

# Mercedes Vzquez

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

60  
papers

1,617  
citations

21  
h-index

39  
g-index

63  
ext. papers

1,883  
ext. citations

5.2  
avg, IF

4.82  
L-index

#	Paper	IF	Citations
60	Silver nanocolloid generation using dynamic Laser Ablation Synthesis in Solution system and drop-casting. <i>Nano Structures Nano Objects</i> , <b>2022</b> , 29, 100841	5.6	2
59	Digitisation of metal AM for part microstructure and property control.. <i>International Journal of Material Forming</i> , <b>2022</b> , 15, 30	2	0
58	Magnesium Nanoparticle Synthesis from Powders via Pulsed Laser Ablation in Liquid for Nanocolloid Production. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 10974	2.6	1
57	MXene materials based printed flexible devices for healthcare, biomedical and energy storage applications. <i>Materials Today</i> , <b>2021</b> , 43, 99-131	21.8	29
56	Electrochemical and chronoamperometry assessment of nano-gold sensor surfaces produced via novel laser fabrication methods. <i>Journal of Electroanalytical Chemistry</i> , <b>2021</b> , 880, 114813	4.1	1
55	Use of some cost-effective technologies for a routine clinical pathology laboratory. <i>Lab on A Chip</i> , <b>2021</b> , 21, 4330-4351	7.2	3
54	Multi-Material Production of 4D Shape Memory Polymer Composites <b>2021</b> , 879-894		3
53	Real-time monitoring and control for high-efficiency autonomous laser fabrication of silicon nanoparticle colloids. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2021</b> , 114, 291-304	3.2	3
52	Additive Manufacturing of Bone Scaffolds Using PolyJet and Stereolithography Techniques. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 7336	2.6	3
51	Review of Materials and Fabrication Methods for Flexible Nano and Micro-Scale Physical and Chemical Property Sensors. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 8563	2.6	4
50	Ti6Al4V functionally graded material via high power and high speed laser surface modification. <i>Surface and Coatings Technology</i> , <b>2020</b> , 398, 126085	4.4	7
49	Portable low-cost open-source wireless spectrophotometer for fast and reliable measurements.. <i>HardwareX</i> , <b>2020</b> , 7, e00108	2.7	20
48	Advanced materials of printed wearables for physiological parameter monitoring. <i>Materials Today</i> , <b>2020</b> , 32, 147-177	21.8	59
47	Enhanced organic species identification via laser structuring of carbon monolithic surfaces. <i>Applied Surface Science</i> , <b>2019</b> , 493, 829-837	6.7	
46	Taguchi method modelling of Nd:YAG laser ablation of microchannels on cyclic olefin polymer film. <i>Optics and Laser Technology</i> , <b>2018</b> , 106, 265-271	4.2	8
45	Advanced Characterisation Techniques for Nanostructures <b>2018</b> , 55-93		1
44	Modelling and optimisation of single-step laser-based gold nanostructure deposition with tunable optical properties. <i>Optics and Laser Technology</i> , <b>2018</b> , 108, 295-305	4.2	1

43	Nanoparticle functionalized laser patterned substrate: an innovative route towards low cost biomimetic platforms. <i>RSC Advances</i> , <b>2017</b> , 7, 8060-8069	3.7	6
42	New strategies for stationary phase integration within centrifugal microfluidic platforms for applications in sample preparation and pre-concentration. <i>Analytical Methods</i> , <b>2017</b> , 9, 1998-2006	3.2	10
41	Physical integrity of 3D printed parts for use as embossing tools. <i>Advances in Materials and Processing Technologies</i> , <b>2017</b> , 3, 308-317	0.8	3
40	An evaluation of components manufactured from a range of materials, fabricated using PolyJet technology. <i>Advances in Materials and Processing Technologies</i> , <b>2017</b> , 3, 318-329	0.8	12
39	Pulsed laser deposition of plasmonic nanostructured gold on flexible transparent polymers at atmospheric pressure. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 245303	3	12
38	Surface roughness control by extreme ultraviolet (EUV) radiation <b>2017</b> ,		1
37	Microchannel fabrication on cyclic olefin polymer substrates via 1064 nm Nd:YAG laser ablation. <i>Applied Surface Science</i> , <b>2016</b> , 387, 603-608	6.7	25
36	Rapid Prototyped Biomimetic Antifouling Surfaces for Marine Applications. <i>Materials Today: Proceedings</i> , <b>2016</b> , 3, 527-532	1.4	11
35	Extreme Ultraviolet Surface Modification of Polyethylene Terephthalate (PET) for Surface Structuring and Wettability Control. <i>Acta Physica Polonica A</i> , <b>2016</b> , 129, 241-243	0.6	11
34	Methacrylate Polymer Monoliths for Separation Applications. <i>Materials</i> , <b>2016</b> , 9,	3.5	21
33	Laser-assisted synthesis of ultrapure nanostructures for biological sensing applications <b>2016</b> ,		2
32	Laser micro-engineering of functionalised cyclic olefin polymers for microfluidic applications <b>2015</b> ,		3
31	Laser assisted synthesis of carbon nanoparticles with controlled viscosities for printing applications. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 447, 263-8	9.3	36
30	Fast Fabrication Process of Microfluidic Devices Based on Cyclic Olefin Copolymer. <i>Materials and Manufacturing Processes</i> , <b>2014</b> , 29, 93-99	4.1	20
29	Focussed ion beam serial sectioning and imaging of monolithic materials for 3D reconstruction and morphological parameter evaluation. <i>Analyst, The</i> , <b>2014</b> , 139, 99-104	5	8
28	In vitro fibroblast and pre-osteoblastic cellular responses on laser surface modified Ti-6Al-4V. <i>Biomedical Materials (Bristol)</i> , <b>2014</b> , 10, 015007	3.5	26
27	Advances in three-dimensional rapid prototyping of microfluidic devices for biological applications. <i>Biomicrofluidics</i> , <b>2014</b> , 8, 052112	3.2	94
26	Permeability of rapid prototyped artificial bone scaffold structures. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2014</b> , 102, 4127-35	5.4	23

25	Surface modification of polymers for biocompatibility via exposure to extreme ultraviolet radiation. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2014</b> , 102, 3298-310	5.4	58
24	Developments of Laser Fabrication Methods for Lab-on-a-Chip Microfluidic Multisensing Devices <b>2014</b> , 447-458		4
23	Liquid Phase [Pulsed Laser Ablation: A route to fabricate different carbon nanostructures. <i>Applied Surface Science</i> , <b>2014</b> , 302, 141-144	6.7	36
22	Adsorption and desorption of methylene blue on porous carbon monoliths and nanocrystalline cellulose. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 8796-804	9.5	247
21	Fabrication and characterization of nanotemplated carbon monolithic material. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 8572-80	9.5	9
20	Fabrication of Bonded Monolithic Porous Layer Open Tubular (monoPLOT) Columns in Wide Bore Capillary by Laminar Flow Thermal Initiation. <i>Chromatographia</i> , <b>2013</b> , 76, 581-589	2.1	15
19	High speed laser surface modification of Ti6Al4V. <i>Surface and Coatings Technology</i> , <b>2012</b> , 206, 3223-3229	4.4	60
18	Laser Processing of Quartz for Microfluidic Device Fabrication. <i>Advanced Materials Research</i> , <b>2012</b> , 445, 436-441	0.5	4
17	Centrifugally-driven sample extraction, preconcentration and purification in microfluidic compact discs. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2011</b> , 30, 1575-1586	14.6	24
16	Versatile capillary column temperature control using a thermoelectric array based platform. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 4307-13	7.8	24
15	The use of scanning contactless conductivity detection for the characterisation of stationary phases in micro-fluidic chips. <i>Lab on A Chip</i> , <b>2010</b> , 10, 1777-80	7.2	12
14	Dual contactless conductivity and amperometric detection on hybrid PDMS/glass electrophoresis microchips. <i>Analyst, The</i> , <b>2010</b> , 135, 96-103	5	54
13	Review on recent and advanced applications of monoliths and related porous polymer gels in micro-fluidic devices. <i>Analytica Chimica Acta</i> , <b>2010</b> , 668, 100-13	6.6	77
12	Selective laser sintering of hydroxyapatite/poly-epsilon-caprolactone scaffolds. <i>Acta Biomaterialia</i> , <b>2010</b> , 6, 2511-7	10.8	144
11	Design of Bone Scaffolds Structures for Rapid Prototyping with Increased Strength and Osteoconductivity. <i>Advanced Materials Research</i> , <b>2009</b> , 83-86, 914-922	0.5	11
10	Effect of Saturation and Post Processing on 3D Printed Calcium Phosphate Scaffolds. <i>Key Engineering Materials</i> , <b>2008</b> , 396-398, 663-666	0.4	8
9	Effect of Hydroxyapatite on Biodegradable Scaffolds Fabricated by SLS. <i>Key Engineering Materials</i> , <b>2008</b> , 396-398, 659-662	0.4	10
8	Procedure 4 Determination of Ca(II) in wood pulp using a calcium-selective electrode with poly(3,4-ethylenedioxythiophene) as ion-to-electron transducer. <i>Comprehensive Analytical Chemistry</i> , <b>2007</b> , 49, e25-e28	1.9	2

7	Potentiometric sensors based on poly(3,4-ethylenedioxythiophene) (PEDOT) doped with sulfonated calix[4]arene and calix[4]resorcarenes. <i>Journal of Solid State Electrochemistry</i> , <b>2005</b> , 9, 312-319	2.6	45
6	Potentiometric sensors for Ag <sup>+</sup> based on poly(3-octylthiophene) (POT). <i>Journal of Solid State Electrochemistry</i> , <b>2005</b> , 9, 865-873	2.6	31
5	Solution-cast films of poly(3,4-ethylenedioxythiophene) as ion-to-electron transducers in all-solid-state ion-selective electrodes. <i>Sensors and Actuators B: Chemical</i> , <b>2004</b> , 97, 182-189	8.5	103
4	Small-volume radial flow cell for all-solid-state ion-selective electrodes. <i>Talanta</i> , <b>2004</b> , 62, 57-63	6.2	31
3	Influence of oxygen and carbon dioxide on the electrochemical stability of poly(3,4-ethylenedioxythiophene) used as ion-to-electron transducer in all-solid-state ion-selective electrodes. <i>Sensors and Actuators B: Chemical</i> , <b>2002</b> , 82, 7-13	8.5	121
2	Determination of Na <sup>+</sup> , K <sup>+</sup> , Ca <sup>2+</sup> , and Cl <sup>-</sup> ions in Wood Pulp Suspension Using Ion-Selective Electrodes. <i>Electroanalysis</i> , <b>2001</b> , 13, 1119-1124	3	15
1	Fabrication of microstructured planar chromatography platforms via laser ablation. <i>Journal of Liquid Chromatography and Related Technologies</i> , 1-6	1.3	1