

## PUBLICATIONS OF DAVID W. CARESS

- The “h-index” = 35 for peer-reviewed publications.
- Citation counts are given in red brackets.
- Citations counts are from the Scopus Database, or Google Scholar for articles not listed in Scopus.
- Citations last updated November 1, 2024.

## PEER-REVIEWED JOURNAL ARTICLES AND BOOK CHAPTERS

2024:

91. Girard, Fanny, Caress, David W., Paduan, Jennifer B., Kuhn, Linda A., Litvin, Steven Y., Flattery, Emma, Kahn, Amanda, DeVogelaere, Andrew, Burton, Erica J., Lovera, Christopher, Martin, Eric, Barry, James P. (2024), Habitat heterogeneity over multiple scales supports dense and diverse megafaunal communities on a NE Pacific ridge, in press, *Limnology and Oceanography*.
90. Paull, C. K., Hong, J. K., Caress, D. W., Gwiazda, R., Kim, J., Lundsten, E., Paduan, J. B., Jin, Y. K., Duchesne, M. J., Rhee, T. S., Brake, V., Obelcz, J., Walton, M. A. L. (2024). Massive ice outcrops and thermokarst along the Arctic shelf edge: by-products of ongoing groundwater freezing and thawing in the sub-surfaces, *Journal Geophysical Research - Earth Surface*. <https://doi.org/10.1029/2024JF007719> [0]
89. Julià-Miralles, M., Yarbuh, I., Spelz, R.M., Negrete-Aranda, R., Contreras, J., Fletcher, J.M., Gonzalez-Fernandez, A., Zierenberg, R., Caress, D.W. (2024). Strain localization instabilities and the genesis of multiple axes of seafloor spreading in the Carmen basin, southern Gulf of California. *Int J Earth Sci (Geol Rundsch)*. <https://doi.org/10.1007/s00531-024-02426-6> [0]
88. Lundsten, E., Paull, C. K., Gwiazda, R., Dobbs, S., Caress, D. W., Kuhn, L. A., Walton, M., Nieminski, N., McGann, M., Lorensen, T., Cochrane, G., Addison, J., (2024). Pockmarks offshore Big Sur, California provide evidence for recurrent, regional, and unconfined sediment gravity flows, *Journal of Geophysical Research Earth Surface*. <http://dx.doi.org/10.1029/2023JF007374> [1]
87. Slead, S., Wei, M., Nooner, S., Chadwick, W. W., Caress, D. W., Beeson, J. (2024). Compartmentalization of Axial Seamount’s magma reservoir inferred by analytical and numerical deformation modeling with realistic geometry, *Journal of Geophysical Research Solid Earth*. <http://dx.doi.org/10.1029/2023JB028414> [0]
86. Peña-Salinas, Manet E., Speth, Daan R., Utter, Daniel R, Lim, Sujung, Zierenberg, Robert A., Caress, David W., Núñez, Patricia G., Vázquez, Roberto, Orphan, Victoria J, Spelz, Ronald M. (2024). Thermotogota diversity and distribution patterns revealed in diffuse fluids in *Auka* and *JaichMaa* ‘ja’ag hydrothermal vent fields in the Pescadero Basin, Gulf of California, PeerJ 12:e17724. <https://doi.org/10.7717/peerj.17724> [0]

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85. Barry, J. P., Litvin, S. Y., DeVogelaere, A., Caress, D. W., Lovera, C., Kahn, A. S., Burton, E. J., King, C., Paduan, J. P., Wheat, C. G., Girard, F., Sudek, S., Hartwell, A. M., Sherman, A. D., McGill, P. R., Schnittger, A., Voight, J. R., Martin, E. J. (2023). Abyssal hydrothermal springs –

cryptic incubators for brooding octopus, *Science Advances*, **9**.

<https://www.science.org/doi/10.1126/sciadv.adg3247> [3]

84. Wolfson-Schwehr, M., Paull, C. K., Caress, D. W., Gwiazda, R., Nieminski, N. M., Talling, P. J., et al. (2023). Time-lapse Seafloor surveys reveal how turbidity currents and internal tides in Monterey Canyon interact with the seabed at centimeter-scale. *Journal of Geophysical Research: Earth Surface*, *128*, e2022JF006705. <https://doi.org/10.1029/2022JF006705> [5]
83. Tseng, Y., Römer, M., Lin, S., Pape, T., Berndt, C., Chen, T., Paull, C.K., Caress, D.W., Borhrmann, G. (2022). Yam seep area at Four-Way Closure Ridge – a prominent active gas seep system at the accretionary wedge SW offshore Taiwan, *International Journal of Earth Sciences*. <https://doi.org/10.1007/s00531-022-02280-4> [7]
82. Dobbs, Stephen, Lundsten, E., Gwiazda, R., Caress, D. W., McHargue, T., McGann, M., Walton, M., Coholich, M., Nieminski, N., Paull, C. K., Graham, S. (2023). Sediment gravity flow frequency diminished significantly following the Last Glacial Maximum (offshore central California), *Frontiers in Marine Science, section Deep-Sea Environments and Ecology*. <https://doi.org/10.3389/fmars.2023.1099472> [2]

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81. Kim, Y.G., Y. K. Jin, J. K. Hong, B.D. So, C. K. Paull, C. Hee, D. W. Caress (2022). Thermal structure and sediment bulk density of the MV420 mud volcano on the continental slope of the Canadian Beaufort Sea and its implications for the plumbing system, *Frontiers Earth Science Section Solid Earth Geophysics*. <https://doi.org/10.3389/feart.2022.963580> [1]
80. Clague, D.A., Zierenberg, R.A., Paduan, J.B., Caress, D.W., Cousens, B.L., Dreyer, B. M., Davis, A.S., McClain, J., Ross, S.L. (2022). Emplacement and impacts of lava flows and intrusions on the sediment-buried Escanaba Segment of the Gorda mid-ocean ridge, *Journal of Volcanology and Geothermal Research*, *432*, . [0]
79. Riedel, M., Scherwath, M., Römer, M., Paull, C.K., Lundsten, E., Caress, D., Brewer, P., Pohlman, Lapham, L.L., Chapman, N.R., Whiticar, M.J., Spence, G., Enkin, R., Douglas, K., Barkley Canyon gas hydrates: A synthesis based on two decades of seafloor observation and remote sensing, <https://doi.org/10.3389/feart.2022.852853>, *Frontiers in Earth Science*, *10*, 2022. [4]
78. Paull, C.K., Dallimore, S.R., Jin, Y.K., Caress, D.W., Lundsten, E., Gwiazda, R., Anderson, K., Hughes Clarke, J., Youngblut, S., and Melling, H., Rapid seafloor changes associated with the degradation of Arctic submarine permafrost, <https://doi.org/10.1073/pnas.2119105119>, *PNAS*, *119* (12) e2119105119, 2022. [18]

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77. Ramírez-Zerpa, N., Spelz, R. M., Yarbuh, I., Negrete-Aranda, R., Contreras, J., Clague, D. A., Neumann, F., Caress, D. W., Zierenberg, R., González-Fernández, A., Architecture and tectonostratigraphic evolution of the Pescadero Basin Complex, southern Gulf of California: Analysis of high-resolution bathymetry data and seismic reflection profiles, <https://doi.org/10.1016/j.jsames.2021.103678>, *Journal of South American Earth Sciences*, 2021. [4]
76. Vega-Ramirez, L. A., Spelz-Madero, R. M., Negreta-Aranda, R., Neumann, F., Caress, D. W., Clague, D. A., Paduan, J. B., Contreras, J., Pena-Dominguez, G., A new method for fault-scarp detection using linear discriminant analysis in high-resolution bathymetry data from the

Alarcon Rise and Pescadero Basin, <https://doi.org/10.1029/2021TC006925>, *Tectonics*, 2021. [4]

75. Negrete-Aranda, R., Neumann, F., Contreras, J., Harris, R. N., Spelz, R. M., Zierenberg, R., & Caress, D. W. Transport of heat by hydrothermal circulation in a young rift setting: Observations from the Auka and JaichMaa Ja'ag' vent field in the Pescadero Basin, southern Gulf of California. 126, e2021JB022300. <https://doi.org/10.1029/2021JB022300>, *Journal of Geophysical Research: Solid Earth*, 2021. [7]
74. Fildani, A., S. Kostic, J. A. Covault, K. L. Maier, D. W. Caress, C. K. Paull, Exploring a new breadth of cyclic steps on distal submarine fans, <https://doi.org/10.1111/sed.12803>, *Sedimentology*, 2020. [18]
73. Paull, C. K., S.R. Dallimore, D.W.Caress, R. Gwiazda, E. Lundsten, K. Anderson, H. Melling, Y.K. Jin, M.J. Duchesne, S.-G. Kang, S. Kim, M. Riedel, E.L. King, T. Lorensen, A 100-km wide slump along the upper slope of the Canadian Arctic was likely preconditioned for failure by brackish pore water flushing, <https://doi.org/10.1016/j.margeo.2021.106453>, *Marine Geology*, 435, 2021. [11]

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72. Wheat, C. G., R. A. Zierenberg, J. B. Paduan, D. W. Caress, Clague, D. A., W. W. Chadwick, Changing brine inputs into hydrothermal fluids: Southern Cleft Segment, Juan de Fuca Ridge, <https://doi.org/10.1029/2020GC009360>, *Geochemistry Geophysics Geosystems*, 2020. [3]
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70. Clague, D. A., J. F. Martin, J. B. Paduan, D. A. Butterfield, J. W. Jamieson, M. Le Saout, D. W. Caress, H. Thomas, J. F. Holden, D. S. Kelley, Hydrothermal chimney distribution on the Endeavour Segment, Juan de Fuca Ridge, <https://doi.org/10.1029/2020GC008917>, 21 (6): e2020GC008917, *Geochemistry Geophysics Geosystems*, 2020. [12]
69. Maier, K. L., C. K. Paull, D. W. Caress, K. Anderson, N. M. Nieminski, E. Lundsten, B. Erwin, R. Gwiazda, A. Fildani, Submarine fan development revealed by integrated high-resolution datasets from La Jolla Fan, offshore California, <http://dx.doi.org/10.2110/jsr.2020.22>, 90: 468-479, *Journal Sedimentary Research*, 2020. [27]
68. Clague, D. A., J. B. Paduan, D. W. Caress, J. S. McClain, R. A. Zierenberg, Lava flows erupted in 1996 on North Gorda Ridge Segment and the geology of the nearby Sea Cliff hydrothermal vent field from 1-m resolution AUV mapping, <https://doi.org/10.3389/fmars.2020.00027>, *Frontiers in Marine Science*, 2020. [7]
67. Hilley, G. E., Sare, R. M., Aron, F., Baden, C. W., Caress, D., Castillo, C., Dobbs, S. C., Gooley, J. T., Johnstone, S., Liu, F., McHargue, T., Nevitt, J. M., Paull, C., Shumaker, L., Traer, M. M., Young, H. H., Coexisting Seismic Behavior of Transform Faults Revealed by High-Resolution Bathymetry, <https://doi.org/10.1130/G46663.1>, 48 (4): 379–384, *Geology*, 2020. [2]

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66. Clague, D. A., J. B. Paduan, D. W. Caress, C. L. Moyer, B. T. Glazer, Dana R. Yoerger, Structure and lava flow morphology on Loihi Seamount from high-resolution mapping,

<https://doi.org/10.3389/feart.2019.00058>, *Frontiers in Marine Science*, Volcanology, 2019.

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65. Gwiazda, R., C. K. Paull, D. W. Caress, C. M. Preston, S. B. Johnson, E. Lundsten, K. Anderson, The extent of fault-associated modern authigenic barite deposits offshore northern Baja California revealed by high resolution mapping, <https://doi.org/10.3389/fmars.2019.00460>, *Frontiers in Marine Science*, 2019. [6]
64. Georgieva, M. N., C. K. Paull, C. T. S. Little, M. McGann, D. Sahy, D. Condon, L. Lundsten, J. Pewsey, D. W. Caress, R. C. Vrijenhoek, Discovery of an extensive deep-sea fossil serpulid reef associated with an active cold seep, Santa Monica Basin, CA, <https://doi.org/10.3389/fmars.2019.00115>, *Frontiers in Marine Science*, 2019. [13]

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63. Paduan, J. B., R. Zierenberg, D. A. Clague, R. Spelz-Madero, D. W. Caress, G. Troni, H. Thomas, J. Glessner, M. D. Lilley, T. Lorensen, J. Lupton, F. Neumannn, M. Santa Rosa-del Rio, C. Geoffrey Wheat, Discovery of Hydrothermal Vent Fields on Alarcon Rise and in Southern Pescadero Basin, Gulf of California, <https://doi.org/10.1029/2018GC007771>, *Geochemistry Geophysics Geosystems*, 2018. [39]
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59. Clague, D. A., D. W. Caress, B. M. Dreyer, L. Lundsten, J. B. Paduan, R. A. Portner, R. Spelz-Madero, J. A. Bowles, P. R. Castillo, R. Guardado-France, M. Le Saout, J. F. Martin, M. A. Santa Rosa-del Rio, R. A. Zierenberg, Geology of the Alarcon Rise, Southern Gulf of California, 19, 807-837, <https://doi.org/10.1002/2017GC007348>, *Geochemistry Geophysics Geosystems*, 2018. [25]
58. Maier, K. L., D. S. Brothers, C. K. Paull, M. McGann, D. W. Caress, J. E. Conrad, Records of continental slope sediment flow morphodynamic responses to gradient and active faulting from integrated AUV and ROV data, offshore Palos Verdes, southern California Borderland, *Marine Geology*, <http://dx.doi.org/10.1016/j.margeo.2016.10.001>, 2017. [19]
57. Carvajal, C., C. K. Paull, D. W. Caress, A. Fildani, E. M. Lundsten, K. Anderson, K. L. Maier, M. McGann, R. Gwiazda, J. C. Herguera, Unraveling the channel-to-lobe transition with high-resolution AUV bathymetry: Navy Fan, offshore Baja California, Mexico, *Journal of Sedimentary Research*, **87**(10), 1049-1059, <https://doi.org/10.2110/jsr.2017.58>, 2017. [38]
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