# David Caballero

List of Publications by Year
in descending order



| 58 | 1,250 | 448610 | 445137 |
|---|---|---|---|
| papers | citations | 19 h-index | 33 g-index |

| 62 | 62 | 62 | 1875 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Precision biomaterials in cancer theranostics and modelling. Biomaterials, 2022, 280, 121299. | 5.7 | 26 |
| 2 | Microfluidic platforms for extracellular vesicle isolation, analysis and therapy in cancer. Lab on A Chip, 2022, 22, 1093-1125. | 3.1 | 29 |
| 3 | Forecast cancer: the importance of biomimetic 3D in vitro models in cancer drug testing/discovery and therapy. In Vitro Models, 2022, 1, 119-123. | 1.0 | 2 |
| 4 | Personalized in vitro Extracellular Matrix Models of Collagen VI-Related Muscular Dystrophies. Frontiers in Bioengineering and Biotechnology, 2022, 10, 851825. | 2.0 | 4 |
| 5 | The Tumor Microenvironment: An Introduction to the Development of Microfluidic Devices. Advances in Experimental Medicine and Biology, 2022, , 115-138. | 0.8 | 1 |
| 6 | Modulation of inflammation by anti-TNF Î± mAb-dendrimer nanoparticles loaded in tyramine-modified gellan gum hydrogels in a cartilage-on-a-chip model. Journal of Materials Chemistry B, 2021, 9, 4211-4218. | 2.9 | 17 |
| 7 | Breast tumor-on-chip models: From disease modeling to personalized drug screening. Journal of Controlled Release, 2021, 331, 103-120. | 4.8 | 36 |
| 8 | Versatile Vessel-on-a-Chip Platform for Studying Key Features of Blood Vascular Tumors. Bioengineering, 2021, 8, 81. | 1.6 | 14 |
| 9 | Tumorâ€Associated Protrusion Fluctuations as a Signature of Cancer Invasiveness. Advanced Biology, 2021, 5, e2101019. | 1.4 | 11 |
| 10 | Micropatterned gellan gum-based hydrogels tailored with laminin-derived peptides for skeletal muscle tissue engineering. Biomaterials, 2021, 279, 121217. | 5.7 | 17 |
| 11 | A Microfludic Platform as An In Vitro Model for Biomedical Experimentation - A Cell Migration Study. , 2021, , . | | 1 |
| 12 | Trends in biomaterials for three-dimensional cancer modeling. , 2020, , 3-41. | | 3 |
| 13 | 3D neuroblastoma in vitro models using engineered cell-derived matrices. , 2020, , 107-130. | | 0 |
| 14 | Microfluidic systems in cancer research. , 2020, , 331-377. | | 8 |
| 15 | Preface. Methods in Cell Biology, 2020, 156, xvii. | 0.5 | 0 |
| 16 | Convection patterns gradients of non-living and living micro-entities in hydrogels. Applied Materials Today, 2020, 21, 100859. | 2.3 | 3 |
| 17 | Human Microcirculationâ€onâ€Chip Models in Cancer Research: Key Integration of Lymphatic and Blood Vasculatures. Advanced Biology, 2020, 4, e2000045. | 3.0 | 22 |
| 18 | Collective Dynamics of Focal Adhesions Regulate Direction of Cell Motion. Cell Systems, 2020, 10, 535-542.e4. | 2.9 | 17 |

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|---|---|---|---|
| 19 | Preface. Methods in Cell Biology, 2020, 157, xv. | 0.5 | 0 |
| 20 | Engineering cell-derived matrices with controlled 3D architectures for pathophysiological studies. Methods in Cell Biology, 2020, 156, 161-183. | 0.5 | 5 |
| 21 | Engineering Patient-on-a-Chip Models for Personalized Cancer Medicine. Advances in Experimental Medicine and Biology, 2020, 1230, 43-64. | 0.8 | 12 |
| 22 | The Biophysics of Cell Migration: Biasing Cell Motion with Feynman Ratchets. The Biophysicist, 2020, 1, . | 0.1 | 9 |
| 23 | Tissue engineering and regenerative medicine research - how can it contribute to fight future pandemics?. , 2020, , 389-416. | | 1 |
| 24 | Protrusion membrane pearling emerges during 3D cell division. Physical Biology, 2019, 16, 066009. | 0.8 | 4 |
| 25 | Peptideâ€Modified Dendrimer Nanoparticles for Targeted Therapy of Colorectal Cancer. Advanced Therapeutics, 2019, 2, 1900132. | 1.6 | 33 |
| 26 | 3D biosensors in advanced medical diagnostics of high mortality diseases. Biosensors and Bioelectronics, 2019, 130, 20-39. | 5.3 | 76 |
| 27 | Directed Flow of Micromotors through Alignment Interactions with Micropatterned Ratchets. ACS Nano, 2018, 12, 7282-7291. | 7.3 | 55 |
| 28 | Topological Control of Extracellular Matrix Growth: A Native-Like Model for Cell Morphodynamics Studies. ACS Applied Materials & Interfaces, 2017, 9, 4159-4170. | 4.0 | 20 |
| 29 | Organ-on-chip models of cancer metastasis for future personalized medicine: From chip to the patient. Biomaterials, 2017, 149, 98-115. | 5.7 | 155 |
| 30 | An Interplay between Matrix Anisotropy and Actomyosin Contractility Regulates 3Dâ€Directed Cell Migration. Advanced Functional Materials, 2017, 27, 1702322. | 7.8 | 22 |
| 31 | Tumour-vessel-on-a-chip models for drug delivery. Lab on A Chip, 2017, 17, 3760-3771. | 3.1 | 68 |
| 32 | Motion in microfluidic ratchets. Lab on A Chip, 2016, 16, 4477-4481. | 3.1 | 16 |
| 33 | Ordering Single Cells and Single Embryos in 3D Confinement: A New Device for High Content Screening. Journal of Visualized Experiments, 2016, , . | 0.2 | 4 |
| 34 | Cells as Active Particles in Asymmetric Potentials: Motility under External Gradients. Biophysical Journal, 2015, 108, 456a. | 0.2 | 3 |
| 35 | Foreword: Physics of cell migration. Cell Adhesion and Migration, 2015, 9, 325-326. | 1.1 | 2 |
| 36 | The cell ratchet: Interplay between efficient protrusions and adhesion determines cell motion. Cell Adhesion and Migration, 2015, 9, 327-334. | 1.1 | 25 |

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| 37 | Ratchetaxis: Long-Range Directed Cell Migration by Local Cues. Trends in Cell Biology, 2015, 25, 815-827. | 3.6 | 54 |
| 38 | Cells as Active Particles in Asymmetric Potentials: Motility under External Gradients. Biophysical Journal, 2014, 107, 1513-1522. | 0.2 | 36 |
| 39 | Protrusion Fluctuations Direct Cell Motion. Biophysical Journal, 2014, 107, 34-42. | 0.2 | 60 |
| 40 | Synthetic polyamines promote rapid lamellipodial growth by regulating actin dynamics. Nature Communications, 2013, 4, 2165. | 5.8 | 21 |
| 41 | Directing polypyrrole growth by chemical micropatterns: A study of high-throughput well-ordered arrays of conductive 3D microrings. Sensors and Actuators B: Chemical, 2013, 177, 1003-1009. | 4.0 | 16 |
| 42 | Separation of distinct adhesion complexes and associated cytoskeleton by a micro-stencil-printing method. Cell Adhesion and Migration, 2012, 6, 471-475. | 1.1 | 2 |
| 43 | Impedimetric immunosensor for human serum albumin detection on a direct aldehyde-functionalized silicon nitride surface. Analytica Chimica Acta, 2012, 720, 43-48. | 2.6 | 62 |
| 44 | Optical Gratings Coated with Thin Si3N4 Layer for Efficient Immunosensing by Optical Waveguide Lightmode Spectroscopy. Biosensors, 2012, 2, 114-126. | 2.3 | 25 |
| 45 | Development of an impedimetric DNA-biosensor based on layered double hydroxide for the detection of long ssDNA sequences. Electrochimica Acta, 2012, 74, 123-129. | 2.6 | 21 |
| 46 | Sharp High-Aspect-Ratio AFM Tips Fabricated by a Combination of Deep Reactive Ion Etching and Focused Ion Beam Techniques. Journal of Nanoscience and Nanotechnology, 2010, 10, 497-501. | 0.9 | 9 |
| 47 | Multi-analytic grating coupler biosensor for differential binding analysis. Sensors and Actuators B: Chemical, 2010, 144, 413-417. | 4.0 | 17 |
| 48 | Versatile micropipette technology based on deep reactive ion etching and anodic bonding for biological applications. Journal of Micromechanics and Microengineering, 2009, 19, 105013. | 1.5 | 14 |
| 49 | Direct Patterning of Antiâ€Human Serum Albumin Antibodies on Aldehydeâ€Terminated Silicon Nitride Surfaces for HSA Protein Detection. Small, 2009, 5, 1531-1534. | 5.2 | 30 |
| 50 | Submerged Nanocontact Printing (SnCP) of Thiols. Journal of Nanoscience and Nanotechnology, 2009, 9, 6478-6482. | 0.9 | 4 |
| 51 | Development of Urease/Layered Double Hydroxides Nanohybrid Materials for the Urea Detection: Synthesis, Analytical and Catalytic Characterizations. Sensor Letters, 2009, 7, 676-682. | 0.4 | 4 |
| 52 | Novel Anionophores for Biosensor Applications: Nano Characterisation of SAMs Based on Amphiphilic Imidazolium Protophanes and Cyclophanes on Gold Surfaces. Sensor Letters, 2009, 7, 757-764. | 0.4 | 3 |
| 53 | Characterisation of a Cr(VI) Sensitive Polysiloxane Membrane by X-ray Photoelectron Spectrometry and Atomic Force Microscopy. Sensor Letters, 2009, 7, 995-1000. | 0.4 | 3 |
| 54 | Focused ion beam-assisted technology in sub-picolitre micro-dispenser fabrication. Journal of Micromechanics and Microengineering, 2008, 18, 075021. | 1.5 | 11 |

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|---|---|---|---|
| 55 | Electropolymerization of nano-dimensioned polypyrrole micro-ring arrays on gold substrates prepared using submerged micro-contact printing. Nanotechnology, 2007, 18, 485301. | 1.3 | 34 |
| 56 | Gold Surface Functionalization and Patterning for Specific Immobilization of Olfactory Receptors Carried by Nanosomes. Analytical Chemistry, 2007, 79, 3280-3290. | 3.2 | 74 |
| 57 | Atomic Force Microscopy Characterization of a Microcontact Printed, Selfâ€Assembled Thiol Monolayer for Use in Biosensors. Analytical Letters, 2006, 39, 1721-1734. | 1.0 | 18 |
| 58 | Quantifying protrusions as tumor-specific biophysical predictors of cancer invasion in in vitro tumor micro-spheroid models. In Vitro Models, 0, , . | 1.0 | 0 |