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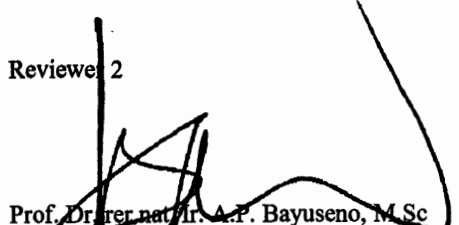
Judul Jurnal Ilmiah (Artikel) : Study of an Additional Layer of Cement Mantle Hip Joints for Reducing Cracks
 Jumlah Penulis : 4 orang (J. Jamari, Eko Saputra, Iwan Budiwan Anwar, Emile van der Heide)
 Status Pengusul : penulis ke-1
 Identitas Jurnal Ilmiah : a. Nama Jurnal : Journal of Functional Biomaterials
 b. Nomor ISSN : ISSN 2079-4983
 c. Vol, No., Bln Thn : Volume 10, Nomor 3, 6 September 2019
 d. Penerbit : MDPI AG
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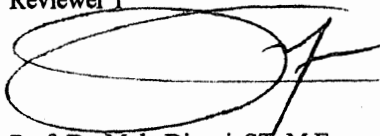
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Total = (100%)	37	38	37.5
Nilai Pengusul = (60% x 37.5) = 22.5			

Reviewer 2


 Prof. Dr. Ir. A.P. Bayuseno, M.Sc
 NIP. 196205201989021001
 Unit Kerja : Dept. Teknik Mesin, FT UNDIP

Semarang,

Reviewer 1


 Prof. Dr. Moh. Djaeni, S.T., M.Eng.
 NIP. 197102071995121001
 Unit Kerja : Dept. Teknik Kimia, FT UNDIP

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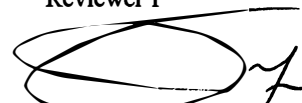
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Semarang, 18 September 2019

Reviewer 1



Prof. Dr. Moh. Djac, ST, M.Eng.

NIP. 197102071990121001

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Kelengkapan penerbit baik. Jurnal ini terindeks scopus dengan SJR sebesar 0.755, dengan kuartil Q2.

Semarang, 18 September 2019
 Reviewer 2


 Prof. Dr. rer. Nat. Ir. A.P. Bayuseno, M.Sc.
 NIP. 196205201989021001

Unit Kerja : Dept. Teknik Mesin, FT UNDIP

Source details

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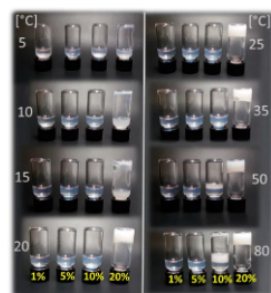
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by Michael M. Lübtow et al.
J. Funct. Biomater. 2019
Published: 7 August 2019



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by J. Jamari, Eko Saputra, Iwan Budiwan Anwar and Emile van der Heide

J. Funct. Biomater. 2019, 10(3), 40; <https://doi.org/10.3390/jfb10030040> - 06 Sep 2019

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J. Funct. Biomater. 2019, 10(3), 39; <https://doi.org/10.3390/jfb10030039> - 02 Sep 2019

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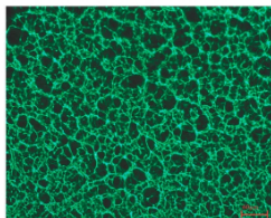
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Biocompatibility of Nanocellulose-Reinforced PVA Hydrogel with Human Corneal Epithelial Cells for Ophthalmic Applications

by Gopi Krishna Tummala et al.
J. Funct. Biomater. 2019
Published: 1 August 2019



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by Varinder Pal Singh Sidhu, Mark R. Towler and Marcello Papini

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by Michael M. Lübtow, Miroslav Mrlik, Lukas Hahn, Alexander Altmann, Matthias Beudert, Tessa Lühmann and Robert Luxenhofer

J. Funct. Biomater. 2019, 10(3), 36; <https://doi.org/10.3390/jfb10030036> - 07 Aug 2019

Abstract The synthesis and characterization of an ABA triblock copolymer based on hydrophilic poly(2-methyl-2-oxazoline) (pMeOx) blocks A and a modestly hydrophobic poly(2-iso-butyl-2-oxazoline) (piBuOx) block B is described. Aqueous polymer solutions were prepared at different concentrations (1–20 wt %) and their [...] [Read more.](#)

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by Gopi Krishna Tummala, Viviana R. Lopes, Albert Miharayan and Natalia Ferraz

J. Funct. Biomater. 2019, 10(3), 35; <https://doi.org/10.3390/jfb10030035> - 01 Aug 2019

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Interests: biosensors; interfaces; polymers; membranes

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Tel. 981563100; Fax: +34 981547148

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Department of Chemistry "G. Ciamician", University of Bologna, via Selmi 2, I - 40126 Bologna, Italy

Fax: +39 051 2099456

Interests: biomaterials; bioceramics; functionalized calcium phosphates; bone cements; bioactive coatings; scaffolds**Special Issues and Collections in MDPI journals:**Special Issue in *Journal of Functional Biomaterials*: Functionalized Biomimetic Calcium PhosphatesProf. Dr. Aldo R. Boccaccini [E-Mail](#) [Website](#)

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Tel. 4991318528601; Fax: +49 9131 85 28602

Interests: biomaterials; bioactive glasses; composites; tissue engineering**Special Issues and Collections in MDPI journals:**Special Issue in *Materials*: Tissue Engineering ScaffoldsSpecial Issue in *International Journal of Molecular Sciences*: Biodegradability of Materials in Biomedical Applications 2011Special Issue in *Materials*: Biodegradability of Materials in Biomedical Applications 2011Special Issue in *Coatings*: Electrophoretic DepositionSpecial Issue in *Materials*: Bioactive Glasses 2017Special Issue in *Materials*: Selected papers from EUROMAT 2017 Conference—BiomaterialsSpecial Issue in *Materials*: Advanced Glasses, Composites and Ceramics for High Growth IndustriesProf. Daniel X.B. Chen [E-Mail](#) [Website](#)

Department of Mechanical Engineering, University of Saskatchewan, 57 Campus Dr., Saskatoon, SK S7N 5A9, Canada

Interests: biofabrication; tissue engineering scaffolds; mechanical properties; 3D printing**Special Issues and Collections in MDPI journals:**Special Issue in *Journal of Functional Biomaterials*: Mechanical Properties of Tissue Engineering ScaffoldsSpecial Issue in *Applied Sciences*: Biomaterials and Scaffolds in Tissue Engineering Applications and Cancer TherapiesSpecial Issue in *Applied Sciences*: Biomaterials and Scaffolds in Tissue Engineering Applications and Cancer Therapies 2018Special Issue in *Applied Sciences*: Bioprinting Scaffolds for Tissue Engineering ApplicationsProf. Francesco Citurzo [E-Mail](#) [Website](#)

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Interests: transdermal dosage forms; orodispersible dosage forms; mucoadhesion; liposomes**Special Issues and Collections in MDPI journals:**Special Issue in *Journal of Functional Biomaterials*: Functional Biomaterials in Drug Delivery ApplicationsProf. Dr. Fu-Zhai Cui [E-Mail](#) [Website](#)

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Interests: biomaterials; bone and nerve tissue engineering; interactions of cell and materialsProf. Dr. Luigi De Nardo [E-Mail](#) [Website](#)

Politecnico di Milano, Department of Design, Via Durando 38/A, Milan, Italy

Interests: Smart Materials (polymers); Cellular Solids (Scaffolds); Bioactive Materials (glasses, glass-ceramics, polymers); Surface Treatments; Electrophoretic Deposition; (Bio)Materials Characterization; (Bio)Materials Fabrication

Prof. Dr. Mohan Edirisinghe FEng [E-Mail](#) [Website](#)

Biomaterials Processing Laboratory, Department of Mechanical Engineering, University College London, Gower Street, London, UK

Interests: processing and forming of biomaterials and biostructures incorporating particles; bubbles; capsules and fibres at all scales

Prof. Dr. Jianjun Guan [E-Mail](#) [Website](#)

Department of Materials Science and Engineering, The Ohio State University, 2041 College Road, Columbus, OH, USA

Fax: +1 614 2921537

Interests: tissue engineering; drug delivery; bioactive polymers; hydrogels; biomaterial surface modification

Prof. Dr. Atsushi Harada [E-Mail](#) [Website](#)

Department of Applied Chemistry, Graduate School of Engineering, Osaka Prefecture University, 1-1 Gakuen-cho, Naka-ku, Sakai, Osaka 599-8531, Japan

Interests: drug and gene delivery system; block copolymers; dendrimers; sonodynamic therapy

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Dr. John G. Hardy [E-Mail](#) [Website](#)

Department of Chemistry and Materials Science Institute, Faraday Building, Lancaster University, Lancaster, LA1 4YB, UK

Interests: bioelectronics, electricity, light, magnetism, stimuli-responsive materials, silk, drug delivery, neuromodulation, tissue engineering

Special Issues and Collections in MDPI journals:

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Special Issue in *International Journal of Molecular Sciences*: New P-Conjugated Oligomers for Organic Electronics

Special Issue in *Gels*: Supramolecular Gels



Prof. Dr. Håvard J. Haugen [E-Mail](#) [Website](#)

University of Oslo, Department of Biomaterials, Institute of Clinical Dentistry, P.O. Box 1109 Blindern, 0317, Oslo, Norway

Interests: Titanium; Dental implants; Bone graft materials; Titanium dioxide; Implant debridement



Prof. Dr. Richard Hoogenboom [E-Mail](#) [Website](#)

Supramolecular Chemistry group, Department of Organic and Macromolecular Chemistry, Ghent University, Krijgslaan 281 S4, B-9000 Ghent, Belgium

Interests: polymer chemistry; controlled polymerization; living cationic ring-opening polymerization; responsive polymers; hydrophilic polymers; poly(2-oxazoline)s; supramolecular materials; self-assembly

Special Issues and Collections in MDPI journals:

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Prof. Dr. Jae-Hyung Jang [E-Mail](#) [Website](#)

Department of Chemical and Biomolecular Engineering, Yonsei University, Seoul, 120-749, Korea

Tel. 82-2-2123-2756; Fax: +82 2 312 6401

Interests: gene delivery; gene vector engineering; gene therapy; tissue engineering scaffolds; bio-inspired materials; electrospinning; biomaterials; bio-interfaces

Prof. Dr. R. Jayakumar [E-Mail](#)

Amrita Center for Nanosciences and Molecular Medicine, Amrita Institute of Medical Sciences and Research Centre, Amrita Vishva Vidyapeetham, Kochi-682041, Kerala, India

Tel. 91-9995295407

Interests: functional biomaterials; nanoparticle; nanogels; nanofibers; hydrogels; scaffolds; drug delivery; tissue engineering; wound healing

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Dr. Dimitrios Karamichos [E-Mail](#) [Website](#)

Department of Cell Biology, University of Oklahoma Health Sciences Center, Oklahoma City, OK, 73104, USA; Department of Ophthalmology/Dean McGee Eye Institute, University of Oklahoma Health Sciences Center, Oklahoma City, OK, 73104, USA

Interests: corneal wound healing; cornea trauma; keratoconus; bioengineering; bioprinting; diabetic keratopathy

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Interests: block copolymers; drug delivery systems; polymeric micelles; gene delivery; biomaterials; self-assembly; smart materials; nanomedicine; gene therapy



Prof. Dr. Roland Kaunas [E-Mail](#) [Website](#)

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Interests: nanocomposite hydrogels; bioinks; bone regeneration; advanced biomaterial manufacturing

Prof. Dr. Ali Khademhosseini ★ [E-Mail](#) [Website1](#) [Website2](#)

Departments of Bioengineering, Radiology, Chemical and Biomolecular Engineering, University of California - Los Angeles, CA 90095, USA

Interests: micro- and nanoscale biomaterials for tissue engineering; 'organ-on-a-chip' systems; formation of vascularized tissues with appropriate microarchitectures as well as regulating stem cell differentiation within microengineered systems; biomaterials for medical applications

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Prof. Dr. Hae-Won Kim [E-Mail](#) [Website](#)



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Interests: nanomedicine; bone scaffolds; nerve regeneration; stem cell regulation; drug delivery



Prof. Dr. Shunsaku Kimura E-Mail

Department of Material Chemistry, Graduate School of Engineering, Kyoto University, Kyoto-Daigaku-Katsura, Nishikyo-ku, Kyoto 615-8510, Japan

Interests: peptide materials; self-assembly; theranostic agent; solid tumor imaging; nanoparticle; immunology; tumor associated carbohydrate antigen

Prof. Dr. Joachim B. Kohn E-Mail Website

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Interests: biocompatibility of medical implant materials; biomedical materials; tissue engineering; design of new degradable polymers

Prof. Dr. J. Kent Leach E-Mail Website

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Interests: cell-instructive biomaterials; composites; ceramics; hydrogels; drug delivery; cell transplantation vehicles

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Prof. Dr. Dusan Losic E-Mail Website

School of Chemical Engineering, The University of Adelaide, Adelaide, SA 5005, Australia

Fax: +61 8 8303 4373

Interests: nanomaterials; nanoengineering; nanomedicine; biosensing; bioseparations; functional biomaterials; bioinspired materials; drug-releasing implants; nano-carriers for drug delivery; diatom nanotechnology

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Prof. Dr. John H. T. Luong E-Mail Website

Innovative Chromatography Group, Irish Separation Science Cluster (ISSC), School of Chemistry, University College Cork, Cork, Ireland

Interests: Biosensors, immunoassays, functional biomaterials, nanocomposites, nanopolymers

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Prof. Dr. Robert Luxenhofer E-Mail Website

Department Chemistry and Pharmacy, Julius-Maximilians-Universität Würzburg, Röntgenring 11, 97070 Würzburg, Germany

Interests: nanomedicine; polymer chemistry; polymer analog modification; living cationic ring-opening polymerization; stimuli-responsive polymers; amphiphilic block copolymers; polypeptoids; poly(2-oxazine)s; poly(2-oxazoline)s; polymer-protein conjugates; bioconjugation; polymer micelles; drug delivery; drug formulation; cancer therapy; polyplexes; non-fouling; surface modification; 3D printing; hydrogels; biofabrication

Prof. Dr. Evangelos Manias E-Mail Website

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Interests: polymer and organic materials; soft materials; nanostructures; nanocomposites

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Dr. Emad Moeendarbary E-Mail Website

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Interests: cell-material interactions; nanobiomaterials for cell targeted therapies; bioactive polymers

Dr. Pedro Morouço E-Mail Website

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Interests: biofabrication; bioprinting; tissue engineering; bioactive polymers; hydrogels

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Interests: new polymer-forming reactions including methods of organometallic chemistry; multi-dimensional polymers with complex shape-persistent architectures; functional polymeric networks, in particular for catalytic purposes; dyes and laser writing into polymers; chemistry and physics of single molecules; molecular materials with liquid crystalline properties for electronic and optoelectronic devices; materials for lithium or hydrogen storage; biosynthetic hybrids; nanocomposites

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Interests: nanocomposites; polymeric scaffolds; porous materials; tissue engineering; clay hydrogels; drug delivery; gene therapy

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Interests: bioprinting; tissue engineering; additive manufacturing; regenerative medicine



Prof. Dr. Alberto Rainer [E-Mail](#) [Website](#)

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Interests: Biofabrication, microfluidics, cell mechanobiology, in vitro models

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Prof. Dr. Filippo Rossi [E-Mail](#) [Website](#)

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School of Chemical Biological and Materials Engineering, The University of Oklahoma, 100 E Boyd Str SEC T301 Norman, OK 73019, USA

Interests: Biomedical Materials, Orthopedic Tissue Engineering, Biocompatibility, Mechanostimulation, Bioreactors, Adult Stem Cells, In Vitro Cancer Models

Prof. Dr. Cassian Sitaru [E-Mail](#) [Website](#)

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Interests: biomaterials; bioceramics; bioactive glasses; bioactive coatings; porous materials; scaffolds; glasses; ceramics; composite materials; functional coatings; sintering and thermal treatments

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Prof. Dr. Hao Song [E-Mail](#) [Website](#)

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Interests: electrode materials for biofuel cells & biosensors; genetic engineering for biomaterials synthesis; cell-materials interaction; bionanomaterials

Prof. Dr. Gianrico Spagnuolo [E-Mail](#) [Website](#)

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Interests: dental materials; dental surgery; restorative dentistry and endodontics

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Special Issue in *Dentistry Journal*: Oral Hygiene and Biofilms in Orthodontics

Special Issue in *Materials*: Current and Future Trends in Dental Materials



Dr. Savas Tasoglu [E-Mail](#) [Website](#)

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Special Issues and Collections in MDPI journals:

Special Issue in *Micromachines*: 3D Printed Microfluidic Devices

Prof. Dr. Carsten Werner [E-Mail](#) [Website](#)

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Interests: biomedical polymers; biointerfacial phenomena; hemocompatible materials; cell-instructive polymer matrices; bio-inspired materials

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Prof. Dr. Bing Xu [E-Mail](#) [Website](#)

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Fax: +1 781 7362516

Interests: biofunctional materials; nanomaterials; biomedicine; molecular drug delivery; cancer therapy; biomedical diagnostics; biomimetics

Dr. Xuebin Yang [E-Mail](#) [Website](#)

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Interests: stem cell therapy; tissue engineering; multi-layer cell sheet technology; biomaterial scaffold; surface modification; biomimetics; cell-materials interaction; biological testing; in vivo models; gene therapy

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**Effect of Process Parameters on the Initial Burst Release of Protein-Loaded Alginate Nanospheres**

by Farhana Yasmin, Xiongbiao Chen and Brian Eames

J. Funct. Biomater. 2019, 10(3), 42; <https://doi.org/10.3390/jfb10030042> (registering DOI) - 16 Sep 2019

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Abstract The controlled release or delivery of proteins encapsulated in micro/nanospheres is an emerging strategy in regenerative medicine. For this, micro/nanospheres made from alginate have drawn considerable attention for the use as a protein delivery device because of their mild fabrication process, inert nature, [...] Read more.

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**Silk-Based Therapeutics Targeting *Pseudomonas aeruginosa***

by Tina B. McKay, Rachael N. Parker, Morgan J. Hawker, Meghan McGill and David L. Kaplan

J. Funct. Biomater. 2019, 10(3), 41; <https://doi.org/10.3390/jfb10030041> - 13 Sep 2019

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Abstract *Pseudomonas aeruginosa* (*P. aeruginosa*) infections may lead to severe damage of the cornea, mucosa, and skin. The highly aggressive nature of *P. aeruginosa* and the rise in multi-drug resistance, particularly in nosocomial settings, lead to an increased risk for permanent tissue [...] Read more.

(This article belongs to the Special Issue Functional Biomaterials in Drug Delivery Applications)

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**Study of an Additional Layer of Cement Mantle Hip Joints for Reducing Cracks**

by J. Jamari, Eko Saputra, Iwan Budiwan Anwar and Emile van der Heide

J. Funct. Biomater. 2019, 10(3), 40; <https://doi.org/10.3390/jfb10030040> - 06 Sep 2019

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Abstract Failure of the cement mantle in total hip arthroplasty is not a simple phenomenon. Cracking, which can be caused by crack initiation and repeated loading, can cause loosening of the acetabular liner component. A previous study showed that addition of a metal layer [...] Read more.

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**Production of a Recombinant Non-Hydroxylated Gelatin Mimetic in *Pichia pastoris* for Biomedical Applications**

by Pia Gellermann, Caroline Schneider-Barthold, Svenja Nicolin Bolten, Ethan Overfelt, Thomas Scheper and Iliyana Pepelanova

J. Funct. Biomater. 2019, 10(3), 39; <https://doi.org/10.3390/jfb10030039> - 02 Sep 2019

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Abstract Proteins derived from the natural extracellular matrix like collagen or gelatin are common in clinical research, where they are prized for their biocompatibility and bioactivity. Cells are able to adhere, grow and remodel scaffolds based on these materials. Usually, collagen and gelatin are [...] Read more.

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**Effect of Melt-Derived Bioactive Glass Particles on the Properties of Chitosan Scaffolds**

by Hamasa Faqhiri, Markus Hannula, Minna Kellomäki, Maria Teresa Calejo and Jonathan Massera

J. Funct. Biomater. 2019, 10(3), 38; <https://doi.org/10.3390/jfb10030038> - 13 Aug 2019

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Abstract This study reports on the processing of three-dimensional (3D) chitosan/bioactive glass composite scaffolds. On the one hand, chitosan, as a natural polymer, has suitable properties for tissue engineering applications but lacks bioactivity. On the other hand, bioactive glasses are known to be bioactive [...] Read more.



(This article belongs to the Special Issue Application of Bioactive Glass Scaffolds)

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Measurement of Adhesion of Sternal Wires to a Novel Bioactive Glass-Based Adhesive

by Varinder Pal Singh Sidhu, Mark R. Towler and Marcello Papini

J. Funct. Biomater. 2019, 10(3), 37; <https://doi.org/10.3390/jfb10030037> - 09 Aug 2019

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Abstract Stainless steel wires are the standard method for sternal closure because of their strength and rigidity, the simplicity of the process, and the short healing time that results from their application. Despite this, problems still exist with sternal stability due to micromotion between [...] Read more.

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Temperature-Dependent Rheological and Viscoelastic Investigation of a Poly(2-methyl-2-oxazoline)-b-poly(2-iso-butyl-2-oxazoline)-b-poly(2-methyl-2-oxazoline)-Based Thermogelling Hydrogel

by Michael M. Lübtow, Miroslav Mrlík, Lukas Hahn, Alexander Altmann, Matthias Beudert, Tessa Lühmann and Robert Luxenhofer

J. Funct. Biomater. 2019, 10(3), 36; <https://doi.org/10.3390/jfb10030036> - 07 Aug 2019

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Abstract The synthesis and characterization of an ABA triblock copolymer based on hydrophilic poly(2-methyl-2-oxazoline) (pMeOx) blocks A and a modestly hydrophobic poly(2-iso-butyl-2-oxazoline) (pIBuOx) block B is described. Aqueous polymer solutions were prepared at different concentrations (1–20 wt %) and their [...] Read more.

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Biocompatibility of Nanocellulose-Reinforced PVA Hydrogel with Human Corneal Epithelial Cells for Ophthalmic Applications

by Gopi Krishna Tummala, Viviana R. Lopes, Albert Mitranyan and Natalia Ferraz

J. Funct. Biomater. 2019, 10(3), 35; <https://doi.org/10.3390/jfb10030035> - 01 Aug 2019

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Abstract Transparent composite hydrogel in the form of a contact lens made from poly(vinyl alcohol) (PVA) and cellulose nanocrystals (CNCs) was subjected to in vitro biocompatibility evaluation with human corneal epithelial cells (HCE-2 cells). The cell response to direct contact with the hydrogels was [...] Read more.

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Stimuli-Responsive Drug Release from Smart Polymers

by Carlos M. Wells, Michael Harris, Landon Choi, Vishnu Priya Murali, Fernanda Delbuque Guerra and J. Amber Jennings

J. Funct. Biomater. 2019, 10(3), 34; <https://doi.org/10.3390/jfb10030034> - 31 Jul 2019

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Abstract Over the past 10 years, stimuli-responsive polymeric biomaterials have emerged as effective systems for the delivery of therapeutics. Persistent with ongoing efforts to minimize adverse effects, stimuli-responsive biomaterials are designed to release in response to either chemical, physical, or biological triggers. The stimuli-responsiveness [...] Read more.

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Enhanced Osteogenic Differentiation of Human Fetal Cartilage Rudiment Cells on Graphene Oxide-PLGA Hybrid Microparticles

by Stuart C. Thickett, Ella Hamilton, Gokulan Yogeswaran, Per B. Zetterlund, Brooke L. Farrugia and Megan S. Lord

J. Funct. Biomater. 2019, 10(3), 33; <https://doi.org/10.3390/jfb10030033> - 30 Jul 2019

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Abstract Poly(D,L-lactide-co-glycolide) (PLGA) has been extensively explored for bone regeneration applications; however, its clinical use is limited by low osteointegration. Therefore, approaches that incorporate osteoconductive molecules are of great interest. Graphene oxide (GO) is gaining popularity for biomedical applications due [...] Read more.

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Novel Tools towards Magnetic Guidance of Neurite Growth: (I) Guidance of Magnetic Nanoparticles into Neurite Extensions of Induced Human Neurons and In Vitro Functionalization with RAS Regulating Proteins

by Hendrik Schöneborn, Fabian Raudzus, Emilie Secret, Nils Otten, Aude Michel, Jérôme Fresnais, Christine Ménager, Jean-Michel Siaugue, Holm Zaehres, Irmgard D. Dietzel and Rolf Heumann

J. Funct. Biomater. 2019, 10(3), 32; <https://doi.org/10.3390/jfb10030032> - 16 Jul 2019

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Abstract Parkinson's disease (PD) is a neurodegenerative disease associated with loss or dysfunction of dopaminergic neurons located in the substantia nigra (SN), and there is no cure available. An emerging new approach for treatment is to transplant human induced dopaminergic neurons directly into the [...] Read more.

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The Role of In Vitro Immune Response Assessment for Biomaterials

by Alistair Lock, Jillian Cornish and David S. Musson

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Abstract Grafts are required to restore tissue integrity and function. However, current gold standard autografting techniques yield

limited harvest, with high rates of complication. In the search for viable substitutes, the number of biomaterials being developed and studied has increased rapidly. To date, low [...] Read more.

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Strategies to Tune Electrospun Scaffold Porosity for Effective Cell Response in Tissue Engineering

by Jimna Mohamed Ameer, Anil Kumar PR and Naresh Kasoju

J. Funct. Biomater. 2019, 10(3), 30; <https://doi.org/10.3390/jfb10030030> - 09 Jul 2019

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Abstract Tissue engineering aims to develop artificial human tissues by culturing cells on a scaffold in the presence of biochemical cues. Properties of scaffold such as architecture and composition highly influence the overall cell response. Electrospinning has emerged as one of the most affordable, [...] Read more.

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First Clinical Experience with a Carbon Fibre Reinforced PEEK Composite Plating System for Anterior Cervical Discectomy and Fusion

by Helena Milavec, Christoph Kellner, Nivetha Ravikumar, Christoph E. Albers, Till Lerch, Sven Hoppe, Moritz C. Deml, Sebastian F. Bigdon, Naresh Kumar and Lorin M. Benneker

J. Funct. Biomater. 2019, 10(3), 29; <https://doi.org/10.3390/jfb10030029> - 02 Jul 2019

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Abstract Carbon fibre reinforced polyether ether ketone (CFR-PEEK) is a suitable material to replace metal implants in orthopaedic surgery. The radiolucency of CFR-PEEK allows an optimal visualisation of the bone and soft tissue structures. We aimed to assess the performance and radiological and clinical [...] Read more.

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Gadolinium-Labelled Cell Scaffolds to Follow-up Cell Transplantation by Magnetic Resonance Imaging

by Valeria Catanzaro, Giuseppe Digilio, Federico Capuana, Sergio Padovan, Juan C. Cutrin, Fabio Carniato, Stefano Porta, Cristina Grange, Nenad Filipović and Magdalena Stevanović

J. Funct. Biomater. 2019, 10(3), 28; <https://doi.org/10.3390/jfb10030028> - 02 Jul 2019

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Abstract Cell scaffolds are often used in cell transplantation as they provide a solid structural support to implanted cells and can be bioengineered to mimic the native extracellular matrix. Gadolinium fluoride nanoparticles (Gd-NPs) as a contrast agent for Magnetic Resonance Imaging (MRI) were incorporated [...] Read more.

(This article belongs to the Special Issue Molecular Imaging of Biomaterials)

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Repair of Orbital Post-Traumatic Wall Defects by Custom-Made TiNi Mesh Endografts

by Valentin Shtin, Valeriy Novikov, Timofey Chekalkin, Victor Gunther, Ekaterina Marchenko, Evgeniy Choyznzonov, Seung Baik Kang, Moon Jong Chang, Ji Hoon Kang and Aleksei Obrosof

J. Funct. Biomater. 2019, 10(3), 27; <https://doi.org/10.3390/jfb10030027> - 27 Jun 2019

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Abstract Repairs of orbital post-traumatic and extensive malignant defects remain a major surgical challenge, in view of follow-up outcomes. Incorrect surgical management of injured facial structures results in cosmetic, ophthalmic, and social aftereffects. A custom-made knitted TiNi-based mesh (KTNM) endograft was employed to overcome [...] Read more.

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