Elisa Mele

List of Publications by Citations

101 papers	2,330 citations	26 h-index	44 g-index
109 ext. papers	2,660 ext. citations	5.2 avg, IF	5.46 L-index

#	Paper	IF	Citations
101	Patterning of light-emitting conjugated polymer nanofibres. *Nature Nanotechnology*, **2008**, 3, 614-9	28.7	161
100	Electrospinning of natural polymers for advanced wound care: towards responsive and adaptive dressings. *Journal of Materials Chemistry B*, **2016**, 4, 4801-4812	7.3	126
99	Fibrous wound dressings encapsulating essential oils as natural antimicrobial agents. *Journal of Materials Chemistry B*, **2015**, 3, 1583-1589	7.3	114
98	Alginate-lavender nanofibers with antibacterial and anti-inflammatory activity to effectively promote burn healing. *Journal of Materials Chemistry B*, **2016**, 4, 1686-1695	7.3	113
97	Photocontrolled variations in the wetting capability of photochromic polymers enhanced by surface nanostructuring. *Langmuir*, **2006**, 22, 2329-33	4	97
96	Electrospun Nanofibres Containing Antimicrobial Plant Extracts. *Nanomaterials*, **2017**, 7,	5.4	95
95	Capillary micromechanics: Measuring the elasticity of microscopic soft objects. *Soft Matter*, **2010**, 6, 4550	3.6	84
94	Biophysical properties of normal and diseased renal glomeruli. *American Journal of Physiology - Cell Physiology*, **2011**, 300, C397-405	5.4	75
93	Multilevel, room-temperature nanoimprint lithography for conjugated polymer-based photonics. *Nano Letters*, **2005**, 5, 1915-9	11.5	75
92	Strelitzia reginae leaf as a natural template for anisotropic wetting and superhydrophobicity. *Langmuir*, **2012**, 28, 5312-7	4	70
91	Photoswitchable Organic Nanofibers. *Advanced Materials*, **2008**, 20, 314-318	24	69
90	A bioartificial renal tubule device embedding human renal stem/progenitor cells. *PLoS ONE*, **2014**, 9, e87496	3.7	57
89	Near-infrared imprinted distributed feedback lasers. *Applied Physics Letters*, **2006**, 89, 201105	3.4	46
88	Adult Stem Cell Therapies for Wound Healing: Biomaterials and Computational Models. *Frontiers in Bioengineering and Biotechnology*, **2015**, 3, 206	5.8	43
87	Cellular Response to Surface Morphology: Electrospinning and Computational Modeling. *Frontiers in Bioengineering and Biotechnology*, **2018**, 6, 155	5.8	40
86	Alginate nanofibrous mats with adjustable degradation rate for regenerative medicine. *Biomacromolecules*, **2015**, 16, 936-43	6.9	39
85	Polymeric distributed feedback lasers by room-temperature nanoimprint lithography. *Applied Physics Letters*, **2006**, 89, 131109	3.4	38

84	Electrospinning of polylactic acid fibres containing tea tree and manuka oil. *Reactive and Functional Polymers*, **2017**, 117, 106-111	4.6	37
83	Monolithic polymer microcavity lasers with on-top evaporated dielectric mirrors. *Applied Physics Letters*, **2006**, 88, 121110	3.4	34
82	Microvascular endothelial cell spreading and proliferation on nanofibrous scaffolds by polymer blends with enhanced wettability. *Soft Matter*, **2013**, 9, 5529	3.6	32
81	Polymer nanofibers by soft lithography. *Applied Physics Letters*, **2005**, 87, 123109	3.4	31
80	Low-Cost and Effective Fabrication of Biocompatible Nanofibers from Silk and Cellulose-Rich Materials. *ACS Biomaterials Science and Engineering*, **2016**, 2, 526-534	5.5	28
79	Role of doping concentration on the competition between amplified spontaneous emission and nonradiative energy transfer in blends of conjugated polymers. *Physical Review B*, **2006**, 73,	3.3	28
78	Zwitterionic Nanofibers of Super-Glue for Transparent and Biocompatible Multi-Purpose Coatings. *Scientific Reports*, **2015**, 5, 14019	4.9	27
77	Enhancement of light polarization from electrospun polymer fibers by room temperature nanoimprint lithography. *Nanotechnology*, **2010**, 21, 215304	3.4	27
76	Very high-quality distributed Bragg reflectors for organic lasing applications by reactive electron-beam deposition. *Optics Express*, **2006**, 14, 1951-6	3.3	27
75	Biomimetic approach for liquid encapsulation with nanofibrillar cloaks. *Langmuir*, **2014**, 30, 2896-902	4	26
74	Optical gain from the open form of a photochromic molecule in the solid state. *Journal of Physical Chemistry B*, **2006**, 110, 4506-9	3.4	25
73	Fibres from blends of epoxidized natural rubber and polylactic acid by the electrospinning process: Compatibilization and surface texture. *European Polymer Journal*, **2017**, 87, 241-254	5.2	24
72	Multi-layer Scaffolds of Poly(caprolactone), Poly(glycerol sebacate) and Bioactive Glasses Manufactured by Combined 3D Printing and Electrospinning. *Nanomaterials*, **2020**, 10,	5.4	23
71	Smart photochromic gratings with switchable wettability realized by green-light interferometry. *Applied Physics Letters*, **2006**, 88, 203124	3.4	21
70	Influence of topography of nanofibrous scaffolds on functionality of engineered neural tissue. *Journal of Materials Chemistry B*, **2018**, 6, 930-939	7.3	20
69	Effect of Antibacterial Plant Extracts on the Morphology of Electrospun Poly(Lactic Acid) Fibres. *Materials*, **2018**, 11,	3.5	20
68	Localized synthesis of gold nanoparticles in anisotropic alginate structures. *RSC Advances*, **2014**, 4, 20449	3.7	20
67	Complex architectures formed by alginate drops floating on liquid surfaces. *Soft Matter*, **2013**, 9, 6338	3.6	19

66	First-order imprinted organic distributed feedback lasers. *Synthetic Metals*, **2005**, 153, 237-240	3.6	19
65	Amplified Spontaneous Emission and Waveguiding Properties of the Colored Merocyanine Form of (1′,3′-Dihydro-1′,3′,3′-trimethyl-6- nitrospiro[2H-1-benzopyran-2,2′-(2H)-indole] Molecules. *Chemistry of Materials*, **2006**, 18, 4171-4175	9.6	19
64	Reduction of water evaporation in polymerase chain reaction microfluidic devices based on oscillating-flow. *Biomicrofluidics*, **2010**, 4,	3.2	18
63	Electrospinning of Essential Oils. *Polymers*, **2020**, 12,	4.5	17
62	Microdroplet-based multiplex PCR on chip to detect foodborne bacteria producing biogenic amines. *Food Microbiology*, **2013**, 35, 10-4	6	17
61	Rapid nested-PCR for tyrosinase gene detection on chip. *Biosensors and Bioelectronics*, **2011**, 26, 2711-5	11.8	17
60	Photocontrolled wettability changes in polymer microchannels doped with photochromic molecules. *Applied Physics Letters*, **2007**, 91, 113113	3.4	17
59	Combination of microstructuring and laser-light irradiation for the reversible wettability of photosensitised polymer surfaces. *Applied Physics A: Materials Science and Processing*, **2006**, 83, 351-356	2.6	17
58	Fumarate-loaded electrospun nanofibers with anti-inflammatory activity for fast recovery of mild skin burns. *Biomedical Materials (Bristol)*, **2016**, 11, 041001	3.5	15
57	Enhanced charge-carrier mobility in polymer nanofibers realized by solvent-resistant soft nanolithography. *Journal of Materials Chemistry*, **2012**, 22, 18051		15
56	Ultraviolet-based bonding for perfluoropolyether low aspect-ratio microchannels and hybrid devices. *Lab on A Chip*, **2008**, 8, 1394-7	7.2	15
55	Emission properties of printed organic semiconductor lasers. *Optics Letters*, **2005**, 30, 260-2	3	15
54	Omniphobic nanocomposite fiber mats with peel-away self similarity. *Journal of Materials Chemistry A*, **2015**, 3, 23821-23828	13	14
53	Optically controlled liquid flow in initially prohibited elastomeric nanocomposite micro-paths. *RSC Advances*, **2012**, 2, 9543	3.7	14
52	Amplified spontaneous emission from a conjugated polymer undergone a high-temperature lithography cycle. *Applied Physics Letters*, **2005**, 86, 261104	3.4	14
51	Polydimethylsiloxane and poly(ether) ether ketone functionally graded composites for biomedical applications. *Journal of the Mechanical Behavior of Biomedical Materials*, **2019**, 93, 130-142	4.1	14
50	Low-threshold blue-emitting monolithic polymer vertical cavity surface-emitting lasers. *Applied Physics Letters*, **2006**, 89, 121111	3.4	13
49	Ultra-efficient, widely tunable gold nanoparticle-based fiducial markers for X-ray imaging. *Nanoscale*, **2016**, 8, 18921-18927	7.7	12

48	Photo-polymerisable electrospun fibres of N-methacrylate glycol chitosan for biomedical applications. *RSC Advances*, **2015**, 5, 24723-24728	3.7	10
47	Soft Nanolithography by Polymer Fibers. *Advanced Functional Materials*, **2011**, 21, 1140-1145	15.6	10
46	Polymer to polymer to polymer pattern transfer: Multiple molding for 100nm scale lithography. *Journal of Vacuum Science & Technology B*, **2006**, 24, 807		10
45	Full organic distributed feedback cavities based on a soluble electroluminescent oligothiophene. *Physical Review B*, **2004**, 70,	3.3	10
44	Polarization mode splitting in monolithic polymer microcavities. *Applied Physics Letters*, **2005**, 87, 031103	3.4	10
43	Dry vs. wet: Properties and performance of collagen films. Part I. Mechanical behaviour and strain-rate effect. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 111, 103983	4.1	10
42	Phase separation events induce the coexistence of distinct nanofeatures in electrospun fibres of poly(ethyl cyanoacrylate) and polycaprolactone. *Materials Today Communications*, **2018**, 16, 135-141	2.5	9
41	Rolling particle lithography by soft polymer microparticles. *Soft Matter*, **2013**, 9, 2206	3.6	9
40	Low-loss and highly polarized emission from planar polymer waveguides. *Optics Letters*, **2006**, 31, 1429-31	3.1	9
39	In Situ Generation of ZnO Nanoparticles within a Polyethyleneimine Matrix for Antibacterial Zein Fibers. *ACS Applied Polymer Materials*, **2019**, 1, 1707-1716	4.3	8
38	Nanoparticle image velocimetry at topologically structured surfaces. *Biomicrofluidics*, **2009**, 3, 44111	3.2	8
37	Study of optical properties of electrospun light-emitting polymer fibers. *Superlattices and Microstructures*, **2010**, 47, 145-149	2.8	8
36	Sub-50-nm conjugated polymer dots by nanoprinting. *Small*, **2008**, 4, 1894-9	11	8
35	Printability and mechanical performance of biomedical PDMS-PEEK composites developed for material extrusion. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 115, 104291	4.1	7
34	Structural relaxation in PLLA: Contribution of different scale motions. *Thermochimica Acta*, **2019**, 672, 157-161	2.9	7
33	Synthesis and Electrospinning of Polycaprolactone from an Aluminium-Based Catalyst: Influence of the Ancillary Ligand and Initiators on Catalytic Efficiency and Fibre Structure. *Polymers*, **2019**, 11,	4.5	6
32	Biomimetic Locomotion on Water of a Porous Natural Polymeric Composite. *Advanced Materials Interfaces*, **2016**, 3, 1500854	4.6	6
31	Polymeric foams with functional nanocomposite cells. *RSC Advances*, **2014**, 4, 19177-19182	3.7	6

30	Combined capillary force and step and flash lithography. *Nanotechnology*, **2005**, 16, 391-395	3.4	6
29	In-situ formation of polyvinylidene fluoride microspheres within polycaprolactone electrospun mats. *Polymer*, **2020**, 186, 122087	3.9	6
28	Chitosan-Coated Poly(lactic acid) Nanofibres Loaded with Essential Oils for Wound Healing. *Polymers*, **2021**, 13,	4.5	6
27	Patterning photo-curable light-emitting organic composites by vertical and horizontal capillarity: a general route to photonic nanostructures. *Nanotechnology*, **2008**, 19, 335301	3.4	5
26	Nanostructuring polymers by soft lithography templates realized via ion sputtering. *Nanotechnology*, **2005**, 16, 2714-2717	3.4	5
25	Dry vs. wet: Properties and performance of collagen films. Part II. Cyclic and time-dependent behaviours. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 112, 104040	4.1	5
24	Bioinspired Poly(vinylidene fluoride) Membranes with Directional Release of Therapeutic Essential Oils. *Langmuir*, **2018**, 34, 8652-8660	4	5
23	3D Arrays of Super-Hydrophobic Microtubes from Polypore Mushrooms as Naturally-Derived Systems for Oil Absorption. *Materials*, **2019**, 12,	3.5	4
22	Organic Light-Emitting Nanofibers by Solvent-Resistant Nanofluidics. *Advanced Materials*, **2008**, 20, NA-NA	14	4
21	Mechanical performance of 3D printed polylactide during degradation. *Additive Manufacturing*, **2021**, 38, 101764	6.1	4
20	Investigation of the electro-spinnability of alginate solutions containing gold precursor HAuCl4. *Journal of Colloid and Interface Science*, **2016**, 483, 60-66	9.3	3
19	Damage in extrusion additive manufactured parts: effect of environment and cyclic loading. *Procedia Structural Integrity*, **2020**, 28, 452-457	1	3
18	Porous Optically Transparent Cellulose Acetate Scaffolds for Biomimetic Blood-Brain Barrier Models. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 630063	5.8	3
17	Probing the Thermal Transitions of Lactobionic Acid and Effects of Sample History by DSC Analysis. *Journal of Pharmaceutical Sciences*, **2019**, 108, 3781-3784	3.9	2
16	Imprinting strategies for 100□nm lithography on polyfluorene and poly(phenylenevinylene) derivatives and their blends. *Materials Science and Engineering C*, **2007**, 27, 1428-1433	8.3	2
15	Absolute luminescence efficiency and photonic band-gap effect of conjugated polymers with top-deposited distributed Bragg reflectors. *Chemical Physics Letters*, **2005**, 411, 316-320	2.5	2
14	Fracture Behaviour of Collagen: Effect of Environment. *Procedia Structural Integrity*, **2020**, 28, 843-849	1	2
13	Cell marbles: A novel cell encapsulation technology by wrapping cell suspension droplets using electrospun nanofibers for developmental engineering. *Journal of Biotechnology*, **2020**, 323, 82-91	3.7	2

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12	Designing responsive dressings for inflammatory skin disorders; encapsulating antioxidant nanoparticles into biocompatible electrospun fibres. *Soft Matter*, **2021**, 17, 3775-3783	3.6	2
11	On the quantification of local power densities in a new vibration bioreactor. *PLoS ONE*, **2021**, 16, e0245768	3.7	2
10	Real-time monitoring of microfluidic lithography. *Synthetic Metals*, **2005**, 153, 325-328	3.6	1
9	Polymer microcavities by room temperature electron-beam evaporation of TiOx and SiOx. *Synthetic Metals*, **2005**, 153, 329-332	3.6	1
8	Electrospinning and Additive Manufacturing: Adding Three-Dimensionality to Electrospun Scaffolds for Tissue Engineering.. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 674738	5.8	1
7	Development of a hollow fibre-based renal module for active transport studies. *Journal of Artificial Organs*, **2021**, 24, 473-484	1.8	1
6	Introduction: Smart Materials in Biomedicine **2018**, 1-13		1
5	MaTrEx AM: a new hybrid additive manufacturing process to selectively control mechanical properties. *Additive Manufacturing*, **2021**, 47, 102337	6.1	1
4	Stability and mechanical performance of collagen films under different environmental conditions. *Polymer Degradation and Stability*, **2022**, 197, 109853	4.7	0
3	Atomic-scale clustering inhibits the bioactivity of fluoridated phosphate glasses. *Biomedical Glasses*, **2019**, 5, 76-84	2.7	0
2	Damage in extrusion additive manufactured biomedical polymer: Effects of testing direction and environment during cyclic loading. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 118, 104397	4.1	
1	Resonance vibration interventions in the femur: Experimental-numerical modelling approaches. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 124, 104850	4.1	