Isabel Rodriguez

List of Publications by Year
in descending order

68 papers	2,358 citations	159358 30 h-index	214527 47 g-index
69 all docs	69 docs citations	69 times ranked	3207 citing authors

#	Article	IF	Citations
1	The effect of topography of polymer surfaces on platelet adhesion. Biomaterials, 2010, 31, 1533-1545.	5.7	166
2	DC-biased AC-electroosmotic and AC-electrothermal flow mixing in microchannels. Lab on A Chip, 2009, 9, 802-809.	3.1	141
3	Surface deactivation in protein and peptide analysis by capillary electrophoresis. Analytica Chimica Acta, 1999, 383, 1-26.	2.6	133
4	Fluidic lenses with variable focal length. Applied Physics Letters, 2006, 88, 041120.	1.5	106
5	High-speed chiral separations on microchip electrophoresis devices. Electrophoresis, 2000, 21, 211-219.	1.3	104
6	Fabrication and Analysis of Gecko-Inspired Hierarchical Polymer Nanosetae. ACS Nano, 2011, 5, 1897-1906.	7.3	82
7	Review: Micro- and nanostructured surface engineering for biomedical applications. Journal of Materials Research, 2013, 28, 165-174.	1.2	77
8	Microfluidic cell trap array for controlled positioning of single cells on adhesive micropatterns. Lab on A Chip, 2013, 13, 714.	3.1	71
9	Controlled Fabrication of Multitiered Threeâ€Dimensional Nanostructures in Porous Alumina. Advanced Functional Materials, 2008, 18, 2057-2063.	7.8	56
10	Separation of biogenic amines by micellar electrokinetic chromatography. Journal of Chromatography A, 1996, 745, 255-262.	1.8	54
11	Practical integration of polymerase chain reaction amplification and electrophoretic analysis in microfluidic devices for genetic analysis. Electrophoresis, 2003, 24, 172-178.	1.3	54
12	Dynamic Cell Fractionation and Transportation Using Moving Dielectrophoresis. Analytical Chemistry, 2007, 79, 6975-6987.	3.2	52
13	Thermally activated solvent bonding of polymers. Microsystem Technologies, 2008, 14, 753-759.	1.2	52
14	A novel nanostructured poly(lactic-co-glycolic-acid)â€“multi-walled carbon nanotube composite for blood-contacting applications: Thrombogenicity studies. Acta Biomaterialia, 2009, 5, 3411-3422.	4.1	51
15	Mimicking Dominoâ€Like Photonic Nanostructures on Butterfly Wings. Small, 2009, 5, 574-578.	5.2	48
16	Capacitively coupled contactless conductivity detection with dual topâ€“bottom cell configuration for microchip electrophoresis. Electrophoresis, 2010, 31, 1063-1070.	1.3	48
17	Femtomolar detection of2,4-dichlorophenoxyacetic acidherbicidesvia competitive immunoassays using microfluidic based carbon nanotube liquid gated transistor. Lab on A Chip, 2010, 10, 634-638.	3.1	48
18	Direct Detection of Heroin Metabolites Using a Competitive Immunoassay Based on a Carbonâ€Nanotube Liquidâ€Gated Fieldâ€Effect Transistor. Small, 2010, 6, 993-998.	5.2	43

#	Article	IF	Citations
19	Microchannel electrophoretic separation of biogenic amines by micellar electrokinetic chromatography. Electrophoresis, 1999, 20, 118-126.	1.3	42
20	Enantiomeric separation of amino acids derivatized with fluoresceine isothiocyanate isomer I by micellar electrokinetic chromatography using Î²- and Î³-cyclodextrins as chiral selectors. Electrophoresis, 1999, 20, 1538-1545.	1.3	42
21	Lotus bioinspired superhydrophobic, selfâ€cleaning surfaces from hierarchically assembled templates. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 603-609.	2.4	42
22	Cell Motion Model for Moving Dielectrophoresis. Analytical Chemistry, 2008, 80, 5454-5461.	3.2	40
23	Biomechanical Cell Regulation by High Aspect Ratio Nanoimprinted Pillars. Advanced Functional Materials, 2016, 26, 5599-5609.	7.8	40
24	Fabrication of PMMA micro- and nanofluidic channels by proton beam writing: electrokinetic and morphological characterization. Journal of Micromechanics and Microengineering, 2006, 16, 1170-1180.	1.5	39
25	Single-imprint moth-eye anti-reflective and self-cleaning film with enhanced resistance. Nanoscale, 2018, 10, 15496-15504.	2.8	38
26	Isolated, sealed nanofluidic channels formed by combinatorial-mould nanoimprint lithography. Nanotechnology, 2006, 17, 1975-1980.	1.3	35
27	Modeling of dielectrophoretic force for moving dielectrophoresis electrodes. Journal of Electrostatics, 2008, 66, 514-525.	1.0	34
28	Laminated, microfluidic-integrated carbon nanotube based biosensors. Applied Physics Letters, 2009, 94, 013107.	1.5	34
29	Conventional capillary electrophoresis in comparison with short-capillary capillary electrophoresis and microfabricated glass chip capillary electrophoresis for the analysis of fluorescein isothiocyanate anti-human immunoglobulin G. Journal of Chromatography A, 1997, 781, 287-293.	1.8	33
30	Protein/carbon nanotubes interaction: The effect of carboxylic groups on conformational and conductance changes. Applied Physics Letters, 2009, 95, 073704.	1.5	31
31	Platelet adhesion studies on nanostructured poly(lacticâ€coâ€glycolicâ€acid)â€“carbon nanotube composite. Journal of Biomedical Materials Research - Part A, 2008, 86A, 394-401.	2.1	30
32	A portable labâ€onâ€aâ€chip instrument based on <scp>MCE</scp> with dual topâ€“bottom capacitive coupled contactless conductivity detector in replaceable cell cartridge. Electrophoresis, 2013, 34, 1390-1399.	1.3	29
33	Nanotubes-/nanowires-based, microfluidic-integrated transistors for detecting biomolecules. Microfluidics and Nanofluidics, 2010, 9, 1185-1214.	1.0	28
34	Ion-pair solid-phase extraction of biogenic amines before micellar electrokinetic chromatography with laser-induced fluorescence detection of their fluorescein thiocarbamyl derivatives. Electrophoresis, 1999, 20, 1862-1868.	1.3	27
35	Moth-eye mimetic cytocompatible bactericidal nanotopography: a convergent design. Bioinspiration and Biomimetics, 2018, 13, 026011.	1.5	27
36	Flexible all-polymer waveguide for low threshold amplified spontaneous emission. Scientific Reports, 2016, 6, 34565.	1.6	26

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37	Experimental verification of Faradaic charging in ac electrokinetics. Biomicrofluidics, 2009, 3, 022405.	1.2	25
38	Experimental study and numerical estimation of current changes in electroosmotically pumped microfluidic devices. Electrophoresis, 2005, 26, 1114-1121.	1.3	22
39	Conformational behavior of fibrinogen on topographically modified polymer surfaces. Physical Chemistry Chemical Physics, 2010, 12, 10301.	1.3	22
40	Flexible distributed feedback lasers based on nanoimprinted cellulose diacetate with efficient multiple wavelength lasing. Npj Flexible Electronics, 2019, 3, .	5.1	22
41	Fabrication of labâ€on chip platforms by hot embossing and photo patterning. Biotechnology Journal, 2007, 2, 1381-1388.	1.8	21
42	Bioinspired antireflective flexible films with optimized mechanical resistance fabricated by roll to roll thermal nanoimprint. Scientific Reports, 2021, 11, 2419.	1.6	21
43	DC-biased AC-electrokinetics: a conductivity gradient driven fluid flow. Lab on A Chip, 2011, 11, 4241.	3.1	20
44	Nano-engineering safer-by-design nanoparticle based moth-eye mimetic bactericidal and cytocompatible polymer surfaces. RSC Advances, 2018, 8, 22606-22616.	1.7	20
45	Efficient Optical Gain from Nearâ€Infrared Polymer Lasers Based on Poly[Nâ€9â€²â€heptadecanylâ€2,7â€carbazoleâ€altâ€5,5â€(4â€²,7â€²â€diâ€2â€thienylâ€2â€²,1â€²,3â€²â€benzoth Optical Materials, 2018, 6, 1800263.	3.3	20
46	Multifunctional Nano-engineered Polymer Surfaces with Enhanced Mechanical Resistance and Superhydrophobicity. Scientific Reports, 2017, 7, 43450.	1.6	17
47	Multilevel Hierarchical Topographies by Combined Photolithography and Nanoimprinting Processes To Create Surfaces with Controlled Wetting. ACS Applied Nano Materials, 2019, 2, 4727-4733.	2.4	17
48	Engineered protein-based functional nanopatterned materials for bio-optical devices. Nanoscale Advances, 2019, 1, 3980-3991.	2.2	17
49	Shear Adhesion Strength of Gecko-Inspired Tapes on Surfaces with Variable Roughness. Journal of Adhesion, 2013, 89, 921-936.	1.8	13
50	Polystyrene Nanopillars with Inbuilt Carbon Nanotubes Enable Synaptic Modulation and Stimulation in Interfaced Neuronal Networks. Advanced Materials Interfaces, 2021, 8, 2002121.	1.9	13
51	On the nature of solvothermally synthesized carbon nanodots. Journal of Materials Chemistry C, 2021, 9, 16935-16944.	2.7	11
52	Roll-to-roll nanoimprint lithography of high efficiency Fresnel lenses for micro-concentrator photovoltaics. Optics Express, 2021, 29, 34135.	1.7	10
53	Resilient moth-eye nanoimprinted antireflective and self-cleaning TiO2 sputter-coated PMMA films. Applied Surface Science, 2022, 585, 152653.	3.1	10
54	Fluorescent C-NanoDots for rapid detection of BRCA1, CFTR and MRP3 gene mutations. Mikrochimica Acta, 2019, 186, 293.	2.5	8

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55	Microvessel-on-Chip Fabrication for the In Vitro Modeling of Nanomedicine Transport. ACS Omega, 2021, 6, 25109-25115.	1.6	8
56	Capillary electrophoresis separation of p-sulfonated calix[n]arenes, n=4,6,8. Talanta, 1998, 45, 683-691.	2.9	6
57	Numerical study of dc-biased ac-electrokinetic flow over symmetrical electrodes. Biomicrofluidics, 2012, 6, 12817-1281710.	1.2	6
58	Liquid Chromatographic Separationa of Calixarenes. Journal of Liquid Chromatography and Related Technologies, 1997, 20, 1197-1209.	0.5	5
59	Micropatterns of cell adhesive proteins with poly(ethylene oxide)â€blockâ€Poly(4â€vinylpyridine) diblock copolymer. Biotechnology and Bioengineering, 2011, 108, 983-987.	1.7	5
60	Mechanoâ€Đynamic Analysis of the Bactericidal Activity of Bioinspired Mothâ€Eye Nanopatterned Surfaces. Advanced Materials Interfaces, 2022, 9, .	1.9	4
61	Restrictive dual capacitively coupled contactless conductivity detection for microchip electrophoresis. Procedia Chemistry, 2009, 1, 1351-1354.	0.7	3
62	Highly pH-responsive sensor based on amplified spontaneous emission coupled to colorimetry. Scientific Reports, 2017, 7, 46265.	1.6	3
63	DC-Biased AC-Electrokinetic Mixing: A Mechanistic Investigation. Advanced Materials Research, 0, 74, 109-112.	0.3	2
64	Investigation of sensing mechanism and signal amplification in carbon nanotube based microfluidic liquid-gated transistors via pulsating gate bias. Lab on A Chip, 2010, 10, 1454.	3.1	2
65	Enhanced Mechanical and Thermal Resistances of Nanoimprinted Antireflective Mothâ€Eye Surfaces Based on Poly Vinylidene Fluoride/TiO 2 Surface Nanocomposites. Advanced Engineering Materials, 0, , 2100603.	1.6	2
66	Improved thermal stability of antireflective moth-eye topography imprinted on PMMA/TiO₂ surface nanocomposites. Nanotechnology, 2021, 32, 335302.	1.3	1
67	Platelet Response on Poly(D,L -lactide-co-glycolide) (PLGA) Film with Nano-structured Fillers. , 2008, , .		1
68	Fabrication of Adhesive Protein Micropatterns In Application of Studying Cell Surface Interactions. IFMBE Proceedings, 2009, , 1980-1983.	0.2	0