

HORIZON
2020

Novel Cell Migration Assay Based on Microtissue Technology and Tissue-Specific Matrices

Resultados

Información del proyecto

MATRIXASSAY

Identificador del acuerdo de subvención:
644175

[Sitio web del proyecto](#)

DOI

[10.3030/644175](https://doi.org/10.3030/644175)

Proyecto cerrado

Fecha de la firma de la CE
23 Abril 2015

Fecha de inicio
1 Junio 2015

Fecha de
finalización
31 Mayo 2019

Financiado con arreglo a

EXCELLENT SCIENCE - Marie Skłodowska-Curie
Actions

Coste total

€ 1 053 000,00

Aportación de la UE

€ 931 500,00

Coordinado por

UNIVERSITY COLLEGE DUBLIN,
NATIONAL UNIVERSITY OF
IRELAND, DUBLIN



Irlanda

CORDIS proporciona enlaces a los documentos públicos y las publicaciones de los proyectos de los programas marco HORIZONTE.

Los enlaces a los documentos y las publicaciones de los proyectos del Séptimo Programa Marco, así como los enlaces a algunos tipos de resultados específicos,

como conjuntos de datos y «software», se obtienen dinámicamente de [OpenAIRE](#) .

Resultado final

Documentos, informes (10)

[Yearly report on scientific and technical progress 4](#) 

[Yearly report on scientific and technical progress 3](#) 

[Yearly report & management of next year's outreach activities 3](#) 

[Abstracts of the workshop](#) 

[Conference proceedings](#) 

[Yearly report of outreach activities 4](#) 

[Yearly report & management of next year's outreach activities 1](#) 

Yearly report management of next years outreach activities 1

[Yearly report & management of next year's outreach activities 2](#) 

Yearly report management of next years outreach activities 2

[Yearly report on scientific and technical progress 1](#) 

[Yearly report on scientific and technical progress 2](#) 

Publicaciones

Artículos arbitrados (24)

[Pipette aspiration testing of soft tissues: the elastic half-space model revisited](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Proceedings of the Royal Society A: Mathematical, Physical and Engineering Science, Edición 472/2193, 2016, Página(s) 20160559, ISSN 1364-5021

Editor: Royal Society of London

DOI: 10.1098/rspa.2016.0559

[Photo-induced surface-enhanced Raman spectroscopy from a diphenylalanine peptide nanotube-metal nanoparticle template](#)

Autores: Sawsan Almohammed, Fengyuan Zhang, Brian J. Rodriguez, James H. Rice

Publicado en: Scientific Reports, Edición 8/1, 2018, Página(s) 3880, ISSN 2045-2322

Editor: Nature Publishing Group

DOI: 10.1038/s41598-018-22269-x

[When is a surface foam-phobic or foam-philic?](#)

Autores: Miguel A. C. Teixeira, Steve Arscott, Simon J. Cox, Paulo I. C. Teixeira

Publicado en: Soft Matter, Edición 14/26, 2018, Página(s) 5369-5382, ISSN 1744-683X

Editor: Royal Society of Chemistry

DOI: 10.1039/c8sm00310f

[Simulating the interaction between a descending super-quadric solid object and a soap film](#)

Autores: I. T. Davies

Publicado en: Proceedings of the Royal Society A: Mathematical, Physical and Engineering Science, Edición 474/2218, 2018, Página(s) 20180533, ISSN 1364-5021

Editor: Royal Society of London

DOI: 10.1098/rspa.2018.0533

[Towards nanoscale electrical measurements in liquid by advanced KPFM techniques: a review](#)

Autores: Liam Collins, Jason I Kilpatrick, Sergei V Kalinin, Brian J Rodriguez

Publicado en: Reports on Progress in Physics, Edición 81/8, 2018, Página(s) 086101, ISSN 0034-4885

Editor: Institute of Physics Publishing

DOI: 10.1088/1361-6633/aab560

[Non-destructive determination of collagen fibril width in extruded collagen fibres by piezoresponse force microscopy](#)

Autores: Arwa Bazaid, Sabine M Neumayer, Anna Soroushanova, Jill Guyonnet, Dimitrios Zeugolis, Brian J Rodriguez

Publicado en: Biomedical Physics & Engineering Express, Edición 3/5, 2017, Página(s) 055004, ISSN 2057-1976

Editor: Institute of Physics

DOI: 10.1088/2057-1976/aa85ec

[ANALYSIS OF THE UNILATERAL CONTACT PROBLEM FOR BIPHASIC CARTILAGE LAYERS WITH AN ELLIPTIC CONTACT ZONE AND ACCOUNTING FOR TANGENTIAL DISPLACEMENTS](#)



Autores: Sergei Rogosin, Gennady Mishuris, Anna Koroleva, Anastasiya Vinakurava

Publicado en: Mathematical Modelling and Analysis, Edición 21/5, 2016, Página(s) 585-609, ISSN 1392-6292

Editor: Vilnius Gediminas Technical University

DOI: 10.3846/13926292.2016.1196249

[Three-dimensional contact of transversely isotropic transversely homogeneous cartilage layers: A closed-form solution](#)

Autores: Gennaro Vitucci, Gennady Mishuris

Publicado en: European Journal of Mechanics - A/Solids, Edición 65, 2017, Página(s) 195-204, ISSN 0997-7538

Editor: Elsevier BV

DOI: 10.1016/j.euromechsol.2017.04.004

[Simulation of surfactant transport during the rheological relaxation of two-dimensional dry foams](#)

Autores: F. Zaccagnino, A. Audebert, S. J. Cox

Publicado en: Physical Review E, Edición 98/2, 2018, ISSN 2470-0045

Editor: APS

DOI: 10.1103/PhysRevE.98.022801

[An Approximate JKR Model of Elliptical Contact Between Thin Incompressible Elastic Coatings Covering Rigid Cylinders](#)

Autores: I. I. Argatov, G. S. Mishuris, V. L. Popov

Publicado en: Tribology Letters, Edición 64/1, 2016, ISSN 1023-8883

Editor: Kluwer Academic/Plenum Publishers

DOI: 10.1007/s11249-016-0746-z

[Articular Contact Mechanics from an Asymptotic Modeling Perspective: A Review](#)

Autores: I. Argatov and G. Mishuris

Publicado en: Front. Bioeng. Biotechnol., Edición 4, 2016, Página(s) 83: 1-9, ISSN 2296-4185

Editor: Frontier

DOI: 10.3389/fbioe.2016.00083

[Quasicrystalline three-dimensional foams](#)

Autores: S J Cox, F Graner, R Mosseri and J-F Sadoc

Publicado en: Journal of Physics: Condensed Matter, Edición 29, 2017, Página(s) 114001- 114010, ISSN 0953-8984

Editor: Institute of Physics Publishing

DOI: 10.1088/1361-648X/aa5712

[Deformation and damage of random fibrous networks](#) 

Autores: Emrah Sozumert, Farukh Farukh, Baris Sabuncuoglu, Emrah Demirci, Memis Acar, Behnam Pourdeyhimi, Vadim V. Silberschmidt

Publicado en: International Journal of Solids and Structures, 2018, ISSN 0020-7683

Editor: Pergamon Press Ltd.

DOI: 10.1016/j.ijsolstr.2018.12.012

[An asymptotic model for the deformation of a transversely isotropic, transversely homogeneous biphasic cartilage layer](#) 

Autores: G. Vitucci, I. Argatov, G. Mishuris

Publicado en: Mathematical Methods in the Applied Sciences, Edición 40/9, 2017, Página(s) 3333-3347, ISSN 0170-4214

Editor: John Wiley & Sons Inc.

DOI: 10.1002/mma.3895

EXISTENCE OF SOLUTIONS FOR A SINGULARLY PERTURBED NONLINEAR NON-AUTONOMOUS TRANSMISSION PROBLEM

Autores: RICCARDO MOLINAROLO

Publicado en: Electronic Journal of Differential Equations, Edición Vol. 2019 (2019), No. 53, pp. 1–29., 2019, Página(s) 1–29, ISSN 1072-6691

Editor: Texas State University - San Marcos

[Fluid velocity based simulation of hydraulic fracture: a penny shaped model—part I: the numerical algorithm](#) 

Autores: Daniel Peck, Michal Wrobel, Monika Perkowska, Gennady Mishuris

Publicado en: Meccanica, Edición 53/15, 2018, Página(s) 3615-3635, ISSN 0025-6455

Editor: Kluwer Academic Publishers

DOI: 10.1007/s11012-018-0899-y

[An efficient method of analysis of heat transfer during plane strain upsetting of a viscoplastic strip](#) 

Autores: Sergei Alexandrov, Wiktor Miszuris, Lihui Lang

Publicado en: ZAMM - Journal of Applied Mathematics and Mechanics / Zeitschrift für Angewandte Mathematik und Mechanik, Edición 99/5, 2019, Página(s) e201700313, ISSN 0044-2267

Editor: John Wiley & Sons Ltd.

DOI: 10.1002/zamm.201700313

[Liquid-phase 3D bioprinting of gelatin alginate hydrogels: influence of printing parameters on hydrogel line width and layer height](#) 

Autores: Maha Alruwaili, Jose A. Lopez, Kevin McCarthy, Emmanuel G. Reynaud, Brian J. Rodriguez

Publicado en: Bio-Design and Manufacturing, 2019, ISSN 2096-5524

Editor: Springer

DOI: 10.1007/s42242-019-00043-w

[Enhanced photocatalysis and biomolecular sensing with field-activated nanotube-nanoparticle templates](#)

Autores: Sawsan Almohammed, Sebastian Tade Barwich, Andrew K. Mitchell, Brian J. Rodriguez, James H. Rice

Publicado en: Nature Communications, Edición 10/1, 2019, ISSN 2041-1723

Editor: Nature Publishing Group

DOI: 10.1038/s41467-019-10393-9

[Nucleobase sensing using highly-sensitive surface-enhanced Raman spectroscopy templates comprising organic semiconductor peptide nanotubes and metal nanoparticles](#)

Autores: Sawsan Almohammed, Brian J. Rodriguez, James H. Rice

Publicado en: Sensing and Bio-Sensing Research, Edición 24, 2019, Página(s) 100287, ISSN 2214-1804

Editor: Elsevier BV

DOI: 10.1016/j.sbsr.2019.100287

[Electric Field-Induced Chemical Surface-Enhanced Raman Spectroscopy Enhancement from Aligned Peptide Nanotube–Graphene Oxide Templates for Universal Trace Detection of Biomolecules](#)

Autores: Sawsan Almohammed, Fengyuan Zhang, Brian J. Rodriguez, James H. Rice

Publicado en: The Journal of Physical Chemistry Letters, Edición 10/8, 2019, Página(s) 1878-1887, ISSN 1948-7185

Editor: American Chemical Society

DOI: 10.1021/acs.jpcllett.9b00436

[3D-Printed Peptide-Hydrogel Nanoparticle Composites for Surface-Enhanced Raman Spectroscopy Sensing](#)

Autores: Sawsan Almohammed, Maha Alruwaili, Emmanuel G. Reynaud, Gareth Redmond, James H. Rice, Brian J. Rodriguez

Publicado en: ACS Applied Nano Materials, 2019, ISSN 2574-0970

Editor: ACS

DOI: 10.1021/acsanm.9b00940

[Cylindrical lateral depth-sensing indentation of anisotropic elastic tissues: Effects of adhesion and incompressibility](#)

Autores: I. Argatov, G. Mishuris

Publicado en: The Journal of Adhesion, Edición 94/8, 2017, Página(s) 583-596, ISSN 0021-8464

Editor: Taylor & Francis

DOI: 10.1080/00218464.2017.1309524

[The piezoelectric tensor of collagen fibrils determined at the nanoscale](#)

Autores: Denise Denning, Jason I Kilpatrick, Eiichi Fukada, Nan Zhang, Stefan Habelitz, Andrzej Fertala, Michael Gilchrist, Yuqi Zhang, Syed A. M. Tofail, Brian J. Rodriguez

Publicado en: ACS Biomaterials Science & Engineering, Edición 3, 2017, Página(s) 929-935, ISSN 2373-9878

Editor: American Chemical Society

DOI: 10.1021/acsbiomaterials.7b00183

Capítulos de libros (14)

[Applications of KPFM-Based Approaches for Surface Potential and Electrochemical Measurements in Liquid](#)

Autores: Liam Collins, Stefan A.L. Weber, Brian J. Rodriguez

Publicado en: 2018, Página(s) 391-433

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-75687-5_13

[Indentation of a Poroelastic/Biphasic Half-Space](#)

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 285-321, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_11

[Indentation of an Anisotropic Elastic Half-Space](#)

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 323-371, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_12

[Surface Stretch of an Elastic Half-Space Under Indentation](#)

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 89-105, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_4

[Non-axisymmetric Frictionless Indentation of a Transversely Isotropic Elastic Half-Space](#)

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018,

Página(s) 29-51, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_2

[Sticking \(No-slip\) Indentation of an Elastic Half-Space](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 197-214, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_8

[Axisymmetric Frictionless Indentation of a Transversely Isotropic Elastic Half-Space](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 1-27, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_1

[Frictional Indentation of an Elastic Half-Space](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 215-229, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_9

[Pipette Aspiration of an Elastic Half-Space](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 53-87, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_3

[Indentation of a Viscoelastic Half-Space](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 231-283, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_10

[Adhesive Indentation of an Elastic Half-Space](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 147-196, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_7

[Tangential Contact of Elastically Similar Bodies](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 129-146, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_6

[Torsion of a Transversely Isotropic Elastic Half-Space](#) 

Autores: Ivan Argatov, Gennady Mishuris

Publicado en: Indentation Testing of Biological Materials, Edición 91, 2018, Página(s) 107-127, ISBN 978-3-319-78532-5

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-78533-2_5

[Subperiodic Trigonometric Hyperinterpolation](#) 

Autores: Gaspare Da Fies, Alvis Sommariva, Marco Vianello

Publicado en: Contemporary Computational Mathematics - A Celebration of the 80th Birthday of Ian Sloan, 2018, Página(s) 283-304, ISBN 978-3-319-72455-3

Editor: Springer International Publishing

DOI: 10.1007/978-3-319-72456-0_13

Libros monográficos (1)

Indentation Testing of Biological Materials

Autores: Argatov, Ivan, Mishuris, Gennady

Publicado en: 2018, ISBN 978-3-319-78533-2

Editor: Springer

Última actualización: 15 Agosto 2022

Permalink: <https://cordis.europa.eu/project/id/644175/results/es>

European Union, 2025

