

Curriculum Vitae

DR WOLFGANG GERNJAK

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DATE OF BIRTH June 29th 1974 in Salzburg, Austria
NATIONALITY Austrian
MARITAL STATUS married, two children (8 and 5)

SUMMARY

I am an international expert in water quality and technology innovation in the production of potable and reclaimed water, striving to realize the vision of water smart circular economy. I conducted my research at Plataforma Solar de Almería (2002-2008), The University of Queensland, Australia (2008-2014) and since late 2014 at the Catalan Institute for Water Research (ICRA). At UQ and ICRA, both top notch institutions, I have led and lead research groups, honing my team leadership abilities. I returned to Spain with a Ramon & Cajal fellowship in 2014 and since 2015 I am an ICREA researcher. In all placements, I successfully acquired substantial funding from competitive public as well as industry sources. I have abundant experience in research and project management, including European Commission funded research projects.

PROFESSIONAL EXPERIENCE

11/2015 to date: Catalan Institute for Research and Advanced Studies (ICREA), Barcelona, Spain.
ICREA research professor.

10/2014 to date: Catalan Institute for Water Research (ICRA), Girona, Spain. Senior researcher including the following responsibilities:

2014 to date: Research Leader: All.1 Water Supply and Advanced Treatment. Acquire funding, establish research infrastructure, and mentor junior researchers.

2017 to date: President of Knowledge and Technology Transfer Commission. Lead the development and implementation of the institute's knowledge transfer strategy.

01/2015 to 12/2023: The University of Queensland, Advanced Water Management Centre, Brisbane, Australia. Adjunct Associate Professor (honorary appointment).

Responsibilities: Support the Centre's research portfolio in an advisory role in projects related to own expertise (e.g. iron chemistry, water recycling).

08/2008 to 08/2014: The University of Queensland, Advanced Water Management Centre, Brisbane, Australia. Senior Research Fellow including the following responsibilities:

Research Programme Leader: Drinking and Recycled Water. Lead the Chair in Water Recycling research program with up to 20 staff and students, acquire funding, mentor students and junior researchers, build and maintain links with major research alliances (Australian Centre of Excellence in Water Recycling, CRC Water Sensitive Cities, Urban Water Security Research Alliance).

10/2002 to 05/2008: CIEMAT - Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas, Plataforma Solar de Almería, Almería, Spain. Research fellow (12/2006 - 05/2008) and externally funded scientific staff (02/2002-11/2006).

Responsibilities: Assistant to project coordinator (FP VI, MEDESOL, 2006-2008), researcher of EC funded research (CADOX, FP V, 2003-2006, INNOWATECH, FP V, 2006-2008, work package leader), own PhD thesis research (2002-2006), support of other students and academic visitors.

EDUCATION

10/2002 – 04/2006: Ph.D. studies at the *University of Natural Resources and Applied Life Sciences, Vienna*. Title of Ph.D.: “Solar Photo-Fenton Treatment for Wastewater Containing Priority Substances. Influence of Process Parameters and Process Control Options”. Academic title: Doctor rerum naturalium technicarum. **Graduated with distinction.**

10/1995 – 05/2002: Studies of Technical Chemistry, branch of study Analytical and Physical Chemistry, at the *Vienna University of Technology*, achieved Austrian academic title Diplomingenieur (Austrian equivalent to MSc.). **Graduated with distinction.**

June 1992: Austrian *Matura* (corresponding to A-Levels) **passed with distinction**

COMMISSIONS OF TRUST

Member of expert panel for the Catalan Water Agency (since 2019-): El Prat de Llobregat water reclamation trial

Advisory Board Member of ENMRI – Environment and Natural Materials Research Institute, SRTA City, Alexandria, Egypt.

Member of the Doctoral Commission of the PhD programme Water Science and Technology at the University of Girona.

Member of Scientific and/or organizing Committee of several international conferences, e.g. IWA Water Reuse 2009, IWA Micropol and Ecohazard, 2010, EEAOP3, 2013, XENOWAC II 2018.

Regular reviewer of all important journals in my field of research.

Expert reviewer of the Australian Research Council, the Swiss National Science Foundation, the Natural Sciences and Engineering Research Council of Canada and several other funding organizations.

PERSONAL AWARDS

2013: ‘Ramon y Cajal fellowship’ (RyC-2012-12181), awarded 100/100 points and ranked first in “Chemical Engineering” (Tecnología Química)

2006: Austrian ‘TGB Science Prize’ for best dissertation in the field of environmental engineering

2002: ‘DOC Stipendium’, highly prestigious and competitive PhD grant awarded by the Austrian Academy of Sciences

1995 – 2002: Several Austrian grants co-financing my education

SUPERVISION

8 PhD thesis directed to completion, 5 on-going, 1 starting in 2022.

Direct supervision of 6 post-doctoral contracts (Reungoat, 2010-2012, Pidou 2010-2012, Donose 2010-2013, Aryal 2012-2014, Velo Gala 2017-2018, Abily 2019-date).

SUMMARY AND IMPACT OF SCIENTIFIC PUBLICATIONS

I co-authored 105 manuscripts in peer-reviewed scientific journals from 2003 to 2021, which have had a significant academic impact as evidenced by >8300 citations and an h index of 46 (Scopus®, 12/2021).

The resulting average citation count is 80 citations per paper compared to an average citation count of 10.7 for papers published between 2011 and 2021 in the field of Engineering (InCites Essential Science Indicators).

62 of my papers are published in the top 5% impact factor journals of the total of 466 journals included in the categories ‘Engineering, Chemical’, ‘Engineering, Environmental’, ‘Engineering Civil’ and ‘Water Resources’ by Thompson Reuters Journal Citation Reports. E.g. I have published 30 papers in *Water Res.* (IF 11.2), 5 papers in *Env. Sci. Technol.* (IF 8.5), 4 papers in *J. Memb. Science* (IF 8.5), and 2 papers in *Appl. Catal. B: Environ.* (IF 19.3), each being the leading journal in its specific field.

I have also contributed to several important reviews (Malato et al, 2009, Pype et, 2016, Rizzo et al, 2019 and 2020, Kumar et al, 2021, Farré and Gernjak, 2021) on oxidation and membrane technologies and water reuse. I have also co-authored a paper in *Science* (Pikaar et al, 2014, IF 47.7).

APPENDICES

Appendix A: Research project list

Appendix B: PhD supervision

Appendix C: Publication list

Appendix A: Research project list – Dr. Wolfgang Gernjak

Grants are listed that lasted up to at least 2015. Noteworthy grants not listed prior to that time include during from 2008-2014 7 competitive Australian research projects (total budget 3.6 million AU\$) and 1 major industry – university partnership (Chair in Water Recycling, 2.8 million AU\$), all as PI or co-PI. Prior to 2008 I participated as researcher in 3 FP V and FP VI projects (CADOX, MEDESOL, INNOWATECH).

At the Catalan Institute for Water Research

A) Public competitive funding

Year	Title, granting institution & reference, principal investigators (PIs), cash budget	Role & staff supervision
2020-2024	iWAYS - Innovative WATER recoverY Solutions through recycling of heat, materials and water across multiple sectors. H2020-CE-SPIRE-07-2020. PI: Gernjak (project coordination: Univ. Modena). €10,596k (total), 584k (ICRA)	PI Supervisor of 1 post-doc and 1 PhD student
2020-2024	PLAGRI – CA19110. Plasma Applications for Smart and Sustainable Agriculture. Action chair: Puac (IPB Belgrade)	WG4 vice-chair, MC member, country representative
2020-2022	SUGGEREIX – Desenvolupament d'eines per al support en la implementació i gestió de la reutilització. Agència Catalana de l'Aigua, Call R&D project 2019. PI: Gernjak (project coordination: Eurecat). €234k (total), 66k (ICRA)	PI, WP2 coordinator Supervisor of 2 research technicians (24 months & 6 months)
2019-2022	INVEST - INtegrated and adaptiVE management of river basins: developing STRategies for optimized investments in urban water infrastructure. Agència Estatal de Investigación, Generación de Conocimiento 2018. PIs: Gernjak, Corominas. €133k	PI Supervisor of 1 post-doc (24 months), co-supervisor 2 research technicians (6 months)
2019-2023	NOWELTIES - Joint PhD Laboratory for New Materials and Inventive Water Treatment Technologies. Harnessing resources effectively through innovation. H2020-MSCA-ITN-2018. PI: Petrovic (ICRA, co-ordinator). €3,422k (total), 753k (ICRA)	Researcher, leader of WP1 Supervisor of 2 PhD students
2017-2020	Development of Chemometric Tools for the Detection of Different Compounds in Water Matrices. <i>Gencat, Doctorat Industrial 017/2017</i> . PIs: Gutierrez, Gernjak, Raich, €56k	Thesis director of PhD candidate
2018-2020	Development of a smart workflow based on high resolution mass spectrometry for the assessment of the performance of wastewater treatment technologies. H2020-MSCA-IF-2016, GA 747698. PI: Petrovic, €158k	Second supervisor at host institution for Marie-Curie fellow Pablo Gago Ferrero
2017-2019	ICRA-TECH (tecnologies i avaluació del cicle integral de l'aigua). <i>AGAUR Suport a les activitats dels grups de recerca de Catalunya (2017-2019)</i> . PI: Rodríguez-Roda, €36k	Researcher, member of SGR
2016-2019	Smart Decentralized Water Management through a dynamic integration of technologies. <i>MINECO - PCIN-2015-257</i> . PI: Rodríguez-Roda, €220k .	Researcher, integration of technologies

2016-2018	Tecnologías eficientes para la eliminación de contaminantes de preocupación emergente, contenidos en Directiva 2013/39/CE o de riesgo significativo según Directiva 2008/105/CE (TRICERATOPS). <i>MINECO CTQ2015-69832-C4-3-R</i> . PI: Gernjak, Radjenovic, €175k.	Lead PI Supervisor of post-doc (30 months)
2012	5 year Ramon y Cajal fellowship (RYC-2012-12181). <i>MINECO</i> . PI: Gernjak, €229k.	Individual award, fellowship

B) Contracts with private entities

(amount not always specified due to confidentiality)

Year	Title, granting institution & reference, principal investigators (PIs), cash budget	Role
2020-2021	TRACA- Traçabilitat de les fonts de contaminació de substàncies prioritàries i contaminants emergents en trams fluvials rellevants, i mesures de millora en el sanejament urbà al Baix Llobregat. <i>Agencia Catalana de l'Aigua, Licitación pública</i> . PIs: Acuña, Farré, Gernjak. €296k	PI, expert in wastewater treatment Co-supervisor of research technician
2019-2022	Servicios de investigación, presencia y eliminación de precursores de NDMA en ETAP. <i>Canal Isabel II, Licitación pública</i> . PIs: Farré, Gernjak, Borrego. €100k.	PI, expert in treatment technology
2018-2019	Estudio de la utilización de rechazos de potabilización para el control de olores, toxicidad y corrosión en redes de saneamiento. Aplicación en el sistema de Nules, Castellón. <i>FACSA Ciclo Integral del Agua</i> . PIs: Gutierrez, Gernjak. Industry	PI, expert knowledge on brine chemistry and drinking water production
2018-2019	Test of pH sensors. <i>Scan Messtechnik GmbH</i> . Pis: Gutierrez, Gernjak. Industry	PI, data evaluation
2015-2016	Estudio de eliminación de microcontaminantes con EDR, segunda fase. <i>ATLL Concesionaria de la Generalitat de Catalunya S.A</i> . PIs: Gernjak. Industry	Lead-PI, lead execution of contract
2015	Determinación del potencial de formación de NDMA mediante espectrometría de masas. <i>Canal Isabel II Gestión S.A</i> . PIs: Farré, Gernjak, Barceló. Industry .	PI, chemistry of NDMA formation.
2015	Evaluación de los rendimientos de eliminación de precursores de sub-productos de desinfección en la ETAP del Llobregat. <i>ATLL Concesionaria de la Generalitat de Catalunya S.A</i> . PIs: Farré, Gernjak, Rodríguez-Roda. Industry .	PI, responsible for membrane engineering

At The University of Queensland, Australia

A) Australian Class I national competitive funding

Year	Title, granting institution & reference, principal investigators (PIs), cash budget	Role
2017-2020	Toxic metal removal from wastewater sludge. <i>ARC Discovery Programme ARC DP 170102812</i> . PIs: Pikaar, Wang, Gernjak, Rabaey, Verstraete. A\$210k.	International partner investigator, iron chemistry

2014-2017	An integrated approach to iron salt use in urban water systems. <i>ARC Linkage Program LP140100386</i> . PIs: Yuan, Gernjak, Pikaar, Sharma, Keller, Roux, Halliwell, Murthy, Jackson. A\$400k from ARC and A\$412 from industry.	Awarded as Chief investigator, role reduced due to relocation to Spain, dissolved and colloidal iron chemistry.
2014-2016	Fit-for-purpose water production. <i>CRC Water Sensitive Cities, Project 1.3</i> . Gernjak, McCarthy, Keller, Deletic. A\$606k.	Awarded as project leader, role reduced due to employer change
2013-2015	NatVal 2.2. Integrity monitoring of high pressure membranes. <i>Australian Water Recycling Centre of Excellence</i> . PIs: Gernjak, Keller, LeClech, Leslie, Charrois, Linge. A\$745k.	Awarded as project leader, role reduced due to employer change
2013-2015	Green chemicals to remove biofilm and preserve membranes. <i>Australian Water Recycling Centre of Excellence</i> . PIs: Yuan, Gernjak, Donose. A\$610k.	PI, responsible for membrane engineering
2013-2016	Navigating from impacts to adaptation: Climate change and water supply and sanitation on atolls and flood-prone catchments in the Pacific. AusAID Development Research Awards Scheme 2012. ADRAS 201200889. PIs: Hadwen, Chan, Elliott, Powell, Bartram, Gernjak, Aalbersberg. A\$1043k.	PI, responsible for drinking water technology and water quality

B) State agency, research foundation or company funding

Year	Title, granting institution & reference, principal investigators (PIs), cash budget	Role
2013-2015	Engineering solutions to minimize nitrogen containing DBPs. Water Research Foundation RFP#4484. PIs: Farré, Weinberg, Gernjak. A\$300k.	PI, responsible for biofiltration/oxidation experiments

Appendix B: PhD supervision

PhD theses supervised to completion

Marc Sauchelli Toran (2019). Mass transfer and fouling in Novel Forward Osmosis Thin-Film Composite Membranes. University of Girona. <http://hdl.handle.net/10803/670169>, Role: Principal advisor

Andres Garcia, Elisabet (2018). Novel decentralized greywater treatment system based on combined adsorption and electrochemical oxidation. PhD Thesis, School of Chemical Engineering, The University of Queensland. <https://doi.org/10.14264/uql.2018.381>, Role: co-advisor.

de Vera, Glen Andrew D. (2017). Reducing disinfection byproduct formation potential using ozonation and biological drinking water treatment. PhD Thesis, School of Chemical Engineering, The University of Queensland. <https://doi.org/10.14264/uql.2017.451>, Role: co-advisor.

Liu, Peng (2016). Novel chemical and biological pre-treatments to improve water quality in drinking water treatment. PhD Thesis, School of Chemical Engineering, The University of Queensland. <https://doi.org/10.14264/uql.2016.863>, Role: co-advisor.

Doederer, Katrin (2014). Disinfection by-products in high quality recycled water production with high pressure membranes. PhD Thesis, School of Chemical Engineering, The University of Queensland. Role: Principal advisor

Rattier, Maxime (2013). Understanding of micropollutant removal during biological activated carbon filtration. PhD Thesis, School of Chemical Engineering, The University of Queensland. Role: Principal advisor

Pype, Marie-Laure (2013). Monitoring reverse osmosis membrane integrity and virus rejection in water reuse. PhD Thesis, School of Chemical Engineering, The University of Queensland. Role: Principal advisor

Ayache, Chrystelle (2012). Impact of biological pre-treatment on membrane fouling and micropollutant rejection in water recycling. PhD Thesis, School of Chemical Engineering, The University of Queensland. Role: Principal advisor

On-going PhD theses

Mireia Plá Castellana (2017-). Chemometric tools for water quality assessment with online UV-Vis spectrometers. University of Girona.

Nimmy Kovoov George (2018-). Vacuum-UV based chemical free advanced oxidation process-development and scale-up. University of Girona.

Nikoletta Tsiarta (2020-). Hybrid ozone-ceramic membrane process: increasing hydroxyl radical yield and OMP reduction while reducing membrane fouling. University of Girona.

Amit Kumar (2020-). Design, development and characterisation of an atmospheric plasma system for wastewater treatment. University of Girona.

Yicheng Wang (2022-). Advanced reduction and oxidation processes applying vacuum UV radiation. University of Girona. (inscription pending)

Atefeh Tizchang (2022-). Foulant and wetting resistant direct contact membrane distillation. University of Girona. (inscription pending).

Appendix C: Publication list – Dr. Wolfgang Gernjak

This appendix contains the following sections

- Peer-review journal publications
- Own M.Sc. and Ph.D. thesis
- Editorial roles
- Books & Monographs
- Book Chapters
- Published Technical Reports
- Selected conference publications

Peer-Reviewed Journal Publications

Impact factor and citation counts are only included from 2015 onwards, when I commenced my ICREA appointment. Impact factors are from Clarivate Journal Citation Reports and citation data is from Elsevier Scopus, both update at the start of 2022.

1. Kumar A., Škoro N., Gernjak W., Puač N. (2021). Cold atmospheric plasma technology for removal of organic micropollutants from wastewater—a review. *Eur. Phys. J. D*, **75(11)**, 283. (IF: 1.57, 0 citations)
2. Abily, M., Vicenç, A., Gernjak, W., Rodríguez-Roda, I., Poch, M., Corominas, L. (2021). *Water Res.* **199**, 117166. (IF: 11.24, 2 citations)
3. Aryal, R., Sidhu, J.P.S., Chong, M.N., Toze, S., Gernjak, W., Mainali, B. (2021). Role of environmental variables in the transport of microbes in stormwater. *Water* **13(9)**, 1146. (IF: 3.10, 1 citations)
4. Sanchís, J., Gernjak, W., Munné, A., Catalán, N., Petrovic, M., Farré, M.J. (2021). Fate of N-nitrosodimethylamine and its precursors during a wastewater reuse trial in the Llobregat River (Spain). *J. Hazard. Mat.* **407**, 124346. (IF: 10.59, 5 citations)
5. Salehin, S., Kulandaivelu, J.K., Rebosura, M., van der Kolk, O., Keller, J., Doederer, K., Gernjak, W., Donose, B., Yuan, Z., Pikaar, I. (2020). Effects of aging of ferric-based drinking water sludge on its reactivity for sulfide and phosphate removal. *Water Res.* **184**, 116179 (IF: 11.24, 4 citations)
6. Sbardella, L., Gala, I.V., Comas, J., Fenu, A., Rodríguez-Roda, I., Gernjak, W. (2020). Integrated assessment of sulfate-based AOPs for pharmaceutical active compound removal from wastewater. *J. Clean. Prod.* **260**, 121014. (IF: 9.30, 22 citations)
7. Sauchelli Toran, M., D'Haese, A., Rodríguez-Roda, I., Gernjak, W. (2020). Fouling propensity of novel TFC membranes with different osmotic and hydraulic pressure driving forces. *Water Res.* **175**, 115657 (IF: 11.24, 5 citations)
8. Salehin, S., Rebosura, M., Keller, J., Gernjak, W., Donose, B., Yuan, Z., Pikaar, I. (2020). Recovery of in-sewer dosed iron from digested sludge at downstream treatment plants and its reuse potential. *Water Res.* **174**, 115627 (IF: 11.24, 14 citations)
9. Rizzo, L., Gernjak, W., Krzeminski, P., Malato, S., McArdell, C., Sanchez Perez, J.A., Schaar, H., Fatta-Kassinos, D. (2020). Best available technologies and treatment trains to address current challenges in urban wastewater reuse for irrigation of crops in EU countries. *Sci. Tot. Env.* **710**, 136312. (IF: 7.96, 54 citations)
10. Farré, M.J., Insa, S., Lamb, A., Cojocariu, C., Gernjak, W. (2020). Occurrence of: N -nitrosamines and their precursors in Spanish drinking water treatment plants and distribution systems. *Env. Sci. Wat. Res. Technol.* **6(1)**, 210-220. (IF: 4.22, 12 citations).
11. Sbardella, L., Velo-Gala, I., Comas, J., Rodríguez-Roda, I., Fenu, A., Gernjak, W. (2019). *J. Haz. Mater.* **380**, 120869. (IF: 10.59, 24 citations)

12. Rizzo, L., Malato, S., Antakyali, D., Beretsou, V.G., Đolić, M.B., Gernjak, W., Heath, E., Ivancev-Tumbas, I., Karaolia, P., Lado Ribeiro, A.R., Mascolo, G., McArdell, C., Schaar, H., Silva, A.M.T., Fatta-Kassinos, D. (2019). Consolidated vs new advanced treatment methods for the removal of contaminants of emerging concern from urban wastewater. *Sci. Tot. Env.* **655**, 986-1008. (IF: 7.96, 247 citations)
13. Velo Gala I., Farre M.J., Radjenovic J., and Gernjak W. (2019). N-Nitrosodimethylamine (NDMA) Degradation by the UV/peroxodisulfate Process. *Env. Sci. Technol. Lett.*, **6(2)**, 106-111. (IF: 7.68, 11 citations)
14. Sauchelli, M., Pellegrino, G., D'Haese, A., Rodríguez-Roda, I., Gernjak, W. (2018). Transport of trace organic compounds through novel forward osmosis membranes: Role of membrane properties and the draw solution. *Water Res.* **141**, 65-73. (IF: 11.24, 18 citation)
15. Andrés García E., Agulló-Barceló M., Bond P., Keller J., Gernjak W., Radjenovic J. (2018). Hybrid electrochemical-granular activated carbon system for the treatment of greywater. *Chem. Eng. J.* **352**, 405-411. (IF: 13.27, 21 citations)
16. Verdaguer M., Molinos-Semante M., Narcis C., Santana M., Gernjak W., Poch M. (2018). Optimal fresh water blending: A methodological approach to improve the resilience of water supply systems. *Sci. Tot. Environ.* **624**, 1308-1315. (IF: 7.96, 11 citation)
17. Rippy M.A., Deletic A., Black J., Aryal R., Lampard J.L., Tang J.Y.M., McCarthy D., Kolotelo P., Sidhu J., Gernjak W. (2017). Pesticide occurrence and spatio-temporal variability in urban run-off across Australia. *Water Res.* **115**, 245-255. (IF: 11.24, 50 citations)
18. Liu P., Gernjak W., Keller J. (2017). Long-term performance of enhanced-zero valent iron for drinking water treatment: A lab-scale study. *Chem. Eng. J.*, **315**, 124-131. (IF: 13.27, 6 citations)
19. De Vera G.A.D., Gernjak W., Radjenovic J. (2017). Predicting reactivity of model DOM compounds towards chlorine with mediated electrochemical oxidation. *Water Res.*, **114**, 113-121. (IF: 11.24, 20 citations)
20. De Vera G.A.D., Gernjak W., Weinberg H.S., Farré M.J., Keller J., von Gunten U. (2017). Kinetics and mechanisms of nitrate and ammonium formation during ozonation of dissolved nitrogen. *Water Res.*, **108**, 451-461. (IF: 11.24, 42 citations)
21. De Vera G.A.D., Keller J., Gernjak W., Weinberg H.S., Farré M.J. (2016). Biodegradability of DBP precursors after drinking water ozonation. *Water Res.*, **106**, 550-561. (IF: 11.24, 39 citations)
22. Filloux E., Gernjak W., Gallard H., Croue J.P. (2016). Investigating the relative contribution of colloidal and soluble fractions of secondary effluent organic matter to the irreversible fouling of MF and UF hollow fibre membranes. *Separ. Purif. Technol.* **170**, 109-115. (IF: 7.31, 13 citations)
23. Liu P., Farré M.J., Keller J., Gernjak W. (2016). Reducing natural organic matter and disinfection by-product precursors by alternating oxic and anoxic conditions during engineered short residence time riverbank filtration: A laboratory-scale column study. *Sci. Tot. Environ.* **565**, 616-625. (IF: 7.96, 12 citations)
24. Pype M.L., Lawrence M.G., Keller J., Gernjak W. (2016). Reverse osmosis integrity monitoring in water reuse: The challenge to verify virus removal – A review. *Water Res.* **98**, 384-395. (IF: 11.24, 66 citations)
25. Gabarrón S., Gernjak W., Valero F., Barceló A., Petrovic M., Rodríguez-Roda I. (2016) Evaluation of emerging contaminants in a drinking water treatment plant using electro dialysis reversal technology. *J. Hazard. Mater.* **309**, 192-201. (IF: 10.59, 51 citations)
26. Liu P., Keller J., Gernjak W. (2016). Enhancing zero valent iron based natural organic matter removal by mixing with dispersed carbon cathodes. *Sci. Tot. Environ.* **550**, 95-102. (IF: 7.96, 12 citations)

27. Farré M.J., Lyon B., de Vera G.A., Stalter D., Gernjak W. (2016). Assessing adsorbable organic halogen formation and precursor removal during drinking water production. *J. Env. Eng.* **142(3)**, 04015087, doi: 10.1061/(ASCE)EE.1943-7870.0001022. (IF: 1.75, 6 citations)
28. Pype M.L., Donose B.C., Martí L., Patureau D., Wery N., Gernjak W. (2016) Virus removal and integrity in aged RO membranes. *Water Research* **90**, 167-175. (IF: 11.24, 23 citations)
29. Filloux E., Wang J., Pidou M., Gernjak W., Yuan Z. (2015). Biofouling and scaling control of reverse osmosis membrane using one-step cleaning-potential of acidified nitrite solution as an agent. *J. Memb. Sci.* **495**, 276-283. (IF: 8.74, 43 citations)
30. De Vera, G.A., Stalter, D., Gernjak, W., Weinberg, H.S., Keller, J., Farré, M.J. (2015). Towards reducing DBP formation potential of drinking water by favouring direct ozone over hydroxyl radical reactions during ozonation. *Water Res.*, **87**, 49-58. (IF: 11.24, 79 citations)
31. W.L. Hadwen, M.C. MacDonald, B. Powell, M. Elliott, T. Chan, W. Gernjak and W.G.L. Aalbersberg. (2015). Putting WASH in the water cycle: Climate change, water resources and the future of water, sanitation and hygiene challenges in Pacific Island Countries. *J. Wat. San. Hyg. Develop.*, **5(2)**, 183-191. (IF: 1.25, 23 citations)
32. B. A. Lyon, M. J. Farré, G. A. De Vera, J. Keller, A. Roux, H. S. Weinberg and W. Gernjak (2014). Organic matter removal and disinfection byproduct management in South East Queensland's drinking water. *Wat. Sci. Technol.: Water Supply*, **14(4)**, 681-689.
33. Doederer, K., Farré, M.J., Pidou, M., Weinberg, H.S., Gernjak, W. (2014). Rejection of disinfection by-products by RO and NF membranes: Influence of solute properties and operational parameters. *J. Memb. Sci.* **467**, 195-205.
34. Pikaar, I., Sharma, K.R., Hu, S., Gernjak, W., Keller, J., Yuan, Z. (2014). Reducing sewer corrosion through integrated urban water management. *Science*, **345(6198)**, 812-814.
35. Thai, P.K., O'Brien, J., Jiang, G., Gernjak, W., Yuan, Z., Eaglesham, G., Mueller, J.F. (2014). Document Degradability of creatinine under sewer conditions affects its potential to be used as biomarker in sewage epidemiology. *Water Res*, **55**, 272-279.
36. M. Rattier, J. Reungoat, J. Keller, W. Gernjak (2014). Removal of micropollutants during tertiary wastewater treatment by biofiltration: Role of nitrifiers and removal mechanisms. *Water Res* **54**, 89-99.
37. Thai, P.K., Jiang, G., Gernjak, W., Yuan, Z., Lai, F.Y., Mueller, J.F. (2014). Effects of sewer conditions on the degradation of selected illicit drug residues in wastewater. *Water Res* **48(1)**, 538-547.
38. Doederer K., Gernjak W., Weinberg H.S. and Farré M.J. (2014). Factors affecting the formation of disinfection by-products during chlorination and chloramination of secondary effluent for the production of high quality recycled water. *Water Res*, **48(1)**, 218-228.
39. Tang J., Aryal R., Deletic A., Gernjak W., Glenn E., McCarthy D., Escher B.I. (2013). Toxicity characterization of urban stormwater with bioanalytical tools. *Water Res*, **47(15)**, 5594-5606.
40. Sidhu J., Warish A., Gernjak W., Aryal R., McCarthy D., Palmer A., Kolotelo P., Toze S. (2013). Sewage pollution in urban stormwater runoff as evident from widespread presence of multiple microbial and chemical source tracking markers. *Sci. Tot. Env.*, **463-464**, 488-496.
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02/2020: Koor George N., Wols B., Santoro D., Bell K., Martijn B., Kruithof J., Gernjak W. Developing a chemical-free AOP for the removal of micropollutants from water and wastewater. At: Adapting to Change: Considerations for water recycling and desalination to address future water supply. **Invited presentation.** Brighton, United Kingdom.

06/2019: Gernjak, W. Lamp driven advanced oxidation processes. At: 6th European Conference on Environmental Applications of Advanced Oxidation Processes. **Invited plenary presentation.** Portoroz, Slovenia.

10/2018: Santoro D. and Gernjak, W. **Invited industry-academia collaboration talk:** Developing the next generation of UV-based advanced oxidation technologies using a dual wavelength approach: UV254nm/ H₂O₂ and UV_{185nm}/ H₂O. At: XENOWAC II. Challenges and Solutions related to Xenobiotics and Antimicrobial Resistance in the Framework of Urban Wastewater Reuse: Towards a Blue Circle Society. Limassol, Cyprus.

07/2018: Gernjak, W. Oxidation processes for environmental applications. At: Water Resources Dialogue: China-Africa Water Forum Series No.6: Sustainable Utilization of Water Resources in Developing Countries. **Invited plenary presentation.** Sharm-el-Sheik, Egypt.

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