

Form 59 Rule 29.02(1)

Affidavit

No. 527 of 2024

Federal Court of Australia

District Registry: New South Wales

Division: General

FORTESCUE LIMITED ACN 002 594 872 and others

Applicants

ELEMENT ZERO PTY LIMITED ACN 664 342 081 and others

Respondents

Affidavit of: Rebecca Mary Dunn

Address: Level 35, International Tower Two, 200 Barangaroo Avenue

Barangaroo NSW 2000

Occupation: Solicitor

Date: 5 December 2024

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I **Rebecca Mary Dunn** of Level 35, International Tower Two, 200 Barangaroo Avenue Barangaroo NSW 2000, Solicitor, say on oath:

Introduction

1. I am a partner of Gilbert + Tobin Lawyers and I have day-to-day carriage of this matter for the First, Second and Fourth Respondents (the **Element Zero Respondents**) with

Filed on behalf of (name & role of party)		The First, Second and Fourth Respondents				
Prepared by (name of person/lawyer)		Michael John Williams, Partner				
Law firm (if applicable)	Gilbert + Tob	in				
Tel (02) 9263 4271		Fax (02) 9263 4111				
Email mwilliams@gtlaw.com.au						
Address for service Level 35,		nternational Tower Two				
(include state and postcode)	200 Baran	garoo Avenue, Barangaroo NSW 2000				



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- Michael Williams, the solicitor for the Element Zero Respondents. I have sworn three previous affidavits in these proceedings.
- I make this affidavit in relation to the definition of "Ionic Liquid" in the Applicants' Interlocutory Application dated 20 November 2024 (Applicants' Discovery Application).
- 3. In this affidavit I refer to the affidavit of Michael John Williams sworn 27 November 2024 (Sixth Williams Affidavit), made in response to the Applicants' Discovery Application.
- 4. I make this affidavit from my own knowledge unless indicated to the contrary. Where I rely on information provided to me from other sources, I have identified the relevant source, and believe that information to be true and correct.
- 5. In making this affidavit, I do not waive or intend to waive nor am I authorised to waive privilege in any communication between Element Zero Respondents and their external legal representatives, including any privileged advice, work product or work undertaken by lawyers of Gilbert + Tobin in connection with these proceedings.
- 6. Exhibited to me at the time of swearing this affidavit is a bundle of confidential documents marked "Exhibit RMD-2" to which I refer below. A reference to a page number of Exhibit RMD-2 is a reference to the document on the corresponding page of Exhibit RMD-2.

Definition of Ionic Liquid proposed by the Applicants

7. Category 1 of the Applicants Discovery Application seeks:

All documents recording or evidencing work undertaken by the Second Respondent, the Third Respondent and/or Fortescue at any time during the period from 25 March 2019 to 12 November 2021 in relation to an electrochemical reduction process involving Ionic Liquid.

8. The Applicants' Discovery Application defines Ionic Liquid as follows:

""lonic Liquid" means any salt or mixture of salts that is capable of acting as an electrolyte in electrowinning and/or electroplating of metals and/or ores when in its liquid form (irrespective of the temperature range at which the salt or mixture is in its liquid form) including, without limitation, electrolytes that may be described as ionic liquids, molten salts, eutectics, molten hydroxide-based electrolytes, molten carbonate-based electrolytes, "hydroxide alkali melt or eutectic melt" (referred to in paragraph 29(a)(i) of the EZ Parties' defence) and/or

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"molten hydroxide eutectic" (referred to in paragraph 29(c) of Dr Winther-Jensen's defence)."

(Applicants' Definition)

9. As set out paragraphs 14 to 30 of the Sixth Williams Affidavit, the Element Zero Respondents do not agree with the definition of Ionic Liquid proposed by the Applicants and have proposed an amendment to category 1 in the following form:

> All documents recording or evidencing work undertaken by the Second Respondent, the Third Respondent and/or Fortescue at any time during the period from 25 March 2019 to 12 November 2021 in relation to:

- (a) Ionic Liquid R&D as defined in paragraph 12 of the FASOC;
- (b) an electrochemical reduction process involving electrolytes that may be described as ionic liquids, molten salts, eutectics, molten hydroxide-based electrolytes, molten carbonate-based electrolytes, "hydroxide alkali melt or eutectic melt" (referred to in paragraph 29(a)(i) of the EZ Parties' defence) and/or "molten hydroxide eutectic" (referred to in paragraph 29(c) of Dr Winther-Jensen's defence).
- 10. The revised category suggested by the Element Zero Respondents has the practical effect of providing the Applicants with discovery sought in Category 1, without requiring the Court or any party giving discovery having to determine the ambit of the meaning of the term "Ionic Liquid" at this stage of the case.
- 11. On 4 December 2024, Davies Collison Cave sent Gilbert + Tobin a letter which indicated that the Applicants intend to press their original Category 1 and the Applicants' Definition as contained in the Applicants' Discovery Application, including all elements within that definition. A copy of this letter is reproduced at pages 2 to 4 of **Exhibit RMD-2**.
- 12. In the circumstances, and as foreshadowed in paragraph 24 of the Sixth Williams
 Affidavit, the Element Zero Respondents have now engaged Professor Andrew Abbott to
 provide independent expert advice on their behalf in the proceeding. A copy of Gilbert +
 Tobin's letter of engagement dated 4 December 2024 which has been signed by
 Professor Abbott is reproduced at pages 5 to 6 of Exhibit RMD-2.

Professor Andrew Abbott

13. A copy of Professor Abbott's curriculum vitae is reproduced at pages 7 to 9 of **Exhibit RMD-2**. As set out in that document, Professor Abbott is a professor of physical chemistry at the University of Leicester with over 35 years' experience. In addition to his role at the University of Leicester, Professor Abbott is a Fellow of the Royal Society of Chemistry, Senior Member of the Centre for Materials Research and a partner in the

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Faraday Institution project ReLiB recycling lithium ion batteries. Professor Abbott's work has focused on 'green chemistry', with a particular focus on materials processing. Professor Abbott's particular expertise involves the development of novel processes using ionic liquids including electrodeposition of metals from ionic liquids. He has been published extensively on the topic of ionic liquids and holds numerous patents involving ionic liquids.

- 14. On 4 December 2024, Gilbert + Tobin provided Professor Abbott with the Applicants' Definition.
- 15. I am informed by Professor Abbott and believe that the Applicants' Definition is wrong and does not correctly describe an 'ionic liquid', including because:
 - (a) The term "ionic liquid" means an ionic compound which has a melting point below 100°C.
 - (b) The Applicants' Definition contains multiple constituent parts, the majority of which are not "ionic liquids" (as set out below);
 - (c) It is incorrect to describe ionic liquids as any salts capable of acting as an electrolyte in electrowinning and/or electroplating of metals and/or ores. An ionic liquid does not have to be an electrolyte (in the sense that it is capable of conducting electricity), and the term electrolyte encompasses any system that contains mobile ions (including for example deep eutectic solvents, brines and aqueous solutions which are not ionic liquids). It is also not correct to define 'ionic liquids' by reference to the use of them in electrowinning and/or electroplating of metal and/or ores, including because there are a multitude of uses for ionic liquids which are unrelated to electrowinning or electroplating, such as for extraction, synthesis and catalysis. There are also a multitude of liquids that are not ionic liquids that can be used for electrowinning and/or electroplating of metal and/or ores.
 - (d) A melting point below 100°C is an essential characteristic of ionic liquids, and the temperature differential was a key reason for the introduction of the term in the first place. As such it is incorrect to disregard the temperature range at which the salt or mixture is in its liquid form, by using the words "irrespective of the temperature range at which the salt or mixture is in its liquid form".
 - (e) The terms "eutectic", "molten salts", "molten hydroxide-based electrolytes", "molten carbonate-based electrolytes", "hydroxide alkali melt or eutectic melt" and "molten hydroxide eutectic" are not synonymous or interchangeable with the term "ionic liquids". These are terms which have distinct meanings in the scientific community.

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- (f) "Molten salts" are not ionic liquids. The term ionic liquid was initially introduced as way of distinguishing ionic compounds with a melting point of above 100°C (molten salts) to those with a melting point of below 100°C (ionic liquids). Aside from the melting temperature, molten salts are comprised of very small ions, whereas ionic liquids have very large ions which makes ionic liquids significantly more viscous (between 100 -10,000 times more viscous) than molten salts.
- (g) <u>"Eutectics"</u> are not "ionic liquids". A "eutectic" is derived from Greek, and means "easily melted". It is a term used to describe a specific mixture of two or more substances, which have a lower melting point than the individual substances on their own. The classic example of a eutectic is solder, which is made out of specific mixture of lead and tin, which will result in a reduced melting point. Certain eutectics can also be described as "ionic liquids", if they are comprised of ionic compounds and have a melting temperature of less than 100°C, however, the term is not used interchangeably with the term ionic liquids and the majority of eutectics are not ionic liquids.
- (h) "Molten hydroxide-based electrolytes", "hydroxide alkali melt or eutectic melt" and "molten hydroxide eutectic" all refer to essentially the same concept and are not ionic liquids. Molten hydroxide (or hydroxide melts) are molten salts. As indicated at subparagraphs (f) above, molten salts and ionic liquids are different concepts.
- (i) "Molten carbonate-based electrolytes" are not ionic liquids.
- (j) Based on his experience, knowledge and education in the field, Professor Abbott would not use the terms referred to in (e) and discussed at (f) to (i) in any definition of ionic liquid, and a number of those terms are inconsistent with his understanding of "ionic liquids".

Sworn by the Deponent at Barangaroo in New South Wales on 5 December 2024 Before me:

Signature of deponent

Signature of witness

Caitlin Aisling Meade, Solicitor Level 35, International Tower Two 200 Barangaroo Avenue Barangaroo NSW 2000

No. NSD527 of 2024

Federal Court of Australia

District Registry: New South Wales

Division: General

FORTESCUE LIMITED ACN 002 594 872 and another

Applicants

ELEMENT ZERO PTY LIMITED ACN 664 342 081 and others

Respondents

Exhibit RMD-2

This is a bundle of documents marked "Exhibit RMD-2" to the Affidavit of Rebecca Mary Dunn sworn before me on 5 December 2024.

Signature of witness

Caitlin Aisling Meade Level 35 Tower Two International Towers Sydney 200 Barangaroo Avenue Barangaroo NSW 2000 Solicitor

Filed on behalf of (name & role of party)

Prepared by (name of person/lawyer)

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Michael John Williams, Partner

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Caitlin Meade

From: Rohit Dighe <RDighe@dcc.com>

Sent: Wednesday, 4 December 2024 1:54 PM

To: Michael Williams; Rebecca Dunn; Caitlin Meade; Daisy Cullen

Cc: Mike Hales; Daniella Lambert; Lachlan McLean; Paul Dewar; Ashley Cameron; Kevin

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Subject: NSD527/2024 Fortescue Limited & Ors v Element Zero Pty Limited & Ors

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Attachments: 2024-12-04 - DCCL letter to G+T.pdf

♠ External email >

Dear Colleagues

Please see attached correspondence.

Yours sincerely

Rohit Dighe Associate **Paul Dewar** Principal Lawyer



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We extend our respect to all Aboriginal and Torres Strait Islander peoples throughout Australia and acknowledge the Traditional Owners and Custodians of the lands on which we work. We recognise their ongoing connection to land, sea and community.

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BY EMAIL:

MWilliams@gtlaw.com.au; RDunn@gtlaw.com.au

COPY TO:

<u>Mike.Hales@minterellison.com;</u> Daniella.Lambert@minterellison.com

Our Ref: PXD:2023413

Your Ref: MJW:RXD:1058625

4 December 2024

Mr Michael Williams / Ms Rebecca Dunn Gilbert + Tobin L35, Tower Two, International Towers Sydney 200 Barangaroo Avenue Barangaroo NSW 2000

Dear Colleagues

Fortescue Limited & Ors v Element Zero Pty Limited & Ors, Federal Court Proceeding No. NSD527/2024

We refer to your letter dated 26 November 2024, our response dated 27 November 2024, and your reply dated 28 November 2024, regarding Fortescue's Category 1 and definition of 'Ionic Liquid'.

In your 26 November letter, your clients proposed an amended Category 1 which omits the following words from Fortescue's definition of 'Ionic Liquid':

"...any salt or mixture of salts that is capable of acting as an electrolyte in electrowinning and/or electroplating of metals and/or ores when in its liquid form (irrespective of the temperature range at which the salt or mixture is in its liquid form) including, without limitation...".

In our 27 November response, we asked your clients whether they propose to include the omitted words, and if not, to please provide an explanation for their omission.

In your 28 November reply, your clients refused to include the omitted words and said they were "overbroad and irrelevant".

Fortescue disagrees with your clients' reasons for omitting the quoted words. To the contrary, each aspect of the quoted words is non-controversial and directly relevant to the pleaded case.

Specifically, we do not understand how your clients could contend, in the context of the pleaded case, that 'Ionic Liquid' should not encompass a "salt or mixture of salts that is capable of acting as an electrolyte in electrowinning and/or electroplating of metals and/or ores when in its liquid form", considering (at least) the allegations in paragraphs 12(b), 12(e), 29(b) and 29(e) of the FASOC, and the averments in paragraphs 12(f), 12(g), 29(a)(i) and 29(a)(ii) of your clients' Defence.

Level 4, 7 Macquarie Place Sydney NSW 2000 Australia

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Attention: Michael Williams

Rebecca Dunn

Copy: Mike Hales Daniella Lambert

Contact: Paul Dewar

PDewar@dcc.com

The remaining omitted words, "(irrespective of the temperature range at which the salt or mixture is in its liquid form)", go to the technical definitional debate between Dr Bhatt and Dr Winther-Jensen about the temperature at which something might be described as an 'ionic liquid' versus the temperature at which something might be described as a 'molten hydroxide-based electrolyte': see paragraphs 14-15 of Dewar 7. It appears common ground that that technical debate should be had at trial, rather than in deciding Fortescue's discovery application.

For these reasons, Fortescue intends to press its original Category 1 and definition of 'Ionic Liquid' as contained in its interlocutory application dated 20 November 2024.

If your clients' real concern is that using the defined term 'Ionic Liquid' might affect the meaning of 'ionic liquid' at trial or constitute an admission by your clients as to the meaning of 'ionic liquid' (as alluded to in your 26 November letter, page 2, second paragraph), Fortescue is content to use another defined term in its discovery categories, such as 'Solvent', and/or to include a notation to the effect that the defined term does <u>not</u> affect the meaning of 'ionic liquid' at trial or constitute an admission by your clients as to the meaning of 'ionic liquid'.

Please let us know if such changes would resolve your clients' concern.

Yours faithfully

Paul Dewar

Principal Lawyer

DAVIES COLLISON CAVE LAW

PDewar@dcc.com

Partner Contact Michael Williams Rebecca Dunn T +61 2 9263 4625 rdunn@gtlaw.com.au MJW:RXD:1058625

Our ref

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4 December 2024

By email: apa1@le.ac.uk

Professor Abbott School of Chemistry University of Leicester

Confidential and privileged

Dear Professor Abbott

Element Zero Pty Ltd & Ors ats Fortescue Ltd & Ors - Proceedings in the Federal Court of Australia (NSD927/2024)

We act for Element Zero Pty Ltd, Bartlomiej Piotr Kolodziejczyk and Michael George Masterman, the First, Second and Fourth Respondents in the above proceedings. The Applicants are represented by Davies Collison Cave.

On behalf of the First Second and Fourth Respondents, we would like to retain your services to provide independent expert evidence in the Federal Court of Australia proceedings number NSD927/2024.

Assistance Required

This engagement will likely involve providing independent expert advice and preparing a reports and/or affidavits that will be filed as evidence.

You may also be required to give evidence at a Court hearing and be cross-examined.

Guidelines for expert witnesses

To assist you to understand your role as an independent expert, we enclose a copy of the Federal Court of Australia Practice Note "Expert Evidence Practice Note (GPN-EXPT)" (the Practice Note) including Annexure A entitled "Harmonised Expert Witness Code of Conduct" and Annexure B entitled "Concurrent Expert Evidence Guidelines".

Please read the Practice Note carefully and let us know if you have any questions. It is most important that you take care to follow the Practice Note. The Practice Note emphasises that in Court proceedings an expert has an overriding duty to assist the Court by providing independent and impartial opinions on matters relevant to the expert's area of expertise.

Other

We record your confirmation to us that you have no conflict of interest in relation to this engagement.

Given that your involvement in this matter and the terms of your engagement are confidential at this stage, please keep a separate file in relation to this matter and keep all documents (including

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electronic files) provided to, or created by you separate from your other files. Please ensure that all communications concerning this engagement are made through Gilbert + Tobin.

To confirm your understanding of the engagement and acceptance of the above terms, please sign, date and return a copy of this letter to our office.

We look forward to working with you.

Yours faithfully Gilbert + Tobin

Gilbert tolon

Michael Williams
Partner
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mwilliams@gtlaw.com.au

Rebecca Dunn Partner +61 2 9263 4625 rdunn@gtlaw.com.au

ACCEPTANCE OF TERMS OF ENGAGEMENT

I accept the terms stated above.

Signature

Professor Andrew Abbott

Andrew Abbott

Date: 04/12/24

Curriculum Vitae ANDREW PETER ABBOTT

Contact Details

Chemistry Department, University of Leicester, University Road, Leicester, LE1 7RH

Tel: (0116) 2522087 E. mail: andrew.abbott@le.ac.uk

Summary

- ♦ Deputy Pro-Vice Chancellor (Enterprise) 9/13 to 9/16. I sat on Leicester Investment Advisory Board, Finance Committee and Enterprise Policy Committee
- ♦ Head of Department (2008-2013) responsible for 450 students and staff. Budgetary control over £4.8M p.a. Improved the financial position of the Departments such that it operates with a financial excess of 52%.
- Member of the College Management Board, Chair of the Business Liaison Committee, Member of the University Finance Committee, Member of University Promotions Committee. Member of Senate and Council. Member of Senate Disciplinary Committee.
- ♦ Chair of the following Committees: Departmental Management, Exams, Work and Progress, Staff Meeting.
- ♦ Strong research background in green chemistry, electrochemistry, and high-pressure techniques. International reputation for the development, characterisation and application of neoteric solvents.
- ♦ Headed a 13 M Euro Network of 33 companies developing new metal processing technologies based on University of Leicester IP. Set up a demonstrator unit with six pilot plants for technology transfer.
- Research Director of a University Spin-out company with expertise in intellectual property, licensing, marketing and business planning through a spin-out company.
- ♦ Extensive teaching background delivering high quality lectures, tutorials, workshops and practical classes in green chemistry, electrochemistry, thermodynamics and kinetics, polymers, solution chemistry and surface science.

Employment

PROFESSOR University of Leicester 1/05 to present (Lecturer since 1993)

Deputy Pro-Vice Chancellor (Enterprise) 9/13 to 9/16

Head of Department (2008-2013) responsible for 450 students and staff. Budgetary control over £4.8M p.a.

RESEARCH DIRECTOR Scionix Ltd 4/99 to present

I was the founder of a University's joint venture company with Whyte Chemicals Ltd., which involved overseeing the financial and research direction of the company. I was also involved in negotiating the licensing agreements for the technology developed by the company. This activity entailed close and frequent liaison with various customers and funding agencies.

Postdoctoral Research

RESEARCH ASSOCIATE: University of Liverpool 7/91 to 12/92

Research topic: "Anisotropic Etching of Silicon"

RESEARCH FELLOW: University of Connecticut, Storrs, USA: 9/89 to 6/91

Research topic: "Electron Transfer in Micellar Solutions"

Education

POSTGRADUATE: Doctor of Philosophy Southampton University 9/86 to 9/89

Thesis: "Transition Metal Electrochemistry in Aromatic Solvents"

UNDERGRADUATE: B.Sc. (Hons.) Chemistry Portsmouth Polytechnic 9/82 to 7/86

INDUSTRIAL EXPERIENCE: B.A.T. Industries *G.m.b.H*. Hamburg, Germany: 7/84 to 9/85

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Curriculum Vitae: Prof. A. P. Abbott

Current Research Areas:

Room temperature ionic liquids: We have recently developed a range of ionic compounds, which are fluid at room temperature and these are being applied to the electrodeposition of chromium, zinc and various alloys, Electropolishing, Ore processing and natural product extraction. Five of these have gone to pilot scale and three to full scale production. We have built an industrial demonstrator laboratory to showcase the technology to potential end-users.

We have also developed a range of starch-based plastics using salts as plasticisers. These have been used as binders for producing fibreboard. This has been scaled up to >1 tonne and is in the process of being commercialised though the brand name Starboard. I have set up a Centre of Excellence with Freshpak Ltd to supply expertise in the area of food processing and preparation.

I have received 46 major grants since 1999 totalling in excess of £13 M from a range of sources including EPSRC, NERC, Royal Society, EU FP6, 7 and H2020, Innovate UK and the Leverhulme Trust.

Teaching

Level 1:	CH1203 Kinetics and Thermodynamics
Level 2:	CH2207 Material Science
Level 4:	CH4206 Green Chemistry
MSc	Applied Electrochemistry

I have examined 46 external Ph.D. vivas at various institutions including Imperial College, York, Queens Belfast, Manchester, St Andrews and Southampton Universities. I have supervised 40 Ph.D and 37 MSc students together with 23 Post-doctoral researchers. I was the external examiner for the undergraduate Chemistry Course at the University of York and Leather Technology at Northampton University and postgraduate degrees at Imperial College and Northampton University

Professional Qualifications

- Member of the Royal Society of Chemistry since 1993 now Fellow
- Chartered Chemist
- FHEA

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September 2002 Westinghouse Prize - Institute of Metal Finishers

July 2003 Royal Society Summer Science Exhibition

March 2004 Royal Society of Chemistry, Entrepreneur of the Year – Runner up

June 2004 Green Chemistry Award – Crystal Faraday (Scionix)
September 2004 Institute of Chemical Engineers - Green Chemistry Award
December 2006 National Energy Efficiency Award – DEFRA (Scionix)
June 2007 Royal Society of Chemistry - Green Chemistry Award

June 2008 Royal Society of Chemistry - Industrial Chemistry Lectureship

July 2009 Royal Society Summer Science Exhibition

October 2012 Food and Drink iNet - Best Collaborative Project Award.
September 2013 Canning Bicentenary Medal - Institute of Metal Finishers

October 2013 Royal Society - Brian Mercer Award

Publications

> 200 REFEREED ARTICLES IN JOURNALS, PATENTS AND BOOKS >42,000 Citations (GS) h-index = 77 (GS)

- 1. Deep eutectic solvents (DESs) and their applications, EL Smith, AP Abbott, KS Ryder, Chemical reviews 2014, 114 (21), 11060-11082 3549 citations
- 2. Novel solvent properties of choline chloride/urea mixtures, AP Abbott, G Capper, DL Davies, RK Rasheed, V Tambyrajah, Chemical communications, 2003, 70-71 2978 citations
- 3. Deep eutectic solvents formed between choline chloride and carboxylic acids: versatile alternatives to ionic liquids. AP Abbott, D Boothby, G Capper, DL Davies, RK Rasheed, Journal of the American Chemical Society 2004, 126 (29), 9142-9147 2953 citations
- 4. Electrodeposition from ionic liquids, F Endres, A Abbott, DR MacFarlane, John Wiley & Sons 2017 1081 citations
- 5. Recycling lithium-ion batteries from electric vehicles G Harper, R Sommerville, E Kendrick, L Driscoll, P Slater, R Stolkin, ...Nature 2019, 575 (7781), 75-86 909 citations
- 6. Application of ionic liquids to the electrodeposition of metals, AP Abbott, KJ McKenzie, Physical Chemistry Chemical Physics 2006, 8 (37), 4265-4279 906 citations
- 7. Glycerol eutectics as sustainable solvent systems, AP Abbott, RC Harris, KS Ryder, C D'Agostino, LF Gladden, MD Mantle, Green Chemistry 2011, 13 (1), 82-90 688 citations
- 8. On the concept of ionicity in ionic liquids, DR MacFarlane, M Forsyth, El Izgorodina, AP Abbott, G Annat, K Fraser, Physical Chemistry Chemical Physics 2009, 11 (25), 4962-4967 669 citations
- 9. Eutectic-based ionic liquids with metal-containing anions and cations, AP Abbott, JC Barron, KS Ryder, D Wilson Chemistry–A European Journal 2007, 13 (22), 6495-6501 550 citations
- Solubility of metal oxides in deep eutectic solvents based on choline chloride AP Abbott, G Capper, DL Davies, KJ McKenzie, SU Obi Journal of Chemical & Engineering Data 2006, 51 (4), 1280-1282
 citations
- Electrodeposition of zinc-tin alloys from deep eutectic solvents based on choline chloride, AP Abbott, G Capper, KJ McKenzie, KS Ryder, Journal of Electroanalytical Chemistry 2007, 599 (2), 288-294 482 citations
- 12. Extraction of glycerol from biodiesel into a eutectic based ionic liquid, AP Abbott, PM Cullis, MJ Gibson, RC Harris, E Raven, Green Chemistry 2007, 9 (8), 868-872 441 citations
- 13. Application of hole theory to define ionic liquids by their transport properties AP Abbott, RC Harris, KS Ryder, The Journal of Physical Chemistry B 2007, 111 (18), 4910-4913 403 citations
- 14. Ionic liquid analogues formed from hydrated metal salts, AP Abbott, G Capper, DL Davies, RK Rasheed Chemistry–A European Journal 2004, 10 (15), 3769-3774 388 citations