

# Umer Zeeshan Ijaz's Publications\*

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\*Publications where I am involved as a senior author, relevant staff/students that I supported, mentored, or supervised are underlined.

## Journals, Book Chapters, Preprints, Proceedings & Datasets

### Journal (Articles, Letters, Responses & Supplements)

- [P1] S. Mills, T. P. Y. Nguyen, **U. Z. Ijaz**, and P. N. L. Lens. Process stability in expanded granular sludge bed bioreactors enhances resistance to organic load shocks. **Journal of Environmental Management**, 342:11827, 2023.  
DOI: [10.1016/j.jenvman.2023.118271](https://doi.org/10.1016/j.jenvman.2023.118271)
- [P2] I. Aziz, Z. Noreen, **U. Z. Ijaz**<sup>#</sup>, O. Gundogdu, M. H. Hamid, N. Muhammad, A. Khan, and H. Bokhari<sup>#</sup>. A prospective study on linking diarrheagenic *E. coli* with stunted childhood growth in relation to gut microbiome. **Scientific Reports**, 13:6802, 2023.  
DOI: [10.1038/s41598-023-32491-x](https://doi.org/10.1038/s41598-023-32491-x)  
<sup>#</sup>Joint corresponding authors
- [P3] S. Singh, C. Keating, **U. Z. Ijaz**<sup>#</sup>, and F. Hassard. Molecular insights informing factors affecting low temperature anaerobic applications: diversity, collated core microbiomes and complexity stability relationships in LCFA-fed systems, **Science of the Total Environment**, 874:162420, 2023.  
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- [P4] P. Dessi, C. Buenano, S. Martinez-Sosa, S. Mills, A. Trego, **U. Z. Ijaz**, D. Pant, S. Puig, V. O'Flaherty, and P. Farras. Microbial electrosynthesis of acetate from CO<sub>2</sub> in three-chamber cells with gas diffusion biocathode under moderate saline conditions. **Environmental Science and Ecotechnology**, 100261, 2023.  
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- [P5] L. Bach, A. Ram, **U. Z. Ijaz**, T. Evans, D. Haydon, and J. Lindström. The effects of smoking on human pharynx microbiota composition and stability. **Microbiology Spectrum**, 2023.  
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- [P6] M. Batool, C. Keating, S. Javed, A. Nasir, M. Muddassar<sup>#</sup>, and **U. Z. Ijaz**<sup>#</sup>. A cross-sectional study of potential antimicrobial resistance and ecology in gastrointestinal and oral microbial communities of young normoweight Pakistani individuals. **Microorganisms**, 11(2):279, 2023.  
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<sup>#</sup>Joint corresponding authors
- [P7] V. Svolos, R. Hansen, R. K. Russell, D. R. Gaya, J. P. Seenan, J. Macdonald, D. Wilson, P. Henderson, S. Din, G. T. Ho, C. Quince, **U. Z. Ijaz**, S. Milling, B. Nichols, R. Papadopoulou, S. McKirdy, L. Gervais, S. Shields, and K. Gerasimidis. P380 Changes in faecal microbiome and metabolome are more pronounced in Crohn's disease patients who adhered to the CD-TREAT diet and responded by calprotectin, **Journal**

- [P8] K. Gerasimidis, B. Nichols, R. Papadopoulou, **U. Z. Ijaz**, R. Rajendran, C. Quince, R. K. Russell, R. Hansen, and G. Ramage. DOP52 The faecal bacterial and fungal microbiome of newly-diagnosed, treatment naïve children with Crohn's disease and the modifying effects of exclusive enteral nutrition and re-introduction of habitual diet, **Journal of Crohn's and Colitis**, 17(suppl1):i122-i124, 2023.  
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- [P9] **A. Trego, C. Keating**, C. Nzeteu, A. Graham, V. O'Flaherty, and **U. Z. Ijaz**<sup>#</sup>. Beyond basic diversity estimates - Analytical tools for mechanistic interpretations of amplicon sequencing data. **Microorganisms**, 10(10):1961, 2022.  
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- [P10] **S. Mills, P. Dessi**, D. Pant, P. Farris, W. T. Sloan, G. Collins<sup>\*</sup>, and **U. Z. Ijaz**<sup>#</sup>. A meta-analysis of acetogenic and methanogenic microbiomes in microbial electrosynthesis. **npj Biofilms and Microbiome**, 8:73, 2022.  
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- [P11] **U. Z. Ijaz**<sup>#</sup>, O. Gundogdu, **C. Keating**, M. van Eekert, W. Gibson, J. Parkhill, F. Abilahi, B. Liseki, V.-A. Nguyen, S. Sudgen, C. Quince, J. H. J. Ensink, B. Torondel, and A. W. Walker. Analysis of pit latrine microbiota reveals depth-related variation in composition, and key parameters and taxa associated with fill-up rate. **Frontiers in Microbiology**, 13:960747, 2022.  
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- [P19] C. Keating, M. Bolton-Warberg, J. Hinchcliffe, R. Davies, S. Whelan, A. H. L. Wan, R. Fitzgerald, S. J. Davies, C. J. Smith, and **U. Z. Ijaz**<sup>#</sup>. Drivers of ecological assembly in the hindgut of Atlantic Cod fed a macroalgal supplemented diet. ***npj Biofilms and Microbiomes***, 8:36, 2022.  
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- [P21] E. De Pablo-Fernandez, G. G. Gebeyehu, L. Flain, R. Slater, A. Frau, **U. Z. Ijaz**, T. Warner, and C. Probert. The faecal metabolome and mycobiome in Parkinson's disease. ***Parkinsonism & Related Disorders***, 95:P65-69, 2022.  
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- [P22] A. Rashid, S. A. Mirza, C. Keating, **U. Z. Ijaz**, S. Ali, and L. C. Campos. Machine learning approach to predict quality parameters for bacterial consortium-treating hospital wastewater and phytotoxicity assessment on Radish, Cauliflower, Hot pepper, Rice, and Wheat crops. ***Water***, 14(1):116, 2022.  
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- [P26] K. Gkikas, M. Logan, B. Nichols, **U. Z. Ijaz**, C. M. Clark, V. Svolos, L. Gervais, H. Duncan, V. Garrick, L. Curtis, E. Buchanan, T. Cardigan, L. Armstrong, C. Delahunty, D. M. Flynn, A. R. Barclay, R. Tayler, S. Milling, R. Hansen, R. K. Russell, and K. Gerasimidis. Dietary triggers of gut inflammation following exclusive enteral nutrition in children with Crohn's disease: a pilot study. ***BMC Gastroenterology***,

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- [P27] A. Khan, S. Akbar, V. Okonkwo, C. J. Smith, S. Khan, A. A. Shah, F. Adnan, **U. Z. Ijaz**, S. Ahmed, and M. Badshah. Enrichment of the hydrogenotrophic methanogens for, in-situ biogas up-gradation by recirculation of gases and supply of hydrogen in methanogenic reactor. **Bioresource Technology**, 126219, 2021.

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- [P28] S. Mills, A. C. Trego, P. N. L. Lens, **U. Z. Ijaz**<sup>#</sup>, and G. Collins<sup>#</sup>. A Distinct, Flocculent, Acidogenic Microbial Community Accompanies Methanogenic Granules in Anaerobic Digesters. **Microbiology Spectrum**, 9(3):ee00784-21, 2021.

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- [P32] S. Singh, J. M. Rinta-Kanto, P. N. L. Lens, M. Kokkoja, J. Rintala, V. O'Flaherty, **U. Z. Ijaz**<sup>#</sup>, and G. Collins. Microbial community assembly and dynamics in granular, fixed-biofilm and planktonic microbiomes valorizing long-chain fatty acids at 20°C. **Bioresource Technology**, 126098, 2021.

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**[Video Abstract: Rhamnolipid, a naturally produced oil dispersant, may improve oil spill remediation <https://vimeo.com/596819493>]**

<sup>#</sup>Joint corresponding authors

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- [P37] A. C. Trego, B. C. Holohan, C. Keating, A. Graham, S. O'Connor, M. Gerardo, D. Hughes, **U. Z. Ijaz**<sup>#</sup>, and V. O'Flaherty. First proof of concept for full-scale, direct, low-temperature anaerobic treatment of municipal wastewater. ***Bioresource Technology***, 341:125786, 2021.

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