

Mohan Edirisinghe: List of Journal Publications: As at March 2022

(This list is updated approximately every 6 months)

2022

Facile One-Pot Method for All Aqueous Green Formation of Biocompatible Silk Fibroin-Poly (Ethylene Oxide) Fibers for Use in Tissue Engineering

P.L.Heseltine, C.Bayram, M.Gultekinoglu, S.Homer-Vanniasinkam, K.Ulubayram and M.Edirisinghe, *ACS Biomaterials Science & Engineering*.

<https://doi.org/10.1021/acsbiomaterials.1c01555>

Severe Acute Respiratory Syndrome Type 2-Causing Coronavirus: Variants and Preventive Strategies

M.O.Aydogdu, J.L.Rohn, N.V.Jafari, F.Brako, S.Homer-Vanniasinkam and M.Edirisinghe, *Advanced Science*. <https://doi.org/10.1002/advs.202104495>

Exploiting the Antiviral Potential of Intermetallic Nanoparticles

R.K.Matharu, Y-K.Cheong, G.Ren, M.Edirisinghe and L.Ciric, *Emergent Materials*.

<https://doi.org/10.1007/s42247-021-00306-2>

Enhancing In Vitro Stability of Albumin Microbubbles Produced Using Microfluidic T-Junction Device

A.H.Khan, S.Surwase, X.Jiang, M.Edirisinghe and S.V.Dalvi, *Langmuir*.

<https://doi.org/10.1021/acs.langmuir.1c01516>

Metformin-Loaded Polymer-Based Microbubbles/Nanoparticles Generated for the Treatment of Type 2 Diabetes Mellitus

S.Cesur, M.E.Cam, F.S.Sayin, S.Su, A.Harker, M.Edirisinghe and O.Gunduz, *Langmuir*.

<https://doi.org/10.1021/acs.langmuir.1c00587>

Theme Issue on Coronavirus and Surfaces

M.Edirisinghe

Interface Focus, 12(2022)6th February.

[ISSUE EDITORIAL & FRONT COVER]

2021

Metal-based Nanoparticles for Combating Antibiotic Resistance

E.Altun, M.O.Aydogdu, E.Chung, G.Ren, S.Homer-Vanniasinkam and M.Edirisinghe, *Applied Physics Reviews*, 8(2021)041303.

[Featured/Editor's picks]

Core–sheath Polymer Nanofiber Formation by the Simultaneous Application of Rotation and Pressure in a Novel Purpose-designed Vessel

H.Alenezi, M.E.Cam and M.Edirisinghe, *Applied Physics Reviews*, 8(2021)041412.

[Work featured on the cover of the journal and also Scilight]

Optimization of Process-Control Parameters for the Diameter of Electrospun Hydrophilic Polymeric Composite Nanofibers

F.S.Alfares, E.Guler, H.Alenezi, M.E.Cam and M.Edirisinghe, *Macromolecular Mater. & Eng.*, 306(2021)2100471.

[Work featured as a Frontispiece]

Vitamin D3/vitamin K2/magnesium-loaded Polylactic acid/tricalcium phosphate/polycaprolactone Composite Nanofibers Demonstrated Osteoinductive Effect by Increasing Runx2 via Wnt via Wnt/ β -catenin Pathway
E.Guler, Y.E.Baripoglu, H.Alenezi, A.Arikan, R.Babazade, S.Unal, G.Duruksu, F.S.Alfares, Y.Yazir, F.N.Oktar, O.Gunduz, M.Edirisinghe and M.E.Cam, *International Journal of Biological Macromolecules*, 190(2021)244-258.

Utilising Co-Axial Electrospinning as a Taste-Masking Technology for Paediatric Drug Delivery
H.E.Abdelhakim, A.Coupe, C.Tuleu, M.Edirisinghe and D.Q.M.Craig, *Pharmaceutics* 13(2021)1665.

Co-Axial Gyro-Spinning of PCL/PVA/HA Core-Sheath Fibrous Scaffolds for Bone Tissue Engineering
S.Mahalingam, C.Bayram, M.Gultekinoglu, K.Ulubayram, S.Homer-Vanniasinkam and M.Edirisinghe, *Macromol. Biosci.*, 21(2021)2100177.
[Work featured as a Frontispiece]

Harnessing Polyhydroxyalkanoates and Pressurized Gyration for Hard and Soft Tissue Engineering
P.Basnett, R.K.Matharu, C.S.Taylor, U.Illangakoon, J.I.Dawson, J.M.Kanczler, M.Behbehani, E.Humphrey, Q.Majid, B.Lukasiewicz, R.Nigmatullin, P.Heseltine, R.O.C.Oreffo, J.W.Haycock, C.Terracciano, S.E.Harding, M.Edirisinghe and I.Roy, *ACS Appl. Mater. & Interfaces*, 13(2021)32624-32639.

Alleviating the Toxicity Concerns of Antibacterial Cinnamon-polycaprolactone Biomaterials for Healthcare-related Biomedical Applications
J.Ahmed, M.Gultekinoglu, C.Bayram, D.Kart, K.Ulubayram and M.Edirisinghe *MedComm*, 2(2021)236-246.

Perspective: Covid-19; Emerging Strategies and Material Technologies
J.Ahmed, H.Alenezi, U.Edirisinghe and M.Edirisinghe *Emergent Materials*, 4(2021)3-8.
[INVITED for Special Issue: Intelligent emergent materials to combat COVID-19 pandemic]

A Novel Reusable Anti-COVID-19 Transparent Face Respirator with Optimized Airflow
H.Alenezi, M.E.Cam and M.Edirisinghe, *Bio-design and Manufacturing*,4(2021)1-9.

Next-generation Antimicrobial Peptides (AMPs) Incorporated Nanofibre Wound Dressings
A.Afshar, E.Yuca, C.Wisdom, H.Alenezi, J.Ahmed, C.Tamerler and M.Edirisinghe, *Medical Devices & Sensors*, 4(2021)e10144.

Accelerated Diabetic Wound Healing by Topical Application of Combination Oral Antidiabetic Agents-loaded Nanofibrous Scaffolds: An In Vitro and In Vivo Evaluation Study
M.E.Cam, B.Ertas, H.Alenezi, A.N.Hazar-Yavuz, S.Cesur, G.S.Ozcan, C.Ekentok, E.Guler, C.Katsakouli, Z.Demirbas, D.Akakin, M.S.Eroglu, L.Kabasakal, O.Gunduz and M.Edirisinghe, *Mater. Sci. Eng. C*, 119(2021)111586.

Surface Interactions and Viability of Coronaviruses

M.O.Aydogdu, E.Altun, E.Chung, G.Ren, S.Homer-Vanniasinkam, B.Chen and M.Edirisinghe, *J.Roy. Soc. Interface*,18(2021)20200798.

[HEADLINE REVIEW]

Wholly Biobased, Highly Stretchable, Hydrophobic, and Self-healing Thermoplastic Elastomer

Y.Nurhamiyah, A.Amir, M.Finnegan, E.Themistou, M.Edirisinghe and B.Chen *ACS Appl. Mater. & Interfaces*,13(2021)6720-6730.

Porous Graphene Composite Polymer Fibres

J.Ahmed, T.A.Tabish, S.Zhang and M.Edirisinghe, *Polymers*,13(2021)76.

Composite Nanoclay-hydroxyapatite-polymer Fiber Scaffolds for Bone Tissue Engineering Manufactured using Pressurized Gyration

K.Kundu, A.Afshar, D.R.Katti, M.Edirisinghe and K.S.Katti, *Composites Science and Technology*, 202(2021)108598.

2020

Current Methodologies and Approaches for the Formation of Core–sheath Polymer Fibers for Biomedical Applications

S.Mahalingam, R.Matharu, S.Homer-Vanniasinkam and M. Edirisinghe, *Appl. Phys. Rev.*, 7(2020)041302.

[INVITED FEATURED ARTICLE: Work news-reported in UPI on 14th October 2020 and many other news agencies]

Novel Antibiotic-loaded Particles Conferring Eradication of Deep Tissue Bacterial Reservoirs for the Treatment of Chronic Urinary Tract Infection

W.K.Lau, D.Dharmasena, H.Horsley, N.V.Jafari, J.Malone-Lee, E.Stride, M.Edirisinghe and J.L.Rohn, *J.Control. Release*, 328(2020)490-502.

Rapid and Label-free Detection of COVID-19 Using Coherent Anti-Stokes Raman Scattering Microscopy

T.A.Tabish, R.J.Narayan and M. Edirisinghe, *MRS Communications*, 10(2020)566-572.

A Novel Treatment Strategy for Preterm Birth: Intra-vaginal Progesterone-loaded Fibrous Patches

M.E.Cam, A.N.Hazar-Yavuz, S.Cesur, O.Ozkan, H.Alenezi, H.T.Sasmazel, M.S.Eroglu, F.Brako, J.Ahmed, L.Kabasakal, G.Ren, O.Gunduz and M. Edirisinghe, *Int. J. Pharmaceutics*, 588(2020)119782.

Effectiveness of Oil-layered Albumin Microbubbles Produced using Microfluidic T-junctions in Series for *In Vitro* Inhibition of Tumor Cells

A.H.Khan, X.Jiang, S.Surwase, M.Gultekinoglu, C.Bayram, I.Sathisaran, Dhiraj Bhatia, J.Ahmed, B.Wu, K.Ulubayram, M. Edirisinghe and S.V.Dalvi, *Langmuir*, 36(2020)11429-11441.

Generation of Core–sheath Polymer Nanofibers by Pressurised Gyration

S.Mahalingam, S.Huo, S.Homer-Vanniasinkam and M.Edirisinghe, *Polymers*,12(2020)1709.

[Work featured on the cover of the journal and in Cover Paper Promotion Project, see https://twitter.com/Polymers_MDPI/status/1364119803384852480]

The Comparison of Glybenclamide and Metformin-loaded Bacterial Cellulose/gelatin Nanofibres Produced by a Portable Electrohydrodynamic Gun for Diabetic Wound Healing
M.E.Cam, M.Crabbe-Mann, H.Alenezi, A.N.Hazar-Yavuz, B.Ertas, C.Ekentok, G.S.Ozcan, F.Topal, E.Guler, Y.Yazir, M.Parhizkar and M.Edirisinghe, *Eur. Polym. J.*,134(2020)109844.

Viral Filtration Using Carbon-Based Materials
R.K.Matharu, H.Porwal, B.Chen, L.Ciric and M.Edirisinghe, *Medical Devices & Sensors*, 3(2020)e10107.

Poly(Caprolactone)-Poly(N-Isopropyl Acrylamide)-Fe₃O₄ Magnetic Nanofibrous Structure with Stimuli Responsive Drug Release
S.Gholami, S.Labbaf, A.Kermanpur A.B.Houreh Chaojie Luo, M.Edirisinghe and H.N.Esfahani, *Macromolecular Mater. & Eng.*, 305(2020)2000208.

Comparative Study of the Antimicrobial Effects of Tungsten Nanoparticles and Tungsten Nanocomposite Fibres on Hospital Acquired Bacterial and Viral Pathogens
R.K.Matharu, L.Ciric, G.Ren and M.Edirisinghe, *Nanomaterials*, 10(2020)10061017.

Microstructure of Fibres Pressure-spun from Polyacrylonitrile–graphene oxide Composite Mixtures
A.Amir, H.Porwal, S.Mahalingam, X.Wu, T.Wu, B.Chen, T.A.Tabish and M.Edirisinghe, *Composites Science and Technology*, 197(2020)108214.

Bacterial Cellulose Micro-nano Fibres for Wound Healing Applications
J.Ahmed, M.Gultekinoglu and M.Edirisinghe, *Biotechnology Advances*, 41, July–August(2020)107549.

COVID-19: Facemasks, Healthcare Policies and Risk Factors in the Crucial Initial Months of a Global Pandemic
J. Ahmad, A.Harker and M.Edirisinghe, *Medical Devices & Sensors*, 3(2020)e10120.

A Portable Device for the Generation of Drug-Loaded Three-Compartmental Fibers Containing Metronidazole and Iodine for Topical Application
F.Brako, C.J.Luo, R.K.Matharu, L.Ciric, A.Harker, M.Edirisinghe and D.Q.M. Craig, *Pharmaceutics*,12(2020)373.

Microstructure and Antibacterial Efficacy of Graphene Oxide Nanocomposite Fibres
R.K.Matharu, T.A.Tabish, T.Trakoolwilaiwan, J.Mansfield, J.Moger, T.Wu, C.Lourenço, B.Chen, L.Ciric, I.P.Parkin and M.Edirisinghe
Journal of Colloid and Interface Science, 571(2020)239-252.

Self-assembled Micro-stripe Patterning of Sessile Polymeric Nanofluid Droplets
M.Gultekinoglu, X.Jiang, C.Bayram, H.Wu, K.Ulubayram and M.Edirisinghe
Journal of Colloid and Interface Science, 561(2020)470-480.

Evaluation of Burst Release and Sustained Release of Pioglitazone-loaded Fibrous Mats on Diabetic Wound Healing: an *In vitro* and *In vivo* Comparison Study
M.E.Cam, S.Yildiz, H.Alenezi, S.Cesur, G.S.Ozcan, G.Erdemir, U.Edirisinghe, D.Akakin, D.S.Kuruca, L.Kabasakal, O.Gunduz and M.Edirisinghe
J. Royal Soc. Interface,17(2020)20190712.

Enhanced Efficacy in Drug-resistant Cancer Cells through Synergistic Nanoparticle Mediated Delivery of Cisplatin and Decitabine
M.Parhizkar, P.J.T.Reardon, A.H.Harker, R.J.Browning, E.Stride, R.B.Pedley, J.C.Knowles and M.Edirisinghe, *Nanoscale Advances* 2(2002)1177-1186.

Copolymer Composition and Nanoparticle Configuration Enhance in vitro Drug Release Behavior of Poorly Water-soluble Progesterone for Oral Formulations
Y.Zhang, R.Zhang, U.E.Illangakoon, A.H.Harker, C.Thrasivoulou, M.Parhizkar, M.Edirisinghe and C.J.Luo
Int. J. Nanomedicine, 15(2020) 5389–5403.

Videographic Analysis of Blink Dynamics following Upper Eyelid Blepharoplasty and Its Association with Dry Eye
F.H.W.Mak, M.Ting, M.R.Edmunds, A.Harker, M.Edirisinghe, S.Duggineni, F.Murta and D.G.Ezra, *Plastic and Reconstructive Surgery Global Open*, 8(2020) e2991.

2019

Biofabrication of Gelatin Tissue Scaffolds with Uniform Pore Size via Microbubble Assembly
C.Bayram, X.Jiang, M.Gultekinoglu, S.Ozturk, K.Ulubayram and M.Edirisinghe, *Macromolecular Mater. & Eng.*, 34(2019)1900394.
[Work featured on the cover of the journal]

Experimental and Theoretical Investigation of the Fluid Behavior During Polymeric Fiber Formation with and without Pressure
H.Alenezi, M.E.Cam and M.Edirisinghe, *Applied Physics Reviews*, 6(2019)041401.
[INVITED FEATURED ARTICLE: Work news-reported in EurekaAlert 15th October 2019 and many other news agencies]

Preparation of Poly (glycerol sebacate) Fibers for Tissue Engineering Applications
M.Gultekinoglu, Ş.Öztürk, B.Chen, M.Edirisinghe and K.Ulubayram, *Euro.Polym.J.*, 121(2019)109297.

Fiber Forming Capability of Binary and Ternary Compositions in the Polymer System: Bacterial Cellulose–Polycaprolactone–Polylactic Acid
M.O.Aydogdu, E.Altun, J.Ahmed, O.Gunduz and M.Edirisinghe, *Polymers*, 11(2019)1148.

Empirical Modelling and Optimization of Pressure-coupled Infusion Gyration Parameters for the Nanofibre Fabrication
X.Hong, A.Harker and M.Edirisinghe, *Proceedings of the Royal Society*, A475(2019)20190008.
[Work featured on the cover of the journal]

Novel Pressurised Gyration Device for Making Core-Sheath Polymer Fibres
S.Mahalingam, S.Homer-Vanniasinkam and M.Edirisinghe, *Materials & Design*, 178(2019)107846.

Bioinspired Scaffold Induced Regeneration of Neural Tissue
E.Altun, M.O.Aydogdu, S.O.Togay, A.Z.Sengil, N.Ekren, M.E.Haskoylu, E.T.Oner, N.A.Altuncu, G.Ozturk, M.Crabbe-Mann, J.Ahmed, O.Gunduz and M.Edirisinghe, *Euro.Polym.J.*, 114(2019)98-108.

PEEK Surface Modification by Fast Ambient-temperature Sulfonation for Bone Implant Applications

W.Wang, C.J.Luo, J.Huang and M.Edirisinghe, *J.Roy. Soc. Interface*, 16(2019)20180955.

Electrosprayed Microparticles: A Novel Drug Delivery Method

M.E.Cam, Y.Zhang and M.Edirisinghe, *Expert Opinion on Drug Del.*, 16(2019) 895-901.

[INVITED EDITORIAL]

Microbubbles: Exploring Gas-liquid Interfaces for Biomedical Applications

M.Edirisinghe and S.Dalvi, *Langmuir*, 35(2019) 9995-9996.

[INVITED SPECIAL ISSUE on Microbubbles a New Medical Frontier, EDITORIAL, Work featured on the cover of the journal]

The Influence of Drug Solubility and Sampling Frequency on Metformin and Glibenclamide Release from Double-layered Particles: Experimental Analysis and Mathematical Modelling

T.Shams, F.Brako, S.Huo, A.H.Harker, U.Edirisinghe and M.Edirisinghe,

J.Roy. Soc. Interface, 16(2019)20180237.

Electrospinning Optimization of Eudragit E PO with and without Chlorpheniramine Maleate Using a Design of Experiment Approach

H.E.Abdelhakim, A.Coupe, C.Tuleu, M.Edirisinghe and D.Q.M.Craig, *Molecular Pharmaceutics*, 16(2019)2257-2568.

Boron Nitride Nanoscrolls: Structure, Synthesis, and Applications

M.S.Qayyum, H.Hayat, R.K.Matharu, T.A.Tabish and M.Edirisinghe, *Applied Physics Reviews*, 6(2019)021310.

[INVITED FEATURED REVIEW]

Anti-fungal Bandages Containing Cinnamon Extract

J.Ahmed, E.Altun, M.O.Aydogdu, O.Gunduz, L.Kerai, G.Ren and M.Edirisinghe, *Int. Wound J.*, 16(2019)730-736.

Effect of the Mixing Region Geometry and Collector Distance on Microbubble Formation in a Microfluidic Device Coupled with ac–dc Electric Fields

A.Kothandaraman, Y.Alfadhl, M.Qureshi, M.Edirisinghe and Y.Ventikos, *Langmuir*, 35(2019)10052-10060.

General Computational Methodology for Modeling Electrohydrodynamic Flows: Prediction and Optimization Capability for the Generation of Bubbles and Fibers

B.Aramide, A.Kothandaraman, M.Edirisinghe, S.N.Jayasinghe and Y.Ventikos, *Langmuir*, 35(2019) 10203-10212.

Generating Antibacterial Microporous Structures Using Microfluidic Processing

C.Katsakouli, X.Jiang, W.K.Lau, J.L.Rohn and M.Edirisinghe, *ACS Omega*, 4(2019)2225-2233.

Co-Culture of Keratinocyte-Staphylococcus aureus on Cu-Ag-Zn/CuO and Cu-Ag-W Nanoparticle Loaded Bacterial Cellulose:PMMA Bandages

E Altun, MO Aydogdu, M Crabbe-Mann, J Ahmed, F Brako, B Karademir, B.Aksu, M.Sennaroglu, M.S.Eroglu, G.Ren, O.Gunduz and M.Edirisinghe, *Macromolecular Mater. & Eng.*, 304(2019)1800537.

2018

Fiber Formation from Silk Fibroin Using Pressurized Gyration

PL Heseltine, J Hosken, C Agboh, D Farrar, S Homer-Vanniasinkam and M.Edirisinghe, *Macromolecular Mater. & Eng.*, 303(2018)1800577.

Effect of Copolymer Composition on Particle Morphology and Release Behavior in vitro Using Progesterone

Y.Zhang, T.Shams, A.H.Harker, M.Parhizkar and M.Edirisinghe, *Materials & Design*,59(2018)57-67.

Novel Preparation of Monodisperse Microbubbles by Integrating Oscillating Electric Fields with Microfluidics

A.Kothandaraman, A.Harker, Y.Ventikos and M.Edirisinghe, *Micromachines*, 9(2018)497.

**Invited Feature: Developments in Pressurized Gyration for the Mass Production of Polymeric Fibers*

P.L.Heseltine, J.Ahmed and M.Edirisinghe, *Macromolecular Mater. & Eng.*,303(2018)1800218.

[INVITED FEATURE ARTICLE: Work featured on the cover of the journal & reported in Advanced Science News July 23 2018, & SELECTED AS BEST OF MACROS 2019]

Electrosprayed Microparticles for Intestinal Delivery of Prednisolone

T.Shams, U.E.Illangakoon, M.Parhizkar, A.H.Harker, S.Edirisinghe, M.Orlu and M.Edirisinghe, *J.Roy. Soc. Interface*,15(2018)20180491.

Antimicrobial Activity of Tellurium-loaded Polymeric Fiber Meshes

R.K.Matharu, Z.Charani, L. Ciric, U.E.Illangakoon and M.Edirisinghe, *J.Applied Polym.Sci.*, 135(2018)46368.

[Work featured on the cover of the journal]

The Biomedical Applications of Graphene

M.Edirisinghe, *Interface Focus*, 8(2018)20180006.

[INVITED SPECIAL ISSUE EDITORIAL]

**Invited: The Effect of Graphene–Poly (methyl methacrylate) Fibres on Microbial Growth*

R.K.Matharu, H.Porwal, L.Ciric and M.Edirisinghe, *Interface Focus*,8(2018)20170058.

[Work featured on the cover of the journal]

Cellular Interactions with Bacterial Cellulose: Polycaprolactone Nanofibrous Scaffolds Produced by a Portable Electrohydrodynamic Gun for Point-of-Need Wound Dressing

M.O.Aydogdu, E.Altun, M.Crabbe-Mann, F.Brako, F.Koc, G.Ozen, S.E.Kuruca, U.Edirisinghe, C.J.Luo, O.Gunduz and M.Edirisinghe, *Int. Wound J.*, 15(2018)787-797.

Process Modeling for the Fiber Diameter of Polymer, Spun by Pressure-Coupled Infusion Gyration

X.Hong, A.Harker and M.Edirisinghe, *ACS Omega*, 3(2018)5470-5479.

Invited Topical Review: Nanocomposites: Suitable Alternatives as Antimicrobial Agents

R.K.Matharu, L.Ciric and M.Edirisinghe, *Nanotechnology*,29(2018)282001.

*Honeycomb-like PLGA-b-PEG Structure Creation with T-junction Micro Droplets
M.Gultekinoglu, X.Jiang, C.Bayram, K.Ulubayram and M.Edirisinghe,
Langmuir, 34(2018) 7989–7997.

[Work featured on the cover of the journal]

An Inexpensive, Portable Device for Point-of-Need Generation of Silver-Nanoparticle
Doped Cellulose Acetate Nanofibers for Advanced Wound Dressing

F.Brako, C.Luo, D.Q.M. Craig and M.Edirisinghe, *Macromolecular Mater. & Eng.*,
303(2018)1700586.

A Comparison of Electric-Field-Driven and Pressure-Driven Fiber Generation Methods for
Drug Delivery

J.Ahmed, R.K.Matharu, T.Shams, U.E.Illangakoon and M.Edirisinghe, *Macromolecular
Mater. & Eng.*, 303(2018)1700577.

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Polymer–Magnetic Composite Fibers for Remote-Controlled Drug Release

A.S.Perera, S.Zhang, S.Homer-Vanniasinkam, M.O.Coppens and M.Edirisinghe, *ACS
Appl. Mater. & Interfaces*, 10(2018)15524-15531.

The Development of Progesterone-loaded Nanofibers Using Pressurized Gyration: A
Novel Approach to Vaginal Delivery for the Prevention of Pre-term Birth

F.Brako, B.T.Raimi-Abraham, S.Mahalingam, D.Q.M.Craig and M.Edirisinghe, *Int.
J.Pharmaceutics*,540(2018)31-39.

Alginate Foam-based Three-dimensional Culture to Investigate Drug Sensitivity in Primary
Leukaemia Cells

M.Karimpoor, E.Yebra-Fernandez, M.Parhizkar, M.Orlu, D.Craig, J.S.Khorashad and
M.Edirisinghe, *J.Roy. Soc. Interface*,15(2018)20170928.

*Mucoadhesion of Progesterone-Loaded Drug Delivery Nanofiber Constructs

F.Brako, R.Thorogate, S.Mahalingam, B.Raimi-Abraham, D.Q.M. Craig and M.Edirisinghe,
ACS Appl. Mater. & Interfaces,10(2018)13381-13389.

Ethyl Cellulose, Cellulose Acetate and Carboxymethyl Cellulose Microstructures Prepared
Using Electrohydrodynamics and Green Solvents

M.Crabbe-Mann, D.Tsaoulidis, M.Parhizkar and M.Edirisinghe,
Cellulose, 25(2018)1687-1703.

Novel Making of Bacterial Cellulose Blended Polymeric Fiber Bandages

E.Altun, MO Aydogdu, F Koc, M Crabbe-Mann, F Brako, R Kaur-Matharu, G.Ozen,
S.E.Kuruca, U.Edirisinghe, O.Gunduz and M.Edirisinghe,
Macromolecular Mater. & Eng.,303(2018)1700607.

[Work featured on the cover of the journal and most downloaded in 2018]

A Comparison of Methods to Assess the Antimicrobial Activity of Nanoparticle
Combinations on Bacterial Cells

C.Bankier, Y.Cheong, S.Mahalingam, M.Edirisinghe, G.Ren, E.Cloutman-Green and
L.Ciric, *PLoS One*,13(2018), Article e0192093.

Latest Developments in Innovative Manufacturing to Combine Nanotechnology with Healthcare

M.Parhizkar, S.Mahalingam, S.Homer-Vanniasinkam and M.Edirisinghe, *Nanomedicine*, 13(2018)5-8.

[INVITED EDITORIAL]

Poly(3-hydroxyoctanoate), a Promising New Material for Cardiac Tissue Engineering

A.V.Bagdadi, M.Safari, P.Dubey, P.Basnett, P.Sofokleous, E.Humphrey, I.Locke, M.Edirisinghe, C.Terracciano, A.R.Boccaccini, J.C.Knowles, S.E.Harding and I.Roy, *J.Tissue Engineering & Regenerative Medicine*, 12(2018)e495-e512.

2017

Development of Artificial Bone Marrow Fibre Scaffolds to Study Resistance to Anti-leukaemia Agents

M.Karimpoor, E.Illangakoon, A.G.Reid, S.Claudiani, M.Edirisinghe and J.S.Khorashad, *Br.J.Haemo.*, 182(2017)924-927.

Development of Foam-Based 3-Dimensional Culture to Investigate Drug Sensitivity in Primary Leukaemia Cells

M.Karimpoor, E.Yebra-Fernandez, M.Parhizkar, M.Orlu, D.Craig M.Edirisinghe and J.S.Khorashad, *Blood*, 130(2017)3824.

Electrohydrodynamic Fabrication of Core-shell PLGA Nanoparticles with Controlled Release of Cisplatin for Enhanced Cancer Treatment

P.J.T.Reardon, M.Parhizkar, A.H.Harker, R.J. Browning, V.Vassileva, E.Stride, R.B.Pedley, M.Edirisinghe and J.C.Knowles, *Int.J.Nanomed.*, 12(2017)3913-3926.

Core/shell Microencapsulation of Indomethacin/paracetamol by Co-axial Electrohydrodynamic Atomization

T.Shams, M.Parhizkar, U.E.Illangakoon, M.Orlu and M.Edirisinghe, *Materials & Design*, 136(2017)204-213.

Evolution of Self-generating Porous Microstructures in Polyacrylonitrile cellulose acetate Blend Fibres

S.Mahalingam, X.Wu and M.Edirisinghe, *Materials & Design*, 136(2017)259-271.

Evolution of Surface Nanopores in Pressurised Gyrospun Polymeric Microfibers

U.E.Illangakoon, S.Mahalingam, R.K.Matharu and M.Edirisinghe, *Polymers*, 9(2017)508 (11 pages).

Drug Delivery Strategies for Platinum-Based Chemotherapy

R.J.Browning, P.J.T. Reardon, M.Parhizkar, R.B.Pedley, M.Edirisinghe, J.C.Knowles and E.Stride, *ACS Nano*, 11(2017)8560-8578.

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