Liyun Yu - DTU Orbit (07/02/2019)
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Department of Chemical and Biochemical Engineering - Senior Researcher
The Danish Polymer Centre

Research outputs:

Glycerol-silicone foams - Tunable 3-phase elastomeric porous materials
Research output: Research - peer-review ; Journal article – Annual report year: 2019

Magnetically activated microcapsules as controlled release carriers for a liquid PDMS cross-linker
Research output: Research - peer-review ; Journal article – Annual report year: 2019

A thermo-reversible silicone elastomer with remotely controlled self-healing
Research output: Research - peer-review ; Journal article – Annual report year: 2018

Corrigendum to "Rheological properties of agar and carrageenan from Ghanaian red seaweeds" [Food Hydrocolloids 63 (2017) 50–58]
Research output: Research - peer-review ; Comment/debate – Annual report year: 2018

Deeper Insight into the Dielectric Breakdown of Elastomers
Research output: Research - peer-review ; Conference abstract for conference – Annual report year: 2018

Degradation patterns of silicone-based dielectric elastomers in electrical fields
Research output: Research - peer-review ; Journal article – Annual report year: 2018

Designing reliable silicone elastomers for high temperature applications
Research output: Research - peer-review ; Conference abstract for conference – Annual report year: 2018

Designing reliable silicone elastomers for high-temperature applications
Research output: Research - peer-review ; Journal article – Annual report year: 2018

Enhancing the electro-mechanical properties of polydimethylsiloxane elastomers through blending with poly(dimethylsiloxane-co-methylphenylsiloxane) copolymers
Research output: Research - peer-review ; Journal article – Annual report year: 2018

Enhancing the electro-mechanical properties of polydimethylsiloxane elastomers through blending with poly(dimethylsiloxane-co-methylphenylsiloxane) copolymers
Research output: Research - peer-review ; Conference abstract for conference – Annual report year: 2018
Enhancing the electro-mechanical properties of polydimethylsiloxane elastomers through blending with poly(dimethylsiloxane-co-methylphenylsiloxane) copolymers

Acknowledgments
Research output: Research - peer-review › Poster – Annual report year: 2018

Highly Anisotropic Glassy Polystyrenes Are Flexible
Research output: Research - peer-review › Journal article – Annual report year: 2018

Insight into the Dielectric Breakdown of Elastomers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Molecular Strategies for Improved Dielectric Elastomer Electrical Breakdown Strengths
Yu, L. & Skov, A. L. 2018 In : Macromolecular Rapid Communications. 39, 16, 6 p., 1800383
Research output: Research - peer-review › Journal article – Annual report year: 2018

Optimization Techniques for Improving the Performance of Silicone-Based Dielectric Elastomers
Research output: Research - peer-review › Journal article – Annual report year: 2018

Simple preparation of thiol-ene particles in glycerol and surface functionalization by thiol-ene chemistry (TEC) and surface chain transfer free radical polymerization (SCT-FRP)
Research output: Research - peer-review › Journal article – Annual report year: 2018

Thermal degradation mechanisms of silicone elastomer
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Thermo-reversible silicone elastomer with remotely controlled self-healing
Research output: Research - peer-review › Poster – Annual report year: 2018

Weibull Analysis of Electrical Breakdown Strength as an Effective Means of Evaluating Elastomer Thin Film Quality
Research output: Research - peer-review › Journal article – Annual report year: 2018

Electrical breakdown phenomena of dielectric elastomers
Research output: Research - peer-review › Conference article – Annual report year: 2017
Electrical breakdown phenomena of dielectric elastomers
Research output: Research - peer-review > Poster – Annual report year: 2017

Electrical breakdown phenomena of dielectric elastomers
Research output: Research - peer-review > Conference abstract for conference – Annual report year: 2017

Electrical breakdown phenomena of dielectric elastomers
Yu, L., Mateiu, R. V. & Skov, A. L. 2017
Research output: Research > Sound/Visual production (digital) – Annual report year: 2018

Oxidation of lignin in hemp fibres by laccase: effects on mechanical properties of hemp fibres and unidirectional fibre/epoxy composites
Research output: Research - peer-review > Journal article – Annual report year: 2017

Rheological properties of agar and carrageenan from Ghanaian red seaweeds
Research output: Research - peer-review > Journal article – Annual report year: 2016

Soft and flexible conductive PDMS/MWCNT composites
Research output: Research - peer-review > Journal article – Annual report year: 2017

The mechanism of fracture for entangled polymer liquids in extensional flow
Research output: Research - peer-review > Conference abstract for conference – Annual report year: 2017

The mechanism of fracture for entangled polymer liquids in extensional flow
Research output: Research - peer-review > Conference abstract for conference – Annual report year: 2017

Voltage-stabilised elastomers with increased relative permittivity and high electrical breakdown strength by means of phase separating binary copolymer blends of silicone elastomers
Research output: Research - peer-review > Journal article – Annual report year: 2017

ZnO as a cheap and effective filler for high breakdown strength elastomers
Yu, L. & Skov, A. L. 2017 In : R S C Advances. 7, 8 p., 45784
Research output: Research - peer-review > Journal article – Annual report year: 2017

A simple method for reducing inevitable dielectric loss in high-permittivity dielectric elastomers
Research output: Research - peer-review > Journal article – Annual report year: 2016

Bimodal condensation silicone elastomers as dielectric elastomers
Research output: Research - peer-review > Conference abstract for conference – Annual report year: 2016

Bimodal condensation silicone elastomers as dielectric elastomers
Research output: Research > Sound/Visual production (digital) – Annual report year: 2016
Bimodal condensation silicone elastomers as dielectric elastomers
Research output: Research - peer-review › Poster – Annual report year: 2016

Glycerol as high-permittivity liquid filler in dielectric silicone elastomers
Research output: Research - peer-review › Journal article – Annual report year: 2016

Interpenetrated polymer networks based on commercial silicone elastomers and ionic networks with high dielectric permittivity and self-healing properties
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Silicone elastomers with superior softness and dielectric properties
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Self-Healing, High-Permittivity Silicone Dielectric Elastomer
Research output: Research - peer-review › Journal article – Annual report year: 2016

Oxidation of lignin in hemp fibres by laccase: effects on mechanical properties of hemp fibres and unidirectional fibre/epoxy composites
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Silicone elastomers with superior softness and dielectric properties
Research output: Research - peer-review › Poster – Annual report year: 2016

Silicone elastomers with superior softness and dielectric properties
Research output: Research - peer-review › Sound/Visual production (digital) – Annual report year: 2016

Mechanical and Electrical Ageing Effects on the Long-Term Stretching of Silicone Dielectric Elastomers with Soft Fillers: Long-Term Stretching of Silicone Dielectric Elastomers
Research output: Research - peer-review › Journal article – Annual report year: 2016
Silicone-modified graphene oxide fillers via the Piers-Rubinsztajn reaction
Research output: Research - peer-review › Journal article – Annual report year: 2016

Silicone rubbers for dielectric elastomers with improved dielectric and mechanical properties as a result of substituting silica with titanium dioxide
Research output: Research - peer-review › Journal article – Annual report year: 2015

A new soft dielectric silicone elastomer matrix with high mechanical integrity and low losses
Research output: Research - peer-review › Journal article – Annual report year: 2015

Bilaterally Microstructured Thin Polydimethylsiloxane Film Production
Research output: Research - peer-review › Journal article – Annual report year: 2015

Dielectric elastomers, with very high dielectric permittivity, based on silicone and ionic interpenetrating networks
Research output: Research - peer-review › Journal article – Annual report year: 2015

High energy density interpenetrating networks from ionic networks and silicone
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Silicone elastomers with high dielectric permittivity and high dielectric breakdown strength based on tunable functionalized copolymers
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Soft Functional Silicone Elastomers with High Dielectric Permittivity: Simple Additives vs. Cross-Linked Synthesized Copolymers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Super soft silicone elastomers with high dielectric permittivity
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Techniques for hot embossing microstructures on liquid silicone rubbers with fillers
Research output: Research - peer-review › Journal article – Annual report year: 2014

The electrical breakdown strength of pre-stretched elastomers, with and without sample volume conservation
Research output: Research - peer-review › Journal article – Annual report year: 2015
Adhesion Between Poly(dimethylsiloxane) Layers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Fremstilling af dielektriske elektroaktive polymerer i stor skala
Research output: Research › Journal article – Annual report year: 2013

Hot-embossing of microstructures on addition-curing PDMS
Research output: Research › Conference abstract for conference – Annual report year: 2012

Lamination of PDMS films by different methods
Research output: Research › Conference abstract for conference – Annual report year: 2012

Low modulus elastomers with low viscous dissipation
Research output: Research › Journal article – Annual report year: 2010

Effects of mixed solvents and PVDF types on performances of PVDF microporous membranes
Research output: Research › Journal article – Annual report year: 2010

Performance of PVDF/Multi-nanoparticles composite hollow fibre ultrafiltration membranes
Han, L-F., Xu, Z-L., Han, L-F., Xu, Z-L., Yu, L., Wei, Y-M. & Cao, Y. 2010 In : Iranian Polymer Journal. 19, 7, p. 553-565
Research output: Research › Journal article – Annual report year: 2010

Preparation of micro-porous polyethersulphone hollow fibre membranes using non-solvent vapour-induced phase separation
Research output: Research › Journal article – Annual report year: 2010

Effect of TiO2 nanoparticles on the surface morphology and performance of microporous PES membrane
Research output: Research › Journal article – Annual report year: 2009

Morphology and performance of polyvinylidene fluoride/perfluorosulphonic acid hollow fibre ultrafiltration blend membranes
Research output: Research › Journal article – Annual report year: 2009

Polymer-nanoinorganic particles composite membranes: a brief overview
Xu, Z., Yu, L. & Han, L. 2009 In : Frontiers of Chemical Engineering in China. 3, 3, p. 318-329
Research output: Research › Journal article – Annual report year: 2009

Preparation and characterization of PVDF-SiO2 composite hollow fiber UF membrane by sol–gel method
Research output: Research › Journal article – Annual report year: 2009

PVDF–TiO2 composite hollow fiber ultrafiltration membranes prepared by TiO2 sol–gel method and blending method
Projects:

**Synthesis and characterization of hydrogels to be used as dielectric elastomers**
Vaicekauskaite, J., Skov, A. L. & Yu, L.
Forskningsrådsfinansiering
15/07/2017 → 14/07/2020
Project: PhD

**Mechanical and photochemical stabilization of flexible organic solar cells**
Ogliani, E., Skov, A. L., Hvilsted, S. & Yu, L.
Samfinansieret - Andet
01/01/2017 → 31/12/2019
Project: PhD