

# Ángel Serrano-Aroca

## List of Publications by Year in descending order

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Version: 2024-02-01

102  
papers

3,469  
citations

136950

32  
h-index

175258

52  
g-index

121  
all docs

121  
docs citations

121  
times ranked

3500  
citing authors

#	ARTICLE	IF	CITATIONS
1	A spatio-temporal analysis for exploring the effect of temperature on COVID-19 early evolution in Spain. <i>Science of the Total Environment</i> , 2020, 728, 138811.	8.0	247
2	Poly(3-Hydroxybutyrate-co-3-Hydroxyvalerate): Enhancement Strategies for Advanced Applications. <i>Polymers</i> , 2018, 10, 732.	4.5	197
3	Changes in air pollution during COVID-19 lockdown in Spain: A multi-city study. <i>Journal of Environmental Sciences</i> , 2021, 101, 16-26.	6.1	135
4	Carbon-Based Nanomaterials: Promising Antiviral Agents to Combat COVID-19 in the Microbial-Resistant Era. <i>ACS Nano</i> , 2021, 15, 8069-8086.	14.6	134
5	The structural basis of accelerated host cell entry by SARS-CoV-2. <i>FEBS Journal</i> , 2021, 288, 5010-5020.	4.7	129
6	The effect of climate on the spread of the COVID-19 pandemic: A review of findings, and statistical and modelling techniques. <i>Progress in Physical Geography</i> , 2020, 44, 591-604.	3.2	110
7	Fused deposition modelling: Current status, methodology, applications and future prospects. <i>Additive Manufacturing</i> , 2021, 47, 102378.	3.0	99
8	Graphene oxide nanosheets versus carbon nanofibers: Enhancement of physical and biological properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) films for biomedical applications. <i>International Journal of Biological Macromolecules</i> , 2020, 143, 1000-1008.	7.5	89
9	Protective Face Masks: Current Status and Future Trends. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 56725-56751.	8.0	76
10	Porous poly(2-hydroxyethyl acrylate) hydrogels. <i>Polymer</i> , 2001, 42, 4667-4674.	3.8	74
11	Bioengineering Approaches for Bladder Regeneration. <i>International Journal of Molecular Sciences</i> , 2018, 19, 1796.	4.1	70
12	Enhancement of water diffusion and compression performance of crosslinked alginate films with a minuscule amount of graphene oxide. <i>Scientific Reports</i> , 2017, 7, 11684.	3.3	63
13	Interaction between water and polymer chains in poly(hydroxyethyl acrylate) hydrogels. <i>Colloid and Polymer Science</i> , 2001, 279, 323-330.	2.1	62
14	Graphene oxide in zinc alginate films: Antibacterial activity, cytotoxicity, zinc release, water sorption/diffusion, wettability and opacity. <i>PLoS ONE</i> , 2019, 14, e0212819.	2.5	62
15	Green synthetic routes to alginate-graphene oxide composite hydrogels with enhanced physical properties for bioengineering applications. <i>European Polymer Journal</i> , 2018, 103, 198-206.	5.4	58
16	Protective Face Mask Filter Capable of Inactivating SARS-CoV-2, and Methicillin-Resistant <i>Staphylococcus aureus</i> and <i>Staphylococcus epidermidis</i> . <i>Polymers</i> , 2021, 13, 207.	4.5	56
17	Calcium alginate/graphene oxide films: Reinforced composites able to prevent <i>Staphylococcus aureus</i> and methicillin-resistant <i>Staphylococcus epidermidis</i> infections with no cytotoxicity for human keratinocyte HaCaT cells. <i>European Polymer Journal</i> , 2019, 110, 14-21.	5.4	55
18	Recent Advances in Metal-Based Antimicrobial Coatings for High-Touch Surfaces. <i>International Journal of Molecular Sciences</i> , 2022, 23, 1162.	4.1	52

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19	Antiviral Properties of Alginate-Based Biomaterials: Promising Antiviral Agents against SARS-CoV-2. ACS Applied Bio Materials, 2021, 4, 5897-5907.	4.6	51
20	Alginate: Enhancement Strategies for Advanced Applications. International Journal of Molecular Sciences, 2022, 23, 4486.	4.1	50
21	Physical and biological properties of alginate/carbon nanofibers hydrogel films. International Journal of Biological Macromolecules, 2020, 151, 499-507.	7.5	49
22	A unique view of SARS-CoV-2 through the lens of ORF8 protein. Computers in Biology and Medicine, 2021, 133, 104380.	7.0	48
23	Porous poly(2-hydroxyethyl acrylate) hydrogels prepared by radical polymerisation with methanol as diluent. Polymer, 2004, 45, 8949-8955.	3.8	47
24	Acrylic scaffolds with interconnected spherical pores and controlled hydrophilicity for tissue engineering. Journal of Materials Science: Materials in Medicine, 2005, 16, 693-698.	3.6	44
25	Antimicrobial Characterization of Advanced Materials for Bioengineering Applications. Journal of Visualized Experiments, 2018, , .	0.3	44
26	Low-Cost Advanced Hydrogels of Calcium Alginate/Carbon Nanofibers with Enhanced Water Diffusion and Compression Properties. Polymers, 2018, 10, 405.	4.5	43
27	Carbon Nanofibers in Pure Form and in Calcium Alginate Composites Films: New Cost-Effective Antibacterial Biomaterials against the Life-Threatening Multidrug-Resistant Staphylococcus epidermidis. Polymers, 2019, 11, 453.	4.5	43
28	Study of 1D and 2D Carbon Nanomaterial in Alginate Films. Nanomaterials, 2020, 10, 206.	4.1	41
29	Crocin Inhibits Angiogenesis and Metastasis in Colon Cancer via TNF- $\alpha$ /NF- $\kappa$ B/VEGF Pathways. Cells, 2022, 11, 1502.	4.1	41
30	Saccharomyces Cerevisiae Var. Boulardii: Valuable Probiotic Starter for Craft Beer Production. Applied Sciences (Switzerland), 2019, 9, 3250.	2.5	40
31	Autoimmunity roots of the thrombotic events after COVID-19 vaccination. Autoimmunity Reviews, 2021, 20, 102941.	5.8	39
32	Bio-Nanocomposite Hydrogel Based on Zinc Alginate/Graphene Oxide: Morphology, Structural Conformation, Thermal Behavior/Degradation, and Dielectric Properties. Polymers, 2020, 12, 702.	4.5	38
33	Notable sequence homology of the ORF10 protein introspects the architecture of SARS-CoV-2. International Journal of Biological Macromolecules, 2021, 181, 801-809.	7.5	36
34	Antiviral Face Mask Functionalized with Solidified Hand Soap: Low-Cost Infection Prevention Clothing against Enveloped Viruses Such as SARS-CoV-2. ACS Omega, 2021, 6, 23495-23503.	3.5	36
35	Characterisation of macroporous poly(methyl methacrylate) coated with plasma-polymerised poly(2-hydroxyethyl acrylate). European Polymer Journal, 2007, 43, 4552-4564.	5.4	35
36	Three-dimensional nanocomposite scaffolds with ordered cylindrical orthogonal pores. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 84B, 541-549.	3.4	34

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37	Electroactive calcium-alginate/polycaprolactone/reduced graphene oxide nanohybrid hydrogels for skeletal muscle tissue engineering. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 214, 112455.	5.0	34
38	Plasma-induced polymerisation of hydrophilic coatings onto macroporous hydrophobic scaffolds. <i>Polymer</i> , 2007, 48, 2071-2078.	3.8	33
39	Carbon Nanomaterials and LED Irradiation as Antibacterial Strategies against Gram-Positive Multidrug-Resistant Pathogens. <i>International Journal of Molecular Sciences</i> , 2019, 20, 3603.	4.1	33
40	Possible Transmission Flow of SARS-CoV-2 Based on ACE2 Features. <i>Molecules</i> , 2020, 25, 5906.	3.8	33
41	Synthesis of irregular graphene oxide tubes using green chemistry and their potential use as reinforcement materials for biomedical applications. <i>PLoS ONE</i> , 2017, 12, e0185235.	2.5	33
42	Dynamic mechanical analysis and water vapour sorption of highly porous poly(methyl methacrylate). <i>Polymer</i> , 2017, 125, 58-65.	3.8	32
43	Fourth-generation glucose sensors composed of copper nanostructures for diabetes management: A critical review. <i>Bioengineering and Translational Medicine</i> , 2022, 7, e10248.	7.1	32
44	Acrylic scaffolds with interconnected spherical pores and controlled hydrophilicity for tissue engineering. <i>Journal of Materials Science</i> , 2005, 40, 4881-4887.	3.7	31
45	Poly(2-hydroxyethyl acrylate) hydrogels reinforced with graphene oxide: Remarkable improvement of water diffusion and mechanical properties. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46158.	2.6	28
46	COVID-19 Vaccines and Thrombosis – Roadblock or Dead-End Street?. <i>Biomolecules</i> , 2021, 11, 1020.	4.0	28
47	Effect of crosslinking on porous poly(methyl methacrylate) produced by phase separation. <i>Colloid and Polymer Science</i> , 2008, 286, 209-216.	2.1	27
48	Novel Semi-Interpenetrated Polymer Networks of Poly(3-Hydroxybutyrate-co-3-Hydroxyvalerate)/Poly (Vinyl Alcohol) with Incorporated Conductive Polypyrrole Nanoparticles. <i>Polymers</i> , 2021, 13, 57.	4.5	27
49	Additive manufacturing of anti-SARS-CoV-2 Copper-Tungsten-Silver alloy. <i>Rapid Prototyping Journal</i> , 2021, 27, 1831-1849.	3.2	26
50	Macroporous poly(methyl methacrylate) produced by phase separation during polymerisation in solution. <i>Colloid and Polymer Science</i> , 2007, 285, 753-760.	2.1	25
51	Enhancement of Antimicrobial Activity of Alginate Films with a Low Amount of Carbon Nanofibers (0.1% w/w). <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2311.	2.5	23
52	Thermal analysis of water in reinforced plasma-polymerised poly(2-hydroxyethyl acrylate) hydrogels. <i>European Polymer Journal</i> , 2015, 72, 523-534.	5.4	22
53	Carbon Nanofibers versus Silver Nanoparticles: Time-Dependent Cytotoxicity, Proliferation, and Gene Expression. <i>Biomedicines</i> , 2021, 9, 1155.	3.2	21
54	Predicting COVID-19 Comorbidity Pathway Crosstalk-Based Targets and Drugs: Towards Personalized COVID-19 Management. <i>Biomedicines</i> , 2021, 9, 556.	3.2	20

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55	The importance of accessory protein variants in the pathogenicity of SARS-CoV-2. Archives of Biochemistry and Biophysics, 2022, 717, 109124.	3.0	20
56	Antiviral Characterization of Advanced Materials: Use of Bacteriophage Phi 6 as Surrogate of Enveloped Viruses Such as SARS-CoV-2. International Journal of Molecular Sciences, 2022, 23, 5335.	4.1	20
57	Non-Woven Infection Prevention Fabrics Coated with Biobased Cranberry Extracts Inactivate Enveloped Viruses Such as SARS-CoV-2 and Multidrug-Resistant Bacteria. International Journal of Molecular Sciences, 2021, 22, 12719.	4.1	19
58	Injectable Gel Form of a Decellularized Bladder Induces Adipose-Derived Stem Cell Differentiation into Smooth Muscle Cells In Vitro. International Journal of Molecular Sciences, 2020, 21, 8608.	4.1	18
59	Prosthetic meshes for hernia repair: State of art, classification, biomaterials, antimicrobial approaches, and fabrication methods. Journal of Biomedical Materials Research - Part A, 2021, 109, 2695-2719.	4.0	18
60	Human adipose-derived mesenchymal stem cells accelerate decellularized neobladder regeneration. International Journal of Energy Production and Management, 2020, 7, 161-169.	3.7	17
61	Zinc Chloride: Time-Dependent Cytotoxicity, Proliferation and Promotion of Glycoprotein Synthesis and Antioxidant Gene Expression in Human Keratinocytes. Biology, 2021, 10, 1072.	2.8	17
62	Biocompatible Films of Calcium Alginate Inactivate Enveloped Viruses Such as SARS-CoV-2. Polymers, 2022, 14, 1483.	4.5	17
63	SARS-CoV-2 Research Using Human Pluripotent Stem Cells and Organoids. Stem Cells Translational Medicine, 2021, 10, 1491-1499.	3.3	16
64	Antimicrobial Face Shield: Next Generation of Facial Protective Equipment against SARS-CoV-2 and Multidrug-Resistant Bacteria. International Journal of Molecular Sciences, 2021, 22, 9518.	4.1	16
65	Graphene Nanoplatelets: In Vivo and In Vitro Toxicity, Cell Proliferative Activity, and Cell Gene Expression. Applied Sciences (Switzerland), 2022, 12, 720.	2.5	16
66	3D Printed Cobalt-Chromium-Molybdenum Porous Superalloy with Superior Antiviral Activity. International Journal of Molecular Sciences, 2021, 22, 12721.	4.1	15
67	The viral capsid as novel nanomaterials for drug delivery. Future Science OA, 2021, 7, FSO744.	1.9	14
68	Real and virtual bioreactor laboratory sessions by STSEâ€œCLIL WebQuest. Education for Chemical Engineers, 2015, 13, 1-8.	4.8	13
69	Emergence of unique SARS-CoV-2 ORF10 variants and their impact on protein structure and function. International Journal of Biological Macromolecules, 2022, 194, 128-143.	7.5	13
70	Multi-Layer Graphene Oxide in Human Keratinocytes: Time-Dependent Cytotoxicity, Proliferation, and Gene Expression. Coatings, 2021, 11, 414.	2.6	12
71	Aprendizaje de las matemáticas a través del lenguaje de programación R en Educación Secundaria. Medicina Universitaria, 2018, 30, 133-162.	0.1	10
72	Nanoarchitectures in Management of Fungal Diseases: An Overview. Applied Sciences (Switzerland), 2021, 11, 7119.	2.5	10

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73	Potential Molecular Mechanisms of Rare Anti-Tumor Immune Response by SARS-CoV-2 in Isolated Cases of Lymphomas. <i>Viruses</i> , 2021, 13, 1927.	3.3	10
74	Implications derived from S-protein variants of SARS-CoV-2 from six continents. <i>International Journal of Biological Macromolecules</i> , 2021, 191, 934-955.	7.5	10
75	Exploiting the Metabolism of the Gut Microbiome as a Vehicle for Targeted Drug Delivery to the Colon. <i>Pharmaceuticals</i> , 2021, 14, 1211.	3.8	9
76	Modelling of Biomass Concentration, Multi-Wavelength Absorption and Discrimination Method for Seven Important Marine Microalgae Species. <i>Energies</i> , 2018, 11, 1089.	3.1	8
77	A city-level analysis of PM2.5 pollution, climate and COVID-19 early spread in Spain. <i>Journal of Environmental Health Science &amp; Engineering</i> , 2022, 20, 395-403.	3.0	8
78	Exosomal mediated signal transduction through artificial microRNA (amiRNA): A potential target for inhibition of SARS-CoV-2. <i>Cellular Signalling</i> , 2022, 95, 110334.	3.6	8
79	The mechanism behind flaring/triggering of autoimmunity disorders associated with COVID-19. <i>Autoimmunity Reviews</i> , 2021, 20, 102909.	5.8	7
80	Graphene Oxide versus Carbon Nanofibers in Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Films: Degradation in Simulated Intestinal Environments. <i>Polymers</i> , 2022, 14, 348.	4.5	7
81	An issue of concern: unique truncated ORF8 protein variants of SARS-CoV-2. <i>PeerJ</i> , 2022, 10, e13136.	2.0	7
82	Latest Improvements of Acrylic-Based Polymer Properties for Biomedical Applications. , 0, , .		6
83	Enhancement of Hydrogelsâ€™ Properties for Biomedical Applications: Latest Achievements. , 0, , .		6
84	Overview of key molecular and pharmacological targets for diabetes and associated diseases. <i>Life Sciences</i> , 2021, 278, 119632.	4.3	6
85	Targeting LIN28: a new hope in prostate cancer theranostics. <i>Future Oncology</i> , 2021, 17, 3873-3880.	2.4	6
86	Associations and Diseaseâ€™Disease Interactions of COVID-19 with Congenital and Genetic Disorders: A Comprehensive Review. <i>Viruses</i> , 2022, 14, 910.	3.3	6
87	On the association between COVID-19 vaccination levels and incidence and lethality rates at a regional scale in Spain. <i>Stochastic Environmental Research and Risk Assessment</i> , 2022, 36, 2941-2948.	4.0	5
88	Periodically aperiodic pattern of SARS-CoV-2 mutations underpins the uncertainty of its origin and evolution. <i>Environmental Research</i> , 2022, 204, 112092.	7.5	4
89	Clinical utility of novel biosensing platform: Diagnosis of coronavirus SARS-CoV-2 at point of care. <i>Materials Letters</i> , 2021, 304, 130612.	2.6	4
90	Novel pedagogical tool for simultaneous learning of plane geometry and R programming. <i>Research Ideas and Outcomes</i> , 0, 4, e25485.	1.0	4

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91	Would New SARS-CoV-2 Variants Change the War against COVID-19?. <i>Epidemiologia</i> , 2022, 3, 229-237.	2.2	3
92	Gene Therapy for Neuropsychiatric Disorders: Potential Targets and Tools. <i>CNS and Neurological Disorders - Drug Targets</i> , 2022, 21, .	1.4	2
93	Acrylic-Based Hydrogels as Advanced Biomaterials. , 2020, , .		1
94	Prácticas de laboratorio interdisciplinarias de alto nivel científico con alumnos de diferentes grados universitarios guiados por WebQuest AICLE. , 0, , .		1
95	Acknowledgement to Reviewers of <i>Micromachines</i> in 2018. <i>Micromachines</i> , 2019, 10, 43.	2.9	0
96	Acrylic-Based Materials for Biomedical and Bioengineering Applications. , 2020, , .		0
97	Green Composites Films with Antibacterial Properties. <i>Materials Horizons</i> , 2021, , 485-506.	0.6	0
98	Direct spectrophotometric method to determine cell density of <i>Isochrysis galbana</i> in serial batch cultures from a larger scale fed-batch culture in exponential phase. , 0, , .		0
99	Enhancement of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate)'s properties for advanced industrial applications. , 0, , .		0
100	<i>Saccharomyces boulardii</i> : probiotic yeast for craft beer production, growth analysis and biovolume estimation. , 0, , .		0
101	Carbon nanofibers: alternative weapons against multidrug-resistant pathogens. , 0, , .		0
102	Advanced hydrogel films of alginate/carbon nanofibers for biomedical applications. , 0, , .		0