Institute for Frontier Materials

Financial Reports and other items 2017

DEAKIN UNIVERSITY

IFM
INSTITUTE FOR FRONTIER MATERIALS

Geelong & Melbourne | Victoria | Australia

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22 Publications

22 Books

22 Book Sections

22 Journal Articles

39 Conference Papers

IFM Financial Summary 2017

Total research income by category - actual 2017 ($M)

Financial Summary - For Period Ended 31 December 2017	2017 Actual $
Income	
Research Income	13,205,446
Other Income	1,228,948
Research Allocation / University Contribution	18,731,652
Total Income	**33,166,046**
Employment costs	
Academic Salaries	15,787,525
General Salaries	6,427,441
Other Employment Costs	26,186
Contractors	3,200
Total Employment Costs	**22,244,352**
Non Salary Expenses	
Buildings and Grounds Infrastructure Costs	294,728
Communication / Advertising, Marketing and Promotions	142,481
Consumables	1,102,044
Depreciation and Amortisation	5,100,816
Equipment - Repairs, Maintenance and Other Costs	1,704,915
Other Costs	-100,563
Professional, Legal and Consultants	81,666
Staff Recruiting, Training and Other / Library Information Resource Expenses	190,146
Student Expenses	1,381,499
Travel, Catering and Entertainment	1,023,962
Total Non Salary Expenses	**10,921,694**
Surplus / Deficit	0

IFM Performance 2014-2017

HDR Student Load (Equivalent Full Time, 2014 - 2017)

2014	2015	2016	2017
144.0	143.1	143.1	139.3

HDR Student Completions (2014 - 2017)

2014	2015	2016	2017
25	30	36	50

Publications (Journal articles, 2014 - 2017)

2014	2015	2016	2017
307	260	334	319

2017 Grant Applications

Grants	Applied	Successful	% Success	Amount Awarded
Reportable - Category 1	37	12	32%	$1,026,178
Reportable - Category 2-4	60	49	82%	$4,114,162
Non-reportable - Other	8	7	88%	$266,706

The amount awarded represents the amount awarded over the total life of the project as initially communicated by the funding agency

***ACG (Austraian Competitive Research Grants - Category 1)** is the term used to describe a group of some 70 research grant schemes to which all universities can apply and where awards are based on merit of the application and the research team. The ARC and NHMRC are two of the major funding bodies included in this list.*

***Other public (Other Public Sector Research funding - Category 2)** is government funding, Federal or State, from schemes not included in the ACG group and not necessarily determined through a competitive process; it includes contract research and research-related consultancies.*

***Industry (Industry and Other Funding - Category 3)** includes all research funding from industry, international sources, donations, bequests and foundations, and Higher Degree by Research fee income for domestic and international students.*

***CRC (Category 4)** is a university's research income from Cooperative Research Centres excluding their own contribution. Note: CRC income is based on financial year results.*

Grant Holders and their Projects

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Australian Research Council				
Australian Research Council Industrial Transformation Research Hub				
Prof Xinhua Wu, Prof Peter Hodgson, Prof Christopher Davies, Dr Wenyi Yan, Dr Mark Easton, Prof Yi-Bing Cheng, A/Prof Matthew Dargusch, A/Prof Bernard Rolfe, Prof Lyndon Edwards, Mr Damien Miller, Mr Gavin Becker, Dr Emilie Herny, Dr Robert Hobbs, Dr Roger Lumley, Mr Thomas Hawkes, Mr Kevin Lee	ARC Research Hub for Transforming Australia's Manufacturing Industry through High Value Additive Manufacturing led by Monash University	2013-2018		1,321
Prof Xungai Wang, Prof Bronwyn Fox, Prof Tong Lin, Prof Russell Varley, A/Prof Joselito Razal, A/Prof Jingliang Li, A/Prof Luke Henderson, Dr Nolene Byrne, Dr Rangam Rajkhowa, Dr Alessandra Sutti, Dr Minoo Naebe, Dr Christopher Hurren, Dr Mandy De Souza, Dr Murray Height, A/Prof Mark Kirkland, Mr Ashley Denmead, Mr Salwan Al-Assafi, A/Prof Rodney Dilley, Prof Marcus Atlas, Mr Grant Mackintosh, Dr Ian Blanchonette, Dr Linda Hillbrick, Dr Tony Pierlot, Prof Gregory Rutledge, A/Prof Friedrich Vollrath, Prof David Kaplan, Prof Uwe Pieles, Dr Rudolf Hufenus, A/Prof Jeffrey Wiggins	A World Class Future Fibre Industry Transformation Research Hub	2016-2021	HeiQ Pty Ltd, Carbon Revolution Pty Ltd, Quickstep Automotive Pty Ltd, Ear Science Institute Australia Inc, Draggin Jeans Pty Ltd, CSIRO	4,745
A/Prof Wenhui Duan; Prof Sritawat Kitipornchai; Prof Aibing Yu; Prof Priyan Mendis; Prof Vute Sirivivatnanon; Prof Sujeeva Setunge; Dr Chao Chen; Prof Qipeng Guo; Prof Bijan Samali; Prof Guowei Ma; Dr David Law; Prof Chun-Qing Li; Prof Zhong Tao; Dr Rackel San Nicolas; Dr Wengui Li; Dr Kwesi Sagoe-Crentsil; Dr Warren South; Prof Tongbo Sui; Dr Phillip Arena; Prof Jannie Van Deventer; Mr Thomas Hanly; Dr Richard Yeo; Mr Brian O'Donnell; Dr Ming Zhou; Mr Nelson Hiscock; Mr Bill Martin; Dr Steve Pascoe; Mr Roland Davies; Dr Yew-Chin Koay; Mr Joel Brown; Mr Fraser Tonner; Prof Surendra Shah; Prof Chien Ming Wang; Dr Redmond Lloyd; Dr Louise Keyte; Mr William Thompson; A/Prof Claire White; Mr Stephen Darwell	ARC Research Hub for Nanoscience-based Construction Material Manufacturing, led by Monash University	2016-2021	Boral Construction Materials Ltd, CSR Building Products Ltd, Cement Concrete & Aggregates Australia; Sinoma International Engineering Co Ltd; Zeobond Research Pty Ltd; Advanced Material Group ; Fortis Adhesives & Coatings Pty Ltd; ARRB Group Ltd; Centre For Pavement Excellence Asia Pacific Ltd; Jiangsu Rongchang Group; Markham Global; AGL Loy Yang Pty Ltd; Energy Australia Pty Ltd; Adbri Masonry Pty Ltd; Roads Corporation; Airey Taylor Pty Ltd; Argos FRP Pty Ltd	5,000
Alexander Lewis-Gray, Balamurali Hebbar Majil, Tony Klein, Kuno Brautigam, Christopher Solnordal, Jeffrey Gates, Kevin Dolman, Daniel Fabijanic, Peter Hodgson, Dr Christopher Hutchinson, A/Prof Ming-Xing Zhang, Prof Matthew Barnett	ARC Training Centre in Alloy Innovation for Mining Efficiency	2017-2022	Keech Castings Aus, Gekko Systems, Weir Minerals, IXL Metal Castings, Cast Bonding Aus, Hycast Metals, Trelleborg Engineered Systems Aus, Newcrest Mining, CSIRO, Central Institute of Mining, Austmine Limited, METS Ignited Australia, Materials Solutions, Australian Foundry Institute	4,881
Prof Chun Wang; Prof Adrian Mouritz; Prof Stuart Bateman; Prof Mark Easton; Prof Milan Brandt; A/Prof Martin Leary; Prof Michael Cardew-Hall; A/Prof Paul Compston; Dr Matthew Doolan; Prof Matthew Barnett; A/Prof Bernard Rolfe; Dr Matthias Weiss; Dr Minoo Naebe; Dr Luke Henderson; Mr Richard Taube; Dr Bita Ghaffari; Dr Nia Harrison; Dr Adam Best; Dr Russell Varley; Dr Richard Evans; Mr Henry Wolfkamp; Mr Brian Hughes; Mr Carl De Koning; Mr Richard Axe; Mr Edward Albert; Mr Brian Oxley; Mr Albert Sedlmaier; Prof Anthony Kinloch; Prof Michael Wisnom; A/Prof Paul Sanders; Prof Dr Marion Merklein	ARC Training Centre in Lightweight Automotive Structures (ATLAS), led by RMIT University	2016-2021	Ford Motor Company of Australia, Australian Rollforming Manufacturers, Composite Materials Engineering, Quickstep Automotive, Capral Aluminium, MTM Pty Ltd, CSIRO, Data M Sheet Metal Solutions, Shape Corporation	3,024
Dr Simon Smart, Prof Long Nghiem, Prof Graeme Millar, Prof Shaomin Liu, A/Prof Ho Kyong Shon, Lian Zhang, A/Prof Andrew Hoadley, Prof Wei Shen, Dr Jinchun Wang, Mr Peter Bury, Mr Gregory Stephen, Mr Chaoxun Zhao, Mr Rui Zeng, Prof Weiming Zhang, Prof Menachem Elimelech, Prof Anthony Fane, Ms Meng Zhuge, Prof Bingcai Pan, Prof Shanwen Tao, Mr Michael Davies, Mr Andrew Horton, Mr Alastair Lockey, A/Prof Xiaofeng Yang, Dr Aaron Thornton, Mr Bahay Ozcakmak, Prof Lingxue Kong, Prof Joao Diniz da Costa, Prof Gregory Leslie, Dr Ludovic Dumee, Dr Hou Hongjuan, Prof Stephen R Gray, A/Prof Xiwang Zhang, Prof Huanting Wang, Prof Mikel Duke, Dr Matthew Hill	ARC Research Hub for Energy-efficient Separation	2018-2022	Led by Monash University	

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Australian Research Council Linkage Infrastructure Equipment and Facilities (LIEF)				
Prof Christopher McConville; Prof Dougal McCulloch; A/Prof Madhu Bhaskaran; A/Prof Lan Wang; A/Prof Brant Gibson; Prof Laurence Meagher; Dr Sebastian Thomas; A/Prof Joselito Razal; Dr Ludovic Dumee; Dr Luhua Li; Prof David Jamieson	Advanced Multifunctional Photoelectron Spectroscopy Platform, led by RMIT University	2018	ARC	595
Prof Gordon Wallace; Prof Peter Innis; Dr Stephen Beirne; A/Prof Jeremy Crook; Prof Xungai Wang; Prof Gerard Sutton; Prof Patrick Coates; Prof Peter Choong; A/Prof Christopher Baker	3D Additive Bio-Fabrication Facility: Printing Bioprinters, led by University of Wollongong	2018	ARC	347
Prof Guoxiu Wang; A/Prof Andrew McDonagh; Dr Bing Sun; A/Prof Rongkun Zheng; Prof Geoffrey Smith; A/Prof Kondo-Francois Aguey-Zinsou; A/Prof Jun Ma; Prof Ying Chen; Prof Michael Cortie; Prof Hua Liu; Dr Wei Kong Pang	Atomic layer nanofabrication system for multi-functional applications, led by Univ Technology Sydney	2018	ARC	425
Prof Zai Guo; Prof Roger Lewis; Dr Wei Kong Pang; Prof Jun Chen; Prof Ying Chen; Prof Guoxiu Wang; Prof Brendan Kennedy; Dr Dewei Chu; Dr Neeraj Sharma; Prof Vanessa Peterson	Thermo-gravimetric infra-red imaging system for functional materials study, led by University of Wollongong	2018	ARC	326
Prof Maria Forsyth; A/Prof Patrick Howlett; Dr Daniel Fabijanic; Prof Peter Hodgson; Prof Nick Birbilis; Dr Sebastian Thomas; Prof Dougal McCulloch; Dr James Partridge	A glow discharge optical emission spectrometer for challenging surfaces	2018	ARC	264
Prof Justin Zobel; Prof Michael Parker; Prof Andrew Ooi; Prof Richard Sandberg; A/Prof Andrew Lonie; Prof Salvy Russo; Prof Toby Allen; Prof Irene Yarovsky; Prof Tiffany Walsh; Prof John Grundy; Prof Maria Forsyth; Prof Brian Smith	A high-performance cloud resource for computational modelling, led by University of Melbourne	2017	ARC	635
Prof Paul Richard Munroe, Prof Chennupati Jagadish, Prof Paul Mulvaney, Prof Dougal McCulloch, Dr Scott Findlay, Dr Joanne Etheridge, Olga Shimoni, Dr Nagarajan Valanoor, Prof Yun Liu, A/Prof Jeffrey McCallum, A/Prof Sharath Sriram, Dr Jian-Feng Nie, Prof Leone Spiccia, Prof Michael Fuhrer, Prof Matthew Barnett	UltraTEM: To resolve the structure of matter in space, energy and time, led by Monash University	2017	ARC	1800
Australian Research Council Linkage				
Prof Peter Hodgson; Prof Nick Birbilis; A/Prof Nicole Stanford; Dr Thomas Dorin; Dr Justin Lamb; Mr John Carr; Mr Victor Dangerfield	Development of novel high performance aluminium alloys containing scandium	2016-2018	Universal Alloy Corporation, Clean TeQ Ltd	400
Dr Daniel Wilkosz, Mr Richard Taube, Henry Wolfkamp, A/Prof Bernard Rolfe, Prof Peter Hodgson, Dr Matthias Weiss	Micro-roll forming of metal bipolar plates for fuel cells	2015-2018	Australian Rollforming Manufacturers, Ford Motor Co Australia	212

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Australian Research Council Linkage - *continued*				
A/Prof Rimma Lapovok, Prof Andrey Molotnikov, Dr Christopher Davies	Innovative aluminium extrusion: increased productivity through simulation	2015-2018	Capral Ltd	285
Mr Gregory H Solomon, Dr James McInnes Middleton, Dr Will Peter Gates, Prof Frank Collins	Concrete Enriched with Carbon Nanotubes for Advanced Future Construction	2015-2017	Eden Energy Ltd	372
Prof Malek Bouazza, Dr Will Gates	Waste containment lining systems for Antarctica: Ensuring their performance under extreme conditions	2015-2017	Geofabrics Australasia	125
Prof Xungai Wang, Dr Alessandra Sutti, Dr Rangam Rajkhowa, Dr Cynthia Wong, A/Prof Mark Kirkland	Short silk nanofibre based 3D scaffolds with enhanced biomimicry	2014-2017	Cytomatrix	696
Prof Peter Hodgson, Prof Stephen Gray, Prof Lingxue Kong, A/Prof Mikel Duke, Dr Ludovic Dumee, Mr Gilbert Erskine	Functional nano-porous metal membranes for novel separations in sustainable industrial processes	2014-2017	Advanced Metallurgical Solutions Pty Ltd	550
Prof Q Ma, Prof Y Chen, Mr G Erskine, Mr C Zhang (led by RMIT)	A transformational approach to enabling the low-cost fabrication of intricate titanium components	2015-2017	Advanced Metallurgical Solutions Pty Ltd, Chongqing Dien Scientific Technology Devpt Co Ltd	420
Australian Research Council Discovery				
Prof Maria Forsyth, Dr Anthony Somers, Prof Margaret Ackland, Dr Laura Machuca Suarez, Prof Herman Terryn	Multifunctional and environmentally friendly corrosion inhibitor systems	2018-2020	ARC	392
Dr Jing Fu, Dr Ross Marceau, Dr Jian Li	Engineering approaches towards atomic imaging of bacterial cells, led by Monash University	2018-2020	ARC	392
Prof Simon Moulton, Dr George Greene; Prof Robert Kapsa, Dr Anita Quigley	Ultra-low fouling active surfaces, led by Swinburne University	2018-2020	ARC	618
Prof Tiffany Walsh; A/Prof Luke Henderson; Prof Russell Varley	Interfacial Design for High Performance Carbon Fibre Polymer Composites	2018-2020	ARC	211
Prof Tong Lin, Dr Jian Fang	Microstructure Effect on Energy Harvesting Ability of Electrospun Fibres	2018-2020	ARC	342

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Australian Research Council Discovery - *continued*				
Prof Peter Hodgson, A/Prof Nicole Stanford, Dr Ross Marceau	Cluster hardening of metastable steel alloys produced by thin strip casting	2015-2018	ARC	333
Prof Michel Armand, Dr Alexey Glushenkov, A/Prof Patrick Howlett, Prof Maria Forsyth	Advanced Na battery technology; key to transforming society's energy use	2015-2018	ARC	621
Dr Laurence Aldridge, A/Prof Daniel Pickard, Dr Kapila Fernando, Prof Frank Collins, Dr Will Gates	Cementitious Gel: The Missing Link in Understanding the Ageing of Built Infrastructure	2015-2017	ARC	340
Dr Ilana Timokhina, Prof Peter Hodgson, Prof Michael Miller	A new approach to advanced steels via cluster and precipitate strengthening	2015-2017	ARC	325
Prof Ying Chen, A/Prof Chunyi	Porous nanosheets	2015-2017	ARC	325
Dr Hongxia Wang, Dr Yan Zhao, Prof Gregory Rutledge	Water-phase Assembly of Durable, Superamphiphobic, Self-cleaning Surfaces	2015-2017	ARC	238
Dr Christopher Hutchinson, Prof Matthew Barnett, Prof Alexis Deschamps	A new paradigm for creating fatigue-resistant light metals- Monash University	2015-2018	ARC	120
A/Prof Jenny Pringle, Adj/Prof Anthony Hollenkamp, Prof Peter Bruce	Increasing solid electrolyte conductivity through defect design	2017-2019	ARC	322
A/Prof Joselito Razal, Dr Maryam Naebe, Prof Xungai Wang	Understanding the true potential and limitations of novel fibres	2017-2019	ARC	278
Australian Research Council Discovery Early Career Researcher Awards				
Dr Dan Liu	Novel Three Dimensional Porous Boron Nitride Foam for Water Cleaning	2015-2017	ARC	340
Dr Luhua Li	Superior Adsorption Capability of Nanosheets for Surface Enhanced Raman	2016-2018	ARC	379
Dr Ludovic Dumee, Prof Peter Hodgson	2D nanoporous membranes	2018-2021	ARC	371
Australian Research Council Future Fellowship				
A/Prof Joselito Razal	Spinning nanosheets for versatile applications	2014-2017	ARC	749
A/Prof Jingliang Li	Supramolecular assembly of chromophores: the effects of nucleation kinetics on their molecular packing, fibre structure and light harvesting efficiency	2014-2017	ARC	692
Australian Research Council Centre of Excellence				
Prof. G.G. Wallace, Prof. G. Spinks, Prof. S. Dodds, Prof. M. Forsyth, Prof. D. R. MacFarlane, Prof. M. Cook, Prof. D. Officer, Prof. S. Moulton, Prof. G. Alici, Prof. M. in het Panhuis, A/Prof. P. Innis, A/Prof. J. M. Crook, Prof. M. Coote, A/Prof. M. Higgins, A/Prof. A. Mozer, Prof. R. Kapsa, Prof. L. Hancock, Prof. L. Spiccia, A/Prof. J. Pringle, Zhang, A/Prof. P. Howlett, Prof. X. Wang, Prof. B. Paull, Prof. R. Sparrow, Dr. J. Zhang	ARC Centre of Excellence for Electromaterials Science, led by University of Wollongong	2014-2020	ARC	4,537
Other Commonwealth Funding				
CSIRO				
Prof Lingxue Kong	CSIRO Postgraduate Scholarships - Manufacturing - Aref Daneshfar	2016-2019	CSIRO	51
Prof Lingxue Kong, Dr Lijue Chen	In vitro and in vivo examination of gold nanoparticles RAFTed with polymers for cancer therapy	2017-2021	CSIRO Grant	50
Prof Matthew Barnett, Mr Tao Zhang	Exploring the additive manufacturing	2017-2020	CSIRO Scholarship	60
A/Prof Patrick Howlett	Lithium air electrolytes	2017-2020	CSIRO Grant	30
Department of Economic Development, Jobs, Transport and Resources				
Dr Jinfeng Wang, Dr Jing Wang, A/Prof Joselito Razal	Development of photocatalyst modified filter for solar-induced direct air pollution degradation	2017-2019	Victoria-Jiangsu Technology and Innovation Grant	139

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Defence Science & Technology Organisation (DSTO)				
Prof Maria Forsyth, Dr Grant McAdam, Neil Wayne, Dr Anthony Somers	Multifunctional inhibitors for mitigation of microbiologically influenced corrosion	2017-2019	DSTO	320
A/Prof Rimma Lapovok, Dr Ilana Timokhina	Recycling of Titanium-machined swarf to form high quality powder for additive manufacturing	2017	DSTO	19
Dr Ilana Timokhina	Literature Survey Fatigue study of small crack growth in Ti-6Al-4V	2017	DSTO	6
Dr Daniel Fabijanic, Dr Ilana Timokhina, A/Prof Rimma Lapovok	Recycling of Titanium-machined swarf to form high quality powder for additive manufacturing - MyIP7902	2017-2018	DSTO	31
Dr Sitarama Kada, Dr Peter Lynch	X-Ray Line Profile Characterisation and Prediction of Microstructural Damage in Aerospace Materials Applications	2017-2018	DSTO	13
A/Prof R Lapovok, Dr Ilana Timokhina	New Energy-Saving Method of Swarf Upcycling into Titanium Alloys with Enhanced Properties	2016-2017	DSTO	30
Dr Peter Lynch, Dr Sitarama Kada	Scoping study for optimal experimental setup and determining microstructural deformation from damaged Aluminium specimen using X-ray diffraction methods	2016-2017	DSTO	9
Dr Grant McAdam, Neil Wayne, Prof Maria Forsyth, Mr Anthony Somers	Development and understanding of multi-functional corrosion inhibitor systems for high strength steels in sea water	2016-2017	DSTO	95
Other Commonwealth Funding				
Prof Peter Hodgson	Manufacture of a small aero-engine entirely through additive manufacturing	2013-2017	Science and Industry Endowment Fund (SIEF)	600

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Other Commonwealth Funding - *continued*				
Ms Seyedeh Azam Oroumei	Development of low-cost and high performance carbon fibre	2017	Dept Education and Training Endeavour Research Fellowship	18
Dr Haijin Zhu	Novel poly(ionic liquid)/plastic crystal composites as an alternative approach for anhydrous proton conductors	2017	Dept Education and Training Endeavour Research Fellowship	24
Dr Daniel Fabijanic	Towards the optimisation of a novel titanium surface modification process - phase II	2017-2018	Dept of Industry, Innovation and Science Global Innovation Linkages program	49
Prof Lingxue Kong, Dr Ludovic Dumee, Dr Mary She	Development of robust and cost effective super hydrophobic surfaces for PP fabrics	2016-2017	Dept of Industry, Innovation and Science	100
Prof Russell Varley	Development of an Improved Polymer Roller Shell	2017	Dept Industry Innovation and Science	
Prof Ying (Ian) Chen, A/Prof Patrick Howlett, Prof Douglas MacFarlane, Prof Maria Forsyth	New materials for large scale, high stability, high energy density batteries: from material design to prototype development	2016-2019	Australia India Strategic Research Foundation	1
A/Prof R. Lapovok, Dr I. Timokhina, Dr J. Wang	Enhanced properties of TWIP steels by asymmetric rolling	2016-2018	Universities Australia/ German Academic Exchange Service (DAAD)	24
Australian Institute of Nuclear Science and Engineering (AINSE)				
Dr Ludovic Dumee, Mr Francois-Marie Jacques Allioux	AINSE International Conference Travel Scholarship Application (Francois-Marie Allioux)	2017	AINSE International Conference Travel Scholarship	1
Dr Ludovic Dumee, Mr James Wainaina Maina	AINSE International Conference Travel Scholarship (James Maina)	2017	AINSE International Conference Travel Scholarship	1
Dr Ludovic Dumee, Mr Francois-Marie Jacques Allioux, Prof Peter Hodgson	Revealing nanoscale interactions and electro-migration mechanisms during desalination by electro-dialysis in mixed solvents by SANS	2015-2017	AINSE Grant - postgraduate research award	22

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Australian Institute of Nuclear Science and Engineering (AINSE) - *continued*				
Dr Thomas Dorin	Understanding the co-precipitation mechanisms of Al3(Sc,Zr) with Li-containing phases in Al-Cu-Li model alloys	2017-2020	AINSE Grant - postgraduate research award	8
Dr Ludovic Dumee, Mr James Maina	Inorganic nanoparticles/metal organic frameworks hybrid membrane reactors for simultaneous separation and conversion of CO2	2016-2018	AINSE Grant - postgraduate research award	22
Industry and Other Funding				
Dr Alessandra Sutti, Dr Paul Collins	HeiQ Australia Research Program 2014/15	2015-2019	HeiQ Australia Pty Ltd	1,833
Dr Jin Zhang, Dr Christopher Hurren, Prof Xungai Wang	Smart cotton/carbon fabrics for electromagnetic interference shielding	2015-2018	Cotton Research and Development Corporation	358
Prof Xungai Wang	Novel spinning technologies for fine and high quality Australian cotton yarns	2014-2017	Cotton Research and Development Corporation	814
A/Prof Olga Troynikov, Dr Ron Denning, Prof Xungai Wang, Dr Maryam Naebe	Breathable cotton for compression athletic wear	2015-2017	Cotton Research and Development Corporation	332
Dr Xin Liu, Dr Yan Zhao	Novel anti-wetting and self-sterilising cotton fabrics	2014-2017	Cotton Research and Development Corporation	299
Dr Nolene Byrne, A/Prof Joselito Razal, Prof Xungai Wang	Identifying technical benefits in producing regenerated cellulose fibres from cotton for carbon fibre production (phase II)	2017-2018	Cotton Research and Development Corporation	152
Dr Stuart Gordon, Dr Rangam Rajkhowa	An eco-friendly treatment to improve look and handle of cotton fabric	2016-2018	Cotton Research and Development Corporation	222
Dr Emma Prime, Prof David Solomon, A/Prof Jason Monty, Prof Alexander Babanin, Prof Greg Qiao	Development of next generation evaporation mitigation technology with increased resistance to wind	2017-2018	Cotton Research and Development Corporation	6

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Industry and Other Funding - *continued*				
Prof Lingxue Kong, Dr Mary She, Prof Frank Collins	Transforming carpet waste into a commercial admixture for concrete	2016-2017	GT Recycling	99
Dr Alessandra Sutti	Production of short fibres from melt and process modelling - Martina Di Venere	2016-2020	HeiQ Australia Pty Ltd	9
Prof Jeong Yoon	Thermo-mechanical deformation model for hot rolling process (Phase-I)	2016-2017	Hyundai	68
Dr Jinfeng Wang, Dr Jing Wang	Body odour intensity of wool/polyester blends	2017	Australian Wool Innovation Ltd	100
Prof Matthew Barnett, Dr Daniel Fabijanic, Mr Gourab Saha	A method for developing steels for wear resistance in ground engaging applications	2013-2019	Keech Australia Pty Ltd student project	80
Prof Russell Varley, Mr Vishnu Unnikrishnan	Polymer Composite Forming Technology	2017	Defence Materials Technology Centre	71
Dr Minoo Naebe, Dr Daniel Fabijanic	High curvature armour systems	2016-2017	Defence Materials Technology Centre	289
Dr Minoo Naebe	D4 forming and testing	2017	Defence Materials Technology Centre	47
Dr Minoo Naebe	Hybrid composite materials and structures	2017-2020	Defence Materials Technology Centre	267
Dr Christopher Hurren	Planet Innovation	2016-2017	Defence Materials Technology Centre	193
Dr Minoo Naebe, Prof Bronwyn Fox	High barrier and strength polyethylene nanocomposites	2014-2018	Qenos	200
A/Prof Luke Henderson	Synthesis of tethered catalysts	2017	Cytec Engineered Materials Ltd	55
Dr Christopher Hurren	Shift gear clothing development project	2016-2017	Shift Gear Industries	22
Dr Christopher Hurren, Dr Liz de Rome, Dr Xin Liu, Prof Tom Gibson	Trial phase testing for motorcycle protective clothing program	2017-2018	Transport for NSW	511
Prof Xungai Wang, Dr Christopher Hurren	Improvements in the dyeing of wool top to Superblack colours	2017-2019	Australian Wool Innovation Scholarship	66

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Industry and Other Funding - *continued*				
Dr Minoo Naebe	Nano-enhanced polyethylene based carbon fibre - Jarret Grout	2015-2019	Imagine Intelligent Materials Pty Ltd	18
Dr Minoo Naebe	Nano-enhanced polyethylene based carbon fibre - Jarret Grout	2015-2019	Qenos	18
Dr Nolene Byrne	Utilisation of textile waste towards new product development	2016-2018	Perkin Elmer	15
Mr Ivi Cicak, Prof Mike Yongjun Tan	Pipeline coating testing and assessment	2016-2017	QIC Protective Coatings	5
Mr Ivi Cicak, Prof Mike Yongjun Tan	Pipeline coating testing and assessment	2016-2017	Atteris	9
Dr Daniel Fabijanic	Towards the optimisation of a novel titanium surface modification process	2017-2018	Callidus Welding Solutions	49
Dr Matthias Weiss	Experimental analysis for Studco Building Systems	2016-2017	Studco Australia Pty Ltd	5
Dr Matthias Weiss	Preliminary analysis of critical material deformation in Futuris lightweight seat frame sections exposed to the pullback test	2017	Futuris Automotie Interiors (Australia) Pty Ltd	6
Dr Jian Fang	High performance elastic fibres	2016-2017	Australian Academy of Technology and Engineering - Global Connections Fund Priming Grant	7
Dr Rangam Rajkhowa	Exploring new products combining Australian animal fibres and Eri silk	2016-2017	Australian Academy of Technology and Engineering - Global Connections Fund Priming Grant	7
Dr Rangam Rajkhowa, Prof Jagat Kanwar	Advanced wound healing protein powder	2017-2018	Australian Academy of Technology and Engineering - Global Connections Fund	49
Prof Xungai Wang, Mr Saeed Dadvar	3D Print Layering - internship	2017	Tec.fit Pty Ltd	23

Grant Holders and their Projects - *continued*

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Industry and Other Funding - *continued*				
Dr Christopher Hurren, Dr Liz de Rome, Dr Jin Zhang	Recycled plastic composite overlay to reduce serious injury crashes into wire rope barriers by motorcyclists	2017-2018	Transurban	100
Mr Ivica Cicak	Pipeline coating testing and assessment	2017	APT Management Services Pty Ltd	17
A/Prof Patrick Howlett, Dr Daniel Fabijanic	Development of improved coatings on wire	2017	OneSteel Wire Pty Ltd	86
Dr Wren Greene, Dr Xiaoen Wang	Plastic crystal assisted sintering of porous plastic	2017-2018	Thermopore Materials Corporation	12
Mr Vishal Pandya, Prof Tiffany Walsh	Investigation of membrane-mediated structures relevant to the Factor X-ase complex via molecular simulations	2017-2021	CSL Ltd	25
Dr Ludovic Dumee	Shade cloth testing and evaluation	2017	Gale Pacific Ltd	15
Dr Ludovic Dumee, Dr Timothy Khoo	Pore size measurements and characterisation of acrylic beads	2017	Ixom Pty Ltd	8
Dr Ludovic Dumee	Landmark scrim evaluation	2017	Gale Pacific Ltd	3
Dr Christopher Hurren, Dr Jane Dai, Dr Frank Chen	Development of plasma treatment process for Zhik high performance garments - Phase II	2017	Zhik Pty Ltd	99
A/Prof Joselito Razal, Dr Shayan Seyedin	Graphene based composite fibres and fabric prototypes	2017	Imagine Intelligent Materials Pty Ltd	36
Dr Thomas Dorin	Aluminium alloy development for aeronautical applications	2017	Universal Alloy Corporation	50
Dr Thomas Dorin	Understanding the repartition of Sc in Al-Si-Sc alloys with increased Si content	2017	Clean Teq	21
Dr Thomas Dorin	Understanding the precipitation kinetics of the nanometre size Al3(Sc,Zr) particles with core/shell structure	2017-2021	Clean Teq Scholarship	70

Team	Project Title	Years	Industry Partner / Funding Body	Total Awarded ($AU ,000)
Industry and Other Funding - *continued*				
Dr Will Gates, Miss Jacqui Sandilands	Audit of testing practices & results. Prepare report for relevant regulatory agencies	2017	Geofabrics Australasia Pty Ltd	15
Prof Russell Varley	Development of an Improved Polymer Roller Shell	2017-2018	Conveyor Products and Solutions	46
Dr Elizabeth de Rome, Dr Christopher Hurren	An epidemiological study of motorcycle crashes in Tasmania	2017	Motor Accidents Insurance Board	38
Cooperative Research Centres				
Dr Nolene Byrne	ENA injecting renewable gas into gas distribution networks	2016-2017	Energy Pipelines CRC	6
Dr Nolene Byrne, A/Prof Tim Hilditch	Cracking in PE and other polymer pipes	2017-2019	Energy Pipelines CRC	164
Prof Mike Yongjun Tan	Predicting pipeline failure through corrosion modelling	2015-2018	Energy Pipelines CRC	114
Prof Mike Yongjun Tan	Interaction between onshore and offshore pipeline cathodic protection systems at shoreline crossings	2016-2017	Energy Pipelines CRC	60
Prof Mike Yongjun Tan	Pipeline condition monitoring sensors	2015-2018	Energy Pipelines CRC	489
Prof Mike Yongyun Tan	Cathodic shielding and corrosion under disbonded coatings	2015-2018	Energy Pipelines CRC	318
Prof Mike Yongyun Tan	Methods for assessing coating integrity and CP efficiency under complex pipeline conditions	2015-2018	Energy Pipelines CRC	308
Prof Mike Yongjun Tan, Mr Ivi Cicak	High voltage testing of dual layer FBE	2017-2018	Energy Pipelines CRC	115
Dr Claudia Creighton, Dr Mandy De Souza, Prof Russell Varley	Improved design of a composite front seat back for higher production at lower cost	2016-2017	AutoCRC Ltd	279

TEAM	PROJECT TITLE	YEARS	INDUSTRY PARTNER / FUNDING BODY	TOTAL AWARDED (,000)
International Funding				
A/Prof Bernard Rolfe, Dr Matthias Weiss	Low volume production of longitudinal components by combining flexible roll forming and free forming	2016-2018	Ford USA	150USD
Dr Minoo Naebe	Development of a cost model for production of carbon fibre	2017-2020	Ford USA	150USD
Dr Ilana Timokhina, Prof Lingxue Kong, Dr Hossein Beladi, Prof Peter Hodgson	Cluster strengthened steels	2016-2018	Wuhan Iron and Steel (Group) Corporation	1369 CNY
Dr Matthias Weiss, A/Prof Bernard Rolfe, Prof Lingxue Kong, Prof Peter Hodgson	Flexible roll forming of WISCO high strength steels	2016-2018	Wuhan Iron and Steel (Group) Corporation	1076 CNY
Prof Tiffany Walsh	Bio-nanocombinatorics to achieve precisely-assembled multicomponent, functional hybrid nanomaterials	2012-2017	US Air Force Office of Scientific Research	527USD
Prof Tiffany Walsh	Integration of experiment and modelling to advance biosensor design based on conformational switching of surface-adsorbed nucleic acids	2016-2018	Air Force Office of Scientific Research	100USD
A/Prof Rimma Lapovok	Shear induced solid-state joining of dissimilar titanium alloys	2016-2018	US Air Force Office of Scientific Research	109USD
Dr Luke Henderson	Small diameter PAN-based carbon fibre	2016-2017	US Air Force Office of Scientific Research	461USD
Prof Qipeng Guo	Nanotoughened Benzoxazine Resins and High Performance Composites	2015-2019	Sichuan SZD New Materials Co. Ltd	250AUD
Dr Ludovic Dumee, Mr Andrea Merenda	Design of iso-porous titania doped membranes with nano-scale pores for waste remediation	2017	Embassy of France	3AUD
Prof Tong Lin	Industrial scale nanofibre production system	2015-2020	Yuntong Nanomaterials Technology Co. Ltd	500AUD

TEAM	PROJECT TITLE	YEARS	INDUSTRY PARTNER / FUNDING BODY	TOTAL AWARDED (,000)
International Funding - *continued*				
Prof Tong Lin, Dr Haitao Niu, Dr Hongxia Wang	Nanofibre face mask production line	2015-2017	Shandong Dongwo Carpet	1230AUD
Prof Lingxue Kong, Dr Ludovic Dumee, Dr Fenghua She, Dr Zhifeng Yi	Improvement on quality of reflecting coating on car lamp reflector	2017-2018	Seeyao Electronics Co. Ltd	200AUD
A/Prof Patrick Howlett, Dr Timothy Khoo	Development of a single ion conducting polymer electrolyte for low temperature	2015-2017	LG Chem Ltd	40AUD
Mr Xi Lu, Dr Jinfeng Wang, Prof Xungai Wang, Dr Jing Wang	Modifying photocatalyst on porous support for odour treatment application	2016-2019	Jiangsu BOHN Environmental Protection Science and Tech Company	45AUD
Prof Xungai Wang, Dr Jing Wang, Dr Jinfeng Wang	Development of graphene/TiO2 modified metal foam for industrial odour control	2016-2017	Jiangsu BOHN Environmental Protection Science and Tech Company	105AUD
Prof Xungai Wang Dr Christopher Hurren Dr Rangam Rajkhowa Dr Joselito Razal	Fibre deconstruction polymer addition material reassembly and applications	2016-2018	Lincoln Agritech Ltd	675NZD
Prof Colin Barrow, Prof Xungai Wang, Dr Rangam Rajkhowa	Functional wool powder with Indian Sandal wood oil and ultrafine sandalwood powder for skin care applications	2016-2017	TFS Corporation	135AUD
Dr Peter Lynch, Dr Claudia Creighton, Dr Minoo Naebe	Next generation fibres program: X-ray scattering characterisation	2017	The Boeing Company	50USD
Prof Jeong Yoon	Generic Project with LG Electronics in the ICIM	2016-2019	LG Electronics	50USD
Prof Jeong Yoon	Membership fee for GM participation in the ICM	2015-2018	General Motors Holdings LLC	150USD
Prof Jeong Yoon	Generic project in the ICIM	2015-2018	POSCO	150USD
Prof Jeong Yoon	Generic Project with SungWoo HiTech (Tier-2) in the ICIM	2015-2018	Sungwoo Hitech	60USD

TEAM	PROJECT TITLE	YEARS	INDUSTRY PARTNER / FUNDING BODY	TOTAL AWARDED (,000)
International Funding - *continued*				
Prof Lingxue Kong	Lightweight electrotransmission system for electric vehicles	2017	Hefei University of Technology	300CNY
A/Prof Luke Henderson, Prof Tiffany Walsh, Prof Russell Varley	Optimization of Carbon Fiber Surfaces for Advanced Composites	2017-2020	Office of Naval Research, USA	449USD
Prof Xungai Wang, Dr Rangam Rajkhowa, Dr Rebecca Van Amber, Dr Nolene Byrne, Dr Christopher Hurren	Circular Denim	2017-2018	H&M Foundation	150EUR
Dr Hong Wang, Prof Tong Lin, Dr Haitao Niu	Continuous Electrospinning of Nanofibres	2017	Nantong Xinau Technology	20AUD
A/Prof Patrick Howlett, Dr Xiaoen Wang, Dr George Greene	Design of high ion conductivity in polymer/OIPC composite through understanding the effect of chemistry on structure and ion dynamics at polymer/ OIPC interfaces	2017-2018	US Army Research Office	96USD

Publications

Books

1. MacFarlane, D; Mega Kar, Pringle, J; Fundamentals of Ionic Liquids: From Chemistry to Applications, Wiley, 2017, ISBN: 978-3-527-33999-0.

2. Lin, T; Fang, J (2017), Fundamentals of electrospinning and electrospun nanofibers, PP. 1-237, DEStech Publications.

Book Sections

1. Estrin, Y; Lapovok, R; Medvedev, A.E; Kasper, C; Ivanova, E; Lowe, T.C (2017) Mechanical performance and cell response of pure titanium with ultrafine grained structure produced by severe plastic deformation. In *'Titanium for Medical and Dental Applications'* (in print)

2. O'Dell, L.A. (2017), Ultra-wideline solid-state NMR: Developments and Applications of the WCPMG experiment, In *Modern Magnetic Resonance*, G.A. Webb (ed.), Springer International Publishing.

3. Pereloma, E; Timokhina, I (2017) Bake Hardening Behaviour of High Strength Steels. In *Automotive Steels, Design, Metallurgy, Processing, Application,* Woodhead Publishing: Cambridge, 259-289.

4. Vahidgolpayegani, A; Wen, C; Hodgson, P; Li, Y (2017), Production methods and characterization of porous Mg and Mg alloys for biomedical applications. In *Metallic foam bone: processing, modification and characterization and properties,* Wen C (ed), Woodhead Publishing: Cambridge, 25-82.

5. Zdraveva, E; Fang, J; Mijovic, B; Lin, T (2017), Electrospun nanofibers, in Bhat G, Structure and properties of high-performance fibers, Woodhead Publishing: Cambridge, 267-300.

Journal Articles

1. Abbas, A; Zhao, Y; Ali, U; Lin, T (2017), Improving heat-retaining property of cotton fabrics through surface coatings, Journal of the Textile Institute, Vol. 108, No. 10, PP. 1808-1814.

2. Abedi, H.R; Zarei Hanzaki, A; Haghdadi, N; Hodgson, P.D (2017), Substructure induced twinning in low density steel. Scripta Materialia, Vol 128, PP. 69-73.

3. Abeyrathna, B; Rolfe, B; Hodgson, P; Weiss, M (2017), Local deformation in roll forming, International Journal of Advanced Manufacturing Technology, Vol. 88, NO. 9-12, PP. 2405-2415.

4. Abeyrathna, B; Rolfe, B; Weiss, M (2017), The effect of process and geometric parameters on longitudinal edge strain and product defects in cold roll forming, International Journal of Advanced Manufacturing Technology, Vol. 92, NO. 1-4, PP. 743-754.

5. Abolhasani, M; Shirvani Moghaddam, K; Naebe, M (2017), PVDF/graphene composite nanofibers with enhanced piezoelectric performance for development of robust nanogenerators, Composites Science and Technology, Vol. 138, PP. 49-56.

6. Abvabi, A; Mendiguren, J; Kupke, A; Rolfe, B; Weiss, M (2017), Evolution of elastic modulus in roll forming, International Journal of Material Forming, Vol. 10, NO. 3, PP. 463-471.

7. Adineh, V; Marceau, R; Chen, Y; Si, K; Velkov, T; Cheng, W; Li, J; Fu, J (2017), Pulsed-voltage atom probe tomography of low conductivity and insulator materials by application of ultrathin metallic coating on nanoscale specimen geometry, Ultramicroscopy, Vol. 181, PP. 150-159.

8. Akbari, M; Shirvani Moghaddam, K; Hai, Z; Zhuiykov, S; Khayyam, H (2017), Al-TiB2 micro/nanocomposites: particle capture investigations, strengthening mechanisms and mathematical modelling of mechanical properties, Materials Science and Engineering: A, Vol. 682, PP. 98-106.

9. Al Shamaileh, H; Wang, T; Xiang, D; Yin, W; Tran, P; Barrero, R; Zhang, P-Z; Li, Y; Kong, L; Liu, K; Zhou, S-F; Hou, Y; Shigdar, S; Duan, W (2017), Aptamer-mediated survivin RNAi enables 5-fluorouracil to eliminate colorectal cancer stem cells, Scientific Reports, Vol. 7, NO. 1, PP. 1-9.

10. Al-Attabi, R; Dumee, L; Kong, L; Schutz, J; Morsi, Y (2017), High efficiency poly(acrylonitrile) electrospun nanofiber membranes for airborne nanomaterials filtration, Advanced Engineering Materials, PP. 1-10.

11. Albanese, B; Gibson, T; Whyte, T; Meredith, L; Savino, G; de Rome, L; Baldock, M; Fitzharris, M; Brown, J (2017), Energy attenuation performance of impact protection worn by motorcyclists in real-world crashes, Traffic Injury Prevention, Vol. 18, NO. S1, PP. S116-S121.

12. Ali, U; Niu, H; Aslam, S; Jabbar, A; Rajput, A; Lin, T (2017), Needleless electrospinning using sprocket wheel disk spinneret, Journal of Materials Science, Vol. 52, NO. 12, PP. 7567-7577.

13. Allardyce, B; Rajkhowa, R; Dilley, R; Redmond, S; Atlas, M; Wang, X (2017), Glycerol-plasticised silk membranes made using formic acid are ductile, transparent and degradation-resistant, Materials Science and Engineering: C, Vol. 80, PP. 165-173.

14. Allioux, F-M; David, O; Etxeberria Benavides, M; Kong, L; Pacheco Tanaka, D; Dumee, L (2017), Preparation of porous stainless steel hollow-fibers through multi-modal particle size sintering towards pore engineering, Membranes, Vol. 7, NO. 3, PP. 1-15.

15. Allioux, F-M; Garvey, C; Rehm, C; Tardy, B; Dagastine, R; Hodgson, P; Kong, L; Dumee, L (2017), Insights into free volume variations across ion-exchange membranes upon mixed solvents uptake by small and ultrasmall angle neutron scattering, ACS Applied Materials & Interfaces, Vol. 9, NO. 10, PP. 8704-8713.

16. Allioux, F-M; Holland, B; Kong, L; Dumee, L (2017), Electro-catalytic biodiesel production from canola oil in methanolic and ethanolic solutions with low-cost stainless steel and hybrid ion-exchange resin grafted electrodes, Frontiers in Materials, Vol. 4, PP. 1-10.

17. Ambujakshan, A; Sadek, A; Magniez, K; Mateti, S; Mayes, E; Devi, G; Pringle, J; Plessis, J; Chen, Z; Corr, C; Hodgson, P; Dai, X (2017), Plasma treated water – a promising electrolyte to produce nanoporous titanium dioxide nanotubes, Plasma Processes and Polymers, Vol. 14, NO. 9, PP. 1-7.

18. Ambujakshan, A.; Pringle, J.M; Corr, C.S; Chen, Z; Du Plessis, J; Hodgson, P.D; Dai, X.J (2017) Superior performance of plasma treated water as an anodizing electrolyte for producing nanoporous titanium dioxide nanotubes. Plasma Processes and Polymers, Vol. 14, NO. 12, doi.10.1002.

19. Askari-Paykani, M; Shahverdi, H; Miresmaeili, R; Beladi, H (2017), Analysis of tensile deformation behavior of AM2B® advanced high-strength steel using electron back-scattered diffraction technique, Materials Characterization, Vol. 130, PP. 64-73.

20. Badr, O; Rolfe, B; Zhang, P; Weiss, M (2017), Applying a new constitutive model to analyse the springback behaviour of titanium in bending and roll forming, International Journal of Mechanical Sciences, Vol. 128-129, PP. 389-400.

21. Balcytis, A; Ryu, M; Wang, X; Novelli, F; Seniutinas, G; Du, S; Wang, X; Li, J; Davis, J; Appadoo, D; Morikawa, J; Juodkazis, S (2017), Silk: optical properties over 12.6 octaves THz-IR-visible-UV range, Materials, Vol. 10, NO. 4, PP. 1-15.

22. Barnett, M; Capek, J; Mathis, K; Clausen, B (2017), Dependence of twinned volume fraction on loading mode and Schmid factor in randomly textured magnesium, Acta Materialia, Vol. 130, PP. 319-328.

23. Basile, A; Makhlooghiazad, F; Yunis, R; Macfarlane, D; Forsyth, M; Howlett, P (2017), Extensive sodium metal plating and stripping in a highly concentrated inorganic-organic ionic liquid electrolyte through surface pretreatment, ChemElectroChem, Vol. 4, NO. 5, PP. 986-991.

24. Basile, A; Makhlooghiazad, F; Yunis, R; MacFarlane, D; Forsyth, M; Howlett, P (2017), Extensive Sodium Metal Plating and Stripping in a Highly Concentrated Inorganic–Organic Ionic Liquid Electrolyte through Surface Pretreatment, ChemElectroChem, Vol. 4, NO. 5, P. 976.

25. Beggs, K; Randall, J; Servinis, L; Krajewski, A; Denning, R; Henderson, L (2017), Increasing the resistivity and IFSS of unsized carbon fibre by covalent surface modification, Reactive and Functional Polymers, PP. 1-6.

26. Begic S., Jonsson, E., Chen, F. and Forsyth, M. (2017) Molecular Dynamics Simulations of Pyrrolidinium and Imidazolium Ionic Liquids at Graphene Interfaces, Phys. Chem. Chem. Phys., 19, 30010-30020

27. Beladi, H; Cizek, P; Taylor, A; Rohrer, G; Hodgson, P (2017), Static softening in a Ni-30Fe austenitic model alloy after hot deformation: microstructure and texture evolution, Metallurgical and Materials Transactions A, Vol. 48A, NO. 2, PP. 855-867.

28. Beladi, H; Rohrer, G (2017), The role of thermomechanical routes on the distribution of grain boundary and interface plane orientations in transformed microstructures, Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, Vol. 48, NO. 6, PP. 2781-2790.

29. Beladi, H; Tari, V; Timokhina, I; Cizek, P; Rohrer, G; Rollett, A; Hodgson, P (2017), On the crystallographic characteristics of nanobainitic steel, Acta Materialia, Vol. 127, PP. 426-437.

30. Benamu, M; Lacava, M; Garci¬a, L; Santana, M; Fang, J; Wang, X; Blamires, S (2017), Nanostructural and mechanical property changes to spider silk as a consequence of insecticide exposure, Chemosphere, Vol. 181, PP. 241-249.

31. Bevacqua, A; Medvedev, A; Molotnikov, A; Axe, R; Lapovok, R (2017), Possibility to predict extrusion die incidental fracture by finite element simulation, Advanced Engineering Materials, Vol. 19, NO. 3, PP. 1-8.

32. Bhuiyan, M; Li, L; Wang, J; Hodgson, P; Chen, Y (2017), Interfacial reactions between titanium and boron nitride nanotubes, Scripta Materialia, Vol. 127, PP. 108-112.

33. Bouazza, A; Ali, M; Gates, W; Rowe, R (2017), New insight on geosynthetic clay liner hydration: the key role of subsoils mineralogy, Geosynthetics International, Vol. 24, NO. 2, PP. 139-150.

34. Bouazza, A; Ali, M; Rowe, R; Gates, W; El-Zein, A (2017), Heat mitigation in geosynthetic composite liners exposed to elevated temperatures, Geotextiles and Geomembranes, Vol. 45, NO. 5, PP. 406-417.

35. Brinkmann, A; O'Dell, L.A. (2017), Optimisation of excitation schemes for 14N overtone MAS NMR using numerically exact simulations, Solid State Nuclear Magnetic Resonance, Vol. 84, PP. 34-40.

36. Brokenshire, R; Somers, A; Chen, M; Torriero, A (2017), Patterned copper sulfide thin films: a method for studying leaching behaviour, Australian Journal of Chemistry, Vol. 70, NO. 1, PP. 26-32.

37. Cai, G; Xu, Z; Tang, B; Wang, X (2017), Water and dye-free coloration of wool, Fibers and Polymers, Vol. 18, NO. 1, PP. 102-109, The Korean Fiber Society.

38. Cai, G; Xu, Z; Yang, M; Tang, B; Wang, X (2017), Functionalization of cotton fabrics through thermal reduction of graphene oxide, Applied Surface Science, Vol. 393, PP. 441-448.

39. Cai, G; Yang, M; Xu, Z; Liu, J; Tang, B; Wang, X (2017), Flexible and wearable strain sensing fabrics, Chemical Engineering Journal, Vol. 325, PP. 396-403.

40. Cai, J; Niu, H; Yu, Y; Xiong, H; Lin, T (2017), Effect of solvent treatment on morphology, crystallinity and tensile properties of cellulose acetate nanofiber mats, Journal of the Textile Institute, Vol. 108, NO. 4, PP. 555-561.

41. Cai, Q; Scullion, D; Falin, A; Watanabe, K; Taniguchi, T; Chen, Y; Santos, E; Li, L (2017), Raman signature and phonon dispersion of atomically thin boron nitride, Nanoscale, Vol. 9, NO. 9, PP. 3059-3067.

42. Casado, N; Hilder, M; Pozo-Gonzalo, C; Forsyth, M; Mecerreyes, D (2017), Electrochemical behavior of PEDOT/Lignin in ionic liquid electrolytes: suitable cathode/electrolyte system for sodium batteries, ChemSusChem, Vol. 10, NO. 8, PP. 1783-1791.

43. Castanet, E; Thamish, M; Hameed, N; Krajewski, A; Dumee, L; Magniez, K (2017), Zinc oxide PVDF nano-composites–tuning interfaces toward enhanced mechanical properties and UV protection, Advanced Engineering Materials, Vol. 19, NO. 3, PP. 1-8.

44. Chaffraix, T; Voda, A; Dumee, L; Magniez, K (2017), Surface ionic charge dependence on the molecular mobility and self-assembly behavior of ionomers produced from carboxylic acid-terminated dendrimers, Polymer Journal, Vol. 49, NO. 2, PP. 245-254.

45. Chang, H; Li, Q; Xu, C; Li, R; Wang, H; Bu, Z; Lin, T; Wool powder: an efficient additive to improve mechanical and thermal properties of poly(propylene carbonate), Composite Science & Technology, 2017, 153, 119-127.

46. Chao, Q; Cruz, V; Thomas, S; Birbilis, N; Collins, P; Taylor, A; Hodgson, P; Fabijanic, D (2017), On the enhanced corrosion resistance of a selective laser melted austenitic stainless steel, Scripta materialia, Vol. 141, PP. 94-98.

47. Chao, Q., Guo, T., Jarvis, T., Wu, X.H., Hodgson, P.D., Fabijanic, D. (2017) Direct laser deposition cladding of AlxCoCrFeNi high entropy alloys on a high-temperature stainless steel, Surface and Coatings Technology, 332, 440-451.

48. Chao, Q; Hodgson, P; Beladi, H (2017), Thermal stability of an ultrafine grained Ti-6Al-4V alloy during post-deformation annealing, Materials Science and Engineering A, Vol. 694, PP. 13-23.

49. Chavoshi, S; Corujeira Gallo, S; Dong, H; Luo, X (2017), High temperature nanoscratching of single crystal silicon under reduced oxygen condition, Materials Science and Engineering: A, Vol. 684, PP. 385-393.

50. Chen, C; Tao, T; Qi, W; Zeng, H; Wu, Y; Liang, B; Yao, Y; Lu, S; Chen, Y (2017), High-performance lithium ion batteries using SiO2-coated LiNi0.5Co0.2Mn0.3O2 microspheres as cathodes, Journal of Alloys and Compounds, Vol. 709, PP. 708-716.

51. Chen, L; Doeven, E; Wilson, D; Kerr, E; Hayne, D; Hogan, C; Yang, W; Pham, T; Francis, P (2017), Co-reactant electrogenerated chemiluminescence of iridium(III) complexes containing an acetylacetonate ligand, ChemElectroChem, Vol. 4, NO. 7, PP. 1797-1808.

52. Chen, R; Zhang, L; Li, X; Ong, L; Soe, Y; Sinsua, N; Gras, S; Tabor, R; Wang, X; Shen, W (2017), Trace analysis and chemical identification on cellulose nanofibers-textured SERS substrates using the "coffee ring" effect, ACS sensors, Vol. 2, NO. 7, PP. 1060-1067.

53. Chen, X; Chen, F; Forsyth, M (2017), Molecular dynamics study of the effect of tetraglyme plasticizer on dual-cation ionomer electrolytes, Physical Chemistry Chemical Physics, Vol. 19, NO. 25, PP. 16426-16432.

54. Chen, X; Chen, F; Jonsson, E; Forsyth, M (2017), Molecular dynamics study of a dual-cation ionomer electrolyte, ChemPhysChem, Vol. 18, NO. 2, PP. 230-237.

55. Chen, X; Chen, Z; Dumee, L; O'Dell, L; du Plessis, J; d'Agostino, R; Dai, X; Magniez, K (2017), Grafting of N-moieties onto octa-methyl polyhedral oligomeric silsesquioxane microstructures by sequential continuous wave and pulsed plasma, Plasma Processes and Polymers, PP. 1-10.

56. Cheng, B; Li, Z; Li, Q; Ju, J; Kang, W; Naebe, M (2017), Development of smart poly(vinylidene fluoride)-graft-poly(acrylic acid) tree-like nanofiber membrane for pH-responsive oil/water separation, Journal of Membrane Science, Vol. 534, PP. 1-8.

57. Chen, Z; Krasik, Y.E; Cousens, S; Ambujakshan, A.T; Corr, C; Dai, X.J (2017), Generation of underwater discharges inside gas bubbles using a 30-needles-to-plate electrode. Journal of Applied Physics, Vol. 122, NO. 15,153303.

58. Chiu, N; Stojanov, D; Rolfe, B; Yan, W (2017), Effect of optimisation parameters in topology optimisation, Key Engineering Materials, Vol. 725, PP. 529-534.

59. Chong, A.L; Zhu, H; Narin, K.M; Forsyth, M; MacFarlane, D.R; Enhancing Solid-State Conductivity through Acid or Base Doping of Protic Imidazolium and Imidazolinium Triflate Salts. The Journal of Physical Chemistry C 121 (50), 27849-27859

60. Corujeira Gallo, S; Charitidis, C; Dong, H (2017), Surface functionalization of carbon fibers with active screen plasma, Journal of vacuum science & technology A: vacuum, surfaces, and films, Vol. 35, NO. 2, PP. 021404-1-021404-10, American Institute of Physics.

61. Corujeira Gallo, S; Li, X; Futterer, K; Charitidis, C; Dong, H (2017), Carbon nanofibers functionalised with active screen plasma-deposited metal nanoparticles for electrical energy storage devices. ACS Applied Materials and Interfaces.

62. Diaz, M; Ortiz, A; Pringle, J; Wang, X; Vijayaraghavan, R; MacFarlane, D; Forsyth, M; Ortiz, I (2017), Protic plastic crystal/PVDF composite membranes for proton exchange membrane fuel cells under non-humidified conditions, Electrochimica acta, Vol. 247, PP. 970-976.

63. De Bruin-Dickason, C; Deacon, G; Forsyth, C; Hanf, S; Heilmann, O; Hinton, B; Junk, P; Somers, A; Tan, Y; Turner, D (2017), Synthesis and structures of rare earth 3-(4-methylbenzoyl)-propanoate complexes-new corrosion inhibitors, Australian journal of chemistry, Vol. 70, NO. 5, PP. 478-484.

64. De Silva, R; Byrne, N (2017), Utilization of cotton waste for regenerated cellulose fibres: influence of degree of polymerization on mechanical properties, Carbohydrate Polymers, Vol. 174, PP. 89-94.

65. Debnath, J; Wang, J (2017), Magnetic and electrical response of Co-doped La0.7Ca0.3MnO3 manganites/insulator system, Physica B: condensed matter, Vol. 504, PP. 58-62.

66. Debnath, J; Wang, J; Zeng, R (2017), Charge ordering and exchange bias behaviors in Co3O4 porous nanoplatelets and nanorings, Journal of Magnetism and Magnetic Materials, Vol. 421, PP. 422-427.

67. Demir, B; Henderson, L; Walsh, T (2017), Design rules for enhanced interfacial shear response in functionalized carbon fiber epoxy composites, ACS Applied Materials and Interfaces, Vol. 9, NO. 13, PP. 11846-11857.

68. Dokouhaki, M, Prime, Emma, Hung, A, Qiao, GG, Day, L and Gras, SL (2017), Structure-Dependent Interfacial Properties of Chaplin F from Streptomyces coelicolor., Biomolecules, Vol. 7, NO. 3, doi: 10.3390/biom7030068.

69. Dokouhaki, M, Hung, A, Prime, Emma, Qiao, GG, Day, L and Gras, SL (2017), pH-Induced interfacial properties of Chaplin E from *Streptomyces coelicolor.* Colloids Surf B Biointerfaces, Vol. 160, PP. 589-597, doi: 10.1016/j.colsurfb.2017.10.006

70. Dorin, T; Ramajayam, M; Lamb, J; Langan, T (2017), Effect of Sc and Zr additions on the microstructure/strength of Al-Cu binary alloys, Mat Sci and Eng A, Vol. 707, PP. 58-64.

71. Du, Y; Xu, J; Wang, Y; Lin, T (2017), Thermoelectric properties of graphite-PEDOT:PSS coated flexible polyester fabrics, Journal of Materials Science: materials in electronics, Vol. 28, NO. 8, PP. 5796-5801.

72. Du, Y; Cai K.F; Shen, Z; Donelsonand, R; Xu, J.Y; Wang, H.X; Lin, T (2017), Multifold enhancement of the output power of flexible thermoelectric generators made from cotton fabrics coated with conducting polymer, RSC Advances, 2017, 7(69), 43737-43742.

73. Dumee, L; Maina, J; Merenda, A; Reis, R; He, L; Kong, L (2017), Hybrid thin film nano-composite membrane reactors for simultaneous separation and degradation of pesticides, Journal of membrane science, Vol. 528, PP. 217-224.

74. Dumee, L; Yi, Z; Tardy, B; Merenda, A; des Ligneris, E; Dagastine, R; Kong, L (2017), Silver metal nano-matrixes as high efficiency and versatile catalytic reactors for environmental remediation, Scientific Reports, Vol. 7, PP. 1-10.

75. Dupont, M; MacFarlane, D; Pringle, J (2017), Thermo-electrochemical cells for waste heat harvesting - progress and perspectives, Chemical Communications, Vol. 53, NO. 47, PP. 6288-6302.

76. Enjapoori, A; Lefevre, C; Nicholas, K; Sharp, J (2017), Hormonal regulation of platypus Beta-lactoglobulin and monotreme lactation protein genes, General and Comparative Endocrinology, Vol. 242, PP. 38-48.

77. Eyckens, D; Henderson, L (2017), Synthesis of α-aminophosphonates using solvate ionic liquids, RSC Advances, Vol. 7, NO. 45, PP. 27900-27904.

78. Fabijanic, D; Timokhina, I; Beladi, H; Hodgson, P (2017), The nitrocarburising response of low temperature bainite steel, Metals, 7, 234.

79. Falin, A; Cai, Q; Santos, E; Scullion, D; Qian, D; Zhang, R; Yang, Z; Huang, S; Watanabe, K; Taniguchi, T; Barnett, M; Chen, Y; Ruoff, R; Li, L (2017), Mechanical properties of atomically thin boron nitride and the role of interlayer interactions, Nature Communications, Vol. 8, PP. 1-9.

80. Fan, Y; Yang, Z; Hua, W; Liu, D; Tao, T; Rahman, M; Lei, W; Huang, S; Chen, Y (2017), Functionalized boron nitride nanosheets/graphene interlayer for fast and long-life lithiumÂ¿sulfur batteries, Advanced energy materials, Vol. 7, NO. 13, PP. 1-6.

81. Fang, J; Xie, Z; Wallace, G; Wang, X (2017), Co-deposition of carbon dots and reduced graphene oxide nanosheets on carbon-fiber microelectrode surface for selective detection of dopamine, Applied Surface Science, Vol. 412, PP. 131-137.

82. Fardi, M; Abraham, R; Hodgson, P; Khoddam, S (2017), A new horizon for barrelling compression test: exponential profile modeling, Advanced Engineering Materials, PP. 1-11.

83. Feng, M; Du, Q; Su, L; Zhang, G; Wang, G; Ma, Z; Gao, W; Qin, X; Shao, G (2017), Manganese oxide electrode with excellent electrochemical performance for sodium ion batteries by pre-intercalation of K and Na ions, Scientific Reports, Vol. 7, NO. 1, PP. 1-8.

84. Forsyth, M; Howlett, P.C; Somers, A.E; MacFarlane, D.R; Basile, A; Mater. Degrad. 2017, 1, 18.

85. Gao, W; Li, Y; Kong, L (2017), Numerical investigation of erosion of tube sheet and tubes of a shell and tube heat exchanger, Computers and chemical engineering, Vol. 96, PP. 115-127, Elsevier.

86. Garriga, R; Jurewicz, I; Seyedin, S; Bardi, N; Totti, S; Matta-Domjan, B; Velliou, E; Alkhorayef, M; Cebolla, V; Razal, J; Dalton, A; Munoz, E (2017), Multifunctional, biocompatible and pH-responsive carbon nanotube- and graphene oxide/tectomer hybrid composites and coatings, Nanoscale, Vol. 9, NO. 23, PP. 7791-7804.

87. Gates, W; Aldridge, L; Carnero-Guzman, G; Mole, R; Yu, D; Iles, G; Klapproth, A; Bordallo, H (2017), Water desorption and absorption isotherms of sodium montmorillonite: a QENS study, Applied Clay Science, Vol. 147, PP. 97-104.

88. Gault, B; Cui, X; Moody, M; Ceguerra, A; Breen, A; Marceau, R; Ringer, S (2017), A nexus between 3D atomistic data hybrids derived from atom probe microscopy and computational materials science: a new analysis of solute clustering in Al-alloys, Scripta Materialia, Vol. 131, PP. 93-97.

89. Golkarnarenji, G; Naebe, M; Church, J; Badii, K; Bab-Hadiashar, A; Atkiss, S; Khayyam, H (2017), Development of a predictive model for study of skin-core phenomenon in stabilization process of PAN precursor, Journal of Industrial and Engineering Chemistry, Vol. 49, PP. 46-60.

90. Gou, S; Li, S; Feng, M; Zhang, Q; Pan, Q; Wen, J; Wu, Y; Guo, Q (2017), Novel biodegradable graft-modified water-soluble copolymer using acrylamide and konjac glucomannan for enhanced oil recovery, Industrial & Engineering Chemistry Research, Vol. 56, NO. 4, PP. 942-951.

91. Greene, G; Thapa, R; Holt, S; Wang, X; Garvey, C; Tabor, R (2017), Structure and property changes in self-assembled lubricin layers induced by calcium ion interactions, Langmuir, Vol. 33, NO. 10, PP. 2559-2570.

92. Guo, C; Zhang, J; Wang, X; Anh, T; Liu, X; Kaplan, D (2017), Comparative Study of Strain-Dependent Structural Changes of Silkworm Silks: Insight into the Structural Origin of Strain-Stiffening, SMALL, Vol. 13, NO. 47.

93. Haghdadi, N; Abou-Ras, D; Cizek, P; Hodgson, P; Rollett, A; Beladi, H (2017), Austenite-ferrite interface crystallography dependence of sigma phase precipitation using the five-parameter characterization approach, Materials letters, Vol. 196, PP. 264-268.

94. Haghdadi, N; Cizek, P; Beladi, H; Hodgson, P (2017), A novel high-strain-rate ferrite dynamic softening mechanism facilitated by the interphase in the austenite/ferrite microstructure, Acta materialia, Vol. 126, PP. 44-57.

95. Haghdadi, N; Cizek, P; Beladi, H; Hodgson, P (2017), Dynamic restoration processes in a 23Cr-6Ni-3Mo duplex stainless steel: effect of austenite morphology and interface characteristics, Metallurgical and materials transactions A: physical metallurgy and materials Science, Vol. 48, NO. 10, PP. 4803-4820.

96. Haghdadi, N; Cizek, P; Beladi, H; Hodgson, P (2017), The austenite microstructure evolution in a duplex stainless steel subjected to hot deformation, Philosophical magazine, Vol. 97, NO. 15, PP. 1209-1237.

97. Haghdadi, N; Zarei-Hanzaki, A; Farabi, E; Cizek, P; Beladi, H; Hodgson, P (2017), Strain rate dependence of ferrite dynamic restoration mechanism in a duplex low-density steel, Materials and Design, Vol. 132, PP. 360-366.

98. Haghdadi, N., Cizek, P., Beladi, H. and Hodgson, P.D. (2017), Hot deformation and restoration mechanisms in duplex stainless steels: Effect of strain rate. Metallurgia Italiana, (9), PP.5-16

99. Haghdadi, N., Zarei-Hanzaki, A., Kawasaki, M., Phillion, A.B. and Hodgson, P.D. (2017), Effect of Severe Plastic Deformation and Subsequent Silicon Spheroidizing Treatment on the Microstructure and Mechanical Properties of an Al–Si–Mg Alloy. Advanced Engineering Materials, 19(7).

100. Han, Q; Wang, X; Byrne, N (2017), A simple approach to achieve self-buffering protic ionic liquid-water mixtures, ChemistrySelect, Vol. 2, NO. 15, PP. 4294-4299.

101. Hangarge, R; Gupta, A; Raynor, A; La, D; Bilic, A; Li, J; Dalal, D; Evans, R; Bhosale, S (2017), Enhancing the efficiency of solution-processable bulk-heterojunction devices via a three-dimensional molecular architecture comprising triphenylamine and cyanopyridone, Dyes and pigments, Vol. 137, PP. 126-134, Elsevier.

102. Henderson, L; Gibert, Y (2017), Validation Techniques for Therapeutic Molecules in Drug Discovery, Current Topics in Medicinal Chemistry, Vol. 17, NO. 18, PP. 2005-2005.

103. Henderson, L; Gibert, Y (2017), Validation techniques for therapeutic molecules in drug discovery, Current Topics in Medicinal Chemistry, Vol. 17, NO. 18, P. 5.

104. Hien, P; Vu, N; Thu, V; Somers, A; Nam, N (2017), Study of yttrium 4-nitrocinnamate to promote surface interactions with AS1020 steel, Applied surface science, Vol. 412, PP. 464-474.

105. Hilder, M; Gras, M; Pope, C; Kar, M; MacFarlane, D; Forsyth, M; O'Dell, L (2017), Effect of mixed anions on the physicochemical properties of a sodium containing alkoxyammonium ionic liquid electrolyte, Physical chemistry chemical physics, Vol. 19, NO. 26, PP. 17461-17468.

106. Hilder, M; Howlett, P; Saurel, D; Gonzalo, E; Armand, M; Rojo, T; Macfarlane, D; Forsyth, M (2017), Small quaternary alkyl phosphonium bis(fluorosulfonyl)imide ionic liquid electrolytes for sodium-ion batteries with P2- and O3-Na2/3[Fe2/3Mn1/3]O2 cathode material, Journal of power sources, Vol. 349, PP. 45-51.

107. Hodgson, P.D; Haghdadi, N; Xin, R; Liu, Z; Hanzaki, A.Z; Abedi, H.R. (2017) Continuous dynamic recrystallization in low density steel, Materials & Design 114, 55-64

108. Horiuchi, S; Zhu, H; Forsyth, M; Takeoka, Y; Rikukawa, M; Yoshizawa-Fujita, M (2017), Synthesis and evaluation of a novel pyrrolidinium-based zwitterionic additive with an ether side chain for ionic liquid electrolytes in high-voltage lithium-ion batteries, Electrochimica acta, Vol. 241, PP. 272-280.

109. Huang, S; Lu, X; Li, Z; Ravishankar, H; Wang, J; Wang, X (2017), A biomimetic approach towards the synthesis of TiO-carbon-clay as a highly recoverable photocatalyst, Journal of Photochemistry and Photobiology A: Chemistry, Vol. 351, PP. 131-138.

110. Hudek, L; Torriero, A; Michalczyk, A; Neilan, B; Ackland, M; Brau, L (2017), Peroxide reduction by a metal-dependent catalase in Nostoc punctiforme (cyanobacteria), Applied microbiology and biotechnology, Vol. 101, NO. 9, PP. 3781-3800.

111. Hughes, Z; Baev, A; Prasad, P; Walsh, T (2017), Halo-substituted azobenzenes adsorbed at Ag(111) and Au(111) interfaces: structures and optical properties, Physical review B, Vol. 95, NO. 20, PP. 1-10.

112. Hughes, Z; Kochandra, R; Walsh, T (2017), Facet-specific adsorption of tripeptides at aqueous Au interfaces: open questions in reconciling experiment and simulation, Langmuir, Vol. 33, NO. 15, PP. 3742-3754.

113. Hughes, Z; Nguyen, M; Li, Y; Swihart, M; Walsh, T; Knecht, M (2017), Elucidating the influence of materials-binding peptide sequence on Au surface interactions and colloidal stability of Au nanoparticles, Nanoscale, Vol. 9, NO. 1, PP. 421-432.

114. Huo, Y; Tan, M (2017), Measuring and understanding the critical duration and amplitude of anodic transients, Corrosion engineering, science and technology, PP. 1-8.

115. Hutchinson, B; Martin, D; Karlsson, O; Lindberg, F; Thoors, H; Marceau, R; Taylor, A (2017), Vanadium microalloying for ultra-high strength steel sheet treated by hot-dip metallising, Materials science and technology, Vol. 33, NO. 4, PP. 497-506.

116. Ike, I; Dumee, L; Groth, A; Orbell, J; Duke, M (2017), Effects of dope sonication and hydrophilic polymer addition on the properties of low pressure PVDF mixed matrix membranes, Journal of Membrane Science, Vol. 540, PP. 200-211.

117. Jain, J; Cizek, P; Hariharan, K (2017), Transmission electron microscopy investigation on dislocation bands in pure Mg, Scripta materialia, Vol. 130, PP. 133-137.

118. Jia, X; Wang, C; Ranganathan, V; Napier, B; Yu, C; Chao, Y; Forsyth, M; Omenetto, F; MacFarlane, D; Wallace, G (2017), A biodegradable thin-film magnesium primary battery using silk fibroin-ionic liquid polymer electrolyte, ACS Energy Letters, Vol. 2, NO. 4, PP. 831-836.

119. Jiang, D; Li, C; Yang, W; Zhang, J; Liu, J (2017), Fabrication of an arbitrary-shaped and nitrogen-doped graphene aerogel for highly compressible all solid-state supercapacitors, Journal of materials chemistry A, Vol. 5, NO. 35, PP. 18684-18690.

120. Jiang, D; Zhang, J; Li, C; Yang, W; Liu, J (2017), A simple and large-scale method to prepare flexible hollow graphene fibers for a high-performance all-solid fiber supercapacitor, New journal of chemistry, Vol. 41, NO. 20, PP. 11792-11799.

121. Jin, L; Nairn, K; Ling, C; Zhu, H; O'Dell, L; Li, J; Chen, F; Pavan, A; Madsen, L; Howlett, P; MacFarlane, D; Forsyth, M; Pringle, J (2017), Conformational dynamics in an organic ionic plastic crystal, Journal of Physical Chemistry B, Vol. 121, NO. 21, PP. 5439-5446.

122. Jin, Q; Wang, W; Jiang, R; Chiu, N; Liu, D; Yan, W (2017), A numerical study on contact condition and wear of roller in cold rolling, Metals, Vol. 7, NO. 9, PP. 1-21.

123. Joosten, M; Agius, S; Hilditch, T; Wang, C (2017), Effect of residual stress on the matrix fatigue cracking of rapidly cured epoxy/anhydride composites, Composites part A: Applied Science and Manufacturing, Vol. 101, PP. 521-528.

124. Joseph, J; Stanford, N; Hodgson, P; Fabijanic, D (2017), Tension/compression asymmetry in additive manufactured face centered cubic high entropy alloy, Scripta materialia, Vol. 129, PP. 30-34.

125. Kandagal, V.S., Chen, F., Jonsson, E., Forsyth, M. (2017) Molecular simulation study of CO 2 and N 2 absorption in a phosphonium based organic ionic plastic crystal. The Journal of Chemical Physics 147, 124703.

126. Kerr, R; Mazouzi, D; Eftekharnia, M; Lestriez, B; Dupre, N; Forsyth, M; Guyomard, D; Howlett, P (2017), High-Capacity Retention of Si Anodes Using a Mixed Lithium/Phosphonium Bis(fluorosulfonyl) imide Ionic Liquid Electrolyte, ACS Energy Letters, Vol. 2, NO. 8, PP. 1804-1809.

127. Khayyam, H; Fakhrhoseini, S; Church, J; Milani, A; Bab-Hadiashar, A; Jazar, R; Naebe, M (2017), Predictive modelling and optimization of carbon fiber mechanical properties through high temperature furnace, Applied Thermal Engineering, Vol. 125, PP. 1539-1554.

128. Khoddam, S (2017), A detailed model of high pressure torsion, Materials Science and Engineering A, Vol. 683, PP. 256-263.

129. Komeily Nia, Z; Chen, J; Tang, B; Yuan, B; Wang, X; Li, J (2017), Optimizing the free radical content of graphene oxide by controlling its reduction, Carbon, Vol. 116, PP. 703-712.

130. Kong, H; Chao, Q; Cai, M; Pavlina, E; Rolfe, B; Hodgson, P; Beladi, H (2017), One-step quenching and partitioning treatment of a commercial low silicon boron steel, Materials Science and Engineering A, Vol. 707, PP. 538-547.

131. Kupke, A; Hodgson, P; Weiss, M (2017), The effect of microstructure and pre-strain on the change in apparent Young's modulus of a dual-phase steel, Journal of Materials Engineering and Performance, Vol. 26, NO. 7, PP. 3387-3398.

132. Ladani, R; Wu, S; Zhang, J; Ghorbani, K; Kinloch, A; Mouritz, A; Wang, C (2017), Using carbon nanofibre sensors for in-situ detection and monitoring of disbonds in bonded composite joints, Procedia engineering, Vol. 188, PP. 362-368.

133. Lang, C; Fang, J; Shao, H; Wang, H; Yan, G; Ding, X; Lin, T (2017), High-output acoustoelectric power generators from poly(vinylidenefluoride-co-trifluoroethylene) electrospun nano-nonwovens, Nano energy, Vol. 35, PP. 146-153.

134. Lapovok, R., Qi, Y., Ng, H.P., Toth, L.S., Estrin, Y. (2017), Gradient structures in thin-walled metallic tubes produced by continuous high pressure tube shearing process, Advanced Engineering Materials, 19:11.

135. Lapovok, R., Molotnikov, A., Medvedev, A., Estrin, Y. (2017) Equal channel angular pressing with rotating shear plane to produce hybrid materials with helical architecture of constituents, Journal of Material Research, 32:24, 4483-4490.

136. Li, Q; Hurren, C.J; Wang, X (2017) Ultrasonic assisted industrial wool scouring, Procedia Engineering 2017, 200, 39-44.

137. Li, C; Rubin de Celis Leal, D; Rana, S; Gupta, S; Sutti, A; Greenhill, S; Slezak, T; Height, M; Venkatesh, S (2017), Rapid Bayesian optimisation for synthesis of short polymer fiber materials, Scientific Reports, Vol. 7, PP. 1-10.

138. Li, Q; Wang, J; Hurren, C (2017), A study on wicking in natural staple yarns, Journal of natural fibers, Vol. 14, NO. 3, PP. 400-409.

139. Li, R; Boyd-Moss, M; Long, B; Martel, A; Parnell, A; Dennison, A; Barrow, C; Nisbet, D; Williams, R (2017), Facile control over the supramolecular ordering of self-assembled peptide scaffolds by simultaneous assembly with a polysacharride, Scientific reports, Vol. 7, NO. 1, PP. 1-8.

140. Li, W; Zhao, X; Yi, Z; Glushenkov, A; Kong, L (2017), Plasmonic substrates for surface enhanced Raman scattering, Analytica chimica acta, Vol. 984, PP. 19-41, Elsevier.

141. Li, X; Deng, S; Lin, T; Xie, X; Du, G (2017), 2-mercaptopyrimidine as an effective inhibitor for the corrosion of cold rolled steel in HNO3 solution, Corrosion science, Vol. 118, PP. 202-216, Elsevier.

142. Li, Y; Ye, Y; Fan, Y; Zhou, J; Jia, L; Tang, B; Wang, X (2017), Silver nanoprism-loaded eggshell membrane: a facile platform for in situ SERS monitoring of catalytic reactions, Crystals, Vol. 7, NO. 2, PP. 1-11.

143. Li, Z; Zabihi, O; Wang, J; Li, Q; Wang, J; Lei, W; Naebe, M (2017), Hydrophilic PAN based carbon nanofibres with improved graphitic structure and enhanced mechanical performance using ethylenediamine functionalized graphene. RSC Advances, Vol. 7, NO. 5, PP. 2621-2628.

144. Li, X; Deng, S; Lin, T; Xie, X; Du, G (2017) 2-Mercaptopyrimidine as an effective inhibitor for the corrosion of cold rolled steel in HNO3 solution, Corrosion Science, 118, 202-216.

145. Lin, B; Kong, L; Hodgson, P; Mudie, S; Hawley, A; Dumee, L (2017), Controlled porosity and pore size of nano-porous gold by thermally assisted chemical dealloying - a SAXS study, RSC Advances, Vol. 7, NO. 18, PP. 10821-10830.

146. Liu, D; Zhang, M; Xie, W; Sun, L; Chen, Y; Lei, W (2017), Porous BN/TiO2 hybrid nanosheets as highly efficient visible-light-driven photocatalysts, Applied Catalysis B: environmental, Vol. 207, PP. 72-78.

147. Liu, S; Zhou, H; Wang, H; Shao, H; Fu, S; Zhao, Y; Liu, D; Feng, Z; Lin, T; Argon-plasma reinforced superamphiphobic fabrics, Small, 2017, 40(25), 1701891.

148. Liu, J; Wang, R; Wu, S; Yuan, B; Bao, M; Li, J; Dou, Y; He, Y; Yang, K (2017), One-pot synthesis of silicon based nanoparticles with incorporated phthalocyanine for long-term bioimaging and photo-dynamic therapy of tumors, Nanotechnology, Vol. 28, NO. 13, PP. 2-8.

149. Liu, J; Yuan, B; Wu, X; Li, J; Han, F; Dou, Y; Chen, M; Yang, Z; Yang, K; Ma, Y (2017), Modulated enhancement in ion transport through carbon nanotubes by lipid decoration, Carbon, Vol. 111, PP. 459-466.

150. Liu, S; Zhou, H; Wang, H; Zhao, Y; Shao, H; Xu, Z; Feng, Z; Liu, D; Lin, T (2017), Argon plasma treatment of fluorine-free silane coatings: a facile, environment-friendly method to prepare durable, superhydrophobic fabrics, Advanced Materials Interfaces, Vol. 4, NO. 11, PP. 1-8.

151. Liu, X; McGregor, B (2017), Cuticle and cortical cell morphology and the ellipticity of cashmere are affected by nutrition of goats, The Journal of the Textile Institute.

152. Long, D; Lu, C; Wang, Y; Yan, S; Zhang, Q; Wang, X (2017), Structure and properties of camphor silk, Journal of the Textile institute, PP. 1-7.

153. Lou, Y; Chen, L; Clausmeyer, T; Tekkaya, A; Yoon, J (2017), Modeling of ductile fracture from shear to balanced biaxial tension for sheet metals, International Journal of Solids and Structures, Vol. 112, PP. 169-184.

154. Lou, Y; Yoon, J (2017), Anisotropic ductile fracture criterion based on linear transformation, International Journal of Plasticity, Vol. 93, PP. 3-25.

155. Lu, Y; Dong, S; Zhang, P; Liu, X; Wang, X (2017), Preparation of a polylactic acid knitting mesh for pelvic floor repair and in vivo evaluation, Journal of the Mechanical Behavior of Biomedical Materials, Vol. 74, PP. 204-213.

156. Luo, G; Li, H; Zhang, D; Gao, L; Lin, T (2017), A template-free synthesis via alkaline route for Nb2O5/carbon nanotubes composite as pseudo-capacitor material with high-rate performance, Electrochimica acta, Vol. 235, PP. 175-181.

157. Ma, Z; Kar, M; Xiao, C; Forsyth, M; MacFarlane, D (2017), Electrochemical cycling of Mg in Mg[TFSI]2/tetraglyme electrolytes, Electrochemistry Communications, Vol. 78, PP. 29-32,

158. Mahdavi, F; Forsyth, M; Tan, M (2017), Techniques for testing and monitoring the cathodic disbondment of organic coatings: An overview of major obstacles and innovations, Progress in Organic Coatings, Vol. 105, PP. 163-175.

159. Mahdavi, F; Forsyth, M; Tan, M (2017), Understanding the effects of applied cathodic protection potential and environmental conditions on the rate of cathodic disbondment of coatings by means of local electrochemical measurements on a multi-electrode array, Progress in Organic Coatings, Vol. 103, PP. 83-92.

160. Maina, J; Pozo-Gonzalo, C; Kong, L; Schutz, J; Hill, M; Dumee, L (2017), Metal organic framework based catalysts for COÂ conversion, Materials Horizons, Vol. 4, NO. 3, PP. 345-361.

161. Maina, J.W; Pozo-Gonzalo, C; Merenda, A; Kong, L; Schutz, J.A; Dumee, L.F (2017), The growth of high density network of MOF nano-crystals across macroporous metal substrates - solvothermal synthesis versus rapid thermal deposition, Applied Surface Science, doi.org/10.1016/j.apsusc.2017.08.060.

162. Maina, J; Schutz, J; Grundy, L; Des Ligneris, E; Yi, Z; Kong, L; Pozo-Gonzalo, C; Ionescu, M; Dumee, L (2017), Inorganic nanoparticles/metal organic framework hybrid membrane reactors for efficient photocatalytic conversion of CO2, ACS Applied Materials and Interfaces, Vol. 9, NO. 40, PP. 35010-35017.

163. Makhlooghiazad, F; Gunzelmann, D; Hilder, M; MacFarlane, D; Armand, M; Howlett, P; Forsyth, M (2017), Mixed phase solid-state plastic crystal electrolytes based on a phosphonium cation for sodium devices, Advanced Energy Materials, Vol. 7, NO. 2, PP. 1-9.

164. Makhlooghiazad, F; Howlett, P; Wang, X; Hilder, M; MacFarlane, D; Armand, M; Forsyth, M (2017), Phosphonium plastic crystal salt alloyed with a sodium salt as a solid-state electrolyte for sodium devices: phase behaviour and electrochemical performance, Journal of Materials Chemistry A, Vol. 5, NO. 12, PP. 5770-5780.

165. Maniruzzaman, M; Sinclair, A; Cahill, D; Wang, X; Dai, X (2017), Nitrate and hydrogen peroxide generated in water by electrical discharges stimulate wheat seedling growth, Plasma Chemistry and Plasma Processing, Vol. 37, NO. 5, PP. 1393-1404.

166. Mateti, S; Wong, C; Liu, Z; Yang, W; Li, Y; Li, L; Chen, Y (2017), Biocompatibility of boron nitride nanosheets, Nano research, PP. 1-9.

167. McGregor, B (2017), Relationships between live weight, body condition, dimensional and ultrasound scanning measurements and carcass attributes in adult Angora goats, Small ruminant research, Vol. 147, PP. 8-17.

168. McGregor, B; Liu, X; Wang, X (2017), Comparisons of the Fourier Transform Infrared Spectra of cashmere, guard hair, wool and other animal fibres, Journal of The Textile Institute, PP. 1-10.

169. Medvedev, A; Neumann, A; Ng, H; Lapovok, R; Kasper, C; Lowe, T; Anumalasetty, V; Estrin, Y (2017), Combined effect of grain refinement and surface modification of pure titanium on the attachment of mesenchymal stem cells and osteoblast-like SaOS-2 cells. Materials Science and Engineering: C, Vol. 71, PP. 483-497.

170. Mendes, A; Timokhina, I., Molotnikov, A., Hodgson, P. and Lapovok, R. (2017), Role of Shear in Interface Formation of Aluminium-Steel Multilayered Composite Sheets, Material Science & Engineering A, 705, 142-152.

171. Meredith, L; Hurren, C; Clarke, E; Fitzharris, M; Baldock, M; de Rome, L; Olivier, J; Brown, J (2017), Validation of the abrasion resistance test protocols and performance criteria of EN13595: the probability of soft tissue injury to motorcycle riders by abrasion resistance of their clothing, Journal of Safety Research, Vol. 61, PP. 1-7.

172. Mukherjee, S; Timokhina, I; Zhu, C; Ringer, S; Hodgson, P (2017), Clustering and precipitation processes in a ferritic titanium-molybdenum microalloyed steel, Journal of Alloys and Compounds, Vol. 690, PP. 621-632.

173. Nasri-Nasrabadi, B; Kaynak, A; Komeily Nia, Z; Kouzani, A (2017), Cyclic cryogelation: a novel approach to control the distribution of carbonized cellulose fibres within polymer hydrogels, Cellulose, PP. 1-10.

174. Neuwirth, M; Mester, K; Weiss, M; Bruder, E (2017), Materialcharakterisierung beim flexiblen spaltprofilieren, Materialwissenschaft und werkstofftechnik, Vol. 48, NO. 1, PP. 53-60. KGaA.

175. Nikafshar, S; Zabihi, O; Ahmadi, M; Mirmohseni, A; Taseidifar, M; Naebe, M (2017), The effects of UV light on the chemical and mechanical properties of a transparent epoxy-diamine system in the presence of an organic UV absorber. Materials, Vol. 10, NO. 2, PP. 1-18.

176. Nikafshar, S; Zabihi, O; Hamidi, S; Moradi, Y; Barzegar, S; Ahmadi, M; Naebe, M (2017), A renewable bio-based epoxy resin with improved mechanical performance that can compete with DGEBA, RSC Advances, Vol. 7, NO. 14, PP. 8694-8701.

177. Nikafshar, S; Zabihi, O; Moradi, Y; Ahmadi, M; Amiri, S; Naebe, M (2017), Catalyzed synthesis and characterization of a novel lignin-based curing agent for the curing of high-performance epoxy resin, Polymers, Vol. 9, NO. 7, PP. 1-16.

178. Nikhare, C; Weiss, M; Hodgson, P (2017), Buckling in low pressure tube hydroforming, Journal of Manufacturing Processes, Vol. 28, Part 1, PP. 1-10.

179. Noor, S; Su, N; Khoon, L; Mohamed, N; Ahmad, A; Yahya, M; Zhu, H; Forsyth, M; MacFarlane, D (2017), Properties of high Na-Ion content N-propyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide -ethylene carbonate electrolytes, Electrochimica acta, Vol. 247, PP. 983-993.

180. Nunna, S; Creighton, C; Fox, B; Naebe, M; Maghe, M; Tobin, M; Bambery, K; Vongsvivut, J; Hameed, N (2017), The effect of thermally induced chemical transformations on the structure and properties of carbon fibre precursors, Journal of Materials Chemistry A, Vol. 5, NO. 16, PP. 7372-7382.

181. Nunna, S; Creighton, C; Hameed, N; Naebe, M; Henderson, L; Setty, M; Fox, B (2017), Radial structure and property relationship in the thermal stabilization of PAN precursor fibres, Polymer Testing, Vol. 59, PP. 203-211.

182. Nunna, S; Naebe, M; Hameed, N; Fox, B; Creighton, C (2017), Evolution of radial heterogeneity in polyacrylonitrile fibres during thermal stabilization: an overview, Polymer degradation and stability, Vol. 136, PP. 20-30.

183. Pakdel, E; Daoud, W; Afrin, T; Sun, L; Wang, X (2017), Enhanced antimicrobial coating on cotton and its impact on UV protection and physical characteristics, Cellulose, Vol. 24, NO. 9, PP. 4003-4015.

184. Parameswaranpillai, J; Joseph, G; Shinu, K; Salim, N; Hameed, N; Jose, S (2017), High performance PP/SEBS/CNF composites: Evaluation of mechanical, thermal degradation, and crystallization properties, Polymer Composites, Vol. 38, NO. 11, PP. 2440-2449.

185. Park, N; Huh, H; Lim, S; Lou, Y; Kang, Y; Seo, M (2017), Fracture-based forming limit criteria for anisotropic materials in sheet metal forming, International Journal of Plasticity, Vol. 96, PP. 1-35.

186. Parvizi, R; Hughes, A; Tan, M; Marceau, R; Forsyth, M; Cizek, P; Glenn, A (2017), Probing corrosion initiation at interfacial nanostructures of AA2024-T3, Corrosion Science, Vol. 116, PP. 98-109.

187. Patil, A; Zhao, Y; Liu, X; Wang, X (2017), Durable superhydrophobic and antimicrobial cotton fabrics prepared by electrostatic assembly of polyhexamethylene biguanide and subsequent hydrophobization, Textile Research Journal.

188. Periyapperuma, K; Zhang, Y; MacFarlane, D; Forsyth, M; Pozo-Gonzalo, C; Howlett, P (2017), Towards higher energy density redox-flow batteries: imidazolium ionic liquid for Zn electrochemistry in flow environment, ChemElectroChem, Vol. 4, NO. 5, PP. 1051-1058.

189. Ponraj, S; Sharp, J; Kanwar, J; Sinclair, A; Kviz, L; Nicholas, K; Dai, X (2017), Argon gas plasma to decontaminate and extend shelf life of milk, Plasma Processes and Polymers, PP. 1-8.

190. Pozo-Gonzalo, C; Howlett, P; MacFarlane, D; Forsyth, M (2017), Highly reversible oxygen to superoxide redox reaction in a sodium-containing ionic liquid, Electrochemistry Communications, Vol. 74, PP. 14-18.

191. Pozo-Gonzalo, C; Johnson, L.R; Jonsson, E; Holc, C; Kerr, R; MacFarlane, D.R; Bruce, P.G; Howlett, P.C; Forsyth, M (2017), An Understanding of the Electrogenerated Bulk Electrolyte Species in Sodium-containing Ionic Liquid Electrolytes during the Oxygen Reduction Reaction, The Journal of Physical Chemistry C, 121,42, 23307-23316.

192. Preston, J; Hatcher, S; McGregor, B (2017), The repeatability of textural wool handle, Animal Production Science, Vol. 57, NO. 4, PP. 793-800.

193. Qiao, Y; Jia, P; Zhang, X; Cai, N; Shen, T; Hao, X; Tang, Y; Wang, X; Kong, L; Gao, W (2017), One-pot synthesized mesoporous Ni-Co hydroxide for high performance supercapacitors, Ionics, Vol. 23, NO. 5, PP. 1229-1238.

194. Qin, S; Liu, D; Wang, G; Portehault, D; Garvey, C; Gogotsi, Y; Lei, W; Chen, Y (2017), High and stable ionic conductivity in 2D nanofluidic ion channels between boron nitride layers, Journal of the American Chemical Society, Vol. 139, NO. 18, PP. 6314-6320.

195. Qiu, Y; Hu, Y; Taylor, A; Styles, M; Marceau, R; Ceguerra, A; Gibson, M; Liu, Z; Fraser, H; Birbilis, N (2017), A lightweight single-phase AlTiVCr compositionally complex alloy, Acta materialia, Vol. 123, PP. 115-124.

196. Ranade, S; Forsyth, M; Tan, Y (2017), The initiation and propagation of coating morphological and structural defects under mechanical strain and their effects on the electrochemical behaviour of pipeline coatings, Progress in Organic Coatings, Vol. 110, PP. 62-77.

197. Ratanaphan, S; Boonkird, T; Sarochawikasit, R; Beladi, H; Barmak, K; Rohrer, G (2017), Atomistic simulations of grain boundary energies in tungsten, Materials Letters, Vol. 186, PP. 116-118.

198. Reis, R; Duke, M; Merenda, A; Winther-Jensen, B; Puskar, L; Tobin, M; Orbell, J; DumÃ©e, L (2017), Customizing the surface charge of thin-film composite membranes by surface plasma thin film polymerization, Journal of membrane science, Vol. 537, PP. 1-10, Elsevier.

199. Reis, R; Duke, M; Tardy, B; Oldfield, D; Dagastine, R; Orbell, J; Dumee, L (2017), Charge tunable thin-film composite membranes by gamma-ray triggered surface polymerization, Scientific Reports, Vol. 7, PP. 1-10.

200. Reis, R; Dumee, L; Merenda, A; Orbell, J; Schutz, J; Duke, M (2017), Plasma-induced physicochemical effects on a poly(amide) thin-film composite membrane, Desalination, Vol. 403, PP. 3-11.

201. Saimoto, S; Timokhina, I; Pereloma, E (2017), Constitutive relations analyses of plastic flow in dual-phase steels to elucidate structure-strength-ductility correlations, JOM : Journal of the Minerals, Metals and Materials Society, Vol. 69, NO. 7, PP. 1228-1235.

202. Sato, K; Nakayama, M; Glushenkov, A; Mukai, T; Hashimoto, Y; Yamanaka, K; Yoshimura, M; Ohta, T; Yabuuchi, N (2017), Na-excess cation-disordered rocksalt oxide: Na1.3Nb0.3Mn0.4O2, Chemistry of Materials, Vol. 29, NO. 12, PP. 5043-5047.

203. Senserrick, T; McRae, D; Wallace, P; de Rome, E; Rees, P; Williamson, A (2017), Enhancing higher-order skills education and assessment in a graduated motorcycle licensing system, Safety, Vol. 3, NO. 2, PP. 1-17.

204. Servinis, L; Beggs, K; Gengenbach, T; Doeven, E; Francis, P; Fox, B; Pringle, J; Pozo-Gonzalo, C; Walsh, T; Henderson, L (2017), Tailoring the fibre-to-matrix interface using click chemistry on carbon fibre surfaces, Journal of Materials Chemistry A, Vol. 5, NO. 22, PP. 11204-11213.

205. Servinis, L; Beggs, K; Scheffler, C; Wolfel, E; Randall, J; Gengenbach, T; Demir, B; Walsh, T; Doeven, E; Francis, P; Henderson, L (2017), Electrochemical surface modification of carbon fibres by grafting of amine, carboxylic and lipophilic amide groups, Carbon, Vol. 118, PP. 393-403, Elsevier.

206. Shafei, S; Foroughi, J; Stevens, L; Wong, C; Zabihi, O; Naebe, M (2017), Electroactive nanostructured scaffold produced by controlled deposition of PPy on electrospun PCL fibres, Research on chemical intermediates, Vol. 43, NO. 2, PP. 1235-1251, Springer Verlag.

207. Shao, H; Fang, J; Wang, H; Lang, C; Yan, G; Lin, T (2017), Mechanical energy-to-electricity conversion of electron/hole-transfer agent-doped poly(vinylidene fluoride) nanofiber webs, Macromolecular materials and engineering, Vol. 302, NO. 8, PP. 1-6, Wiley - VCH Verlag GmbH & Co. KGaA.

208. Shao, H; Fang, J; Wang, H; Zhou, H; Lin, T (2017), Direct current energy generators from a conducting polymer-inorganic oxide junction, Journal of materials chemistry A, Vol. 5, NO. 18, PP. 8267-8273.

209. Shafei, S; Foroughi, J; Chen, Z; Wang, C.S; Naebe, M (2017), Short Oxygen Plasma Treatment Leading to Long-Term Hydrophilicity of Conductive PCL-PPy Nanofiber Scaffolds, Polymer, 2017,9(11),614.

210. Shao, H; Fang, J; Wang, H; Lin, T; Effect of static charges on mechanical-to-electric energy conversion of electrospun PVDF nanofiber mats, Advanced Materials Letters, 2017, 8(4), 418-422.

211. Shao, H; Fang, J; Wang, H; Lin, T; Direct current energy generators from conducting polymer-inorganic oxide junction, Journal of Materials Chemistry A, 2017, 8267-8273.

212. Sharma, N; Parhizkar, M; Cong, W; Mateti, S; Kirkland, M; Puri, M; Sutti, A (2017), Metal ion type significantly affects the morphology but not the activity of lipase-metal-phosphate nanoflowers, RSC Advances, Vol. 7, NO. 41, PP. 25437-25443.

213. Sharp, J; Brennan, A; Polekhina, G; Ascher, D; Lefevre, C; Nicholas, K (2017), Dimeric but not monomeric α-lactalbumin potentiates apoptosis by up regulation of ATF3 and reduction of histone deacetylase activity in primary and immortalised cells, Cellular Signalling, Vol. 33, PP. 86-97.

214. Sharp, J; Wanyonyi, S; Modepalli, V; Watt, A; Kuruppath, S; Hinds, L; Kumar, A; Abud, H; Lefevre, C; Nicholas, K (2017), The tammar wallaby: a marsupial model to examine the timed delivery and role of bioactives in milk, General and Comparative Endocrinology, Vol. 244, PP. 164-177.

215. Sharp, J; Watt, A; Lefevre, C; Nicholas, K (2017), Human milk bioactivity: lessons from the evolution of lactation, Australian Biochemist, Vol. 48, NO. 1, PP. 13-18.

216. Shen, L; Xu, D; Jian, Y; Qiu, W; Guo, Q (2017), Rheological technique as a sensitive method to characterize the chain diffusion across the interface between polystyrene and carbon black filled polystyrene, Journal of Macromolecular Science, Part B: physics, Vol. 56, NO. 4, PP. 254-261.

217. Shirvani Moghaddam, K; Abolhasani, M; Li, Q; Khayyam, H; Naebe, M (2017), Cheetah skin structure: a new approach for carbon-nano-patterning of carbon nanotubes, Composites part A: Applied science and manufacturing, Vol. 95, PP. 304-314.

218. Shirvani Moghaddam, K; Hamim, S; Karbalaei Akbari, M; Fakhrhoseini, S; Khayyam, H; Pakseresht, A; Ghasali, E; Zabet, M; Munir, K; Jia, S; Davim, J; Naebe, M (2017), Carbon fiber reinforced metal matrix composites: fabrication processes and properties, Composites part A: applied science and manufacturing, Vol. 92, PP. 70-96.

219. Singh, C; Wang, X (2017), Metal ion-loaded nanofibre matrices for calcification inhibition in polyurethane implants, Journal of Functional Biomaterials, Vol. 8, NO. 3, PP. 1-16.

220. Siska, F; Guo, T; Stratil, L; Cizek, J; Barnett, M (2017), Numerical study of stress distribution and size effect during AZ31 nanoindentation, Computational Materials Science, Vol. 126, PP. 393-399.

221. Siska, F; Stratil, L; Cizek, J; Ghaderi, A; Barnett, M (2017), Numerical analysis of twin thickening process in magnesium alloys, Acta materialia, Vol. 124, PP. 9-16.

222. Song, P; Xu, Z; Wu, Y; Cheng, Q; Guo, Q; Wang, H (2017), Super-tough artificial nacre based on graphene oxide via synergistic interface interactions of π-π stacking and hydrogen bonding, Carbon, Vol. 111, PP. 807-812.

223. Srivani, D; Gupta, A; Bhosale, S; Puyad, A; Xiang, W; Li, J; Evans, R; Bhosale, S (2017), Non-fullerene acceptors based on central naphthalene diimide flanked by rhodanine or 1,3-indanedione, Chemical Communications, Vol. 53, NO. 52, PP. 7080-7083.

224. Srivani, D; Gupta, A; La, D; Bhosale, R; Puyad, A; Xiang, W; Li, J; Bhosale, S; Bhosale, S (2017), Small molecular non-fullerene acceptors based on naphthalenediimide and benzoisoquinoline-dione functionalities for efficient bulk-heterojunction devices, Dyes and pigments, Vol. 143, PP. 1-9.

225. Stephens, A; Brown, J; de Rome, L; Baldock, M; Fernandes, R; Fitzharris, M (2017), The relationship between motorcycle rider behaviour questionnaire scores and crashes for riders in Australia, Accident Analysis and Prevention, Vol. 102, PP. 202-212.

226. Stynes, G; Gengenbach, T; Kiroff, G; Morrison, W; Kirkland, M (2017), Thiol surface functionalization via continuous phase plasma polymerization of allyl mercaptan, with subsequent maleimide-linked conjugation of collagen., J Biomed Mater Res A, Vol. 105, NO. 7, PP. 1940-1948.

227. Stynes, G; Kiroff, G; Morrison, W; Kirkland, M (2017), Collagen immunoassay as a method to optimise surface functionalisation, Plasma Processes and Polymers, Vol. 14, NO. 9.

228. Stynes, G; Kiroff, G; Morrison, W; Page, R; Kirkland, M (2017), Toward a skin-material interface with vacuum-integrated capped macroporous scaffolds, Journal of Biomedical Materials Research, Vol. 105, NO. 5, PP. 1307-1318.

229. Stynes, G; Kiroff, G; Page, R; Morrison, W; Kirkland, M (2017), Surface-bound collagen 4 is significantly more stable than collagen 1, Journal of Biomedical Materials Research part A, Vol. 105, NO. 5, PP. 1364-1373.

230. Sultana, I; Rahman, M; Mateti, S; Ghanooni Ahmadabadi, V; Glushenkov, A; Chen, Y (2017), K-ion and Na-ion storage performances of Co3O4-Fe2O3 nanoparticle-decorated super P carbon black prepared by a ball milling process, Nanoscale, Vol. 9, NO. 10, PP. 3646-3654.

231. Sun, F; Chen, Z; Zhu, L; Du, Z; Wang, X; Naebe, M (2017), Directional trans-planar and different in-plane water transfer properties of composite structured bifacial fabrics modified by a facile three-step plasma treatment, Coatings, Vol. 7, NO. 8, PP. 1-16.

232. Sun, F; Du, Z; Naebe, M (2017), Determination of model parameters for predicting handle characteristics of wool-rich suiting woven fabrics based on the Wool HandleMeter and KES-F, Journal of the Textiles Institute, PP. 1-13.

233. Sun, W; Marceau, R; Styles, M; Barbier, D; Hutchinson, C (2017), G phase precipitation and strengthening in ultra-high strength ferritic steels: towards lean `maraging' metallurgy, Acta materialia, Vol. 130, PP. 28-46.

234. Tan, Y; Varela, F; Huo, Y; Mahdavi, F; Forsyth, M; Hinton, B (2017), New electrochemical methods for visualizing dynamic corrosion and coating disbondment processes on simulated pipeline conditions, Corrosion and Materials, Vol. 42, NO. 1, PP. 70-74.

235. Tang, B; Lin, X; Zou, F; Fan, Y; Li, D; Zhou, J; Chen, W; Wang, X (2017), In situ synthesis of gold nanoparticles on cotton fabric for multifunctional applications, Cellulose, Vol. 24, NO. 10, PP. 4547-4560.

236. Tang, B; Zeng, T; Liu, J; Zhou, J; Ye, Y; Wang, X (2017), Waste fiber powder functionalized with silver nanoprism for enhanced Raman scattering analysis, Nanoscale Research Letters, Vol. 12, PP. 1-9.

237. Tang, B; Zhou, X; Zeng, T; Lin, X; Zhou, J; Ye, Y; Wang, X (2017), In situ synthesis of gold nanoparticles on wool powder and their catalytic application, Materials, Vol. 10, NO. 3, PP. 1-12.

238. Tao, T; Chen, Y; Chen, Y; Fox, D; Zhang, H; Zhou, M; Raveggi, M; Barlow, A; Glushenkov, A (2017), Two-dimensional metal oxide nanoflower-like architectures: a general growth method and their applications in energy storage and as model materials for nanofabrication, ChemPlusChem, Vol. 82, NO. 2, PP. 295-302.

239. Tao, T; Deng, Y; Liang, Z; Liang, B; Yao, Y; Li, P; Lu, S; Chen, Y (2017), Synthesis of porous polyvinylidene fluoride (PVDF) microspheres and their application in lithium sulfur batteries, Materials Letters, Vol. 188, PP. 180-183.

240. Tao, T; Lu, S; Fan, Y; Lei, W; Huang, S; Chen, Y (2017), Anode Improvement in Rechargeable Lithium-Sulfur Batteries. Adv Mater.

241. Timar, G; Barnett, M; da Fonseca, J (2017), Discontinuous yielding in wrought magnesium, Computational Materials Science, Vol. 132, PP. 81-91.

242. Ubhayaratne, I; Pereira, M; Xiang, Y; Rolfe, B (2017), Audio signal analysis for tool wear monitoring in sheet metal stamping, Mechanical Systems and Signal Processing, Vol. 85, PP. 809-826.

243. Vahid, A; Hodgson, P; Li, Y (2017), Reinforced magnesium composites by metallic particles for biomedical applications, Materials Science & Engineering A, Vol. 685, PP. 349-357.

244. Vahidgolpayegani, A; Hodgson, P; Li, Y (2017), New porous Mg composites for bone implants, Journal of Alloys and Compounds, Vol. 724, PP. 176-186.

245. Vanangamudi, A; Dumee, L; Duke, M; Yang, X (2017), Nanofiber composite membrane with intrinsic Janus surface for reversed-protein-fouling ultrafiltration, ACS Applied Materials and Interfaces, Vol. 9, NO. 21, PP. 18328-18337.

246. Varela, F; Tan, Y; Hinton, B; Forsyth, M (2017), Monitoring Cathodic Shielding and Corrosion under Disbonded Coatings, Corrosion Science and Technology, Vol. 16, NO. 3, PP. 108-114.

247. Walsh, T (2017), Pathways to structure-property relationships of peptide-materials interfaces: challenges in predicting molecular structures, Accounts of Chemical Research, Vol. 50, NO. 7, PP. 1617-1624.

248. Wang, G; Garvey, C; Zhao, H; Huang, K; Kong, L (2017), Toward the fabrication of advanced nanofiltration membranes by controlling morphologies and mesochannel orientations of hexagonal lyotropic liquid crystals, Membranes, Vol. 7, NO. 3, PP. 1-20.

249. Wang, H; Zhou, H; Liu, S; Shao, H; Fu, S; Rutledge, G; Lin, T (2017), Durable, self-healing, superhydrophobic fabrics from fluorine-free, waterborne, polydopamine/alkyl silane coatings, RSC Advances, Vol. 7, NO. 54, PP. 33986-33993.

250. Wang, J; Fuentes, C; Zhang, D; Wang, X; Van Vuure, A; Seveno, D (2017), Wettability of carbon fibres at micro- and mesoscales, Carbon, Vol. 120, PP. 438-446.

251. Wang, J; Hao, J; Liu, D; Qin, S; Portehault, D; Li, Y; Chen, Y; Lei, W (2017), Porous boron carbon nitride nanosheets as efficient metal-free catalysts for the oxygen reduction reaction in both alkaline and acidic solutions, ACS Energy Letters, Vol. 2, PP. 306-312.

252. Wang, J; Huang, S; Lu, X; Xu, Z; Zhao, Y; Li, J; Wang, X (2017), Wet-spinning of highly conductive nanocellulose-silver fibers, Journal of Materials Chemistry C, Vol. 5, NO. 37, PP. 9673-9679.

253. Wang, J; Stanford, N (2017), A critical assessment of work hardening in TWIP steels through micropillar compression, Materials Science and Engineering: A, Vol. 696, PP. 42-51.

254. Wang, X; Zhu, H; Greene, G; Zhou, Y; Yoshizawa-Fujita, M; Miyachi, Y; Armand, M; Forsyth, M; Pringle, J; Howlett, P (2017), Organic ionic plastic crystal-based composite electrolyte with surface enhanced ion transport and its use in all-solid-state lithium batteries, Advanced Materials Technologies, Vol. 2, NO. 7, PP. 1-6.

255. Wang, Y; Wei, X; Li, J; Wang, F; Wang, Q; Zhang, Y; Kong, L (2017), Homogeneous isolation of nanocellulose from eucalyptus pulp by high pressure homogenization, Industrial Crops and Products, Vol. 104, PP. 237-241.

256. Wang, Z; Cheng, J; Ni, W; Gao, L; Yang, D; Razal, J; Wang, B (2017), Poly(3,4-ethylene-dioxythiophene)-poly(styrenesulfonate) glued and graphene encapsulated sulfur-carbon film for high-performance free-standing lithium-sulfur batteries, Journal of Power Sources, Vol. 342, PP. 772-778.

257. Weiss, M; Abeyrathna, B; Gangoda Desinghege, S; Mendiguren, J; Wolfkamp, H (2017), Bending behaviour and oil canning in roll forming a steel channel, International Journal of Advanced Manufacturing Technology, Vol. 91, NO. 5-8, PP. 2875-2884.

258. Weiss, M; Abeyrathna, B; Rolfe, B; Abee, A; Wolfkamp, H (2017), Effect of coil set on shape defects in roll forming steel strip, Journal of Manufacturing Processes, Vol. 25, PP. 8-15, Elsevier.

259. Woodhead, A; de Souza, M; Church, J (2017), An investigation into the surface heterogeneity of nitric acid oxidized carbon fiber, Applied Surface Science, Vol. 401, PP. 79-88, Elsevier.

260. Wu, S; Zhang, J; Ladani, R; Ravindran, A; Mouritz, A; Kinloch, A; Wang, C (2017), Novel electrically conductive porous PDMS/carbon nanofiber composites for deformable strain sensors and conductors, ACS Applied Materials and Interfaces, Vol. 9, PP. 14207-14215, American Chemical Society.

261. Wu, Y; Wang, Z; Yan, Z; Zhang, T; Bai, Y; Wang, P; Luo, P; Gou, S; Guo, Q (2017), Poly(2-acrylamide-2-methylpropanesulfonic acid)-modified SiO2 nanoparticles for water-based muds, Industrial & Engineering Chemistry Research, Vol. 56, NO. 1, PP. 168-174.

262. Wu, Y; Xue, Y; Qin, S; Liu, D; Wang, X; Hu, X; Li, J; Wang, X; Bando, Y; Golberg, D; Chen, Y; Gogotsi, Y; Lei, W (2017), BN nanosheet/polymer films with highly anisotropic thermal conductivity for thermal management applications., ACS Applied Materials and Interfaces.

263. Xiang, D; Shigdar, S; Bean, A; Bruce, M; Yang, W; Mathesh, M; Wang, T; Yin, W; Tran, P; Shamaileh, H; Barrero, R; Zhang, P; Li, Y; Kong, L; Liu, K; Zhou, S; Hou, Y; He, A; Duan, W (2017), Transforming doxorubicin into a cancer stem cell killer via EpCAM aptamer-mediated delivery, Theranostics, Vol. 7, NO. 17, PP. 4071-4086.

264. Xiang, Y; Peng, D; Ubhayaratne, I; Rolfe, B; Pereira, M (2017), Second-order cyclostationary statistics-based blind source extraction from convolutional mixtures, IEEE access, Vol. 5, PP. 2011-2019.

265. Xie, W; Zhang, M; Liu, D; Lei, W; Sun, L; Wang, X (2017), Photocatalytic TiOÂ¿/porous BNNSs composites for simultaneous LR2B and Cr (VI) removal in wool dyeing bath, Journal of Photochemistry and Photobiology A: chemistry, Vol. 333, PP. 165-173.

266. Xie, W; Zhang, M; Liu, D; Lei, W; Sun, L; Wang, X (2017), Reactive yellow 161 decolorization by TiO2/porous boron nitride nanosheet composites in cotton dyeing effluent, ACS Sustainable Chemistry and Engineering, Vol. 5, NO. 2, PP. 1392-1399.

267. Xiong, Z; Saleh, A; Marceau, R; Taylor, A; Stanford, N; Kostryzhev, A; Pereloma, E (2017), Site-specific atomic-scale characterisation of retained austenite in a strip cast TRIP steel, Acta materialia, Vol. 134, PP. 1-15.

268. Xu, S; Toth, L; Schuman, C; Lecomte, J; Barnett, M (2017), Dislocation mediated variant selection for secondary twinning in compression of pure titanium, Acta materialia, Vol. 124, PP. 59-70.

269. Xu, X; Yin, M; Li, N; Wang, W; Sun, B; Liu, M; Zhang, D; Li, Z; Wang, C (2017), Vanadium-doped tin oxide porous nanofibers: enhanced responsivity for hydrogen detection, Talanta, Vol. 167, PP. 638-644.

270. Yadav, R; Naebe, M; Wang, X; Kandasubramanian, B (2017), Review on 3D prototyping of damage tolerant interdigitating brick arrays of nacre, Industrial and engineering chemistry research, Vol. 56, NO. 38, PP. 10516-10525.

271. Yadav, R; Naebe, M; Wang, X; Kandasubramanian, B (2017), Structural and thermal stability of polycarbonate decorated fumed silica nanocomposite via thermomechanical analysis and In-situ temperature assisted SAXS, Scientific Reports, Vol. 7, NO. 1, PP. 1-11.

272. Yan, G; Niu, H; Shao, H; Zhao, X; Zhou, H; Lin, T (2017), Curved convex slot: an effective needleless electrospinning spinneret, Journal of Materials Science, Vol. 52, NO. 19, PP. 11749-11758.

273. Yan, G; Niu, H; Zhao, X; Shao, H; Wang, H; Zhou, H, Lin, T; Improving nanofiber production and application performance by electrospinning at elevated temperatures, Industrial & Engineering Chemistry Research, 2017, 56(43), 12337-12343.

274. Yan, Y; Gunzelmann, D; Pozo-Gonzalo, C; Hollenkamp, A; Howlett, P; MacFarlane, D; Forsyth, M (2017), Investigating discharge performance and Mg interphase properties of an Ionic Liquid electrolyte based Mg-air battery, Electrochimica acta, Vol. 235, PP. 270-279.

275. Yang, F; Kong, N; Conlan, X; Wang, H; Barrow, C; Yan, F; Guo, J; Yang, W (2017), Electrochemical evidences of chiral molecule recognition using L/D-cysteine modified gold electrodes, Electrochimica acta, Vol. 237, PP. 22-28.

276. Yang, H; Zhang, J; Li, J; Jiang, S; Forsyth, M; Zhu, H (2017), Proton transport in hierarchical-structured Nafion membranes: a NMR study, Journal of Physical Chemistry Letters, Vol. 8, NO. 15, PP. 3624-3629.

277. Yang, J; Yang, Z; Li, L; Cai, Q; Nie, H; Ge, M; Chen, X; Chen, Y; Huang, S (2017), Highly efficient oxygen evolution from CoS2/CNT nanocomposites via a one-step electrochemical deposition and dissolution method, Nanoscale, Vol. 9, NO. 20, PP. 6886-6894.

278. Yang, J; Zhu, H; Zhao, Y; Jiang, Q; Chen, H; Liu, G; Chen, P; Wang, D (2017), New insights into the beta-form crystal toughening mechanism in pre-oriented PHBV films, European polymer journal, Vol. 91,PP. 81-91.

279. Yang, Q; Ma, H; Dai, Z; Wang, J; Dong, S; Shen, J; Dong, J (2017), Improved thermal and mechanical properties of bacterial cellulose with the introduction of collagen, Cellulose, Vol. 24, NO. 9, PP. 3777-3787.

280. Yang, T; Wei, L; Jing, L; Liang, J; Zhang, X; Tang, M; Monteiro, M; Chen, Y; Wang, Y; Gu, S; Zhao, D; Yang, H; Liu, J; Lu, G (2017), Dumbbell-shaped bi-component mesoporous Janus solid nanoparticles for biphasic interface catalysis, Angewandte chemie, Vol. 56, NO. 29, PP. 8459-8463.

281. Yang, T; Zhong, Y; Liang, J; Rahman, M; Lei, W; Chen, Y; Monteiro, M; Shao, Z; Liu, J (2017), Hierarchical porous yolk-shell carbon nanosphere for high-performance lithium-sulfur batteries, Particle and Particle Systems Characterization, Vol. 34, NO. 4, PP. 1-7.

282. Yin, M; Yang, F; Wang, Z; Zhu, M; Liu, M; Xu, X; Li, Z (2017), A Fast Humidity Sensor Based on Li+-Doped SnO2 One-Dimensional Porous Nanofibers, Materials, Vol. 10, NO. 5.

283. Yu, Y; Hurren, C; Millington, K; Sun, L; Wang, X (2017), Research on the influence of yarn parameters on the ultraviolet protection of yarns, Journal of The Textile Institute, Vol. 108, NO. 2, PP. 178-188.

284. Yu, Y; Hurren, C; Millington, K; Sun, L; Wang, X (2017), Understanding the influence of fibre, yarn and fabric parameters on UV protection of wool-knitted fabrics, Journal of the Textile Institute, Vol. 108, NO. 9, PP. 1609-1617.

285. Wang, X; Zhu, H; Greene, G.W; Zhou, Y; Yoshizawa-Fujita, M; Miyachi, Y; Organic Ionic Plastic Crystal-Based Composite Electrolyte with Surface Enhanced Ion Transport and Its Use in All-Solid-State Lithium Batteries. Advanced Materials Technologies 2 (7), 1700046.

286. Zabihi, O; Ahmadi, M; Abdollahi, T; Nikafshar, S; Naebe, M (2017), Collision-induced activation: towards industrially scalable approach to graphite nanoplatelets functionalization for superior polymer nanocomposites, Scientific Reports, Vol. 7, PP. 1-13.

287. Zabihi, O; Ahmadi, M; Li, Q; Shafei, S; Huson, M; Naebe, M (2017), Carbon fibre surface modification using functionalized nanoclay: a hierarchical interphase for fibre-reinforced polymer composites, Composites science and technology, Vol. 148, PP. 49-58.

288. Zabihi, O; Ahmadi, M; Naebe, M (2017), Self-assembly of quaternized chitosan nanoparticles within nanoclay layers for enhancement of interfacial properties in toughened polymer nanocomposites, Materials and Design, Vol. 119, PP. 277-289.

289. Zhang, D; Wong, C; Wen, C; Li, Y (2017), Cellular responses of osteoblast-like cells to 17 elemental metals, Journal of Biomedical Materials Research, Vol. 105, NO. 1, PP. 148-158.

290. Zhang, J; Lei, W; Liu, D; Wang, X (2017), Synergistic influence from the hybridization of boron nitride and graphene oxide nanosheets on the thermal conductivity and mechanical properties of polymer nanocomposites, Composites Science and Technology, Vol. 151, PP. 252-257.

291. Zhang, J; Li, J; Jin, X; Du, S; Kaur, J; Wang, X (2017), Natural and highly protective composite structures – wild silkworm cocoons, Composites communications, Vol. 4, PP. 1-4.

292. Zhang, J; Seyedin, S; Gu, Z; Salim, N; Wang, X; Razal, J (2017), Liquid crystals of graphene oxide: a route towards solution-based processing and applications, Particle and particle systems characterization,PP. 1-23.

293. Zhang, J; Seyedin, S; Gu, Z; Yang, W; Wang, X; Razal, J (2017), MXene: a potential candidate for yarn supercapacitors, Nanoscale.

294. Zhang, J; Xie, Z; Hill, A; Cong, W; She, F; Gao, W; Hoang, M; Kong, L (2017), Effects of a volatile solvent with low surface tension combining with the silica network reinforcement on retention of LLC structure in polymer matrix, Polymer bulletin, PP. 1-15.

295. Zhang, L; Kim, T; Li, N; Kang, T; Chen, J; Pringle, J; Zhang, M; Kazim, A; Fang, S; Haines, C; Al-Masri, D; Cola, B; Razal, J; Di, J; Beirne, S; MacFarlane, D; Gonzalez-Martin, A; Mathew, S; Kim, Y; Wallace, G; Baughman, R (2017), High power density electrochemical thermocells for inexpensively harvesting low-grade thermal energy., Advanced materials, Vol. 29, NO. 12, PP. 1-7.

296. Zhang, M; Tang, B; Sun, L; Wang, X (2017), Protection of silica-coated ZnO nanoparticles on pre-dyed polyester fabrics against photofading, Journal of the Textile Institute, Vol. 107, NO. 1, PP. 95-101.

297. Zhang, M; Xie, W; Tang, B; Sun, L; Wang, X (2017), Synthesis of TiO2 & SiO2 nanoparticles as efficient UV absorbers and their application on wool, Textile Research Journal, Vol. 87, NO. 14, PP. 1784-1792.

298. Zhang, T; Guo, Q (2017), Continuous preparation of polyHIPE monoliths from ionomer-stabilized high internal phase emulsions (HIPEs) for efficient recovery of spilled oils, Chemical Engineering Journal, Vol. 307, PP. 812-819.

299. Zhang, T; Xu, Z; Gui, H; Guo, Q (2017), Emulsion-templated, macroporous hydrogels for enhancing water efficiency in fighting fires, Journal of Materials Chemistry A, Vol. 5, NO. 21, PP. 10161-10164.

300. Zhang, Z; Zhang, D; Zhu, L; Gao, L; Lin, T; Li, W (2017), Performance enhancement of the anti-corrosion coating based on Ce3+-polyaniline-montmorillonite composite/epoxy-ester system, Journal of coatings technology and research, Vol. 14, NO. 5, PP. 1083-1093.

301. Zhang, J; Liu, J; Lu, S; Zhu, H; Aili, D; De Marco, R; Xiang, Y; Forsyth, M; Li, Q; Ion-Exchange-Induced Selective Etching for the Synthesis of Amino-Functionalized Hollow Mesoporous Silica for Elevated-High-Temperature Fuel Cells. ACS Applied Materials & Interfaces 9 (37), 31922-31930.

302. Zhao, J; Wang, J; Fan, L; Pakdel, E; Huang, S; Wang, X (2017), Immobilization of titanium dioxide on PAN fiber as a recyclable photocatalyst via co-dispersion solvent dip coating, Textile Research Journal, Vol. 87, NO. 5, PP. 570-581.

303. Zhao, L; Islam, S; Wang, J; Cortie, D; Wang, X; Cheng, Z; Wang, J; Ye, N; Dou, S; Shi, X; Chen, L; Snyder, G; Wang, X (2017), Significant enhancement of figure-of-merit in carbon-reinforced Cu2Se nanocrystalline solids, Nano energy, Vol. 41, PP. 164-171.

304. Zhao, Y; Wang, H; Zhou, H; Lin, T (2017), Directional fluid transport in thin porous materials and its functional applications, Small, Vol. 13, NO. 4, PP. 1-22.

305. Zheng, Y; Jiao, Y; Zhu, Y; Cai, Q; Vasileff, A; Li, L; Han, Y; Chen, Y; Qiao, S-Z (2017), Molecule-level g-C3N4 coordinated transition metals as a new class of electrocatalysts for oxygen electrode reactions, Journal of the American Chemical Society, Vol. 139, NO. 9, PP. 3336-3339.

306. Zhong, X; Rowenhorst, D; Beladi, H; Rohrer, G (2017), The five-parameter grain boundary curvature distribution in an austenitic and ferritic steel, Acta materialia, Vol. 123, PP. 136-145.

307. Zhou, H; Wang, H; Niu, H; Zhao, Y; Xu, Z; Lin, T (2017), A waterborne coating system for preparing robust, self-healing, superamphiphobic surfaces, Advanced functional materials, Vol. 27, NO. 14, PP. 1-8.

308. Zhou, Y; Jadwiszczak, J; Keane, D; Chen, Y; Yu, D; Zhang, H (2017), Programmable graphene doping via electron beam irradiation, Nanoscale, Vol. 9, NO. 25, PP. 8657-8664.

309. Zhou, Y; Wang, X; Zhu, H; Armand, M; Forsyth, M; Greene, G; Pringle, J; Howlett, P (2017), N-ethyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide-electrospun polyvinylidene fluoride composite electrolytes: characterization and lithium cell studies, Physical chemistry chemical physics, Vol. 19, NO. 3, PP. 2225-2234.

310. Zhou, Y; Wang, X; Zhu, H; Yoshizawa-Fujita, M; Miyachi, Y; Armand, M; Forsyth, M; Greene, G; Pringle, J; Howlett, P (2017), Solid-state lithium conductors for lithium metal batteries based on electrospun nanofiber/plastic crystal composites, ChemSusChem, Vol. 10, NO. 15, PP. 3135-3145.

311. Zhou, H; Wang, H; Niu, H; Zhao, Y; Xu, Z; Lin, T; A Waterborne Coating System for Preparing Robust, Self-healing, Superamphiphobic Surfaces, Advanced Functional Materials, 2017, 27, 1604261.

312. Zhu, L; Naebe, M; Blanchonette, I; Wang, X (2017), Heat transfer properties of bifacial fabrics, Textile Research Journal, Vol. 87, NO. 19, PP. 2307-2313.

313. Zhu, H; Yang, H; Li, J; Barlow, K.J; Kong, L; Mecerrreyes, D; MacFarlane, D.R. Proton-Exchange-Induced Configuration Rearrangement in a Poly (ionic liquid) Solution: A NMR Study. The Journal of Physical Chemistry Letters 8 (21), 5355-5359.

314. Zhu, L; Naebe, M; Blanchonette, I; Wang, X (2017), Mechanical properties of bifacial fabrics, Textile Research Journal, PP. 1-10.

315. Zhu, L; Naebe, M; Blanchonette, I; Wang, X (2017), Moisture transfer properties of bifacial fabrics, Textile Research Journal, Vol. 87, NO. 9, PP. 10961-1106.

316. Zhu, L; Wang, X; Blanchonette, I; Naebe, M (2017), Thermal comfort properties of bifacial fabrics, Textile Research Journal, PP. 1-9.

317. Zhu, L; Wang, X; Hinestroza, J; Naebe, M (2017), Determination of the porosity in a bifacial fabric using micro-computed tomography and three-dimensional reconstruction, Textile Research Journal, PP. 1-15.

318. Zhu, S; Lapovok, R; Nie, J; Estrin, Y; Mathaudhu, S (2017), Microstructure and mechanical properties of LPSO phase dominant Mg85.8Y7.1Zn7.1 and Mg85.8Y7.1Ni7.1 alloys, Materials Science and Engineering A, Vol. 692, PP. 35-42.

319. Zindal, A; Jain, J; Prasad, R; Singh, S; Cizek, P (2017), Correlation of grain boundary precipitate characteristics with fracture and fracture toughness in an Mg-8Al-0.5 Zn alloy, Materials Science and Engineering A, Vol. 706, PP. 192-200.

Conference Papers

1. Adineh, V.R; Marceau, R.K.W; Fu J, “Metallic nanoshell for three-dimensional chemical mapping of low conductive materials with pulsed-voltage atom probe tomography”. Microscopy & Microanalysis 23 S1, (2017), pp. 682-683.
2. Barnett, M (2017), Twinning super dislocations to help understand strength, Minerals, Metals and Materials Series. Part F8, PP. 143-145.
3. Jiang, L; Dorin, T; Marceau, R; Stanford, N; Hodgson, P (2017), Influence of coiling on microstructural evolution and mechanical properties of strip-cast low-carbon low-niobium steel, in Sommitsch C; Ionescu M; Mishra B; Kozeschnik E; Chandra T, Processing and manufacturing of advanced materials. Conference (9th : 2016 : Graz, Austria), PP. 1182-1187.
4. Parvizi, R; Marceau, R.K.W; Hughes, A.E; Cizek P; Glenn, A.M; Tan, M.Y; Forsyth, M (2017) Atom Probe Tomography Studies of the Initiation of Localized Corrosion in Aluminum Alloy 2024. Microscopy & Microanalysis 23 S1, pp. 696-697.
5. Patil, A; Zhao, Y; Liu, X; Wang, X (2017), Methodological issues in evaluating the antimicrobial efficiency of antimicrobial-superhydrophobic fabrics, Textile and Clothing. Conference (2017 : Kolkata, India), PP. 115-121.
6. PerzyDski, K; Cios, G; Szwachta, G; Zych, D; Setty, M; Bala, P; Madej, L (2017), Evaluation of pulsed laser deposited thin films properties on the basis of the nanoindentation test, in Allwood J, Department of Engineering at the University of Cambridge. Conference (12th : 2017 : Cambridge, Eng.), PP. 2191-2196.
7. Rolfe, B; Abdollahpoor, A; Wang, Y (2017), Local Patchworking of Sheet Properties Combining Carburization and Hot Stamping, in Zhang Y; Ma M, PP. 346-351.
8. Van Amber, R; Rajkhowa, R; Naebe, M; Chandrasekharan Nair Remadevi, R; Barua, D. (2017), Eri Silk and Silk Blend Protein Fiber Fabrics: Physical Properties and Consumer Acceptability, The Fiber Society 2017 Fall Meeting and Technical Conference, 8-10 November 2017 Athens Georgia.
9. Vellanki, P; Rana, S; Gupta, S; Rubin, D; Sutti, A; Dorin, T; Venkatesh, S (2017), Process-constrained batch Bayesian optimisation, Advances in Neural Information Processing Systems, Proceedings of the 31st Conference of Neural Information Processing Systems, Long Beach, California, PP. 3416-3425.
10. Wang, K; Varela, F; Tan, Y (2017), Approaches to overcoming ongoing pipeline corrosion monitoring challenges, Corrosion and Prevention. Conference (2017: Sydney, NSW), PP. 1-7, The Australasian Corrosion Association.

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