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# CURRICULUM VITAE

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## EXPERIENCE

### Group Leader

Institute for Micro Process Engineering  
Karlsruhe Institute of Technology

📅 Nov 2018 - Present

📍 Karlsruhe, Germany

- Leading the **Photochemistry** research group, working on flow and photochemistry for clean energy applications, CO<sub>2</sub> electroreduction catalysts and high-throughput screening, green hydrogen technologies, gas separation membranes, photoresponsive sorbents and membranes
- Co-teaching: Additive Manufacturing for Process Engineering

### Visiting Professor (current) Senior Lecturer (2015-2019)

Department of Chemical Engineering  
Imperial College London

📅 May 2015 - Sept 2019

📍 London, United Kingdom

- Leader of personal research group with six doctoral researchers, co-founder of the [Barrer Centre](#)
- Developed novel membrane synthesis and characterisation techniques, including for photo-responsive materials
- Pioneered single-crystal metal organic framework membranes, for fundamental measurement of intrinsic separation properties

### Dr. Bradley P. Ladewig FRSC FICHEM FHEA

📍 Saarlandstr. 1, 68519  
Viernheim

✉ bradley.ladewig@  
protonmail.com

📞 +49 177 425 1594

Born: 08.02.1980

Born in: Emerald, Australia

Nationality: German

Family status: Married with two  
children

## MEMBERSHIPS

Fellow of the Royal Society of  
Chemistry (FRSC)

Fellow of the Institution of  
Chemical Engineers (FICHEM)

Fellow of the Higher Education  
Academy (FHEA)

## LANGUAGES

English Mother Tongue

German B1 passed April 2019

## Associate Professor of Chemical Engineering

Department of Chemical Engineering

Monash University

📅 Jan 2009 - May 2015

📍 Melbourne, Australia

- Recruited as Lecturer in 2009, promoted to Senior Lecturer in 2011 and then Associate Professor in 2012
- Built a research group focussed on membranes and porous materials for clean energy and environmental applications
- Established collaborations nationally and internationally

## Postdoctoral Research Fellow

Australian Institute of Bioengineering and Nanotechnology

The University of Queensland

📅 Sept 2007 - Dec 2008

📍 Brisbane, Australia

- Working in a national collaboration project on nanocomposite ion exchange membranes for applications in water desalination
- Extensive materials synthesis and characterisation

## Postdoctoral Research Engineer

École nationale supérieure des industries chimiques (ENSIC)  
CNRS

Institut National Polytechnique de Lorraine

📅 Jun 2006 - Aug 2007

📍 Nancy, France

- Worked in a collaborative project on combined heat and power generation using a methane steam reforming reactor, coupled with a hydrogen PEM fuel cell stack and extensive heat recovery
- I was personally responsible for modelling and simulation of the system using MATLAB-Simulink, as well as participating in experimental campaigns at Uni Belfort (partner institution), and analysis of the experimental results and verifying the model
- Participated in collaboration meetings, giving presentations and writing technical reports

## RECENT INVITED PRESENTATIONS

**Keynote** Advanced Energy Materials 2018, Surrey, UK.

**Invited Discussion Leader** 2018 Gordon Research Conference on Membranes: Materials and Processes, New London, USA

**Keynote** 4th Green and Sustainable Chemistry Conference, Dresden, 2019

**Keynote and Scientific Committee Member** 5th Green and Sustainable Chemistry Conference, Dresden, 2020

## EDITORIAL WORK

**Subject Editor** - Separations Section, [Chemical Engineering Research and Design](#). I joined this journal (owned by IChemE and published by Elsevier) in January 2019 and handle manuscripts in the membrane separation field. I am currently also the Social Media Editor.

### Edited Books

I occasionally participate in writing and editing book chapters. I was the lead editor for Materials for Low-Temperature Fuel Cells, published by Wiley-VCH in 2015, and have contributed various other chapters to edited collections.

## EDUCATION

### Graduate Certificate in Higher Education

*(post-doctoral teaching qualification in Australia)*

Monash University

📅 2009 - May 2010

### PhD in Chemical Engineering

The University of Queensland

Thesis: Nafion Nanocomposite Membranes for the Direct

Methanol Fuel Cell

📅 2002 - 2006

### Bachelor of Engineering (Chemical) with First Class Honours

The University of Queensland

📅 1998 - 2001

## SELECTED AWARDS

- 2019 Alexander von Humboldt Research Fellowship for Experienced Researchers
- 2018 President's Award for Excellence in Teaching, Imperial College London
- 2017 Student Academic Choice Award: Best Innovation
- 2013 VESKI Victoria Fellowship - Victorian State Government
- 2013 Shortlisted for the 2013 Global IChemE Awards - Sustainable Technology Award
- 2013 Special Commendation Vice-Chancellor's Award for Teaching Excellence - Monash University
- 2013 Deans Award for Excellence in Teaching -- Monash University
- 2012 Finalist in the SACS Leadership Awards (State Government Non-Executive Category)
- 2008/09 Australian Academy of Science International Science Linkage Grant for Scientific Visits to Europe
- 2008 Australian Institute of Energy - Energy Council of Australia Travel Scholarship
- 2004 Australian Academy of Technological Sciences and Engineering Young Science Ambassador Award
- 2003 British Chevening Scholarship, funded nine months as a visiting researcher at Imperial College, London

## HOBBIES

**Healthy living** - I run, cycle and swim regularly, and practice healthy eating.

**Photography and Videography**

## EXTRA WORK INTERESTS

**Student leadership** - I previously worked as a Hall Warden at Imperial College (residential supervisor for 150 students) and I enjoy supporting and mentoring students to develop their leadership skills.

**Consulting** - I am a Chartered Chemical Engineer (with IChemE) and have worked on consulting projects in the UK and Australia, mostly with small, high-tech companies. One of my previous clients is now a major supplier of certified green solvents (Cyrene™ and Levoglucosenone), I helped them troubleshoot their first primary distillation pilot facility. Another former client produces high-value lifestyle products and uses detailed trace metal and sustainability analysis I conducted for them, to answer customer queries about their product and those of their competitors.

**Scientific communication** I enjoy making short videos to communicate science to a wider audience, and use these in my teaching, as well as hosting them on YouTube.

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# LIST OF PUBLICATIONS

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## Patent

1. Bradley Ladewig, Richelle Lyndon, Matthew Hill, *Gas separation processes*, US [9,533,282](#), Priority date: July 26, 2012, PCT  
Publication date: January 30, 2014

## Books

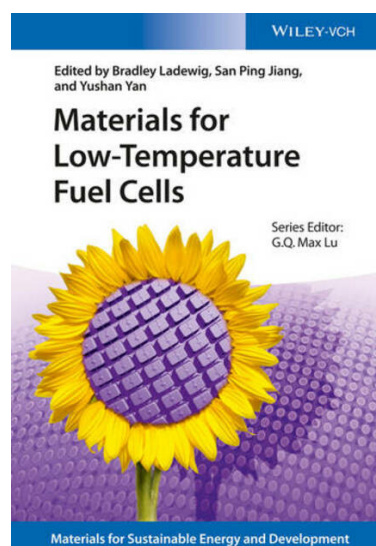
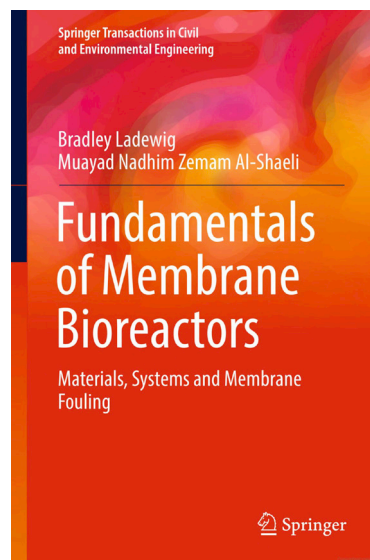
1. B.P. Ladewig, M. N. Z. al-Shaeli, *Fundamentals of Membrane Bioreactors: Materials, Systems and Membrane Fouling*, (2017), Springer Nature, ISBN 978-981-10-2013-1
2. B. P. Ladewig and B. M. Asquith, *Desalination Concentrate Management*, (2012), Springer, ISBN 978-3-642-24851-1.

## Edited Book

3. B. P. Ladewig, S. P. Jiang, Y. Yan (eds), *Materials for Low-Temperature Fuel Cells*, (2015), Wiley-VCH, ISBN 3527330429.

## Book Chapters

1. Zahra Abbasi, Levente Cseri, Xiwang Zhang, Bradley P. Ladewig, Huanting Wang, *Nanomaterials for sustainable wastewater treatment*, in *Sustainable Nanoscale Engineering*, Gyorgy Szekely and Andrew Livingston (Eds.)(2019), Elsevier, ISBN 9780128146811.
2. Ladewig, B.P., Asquith, B. M., Meier-Haack, J., *Key Materials for Low-Temperature Fuel Cells - An Introduction*, in *Materials for Low-Temperature Fuel Cells*, (2015), Wiley-VCH, ISBN 3527330429.
3. Ladewig, B.P., Asquith, B. M., Meier-Haack, J., *Membranes for Direct Methanol Fuel Cells*, in *Key Materials for Low-Temperature Fuel Cells*, (2015), Wiley-VCH, ISBN 3527330429.
4. C. Klaysom, B.P. Ladewig, G.Q. Lu, Lianzhou Wang, *Recent Advances in Ion-Exchange Membranes for Desalination Application*, in *Nanotechnology for Water Treatment: From Nanostructured Materials to Membranes*, Wiley. Editors: Lu, Duke, Zhao and Semiat, 2013.



*Top photo  
Fundamentals  
of Membrane  
Bioreactors, a book I  
co-authored with one  
of my PhD students.*

*Lower photo  
Materials for  
Low-Temperature  
Fuel Cells, a book  
I co-Edited and  
contributed two  
chapters to.*



- B. Zhu, M. Duke, B. P. Ladewig, J. C. Diniz da Costa, Y. S. Lin, Ceramic Membranes for Molecular Level Separations in Gas and Liquid Processing, in Encyclopedia of Chemical Processing, Taylor and Francis UK, ed Sunggyu Lee, UK, pp. 1-16.
- B. P. Ladewig, D. J. Martin, J. C. Diniz da Costa and G. Q. Lu, Nafion nanocomposite membranes for the DMFC in H. S. Nalwa (Ed.), Encyclopedia of Nanoscience and Nanotechnology, American Scientific Publishers, 2011.
- D. J. L. Brett, A. R. J. Kucernak, S. Atkins, R. A. Blewitt, N. P. Brandon, B. P. Ladewig, J. S. Shrimpton, V. Vesovic and N. Vasileiadis, Developing an experimental functional map of a polymer electrolyte fuel cell in P. V. Alemo (Ed.), Progress in Fuel Cell Research, Nova Science Pub Inc, 2007, ISBN: 1600216986.

## Journal Articles

- L. L. Trinkies, A. Düll, J. Zhang, S. Urban, B.J. Deschner, M. Kraut, B.P. Ladewig, A. Weltin, J. Kieninger, R. Dittmeyer, Investigation of mass transport processes in a microstructured membrane reactor for the direct synthesis of hydrogen peroxide, **Chemical Engineering Science**, 248 (2022) 117145. doi: [10.1016/j.ces.2021.117145](https://doi.org/10.1016/j.ces.2021.117145)
- L. H. Mohd Azmi, P. Cherukupally, E. Hunters-Sellars, B. P. Ladewig, D. R. Williams, Fabrication of MIL-101-polydimethylsiloxane composites for environmental toluene abatement from humid air, **Chemical Engineering Journal**, 429 (2022) 132304. doi: [10.1016/j.cej.2021.132304](https://doi.org/10.1016/j.cej.2021.132304)
- S. Jiang, H. Sun, H. Wang, B.P. Ladewig, Z. Yao, A comprehensive review on the synthesis and applications of ion exchange membranes, **Chemosphere**, 282 (2021) 130817. doi: [10.1016/j.chemosphere.2021.130817](https://doi.org/10.1016/j.chemosphere.2021.130817)
- B. D. Slater, M. R. Hill, B. P. Ladewig, Solvent-induced enantioselectivity reversal in a chiral metal organic framework, **Journal of Separation Science**, 44 (2021) 3319–3323. doi: [10.1002/jssc.202100322](https://doi.org/10.1002/jssc.202100322)
- M. al-Shaeli, S.J.D. Smith, S. Jiang, H.T. Wang, K.S. Zhang, B.P. Ladewig, Long-Term Stable Metal Organic Framework (MOF) Based Mixed Matrix Membranes for Ultrafiltration, **Journal of Membrane Science**, 635 (2021) 119339. doi: [10.1016/j.memsci.2021.119339](https://doi.org/10.1016/j.memsci.2021.119339)
- J. Li, H. Šimek, D. Ilioa, N. Jung, S. Bräse, H. Zappe, R. Dittmeyer B.P. Ladewig, In situ sensors for flow reactors - a review, **Reaction Chemistry and Engineering**, 6 (2021) 1497–1507 doi: [10.1039/D1RE00038A](https://doi.org/10.1039/D1RE00038A)
- J. Gaálová, M. Michel, M. Bourassi, B.P. Ladewig, P. Kasal, J. Jindřich, P. Izák, Nafion membranes modified by cationic cyclodextrin derivatives for enantioselective separation, **Separation and Purification Technology**, 266 (2021) 118538. doi: [10.1016/j.seppur.2021.118538](https://doi.org/10.1016/j.seppur.2021.118538)
- L. H. Mohd Azmi, D. Williams, B. P. Ladewig, Polymer-assisted modification of metal-organic framework MIL-96 (Al): influence of HPAM concentration on particle size, crystal morphology and removal of harmful environmental pollutant PFOA, **Chemosphere** 262 (2021) doi: [10.1016/j.chemosphere.2020.128072](https://doi.org/10.1016/j.chemosphere.2020.128072)

## Journal citation information

Cited publications: 90

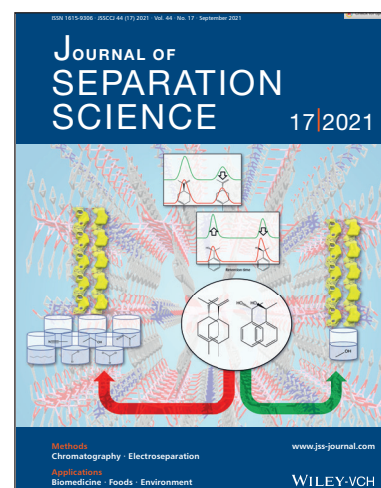
Citations: 3 608

h-index: 35

**Scopus:** <https://www.scopus.com/authid/detail.uri?authorId=12645530400>

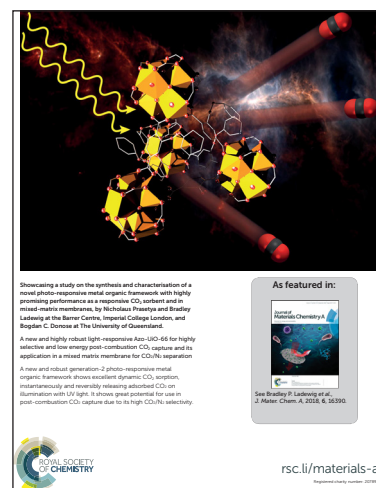
**ORCID:** <http://www.orcid.org/0000-0002-2135-1913>

**Google Scholar:** [https://scholar.google.com/citations?user=TPYuR\\_4AAAAJ](https://scholar.google.com/citations?user=TPYuR_4AAAAJ)



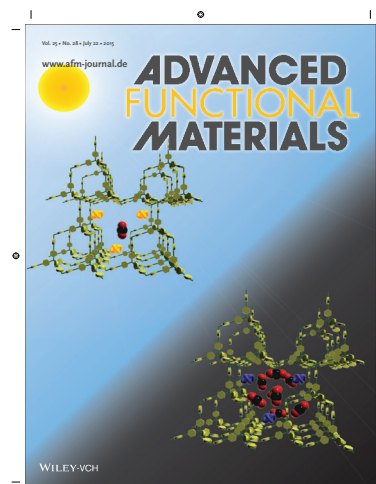
Front cover image, *Journal of Separation Science*, Issue 17, featuring our work on enantioselective MOF sorbents.

9. N. Prasetya, N.F. Himma, P.D. Sutrisna, I.G. Wenten, B.P. Ladewig, A review on emerging organic-containing microporous material membranes for carbon capture and separation, **Chemical Engineering Journal**. 391 (2020) doi: [10.1016/j.ccej.2019.123575](https://doi.org/10.1016/j.ccej.2019.123575)
10. L. H. Mohd Azmi, D. Williams, B. P. Ladewig, Can metal organic frameworks outperform adsorptive removal of harmful phenolic compound 2-chlorophenol by activated carbon? **Chemical Engineering Research and Design**. 158 (2020) 102–113. doi: [10.1016/j.cherd.2020.03.017](https://doi.org/10.1016/j.cherd.2020.03.017)
11. S. Jiang, B.P. Ladewig, Green synthesis of polymeric membranes: Recent advances and future prospects, **Current Opinion in Green and Sustainable Chemistry**. 21 (2020) 1–8. doi: [10.1016/j.cogsc.2019.07.002](https://doi.org/10.1016/j.cogsc.2019.07.002)
12. S.A. Boer, K.F. White, B. Slater, A.J. Emerson, G.P. Knowles, W.A. Donald, A.W. Thornton, B.P. Ladewig, T.D.M. Bell, M.R. Hill, A.L. Chaffee, B.F. Abrahams, D.R. Turner, A Multifunctional, Charge-Neutral, Chiral Octahedral M12L12 Cage, **Chemistry - A European Journal**. 25 (2019) 8489–8493. doi:[10.1002/chem.201901681](https://doi.org/10.1002/chem.201901681).
13. M. Xie, N. Prasetya, B.P. Ladewig, Systematic screening of DMOF-1 with NH<sub>2</sub>, NO<sub>2</sub>, Br and azobenzene functionalities for elucidation of carbon dioxide and nitrogen separation properties, **Inorganic Chemistry Communications**. 108 (2019) 107512. doi:[10.1016/j.inoche.2019.107512](https://doi.org/10.1016/j.inoche.2019.107512).
14. S. Li, N. Prasetya, B.P. Ladewig, Investigation of Azo-COP-2 as a Photoresponsive Low-Energy CO<sub>2</sub> Adsorbent and Porous Filler in Mixed Matrix Membranes for CO<sub>2</sub>/N<sub>2</sub> Separation, **Industrial and Engineering Chemistry Research**. 58 (2019) 9959–9969. doi:[10.1021/acs.iecr.9b00762](https://doi.org/10.1021/acs.iecr.9b00762).
15. C. Chen, A. Ozcan, A.O. Yazaydin, B.P. Ladewig, Gas permeation through single-crystal ZIF-8 membranes, **Journal of Membrane Science**. 575 (2019) 209–216. doi:[10.1016/j.memsci.2019.01.027](https://doi.org/10.1016/j.memsci.2019.01.027).
16. N. Prasetya, B.P. Ladewig, An insight into the effect of azobenzene functionalities studied in UiO-66 frameworks for low energy CO<sub>2</sub> capture and CO<sub>2</sub>/N<sub>2</sub> membrane separation, **Journal of Materials Chemistry A**. 7 (2019) 15164–15172. doi:[10.1039/c9ta02096a](https://doi.org/10.1039/c9ta02096a).
17. B. Slater, S.O. Wong, A. Duckworth, A.J.P. White, M.R. Hill, B.P. Ladewig, Upcycling a plastic cup: One-pot synthesis of lactate containing metal organic frameworks from polylactic acid, **Chemical Communications**. 55 (2019) 7319–7322. doi:[10.1039/c9cc02861g](https://doi.org/10.1039/c9cc02861g).
18. S. Jiang, B.P. Ladewig, High performance cation exchange membranes synthesized via in situ emulsion polymerization without organic solvents and corrosive acids, **Journal of Materials Chemistry A**. 7 (2019) 17400–17411. doi:[10.1039/c9ta06248c](https://doi.org/10.1039/c9ta06248c).
19. N. Prasetya, A.A. Teck, B.P. Ladewig, Matrimid-JUC-62 and Matrimid-PCN-250 mixed matrix membranes displaying light-responsive gas separation and beneficial ageing characteristics for CO<sub>2</sub>/N<sub>2</sub> separation, **Scientific Reports**. 8 (2018). doi:[10.1038/s41598-018-21263-7](https://doi.org/10.1038/s41598-018-21263-7).
20. N. Prasetya, B.C. Donose, B.P. Ladewig, A new and highly robust light-responsive Azo-UiO-66 for highly selective and low energy post-combustion CO<sub>2</sub> capture and its application in a mixed matrix membrane for CO<sub>2</sub>/N<sub>2</sub> separation, **Journal of Materials Chemistry A**. 6 (2018) 16390–16402. doi:[10.1039/c8ta03553a](https://doi.org/10.1039/c8ta03553a).



*Inside back cover image, Journal of Materials Chemistry A, Issue 34, featuring our work on photoresponsive CO<sub>2</sub> sorbents.*

21. N. Prasetya, B.P. Ladewig, New Azo-DMOF-1 MOF as a Photoresponsive Low-Energy CO<sub>2</sub> Adsorbent and Its Exceptional CO<sub>2</sub>/N<sub>2</sub> Separation Performance in Mixed Matrix Membranes, **ACS Applied Materials and Interfaces**. 10 (2018) 34291–34301. doi:[10.1021/acsami.8b12261](https://doi.org/10.1021/acsami.8b12261).
22. K.F.L. Hagesteijn, S. Jiang, B.P. Ladewig, A review of the synthesis and characterization of anion exchange membranes, **Journal of Materials Science**. 53 (2018) 11131–11150. doi:[10.1007/s10853-018-2409-y](https://doi.org/10.1007/s10853-018-2409-y).
23. S. Jiang, K.F.L. Hagesteijn, J. Ni, B.P. Ladewig, A scientometric study of the research on ion exchange membranes, **RSC Advances**. 8 (2018) 24036–24048. doi:[10.1039/c8ra04686g](https://doi.org/10.1039/c8ra04686g).
24. M. Al-Shaeli, S.J.D. Smith, E. Shamsaei, H. Wang, K. Zhang, B.P. Ladewig, Highly fouling-resistant brominated poly(phenylene oxide) membranes using surface grafted diethylenetriamine, **RSC Advances**. 7 (2017) 37324–37330. doi:[10.1039/c7ra05524b](https://doi.org/10.1039/c7ra05524b).
25. S.J.D. Smith, K. Konstas, C.H. Lau, Y.M. Gozukara, C.D. Easton, R.J. Mulder, B.P. Ladewig, M.R. Hill, Post-Synthetic Annealing: Linker Self-Exchange in UiO-66 and Its Effect on Polymer-Metal Organic Framework Interaction, **Crystal Growth and Design**. 17 (2017) 4384–4392. doi:[10.1021/acs.cgd.7b00685](https://doi.org/10.1021/acs.cgd.7b00685).
26. S. Jiang, Y. Li, B.P. Ladewig, A review of reverse osmosis membrane fouling and control strategies, **Science of the Total Environment**. 595 (2017) 567–583. doi:[10.1016/j.scitotenv.2017.03.235](https://doi.org/10.1016/j.scitotenv.2017.03.235).
27. W.F.G. Saleha, R. Ramesh, N. Nalajala, B.P. Ladewig, M. Neergat, Dielectric relaxations in phosphoric acid-doped poly(2,5-benzimidazole) and its composite membranes, **Journal of Applied Polymer Science**. 134 (2017). doi:[10.1002/app.44867](https://doi.org/10.1002/app.44867).
28. N. Prasetya, B.P. Ladewig, Dynamic photo-switching in light-responsive JUC-62 for CO<sub>2</sub> capture, **Scientific Reports**. 7 (2017). doi:[10.1038/s41598-017-13536-4](https://doi.org/10.1038/s41598-017-13536-4).
29. S. Jiang, B.P. Ladewig, High Ion-Exchange Capacity Semihomogeneous Cation Exchange Membranes Prepared via a Novel Polymerization and Sulfonation Approach in Porous Polypropylene, **ACS Applied Materials and Interfaces**. 9 (2017) 38612–38620. doi:[10.1021/acsami.7b13076](https://doi.org/10.1021/acsami.7b13076).
30. W.F.G. Saleha, R. Ramesh, N. Nalajala, A. Chakraborty, B.P. Ladewig, M. Neergat, Broadband dielectric spectroscopy of Nafion-117, sulfonated polysulfone (sPSF) and sulfonated polyether ketone (sPEK) membranes, **Journal of Applied Polymer Science**. 134 (2017). doi:[10.1002/app.44790](https://doi.org/10.1002/app.44790).
31. Z. Abbasi, E. Shamsaei, X.Y. Fang, B. Ladewig, H. Wang, Simple fabrication of zeolitic imidazolate framework ZIF-8/polymer composite beads by phase inversion method for efficient oil sorption, **Journal of Colloid and Interface Science**. 493 (2017) 150–161. doi:[10.1016/j.jcis.2017.01.006](https://doi.org/10.1016/j.jcis.2017.01.006).
32. B. Slater, Z. Wang, S. Jiang, M.R. Hill, B.P. Ladewig, Missing Linker Defects in a Homochiral Metal-Organic Framework: Tuning the Chiral Separation Capacity, **Journal of the American Chemical Society**. 139 (2017) 18322–18327. doi:[10.1021/jacs.7b10112](https://doi.org/10.1021/jacs.7b10112).
33. Z. Abbasi, E. Shamsaei, S.K. Leong, B. Ladewig, X. Zhang, H. Wang, Effect of carbonization temperature on adsorption property of ZIF-8 derived nanoporous carbon for water treatment,

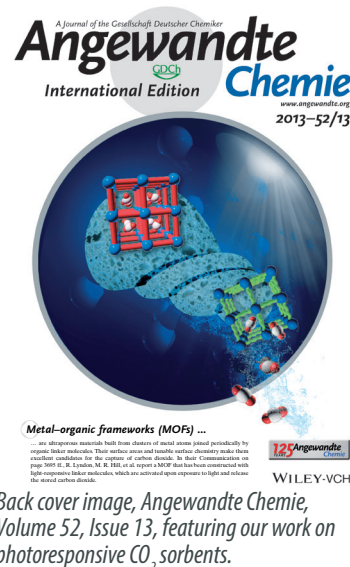


*Inside back cover image, Advanced Functional Materials, Volume 25, Issue 28, featuring our work on photoresponsive CO<sub>2</sub> sorbents.*



**Microporous and Mesoporous Materials.** 236 (2016) 28–37.  
doi:[10.1016/j.micromeso.2016.08.022](https://doi.org/10.1016/j.micromeso.2016.08.022).

34. J. Leong, J. Tan, A. Heitz, B.P. Ladewig, Use of vibratory shear enhanced processing to treat magnetic ion exchange concentrate: A techno-economic analysis, **Desalination.** 383 (2016) 46–52.  
doi:[10.1016/j.desal.2016.01.002](https://doi.org/10.1016/j.desal.2016.01.002).
35. S.J.D. Smith, C.H. Lau, J.I. Mardel, M. Kitchin, K. Konstas, B.P. Ladewig, M.R. Hill, Physical aging in glassy mixed matrix membranes; Tuning particle interaction for mechanically robust nanocomposite films, **Journal of Materials Chemistry A.** 4 (2016) 10627–10634.  
doi:[10.1039/c6ta02603f](https://doi.org/10.1039/c6ta02603f).
36. R. Lyndon, K. Konstas, A.W. Thornton, A.J. Seeber, B.P. Ladewig, M.R. Hill, Visible Light-Triggered Capture and Release of CO<sub>2</sub> from Stable Metal Organic Frameworks, **Chemistry of Materials.** 27 (2015) 7882–7888. doi:[10.1021/acs.chemmater.5b02211](https://doi.org/10.1021/acs.chemmater.5b02211).
37. S.J.D. Smith, B.P. Ladewig, A.J. Hill, C.H. Lau, M.R. Hill, Post-synthetic Ti Exchanged UiO-66 Metal-Organic Frameworks that Deliver Exceptional Gas Permeability in Mixed Matrix Membranes, **Scientific Reports.** 5 (2015). doi:[10.1038/srep07823](https://doi.org/10.1038/srep07823).
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41. Y. Zhang, L. Zou, B.P. Ladewig, D. Mulcahy, Synthesis and characterisation of superhydrophilic conductive heterogeneous PANI/PVDF anion-exchange membranes, **Desalination.** 362 (2015) 59–67. doi:[10.1016/j.desal.2015.02.004](https://doi.org/10.1016/j.desal.2015.02.004).
42. R. Lyndon, K. Konstas, A.W. Thornton, A.J. Seeber, B.P. Ladewig, M.R. Hill, Visible Light-Triggered Capture and Release of CO<sub>2</sub> from Stable Metal Organic Frameworks, **Chemistry of Materials.** 27 (2015) 7882–7888. doi:[10.1021/acs.chemmater.5b02211](https://doi.org/10.1021/acs.chemmater.5b02211).
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