomorphodynamic conditions for the emergence of river anabranching patterns. In: River flow 2014. The Netherlands: CRC Press/Balkema Leiden; 2014. http://dx.doi.org/10.1201/b17133-151 .
8. Wang, L. and **P D'Odorico,** "Ecological Processes: Decomposition and Mineralization", *Encyclopedia of Ecology*, Elsevier, 2008 [*].
9. S. Scarsoglio, F. Laio, **P. D'Odorico**, and L. Ridolfi, Stochastic frameworks for understanding pattern **and** Basic stochastic processes able to induce ordered structures, in *Patterns of land degradation in drylands. Understanding self-organized ecogeomorphic systems* (Springer, Utrecht, The Netherlands, ed.), ISBN: 978-94-007-5726-4, May 2013.

Invited seminars

- Texas A&M University, Civil Engineering Department, College Station (TX), May 1999.
- Duke University, Earth and Ocean Science Division, Durham (NC), April 2001.
- American Geophysical Union, Invited Poster, Spring Meeting, Washington, D.C., 2002.
- University of Trento, Dipartimento di Ingegneria Civile e Ambientale, Trento (Italy), 2003.
- International Institute of Applied System Analysis (IIASA), Control of Distributed Systems and Environmental Application Group, Vienna, May, 2003.
- Florida State University, Geology Department, Tallahassee (FL), October 2003.
- U.C. Berkeley, Department of Environmental Sciences, Policy and Management, Berkeley, February 2004.
- Politecnico di Torino, Dipartimento di Idraulica e Trasporti, Turin (Italy), February, 2005.
- Cornell University, Department of Biological and Environmental Engineering, Ithaca, March 2005.

- Seminar on "Water-Vegetation interactions and Biodiversity in Changing Environments" Summer School on *Fundamental Problems in Geophysical and Environmental Fluid Mechanics*, Aosta, June 2005.
- Asia-Oceania Geosciences Society's Annual Meeting, Ecohydrology Session, Singapore, June 2005.
- Joint Symposium on Long-term Ecological Research Programs (17th Annual Jornada Symposium), Las Cruces, New Mexico July 28, 2007.
- University of Texas, El Paso, TX, October 2007.
- Stanford University, April 2008.
- Universita' di Padova, December 2008.
- University of Minnesota, St. Anthony Falls Laboratory, September 2009.
- University of Virginia, October 2009.
- Ecole Polytechnique Fédérale de Lausanne, Lausanne, November 2009.
- Lehigh University, February, 2010.
- Duke University, March 2010.
- Boston University, April 2010.
- Columbia University, April 2010.
- Monash University, Melbourne, May 2010.
- Latsis Ecohydrology Workshop, Ecole Polytechnique Fédérale de Lausanne, Lausanne, October 2010.
- WSL-Institut für Schnee- und Lawinenforschung SLF, Davos, February, 2011.
- Ecole Polytechnique Fédérale de Lausanne, Lausanne, April 2011.
- Duke University, Symposium on seasonal ecosystems, June 2011.
- Berkeley Atmospheric Science Symposium, February 2012.
- Princeton University, March 2012.
- Cornell University: The Brutsaert-Parlange Symposium, May 2012.
- Politecnico di Torino, Turin, June 2012.
- Congress of the United States of America, Briefing on Water Security, Association of Ecosystem Research Centers, October, 2012.
- Research Symposium on "The Role of Ecosystem Science in National Security", The Smithsonian Institute, Association of Ecosystem Research Centers, October, 2012.
- Leonardo Conference on "Water and Society", Invited Speaker, *European Geophysical Union*, November 2012, Torino, IT
- UC Santa Barbara, Departmental Seminar, February, 2013.
- Ben-Gurion University of the Negev*:* Invited speaker - Workshop "*Ecohydrology of semiarid environments: Confronting mathematical models with ecosystem complexity"*, 20-22 May 2013, Beer-Sheva, Israel.
- Italian Society of Agricultural Engineering (AIIA) Meeting, Keynote Lecture, Viterbo, September 2013.
- Batten School of Public Policy, University of Virginia, September 2013.
- University of Illinois Urbana Champaign, Departmental Seminar, January, 2014.
- Vanderbilt University, Departmental Seminar, April, 2014.
- Environmental Science Department, University of Virginia, April, 2014.
- Istituto Veneto di Scienze Lettere e Arti, Venice, June 2014.
- Cold and Arid Regions Environmental, Chinese Academy of Sciences, Lanzhou, July 2014.
- National Center for Social Environmental Synthesis, Annapolis, MD, February, 2015.
- Department of Environmental Sciences Policy and Management, University of California, Berkeley, 2015.
- Geography Department, University of California, Los Angeles, April 2015.
- University of Trento, July 2015.
- Duke University, February, 2016.
- U.C. Irvine, September 2016.
- U.C. Berkeley, Geography Colloquium, February 2017.
- Lawrence Berkeley National Laboratory, Distinguished Speakers Series, May 2017
- Minho University, Inauguration Institute for Science & Innovation, Keynote Speaker, Braga, October, 2017
- University of Notre Dame, December 2017
- University of Nevada, Reno, February 2018
- Texas A&M University, Department of Ocean Engineering, March 2018
- University of Texas, Austin, Department of Geography March 2018.
- University of Maryland, August 2018.
- Saint Anthony Falls Laboratory, University of Minnesota, October 2018.
- Department of Civil and Environmental Engineering, University of California, Berkeley, January 2019.
- University of California, Merced, March 2019.

- School of Architecture, UC. Berkeley, April 2019.
- Water and Justice, Inaugural Talk, Environmental Resilience Institute, University of Virginia, May 2019.
- Water Futures Conference, Universita' di Padova, June 2019.
- European Commission Briefing on the Land-Food-Energy-Water Nexus, Technical Centre for Agricultural and Rural Cooperation (CTA), Brussels.
- University of California, Davis, October 2019.
- Northwest A&F University, Yangling, November 2019
- Bolin Center for Climate Research, Stockholm University, June 2020
- Santafe Institute, Santafe, October 2020
- Berkeley Energy and Resources Collaborative (BERC) Symposium, October 2020
- Earth and Planetary Science Department, UC Berkeley, October 2020
- Stockholm Resilience Center, March 2021
- EPSCOR Program, University of New Mexico, April 2021
- Dipartimento di Fisica "Galileo Galilei", University of Padua, May 2021
- Circular Economy, University of Padua Alumni Association, May 2021
- Polytechnic of Milan, June 2021.
- University of Texas, El Paso, October 2021
- Carnegie Institute of Global Ecology, Palo Alto, March 2022.
- UN Meeting of water sustainability, Capo Verde, February 2023.
- University of Padova – 800 AQVA-Year Celebration of the University, Keynote Speaker, February 2023.
- University of Rome 2 Torvergata, March 2023.
- INRAE-CAMPUS AGRO PARIS SACLAY, Paris, April 2023.
- Food and Agriculture Organization, UN, Rome, May 2023
- University of Trento, Ph.D. Days, May 2023
- Desert Research institute, Reno, NV, October 2023
- University of Virginia, Charlottesville, VA, October 2023
- University of California, Santa Barbara, CA, October 2023
- U.S. National Academies, Meeting on Environmental Migrations. March 2024.
- Pennstate University, April, 2024.
- Universita' Sapienza, Rome, May 2024
- Santafe' Institute, August, 2024
- University of Alabama, Tuscalusa, September 2024
- Stanford University, Palo Alto, September 2024

- **Graduate and Postgraduate Advisors**

Prof. Andrea Rinaldo, Universita' di Padova (Doctorate)
Prof. Ignacio Rodriguez-Iturbe (Postdoctorate)

Postdocs Advised
Dr. Luigia Brandimarte (2002-2004)
Dr. Matthew Baddock, (2010-2011)
Dr. Joel Carr (2011-2015)
Dr. Christiane Runyan (2013-2015)
Dr. Abinash Bhattachan (2013-2015)
Dr. Zak Ratajczak (2014-2016)
Dr. Jampel Dell'Angelo (2014-2017)
Dr. Chengyi Tu (2017-2021)
Dr. Tobia Rinaldo (2023-)

Doctoral Students Advised
Jae-Chan Yoo, Water Resources Engineering, Texas A&M University, 1998-2002.
Ryan Emanuel, Environmental Sciences, University of Virginia, 2003-2007 (Associate Professor, Duke University)
Sujith Ravi, Environmental Sciences, University of Virginia, 2005-2008 (Associate Professor, Temple Univ.)
Lixin Wang, Environmental Sciences, University of Virginia, 2004-2008 (Professor, Indiana Purdue Univ)
Joel A. Carr, Environmental Sciences, University of Virginia, 2007-2011(Research Scientist at USGS).
Yufei He, Environmental Sciences, University of Virginia, 2008-2014 (Postdoc at Boston Univ.)
Abinash Bhattachan, Environmental Sciences, University of Virginia, 2009-2013 (Assistant Professor, Texas Tech. Univ.)

Thoralf Meyer, Environmental Sciences, University of Virginia, 2008-2014 (Associate Professor, UT, Austin)
Christiane W. Runyan, Environmental Sciences, University of Virginia, 2009-2013 (Lecturer at J. Hopkins Univ.)
Kyle Davis, Environmental Sciences, University of Virginia, 2011-2016 (Assistant Professor, University of Delaware)
Michael Saha, Environmental Sciences, University of Virginia, 2012-2018 (now at Facebook)
Kailiang Yu, Environmental Sciences, University of Virginia, 2012-2016 (Postdoc at Princeton University).
Mokganedi Tatlhego, Environmental Sciences, University of California, Berkeley, 2017-2021
Lorenzo Rosa, Environmental Science, Policy, Management, University of California, Berkeley, 2017-2020 (PI, Carnegie Istitute of Global Ecology and Adjunct Assistant Professor Stanford University)
Heng Huang, Environmental Science, Policy, Management, University of California, Berkeley, 2017-2020 (Assistant Prof.)
Areidy Beltran, Environmental Science, Policy, Management, University of California, Berkeley, 2018-2023 (Postdoc at Stanford University)
Robin Lopez, Environmental Science, Policy, Management, University of California, Berkeley, 2018-
Sarah Hartman, Environmental Science, Policy, Management, University of California, Berkeley, 2019-2024
Benji Reade-Malagueno, Environmental Science, Policy, Management, University of California, Berkeley, 2022-

Master's Students Advised
Mr. Mokganedi Tatlhego, Environmental Sciences, University of Virginia, 2015-2016
Mr. Sujith Ravi, M.S. in Environmental Sciences, University of Virginia, 2003-2004.
Ms. Marcia DeLonge, M.S. in Environmental Sciences, University of Virginia, 2004-2006

Teaching
Principles of Natural Resource Management (DEVP227, Spring 2022; 2024)
Terrestrial Hydrology (ESPM c130, Spring 2020).
Sustainable Water and Food Security (ESPM177, Spring 2017; Spring 2018; Spring 2019), UC Berkeley.
Forest Hydrology (ESPM 130A, 2019; 2024), UC Berkeley.
Environmental Hydrology (ESPM 130A, 2018), UC Berkeley.
Sustainable Water and Food Security (EVSC 4995, Spring 2016), University of Virginia.
Water on Earth (EVSC 140 – Spring 2008, Spring 2009, Spring 2010), University of Virginia
Collapse of Ecosystems and Societies in a Changing World (USEM 180 – Fall 2008, 2009), University of Virginia
Physical Hydrology (EVSC 340 - 2002, 2002, 2004, 2006, 2013, 2014, 2016), University of Virginia.
Introduction to Forest Hydrology (EVSC 493 - Spring 2004, Spring 2007), University of Virginia.
Hydrological Transport Processes (EVHY 545 - 2003, 2004; 2006, 2008, 2010, 2012), University of Virginia.
Dryland Ecohydrology (EVHY 795 – Fall, 2006, Fall 2007, Fall 2009, Fall 2013)
Fluvial Hydrology (EVHY 795 - Fall 2002) , University of Virginia.
Water Sustainability (EVSC 459), University of Virginia
Forest Hydrology (EVHY 795 - Fall 2003, 2004, Spring 2006, 2008, 2010, 2012, 2013), University of Virginia.
Global Food Security and the Environment (Spring 2014, 4th year Undergraduate)
W*ater Resources Engineering.* (CVEN 339 - Undergraduate, taught for 4 semesters), Texas A&M University.
Surface Water Hydrology (CVEN 627 - Graduate), Texas A&M University.
Advanced Hydraulic Engineering (CVEN 628 - Graduate), Texas A&M University.