Prof Teresa Alonso-Rasgado

PhD

School of Engineering and Materials Science
Queen Mary University of London
Mile End Road
London E1 4NS

tel: +44 (0)20 7882 3028
email: t.alonso@qmul.ac.uk web: www.sems.qmul.ac.uk/t.alonso

2026

The impact of subject weight and activity level on over-inserted cemented acetabular cups after Total HIP Arthroplasty (THA).
. Journal of Orthopaedics vol. 74, 256-264.Elsevier.

2025

Investigation Into the Effect of OverInserted Cemented Acetabular Cups After Total Hip Arthroplasty (THA).
. Journal of Orthopaedic ResearchÂ® vol. 43, (10) 1840-1854.Wiley.

Multilevel Thresholding Color Image Segmentation Solved with Metaheuristics.
. Advances in Optimization Algorithms For Multidisciplinary Engineering Applications: From Classical Methods to Ai-Enhanced Soluti 3-26. Springer Nature.

2024

Digital Image Processing Applied in the Deformation Analysis of Hip Prosthesis: Multivariate Regression Analysis.
. IEEE Access vol. 12, 176938-176948.Institute of Electrical and Electronics Engineers.

2023

Tuning parameters of phase retrieval algorithm for single-shot imaging based on object-modulated speckles by particle swarm optimization.
. Optics & Laser Technology vol. 159,.Elsevier.

2022

A Two-Experiment Approach to Scaling in Biomechanics.
. Journal of Biomechanical Engineering vol. 144, (8).Asme International.

2020

Zeroth-order finite similitude and scaling of complex geometries in biomechanical experimentation.
. Journal of The Royal Society Interface vol. 17, (167).The Royal Society.

2019

Performance evaluation of surgical techniques for treatment of scapholunate instability in a type II wrist.
. International Journal For Numerical Methods in Biomedical Engineering vol. 36, (1).Wiley.

Effect of Femoral Head Size, Subject Weight, and Activity Level on Acetabular Cement Mantle Stress Following Total Hip Arthroplasty.
. Journal of Orthopaedic ResearchÂ® vol. 37, (8) 1771-1783.Wiley.

Impact of femoroacetabular impingement and dysplasia of the hip on hip joint sphericity.
. Hip International vol. 30, (2) 195-203.Sage Publications.

2018

Cement interface and bone stress in total hip arthroplasty: Relationship to head size.
. Journal of Orthopaedic Research vol. 36, (11) 2966-2977.

Validation of biofilm formation on human skin wound models and demonstration of clinically translatable bacteria-specific volatile signatures.
. Scientific Reports vol. 8, (1).Springer Nature.

Scaling in biomechanical experimentation: a finite similitude approach.
. Journal of The Royal Society Interface vol. 15, (143).The Royal Society.

WITHDRAWN: Sphericity of the hip joint components for subjects with femoroacebular impingement and dysplastic hips.
. Journal of Orthopaedics.Elsevier.

Wound healing and cutaneous scarring models of the human skin.
. Skin Tissue Models 201-221.

9 Wound healing and cutaneous scarring models of the human skin.
. Skin Tissue Models For Regenerative Medicine 201-221. Elsevier.

2017

Analysis of tenodesis techniques for treatment of scapholunate instability using the finite element method.
. International Journal For Numerical Methods in Biomedical Engineering vol. 33, (12).

Evaluation of the performance of three tenodesis techniques for the treatment of scapholunate instability: flexion-extension and radial-ulnar deviation.
. Medical and Biological Engineering and Computing 1-15.

The Role of Mast Cells in Tuberculosis: Orchestrating Innate Immune Crosstalk?.
. Frontiers in Immunology vol. 8,.Frontiers.

Volatile organic compound detection as a potential means of diagnosing cutaneous wound infections.
. Wound Repair and Regeneration vol. 25, (4) 574-590.Wiley.

Cutaneous wound biofilm and the potential for electrical stimulation in management of the microbiome.
. Future Microbiology vol. 12, (4) 337-357.Taylor & Francis.

The efficacy of electrical stimulation in lower extremity cutaneous wound healing: A systematic review.
. Experimental Dermatology vol. 26, (2) 171-178.Wiley.

3D computer modelling of malunited posterior malleolar fractures: effect of fragment size and offset on ankle stability, contact pressure and pattern.
. Journal of Foot and Ankle Research vol. 10, (1).Wiley.

Wound healing and cutaneous scarring models of the human skin.
. Skin Tissue Models 201-221.

2016

Effect of Anconeus Muscle Blocking on Elbow Kinematics: Electromyographic, Inertial Sensors and Finite Element Study.
. Annals of Biomedical Engineering vol. 45, (3) 775-788.Springer Nature.

Whole genome microarray data of chronic wound debridement prior to application of dermal skin substitutes.
. Wound Repair and Regeneration vol. 24, (5) 870-875.Wiley.

The efficacy of electrical stimulation in experimentally induced cutaneous wounds in animals.
. Veterinary Dermatology vol. 27, (4) 235-e57.Wiley.

2015

Optimization of an ex vivo wound healing model in the adult human skin: Functional evaluation using photodynamic therapy.
. Wound Repair and Regeneration vol. 23, (5) 685-702.Wiley.

Skin substituteassisted repair shows reduced dermal fibrosis in acute human wounds validated simultaneously by histology and optical coherence tomography.
. Wound Repair and Regeneration vol. 23, (4) 483-494.Wiley.

Ex vivo evaluation of the effect of photodynamic therapy on skin scars and striae distensae.
. Photodermatology Photoimmunology & Photomedicine vol. 31, (5) 239-251.Wiley.

Correction: Acute Cutaneous Wounds Treated with Human Decellularised Dermis Show Enhanced Angiogenesis during Healing.
. Plos One vol. 10, (3).Public Library of Science (Plos).

Acute Cutaneous Wounds Treated with Human Decellularised Dermis Show Enhanced Angiogenesis during Healing.
. Plos One vol. 10, (1).Public Library of Science (Plos).

2014

Identification of biomarkers involved in differential profiling of hypertrophic and keloid scars versus normal skin.
. Archives of Dermatological Research vol. 307, (2) 115-133.Springer Nature.

Physico-chemical characteristics of coated silicone textured versus smooth breast implants differentially influence breast-derived fibroblast morphology and behaviour.
. Journal of The Mechanical Behavior of Biomedical Materials vol. 40, 140-155.Elsevier.

Skin equivalent tensional force alters keloid fibroblast behavior and phenotype.
. Wound Repair and Regeneration vol. 22, (5) 557-568.Wiley.

Numerical study of the hydrodynamic drag force in atomic force microscopy measurements undertaken in fluids.
. Micron vol. 66, 37-46.Elsevier.

Optical coherence tomography: a reliable alternative to invasive histological assessment of acute wound healing in human skin?13.
. British Journal of Dermatology vol. 170, (4) 840-850.Oxford University Press (Oup).

2013

Characterisation of breast implant surfaces and correlation with fibroblast adhesion.
. Journal of The Mechanical Behavior of Biomedical Materials vol. 21, 133-148.Elsevier.

Up-Regulation of Tension-Related Proteins in Keloids.
. Plastic & Reconstructive Surgery vol. 131, (2) 158e-173e.Wolters Kluwer.

2012

Optimization of the position of the acetabulum in a ganz periacetabular osteotomy by finite element analysis.
. Journal of Orthopaedic ResearchÂ® vol. 31, (3) 472-479.Wiley.

Differential cytotoxic response in keloid fibroblasts exposed to photodynamic therapy is dependent on photosensitiser precursor, fluence and location of fibroblasts within the lesion.
. Archives of Dermatological Research vol. 304, (7) 549-562.Springer Nature.

Changes in the stress in the femoral head neck junction after osteochondroplasty for hip impingement: A finite element study.
. Journal of Orthopaedic ResearchÂ® vol. 30, (12) 1999-2006.Wiley.

2011

Analytical solutions for vibrating fractal composite rods and beams.
. Applied Mathematical Modelling vol. 35, (3) 1194-1209.Elsevier.

2009

Simulation based Reliability Assessment of Services in the Context of Functional Products.
. Safety and Reliability vol. 29, (4) 47-78.Taylor & Francis.

2007

A solution methodology for contacting domains in pressure die casting.
. Applied Mathematical Modelling vol. 31, (8) 1559-1581.Elsevier.

2006

A rapid design process for Total Care Product creation.
. Journal of Engineering Design vol. 17, (6) 509-531.Taylor & Francis.

Warm deep drawing of wrought magnesium alloy sheets produced by semi-solid roll strip-casting process.
. International Journal of Machine Tools and Manufacture vol. 46, (11) 1233-1237.Elsevier.

Boundary element stress analysis for bi-metallic dies in pressure diecasting.
. Journal of Materials Processing Technology vol. 175, (1-3) 117-122.Elsevier.

Bi-metallic dies for rapid die casting.
. Journal of Materials Processing Technology vol. 175, (1-3) 109-116.Elsevier.

Experimental Investigation Into the Thermal Behavior of Copper-Alloyed Dies in Pressure Die Casting.
. Journal of Manufacturing Science and Engineering vol. 128, (4) 844-859.Asme International.

Boundary element stress analysis for copper-based dies in pressure die casting.
. Computers & Structures vol. 84, (3-4) 254-267.Elsevier.

2005

Effects of Rolling Condition on Warm Deep Drawability of Magnesium Alloy Sheets Produced by Twin-Roll Strip Casting.
. Materials Science Forum vol. 475-479, 489-492.Trans Tech Publications.

2004

The design of functional (total care) products.
. Journal of Engineering Design vol. 15, (6) 515-540.Taylor & Francis.

Semi-solid manufacturing process of magnesium alloys by twin-roll casting.
. Journal of Materials Processing Technology vol. 155, 1662-1667.Elsevier.

Forming Characteristics of Cast Magnesium Alloy Sheets Manufactured by Roll Strip Casting Process.
. Key Engineering Materials vol. 274-276, 379-384.Trans Tech Publications.

Integration over simplexes for accurate domain and boundary integral evaluation in boundary element methods.
. Computers & Structures vol. 82, (2-3) 193-211.Elsevier.

2002

The effect of vibration on surface finish for semisolid and cast components.
. Journal of Materials Processing Technology vol. 125, 543-548.Elsevier.

A coarse preconditioner for multi-domain boundary element equations.
. Computers & Structures vol. 80, (7-8) 643-658.Elsevier.

2001

Accurate evaluation of integrals present in reciprocity methods.
. Computers & Structures vol. 79, (29-30) 2511-2526.Elsevier.

1999

Semi-analytical integration of sub-parametric elements used in the BEM for three-dimensional elastodynamics.
. Computers & Structures vol. 71, (6) 595-615.Elsevier.

The 3D elastodynamic boundary element method: semianalytical integration for linear isoparametric triangular elements.
. International Journal For Numerical Methods in Engineering vol. 44, (8) 1031-1054.Wiley.