Publication List

Total number of citations according to ISI Web of Science (as of March 2021): 11,890

h-Index: 49

Publications in Peer-Reviewed Journals

(* indicates corresponding authorship)

1. Mueller AJ, Jung MY, Strachan CR, Herbold CW, Kirkegaard RH, Wagner M, **Daims H*** (2021). Genomic and kinetic analysis of novel Nitrospinae enriched by cell sorting. *ISME J.* 15: 732–745.
2. Lukumbuzya M, Kristensen JM, Kitzinger K, Pommerening-Roser A, Nielsen PH, Wagner M, **Daims H***, Pjevac P (2020). A refined set of rRNA-targeted oligonucleotide probes for in situ detection and quantification of ammonia-oxidizing bacteria. *Water Res.* 186: 116372.
3. Daebeler A, Kitzinger K, Koch H, Herbold CW, Steinfeder M, Schwarz J, Zechmeister T, Karst SM, Albertsen M, Nielsen PH, Wagner M, **Daims H*** (2020). Exploring the upper pH limits of nitrite oxidation: diversity, ecophysiology, and adaptive traits of haloalkalitolerant *Nitrospira*. *ISME J.* 12: 2967-2979.
4. Yang Y, **Daims H**, Liu Y, Herbold CW, Pjevac P, Lin JG, Li M*, Gu JD* (2020). Activity and metabolic versatility of complete ammonia oxidizers in full-scale wastewater treatment systems. *mBio* 11: e03175-19.
5. Kitzinger K*, Marchant HK*, Bristow LA, Herbold CW, Padilla CC, Kidane AT, Littmann S, **Daims H**, Pjevac P, Stewart FJ, Wagner M, Kuypers MMM (2020). Single cell analyses reveal contrasting life strategies of the two main nitrifiers in the ocean. *Nat. Commun.* 11: 767.
6. Sedlacek CJ*, Giguere AT, Dobie MD, Mellbye BL, Ferrell RV, Woebken D, Sayavedra-Soto LA, Bottomley PJ, **Daims H**, Wagner M, Pjevac P (2020). Transcriptomic response of *Nitrosomonas europaea* transitioned from ammonia- to oxygen-limited steady-state growth. mSystems 5: e00562-19.
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8. Lukumbuzya M, Schmid M, Pjevac P*, **Daims H** (2019). A multicolor fluorescence *in situ* hybridization approach using an extended set of fluorophores to visualize microorganisms. *Front. Microbiol.* 10: 1383.
9. Kits KD, Jung M-Y, Vierheilig J, Pjevac P, Sedlacek CJ, Liu S, Herbold CW, Stein LY, Richter A, Wissel H, Brüggemann N, Wagner M*, **Daims H** (2019). Low yield and abiotic origin of N_2O formed by the complete nitrifier *Nitrospira inopinata*. *Nat. Commun.* 10:1836.
10. Lee KS, Palatinszky M, Pereira FC, Nguyen J, Fernandez VI, Mueller AJ, Menolascina F, **Daims H**, Berry D, Wagner M, Stocker R* (2019). An automated Raman-based platform for the sorting of live cells by functional properties. *Nat. Microbiol.* 4: 1035-1048.
11. Sakoula D, Nowka B, Spieck E, **Daims H**, Lücker S* (2018). The draft genome sequence of "*Nitrospira lenta*" strain BS10, a nitrite oxidizing bacterium isolated from activated sludge. *Stand. Genomic Sci.* 13: 32.
12. Kitzinger K, Koch H, Lücker S, Sedlacek CJ, Herbold C, Schwarz J, Daebeler A, Mueller AJ, Lukumbuzya M, Romano S, Leisch N, Karst SM, Kirkegaard R, Albertsen M, Nielsen PH, Wagner M, **Daims H*** (2018). Characterization of the first "*Candidatus* Nitrotoga" isolate reveals metabolic versatility and separate evolution of widespread nitrite-oxidizing bacteria. *mBio* 9: e01186-18.

13. Daebeler A*, Herbold CW, Vierheilig J, Sedlacek CJ, Pjevac P, Albertsen M, Kirkegaard RH, de la Torre JR, **Daims H,** Wagner M* (2018). Cultivation and genomic analysis of "*Candidatus* Nitrosocaldus islandicus," an obligately thermophilic, ammonia-oxidizing Thaumarchaeon from a hot spring biofilm in Graendalur Valley, Iceland. *Front. Microbiol.* 9:193.

14. Füssel J*, Lücker S*, Yilmaz P, Nowka B, van Kessel MAHJ, Bourceau P, Hach PF, Littmann S, Berg J, Spieck E, **Daims H**, Kuypers MMM, Lam P (2017). Adaptability as the key to success for the ubiquitous marine nitrite oxidizer *Nitrococcus*. *Sci. Adv.* 3:e1700807.

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16. Pjevac P, Schauberger C, Poghosyan L, Herbold CW, van Kessel MAHJ, Daebeler A, Steinberger M, Jetten MSM, Lücker S, Wagner M, **Daims H*** (2017). *AmoA*-targeted polymerase chain reaction primers for the specific detection and quantification of comammox *Nitrospira* in the environment. *Front. Microbiol.* 8:1508.

17. Schulz F*, Yutin N, Ivanova NN, Ortega DR, Lee TW, Vierheilig J, **Daims H**, Horn M, Wagner M, Jensen GJ, Kyrpides NC, Koonin EV, Woyke T (2017). Giant viruses with an expanded complement of translation system components. *Science* 356: 82-85.

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23. Koch H, Lücker S, Albertsen M, Kitzinger K, Herbold C, Spieck E, Nielsen PH, Wagner M, **Daims H*** (2015). Expanded metabolic versatility of ubiquitous nitrite-oxidizing bacteria from the genus *Nitrospira*. *Proc. Natl. Acad. Sci. USA* 112: 11371-11376.

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29. Lücker S*, Schwarz J, Gruber-Dorninger C, Spieck E, Wagner M, **Daims H** (2015). *Nitrotoga*-like bacteria are previously unrecognized key nitrite oxidizers in full-scale wastewater treatment plants. *ISME J.* 9: 708-720.

30. Nowka B, **Daims H**, Spieck E (2015). Comparison of oxidation kinetics of nitrite-oxidizing bacteria: nitrite availability as a key factor in niche differentiation. *Appl. Environ. Microbiol.* 81: 745-753.

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35. Almstrand R, Persson F, **Daims H**, Ekenberg M, Christensson M, Wilén BM, Sörensson F, Hermansson M* (2014). Three-dimensional stratification of bacterial biofilm populations in a moving bed biofilm reactor for nitritation anammox. *Int. J. Mol.Sci.* 15: 2191-2206.

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Book Chapters and Other Publications

1. Sorokin DY, Lücker S, **Daims H** (2018). *Nitrolancea*. *In* Bergey's Manual of Systematics of Archaea and Bacteria. John Wiley & Sons. DOI: 10.1002/9781118960608.gbm01563.

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