Filippo Rossi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8457028/publications.pdf

Version: 2024-02-01

138 papers	6,053 citations	101543 36 h-index	76900 74 g-index
142 all docs	142 docs citations	142 times ranked	7354 citing authors

#	Article	IF	Citations
1	Activation of microglial cells by Î²-amyloid protein and interferon-Î³. Nature, 1995, 374, 647-650.	27.8	1,312
2	Bone grafts: which is the ideal biomaterial?. Journal of Clinical Periodontology, 2019, 46, 92-102.	4.9	316
3	Progress in Conductive Polyaniline-Based Nanocomposites for Biomedical Applications: A Review. Journal of Medicinal Chemistry, 2020, 63, 1-22.	6.4	302
4	A Perspective on Polylactic Acid-Based Polymers Use for Nanoparticles Synthesis and Applications. Frontiers in Bioengineering and Biotechnology, 2019, 7, 259.	4.1	285
5	Hydrogels in Spinal Cord Injury Repair Strategies. ACS Chemical Neuroscience, 2011, 2, 336-345.	3.5	142
6	A new three dimensional biomimetic hydrogel to deliver factors secreted by human mesenchymal stem cells in spinal cord injury. Biomaterials, 2016, 75, 135-147.	11.4	141
7	Current Options for Cell Therapy in Spinal Cord Injury. Trends in Molecular Medicine, 2017, 23, 831-849.	6.7	141
8	Selective Nanovector Mediated Treatment of Activated Proinflammatory Microglia/Macrophages in Spinal Cord Injury. ACS Nano, 2013, 7, 9881-9895.	14.6	136
9	Mechanisms of NADPH oxidase activation: translocation of p40phox, Rac1 and Rac2 from the cytosol to the membranes in human neutrophils lacking p47phox or p67phox. Biochemical Journal, 1996, 314, 409-412.	3.7	117
10	Antimicrobial Ionic Liquidâ€Based Materials for Biomedical Applications. Advanced Functional Materials, 2021, 31, 2104148.	14.9	116
11	Functionalization of polymers and nanomaterials for water treatment, food packaging, textile and biomedical applications: a review. Environmental Chemistry Letters, 2021, 19, 583-611.	16.2	112
12	Early modulation of pro-inflammatory microglia by minocycline loaded nanoparticles confers long lasting protection after spinal cord injury. Biomaterials, 2016, 75, 13-24.	11.4	110
13	Polymeric nanoparticle system to target activated microglia/macrophages in spinal cord injury. Journal of Controlled Release, 2014, 174, 15-26.	9.9	100
14	Drug Delivery (Nano)Platforms for Oral and Dental Applications: Tissue Regeneration, Infection Control, and Cancer Management. Advanced Science, 2021, 8, 2004014.	11.2	100
15	Selective Modulation of A1 Astrocytes by Drug-Loaded Nano-Structured Gel in Spinal Cord Injury. ACS Nano, 2020, 14, 360-371.	14.6	94
16	Multiple drug delivery hydrogel system for spinal cord injury repair strategies. Journal of Controlled Release, 2012, 159, 271-280.	9.9	84
17	Non-invasive in vitro and in vivo monitoring of degradation of fluorescently labeled hyaluronan hydrogels for tissue engineering applications. Acta Biomaterialia, 2016, 30, 188-198.	8.3	80
18	Mesenchymal stem cells encapsulated into biomimetic hydrogel scaffold gradually release CCL2 chemokine in situ preserving cytoarchitecture and promoting functional recovery in spinal cord injury. Journal of Controlled Release, 2018, 278, 49-56.	9.9	80

#	Article	IF	Citations
19	Phagocytosis of Opsonized Yeast Induces Tumor Necrosis Factor-Î± mRNA Accumulation and Protein Release by Human Polymorphonuclear Leukocytes. Journal of Leukocyte Biology, 1991, 50, 223-228.	3.3	79
20	Smart Approach To Evaluate Drug Diffusivity in Injectable Agarâ˜Carbomer Hydrogels for Drug Delivery. Journal of Physical Chemistry B, 2011, 115, 2503-2510.	2.6	79
21	Progress in hydrogels for sensing applications: a review. Materials Today Chemistry, 2020, 17, 100317.	3.5	73
22	Mathematical Modeling of PLGA Microparticles: From Polymer Degradation to Drug Release. Molecular Pharmaceutics, 2014, 11, 4036-4048.	4.6	71
23	Coating and Functionalization Strategies for Nanogels and Nanoparticles for Selective Drug Delivery. Gels, 2020, 6, 6.	4.5	71
24	Neurobiological Mechanisms of Responding to Injustice. Journal of Neuroscience, 2018, 38, 2944-2954.	3.6	66
25	Current options for drug delivery to the spinal cord. Expert Opinion on Drug Delivery, 2013, 10, 385-396.	5.0	61
26	Nanogel Functionalization: A Versatile Approach To Meet the Challenges of Drug and Gene Delivery. ACS Applied Nano Materials, 2018, 1, 6525-6541.	5.0	60
27	Stem cell paracrine effect and delivery strategies for spinal cord injury regeneration. Journal of Controlled Release, 2019, 300, 141-153.	9.9	56
28	Inorganicâ€“organic core/shell nanoparticles: progress and applications. Nanoscale Advances, 2020, 2, 5090-5105.	4.6	54
29	Scaffolds as Structural Tools for Bone-Targeted Drug Delivery. Pharmaceutics, 2018, 10, 122.	4.5	52
30	Electroconductive multi-functional polypyrrole composites for biomedical applications. Applied Materials Today, 2021, 24, 101117.	4.3	49
31	Mechanisms of expression of NADPH oxidase components in human cultured monocytes: role of cytokines and transcriptional regulators involved. European Journal of Immunology, 2001, 31, 929-938.	2.9	47
32	Functionalization of Polymers and Nanomaterials for Biomedical Applications: Antimicrobial Platforms and Drug Carriers. Prosthesis, 2020, 2, 117-139.	2.9	46
33	In vivo drug delivery applications of nanogels: a review. Nanomedicine, 2020, 15, 2707-2727.	3.3	45
34	Polymeric scaffolds as stem cell carriers in bone repair. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 1093-1119.	2.7	41
35	Polymer hydrogel functionalized with biodegradable nanoparticles as composite system for controlled drug delivery. Nanotechnology, 2015, 26, 015602.	2.6	40
36	Tunable hydrogelâ€”Nanoparticles release system for sustained combination therapies in the spinal cord. Colloids and Surfaces B: Biointerfaces, 2013, 108, 169-177.	5.0	38

#	Article	IF	Citations
37	Polymer Functionalization as a Powerful Tool to Improve Scaffold Performances. Tissue Engineering - Part A, 2014, 20, 2043-2051.	3.1	38
38	Modulation of electrostatic interactions to improve controlled drug delivery from nanogels. Materials Science and Engineering C, 2017, 72, 308-315.	7.3	37
39	Evaluation of RGD functionalization in hybrid hydrogels as 3D neural stem cell culture systems. Biomaterials Science, 2018, 6, 501-510.	5.4	37
40	Hybrid Nanogels: Stealth and Biocompatible Structures for Drug Delivery Applications. Pharmaceutics, 2019, 11, 71.	4.5	36
41	Bioresorbable Polymer Coated Drug Eluting Stent: A Model Study. Molecular Pharmaceutics, 2012, 9, 1898-1910.	4.6	35
42	Tunable drug delivery using chemoselective functionalization of hydrogels. Materials Science and Engineering C, 2016, 61, 851-857.	7.3	33
43	Zinc electrodeposition from a chloride-free non-aqueous solution based on ethylene glycol and acetate salts. Electrochimica Acta, 2019, 296, 465-472.	5.2	33
44	Characterization and Degradation Behavior of Agarâ€“Carbomer Based Hydrogels for Drug Delivery Applications: Solute Effect. International Journal of Molecular Sciences, 2011, 12, 3394-3408.	4.1	32
45	Hydrogel-Nanoparticles Composite System for Controlled Drug Delivery. Gels, 2018, 4, 74.	4.5	31
46	Design and clinical application of injectable hydrogels for musculoskeletal therapy. Bioengineering and Translational Medicine, 2022, 7, .	7.1	29
47	Biological buffered saline solution as solvent in agar-carbomer hydrogel synthesis. Chemical Papers, 2010, 64, .	2.2	25
48	A Methodologic Approach for the Selection of Bio-Resorbable Polymers in the Development of Medical Devices: The Case of Poly(l-lactide-co-Îµ-caprolactone). Polymers, 2018, 10, 851.	4.5	25
49	Functionalized nanogel for treating activated astrocytes in spinal cord injury. Journal of Controlled Release, 2021, 330, 218-228.	9.9	25
50	A perspective on the applications of functionalized nanogels: promises and challenges. International Materials Reviews, 2023, 68, 1-25.	19.3	25
51	Nanovectorâ€mediated drug delivery for spinal cord injury treatment. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2014, 6, 506-515.	6.1	24
52	Photoactive polymers-decorated Cu-Al layered double hydroxide hexagonal architectures: A potential non-viral vector for photothermal therapy and co-delivery of DOX/pCRISPR. Chemical Engineering Journal, 2022, 448, 137747.	12.7	24
53	Drugâ€“Polymer Interactions in Hydrogelâ€based Drugâ€Delivery Systems: An Experimental and Theoretical Study. ChemPhysChem, 2015, 16, 2818-2825.	2.1	23
54	Modulators of microglia: a patent review. Expert Opinion on Therapeutic Patents, 2016, 26, 427-437.	5.0	23

#	Article	IF	Citations
55	Novel functionalization strategies to improve drug delivery from polymers. Expert Opinion on Drug Delivery, 2017, 14, 1305-1313.	5.0	23
56	Drug Release from Hydrogel: A New Understanding of Transport Phenomena. Journal of Biomedical Nanotechnology, 2011, 7, 476-481.	1.1	22
57	A library of tunable agarose carbomerâ€based hydrogels for tissue engineering applications: The role of crossâ€linkers. Journal of Applied Polymer Science, 2012, 123, 2211-2221.	2.6	22
58	Microwave-assisted synthesis and click chemistry as simple and efficient strategy for RGD functionalized hydrogels. Tetrahedron Letters, 2014, 55, 6817-6820.	1.4	22
59	Comparison between two different click strategies to synthesize fluorescent nanogels for therapeutic applications. Reactive and Functional Polymers, 2016, 105, 35-44.	4.1	22
60	Ester coupling of ibuprofen in hydrogel matrix: A facile one-step strategy for controlled anti-inflammatory drug release. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 146, 143-149.	4.3	22
61	In situ agarâ€“carbomer hydrogel polycondensation: A chemical approach to regenerative medicine. Materials Letters, 2011, 65, 1688-1692.	2.6	21
62	Nanovector-Mediated Drug Delivery in Spinal Cord Injury: A Multitarget Approach. ACS Chemical Neuroscience, 2019, 10, 1173-1182.	3.5	20
63	Regenerative medicine for spinal cord injury: focus on stem cells and biomaterials. Expert Opinion on Biological Therapy, 2020, 20, 1203-1213.	3.1	20
64	Plasmonic control of drug release efficiency in agarose gel loaded with gold nanoparticle assemblies. Nanophotonics, 2020, 10, 247-257.	6.0	20
65	Studies on the gene expression of several NADPH oxidase components. Biochemical Society Transactions, 1991, 19, 63-67.	3.4	19
66	Hydrogel for Cell Housing in the Brain and in the Spinal Cord. International Journal of Artificial Organs, 2011, 34, 295-303.	1.4	19
67	Improving Bovine Bone Mechanical Characteristics for the Development of Xenohybrid Bone Grafts. Current Pharmaceutical Biotechnology, 2019, 19, 1005-1013.	1.6	18
68	Chemoselective functionalization of nanogels for microglia treatment. European Polymer Journal, 2017, 94, 143-151.	5.4	17
69	Î²-Cyclodextrin Nanosponge Hydrogels as Drug Delivery Nanoarchitectonics for Multistep Drug Release Kinetics. ACS Applied Polymer Materials, 2021, 3, 6562-6571.	4.4	17
70	Sustained Delivery of Chondroitinase ABC from Hydrogel System. Journal of Functional Biomaterials, 2012, 3, 199-208.	4.4	16
71	Structural Characterization of Poly-L-lactic Acid (PLLA) and Poly(glycolic acid)(PGA) Oligomers. International Journal of Molecular Sciences, 2011, 12, 3857-3870.	4.1	15
72	Double conjugated nanogels for selective intracellular drug delivery. RSC Advances, 2017, 7, 30345-30356.	3.6	15

#	Article	IF	Citations
73	Microwave-assisted synthesis of TEMPO-labeled hydrogels traceable with MRI. Soft Matter, 2018, 14, 558-565.	2.7	15
74	Advances in Bio-Based Polymers for Colorectal Cancer Treatment: Hydrogels and Nanoplatforms. Gels, 2021, 7, 6.	4.5	15
75	Astrocytes Regulate the Expression of Insulin-Like Growth Factor 1 Receptor (IGF1-R) in Primary Cortical Neurons During In Vitro Senescence. Journal of Molecular Neuroscience, 2010, 40, 342-352.	2.3	14
76	The Role of Drugâ€“Drug Interactions in Hydrogel Delivery Systems: Experimental and Model Study. ChemPhysChem, 2016, 17, 1615-1622.	2.1	14
77	3D integration of pH-cleavable drug-hydrogel conjugates on magnetically driven smart microtransporters. Materials and Design, 2021, 197, 109212.	7.0	14
78	Computational fluid dynamic models as tools to predict aerosol distribution in tracheobronchial airways. Scientific Reports, 2021, 11, 1109.	3.3	14
79	A Kinetic Analysis of the Growth and Doping Kinetics of the SiC Chemical Vapor Deposition Process. Industrial & Engineering Chemistry Research, 2014, 53, 9076-9087.	3.7	13
80	Evidence of superdiffusive nanoscale motion in anionic polymeric hydrogels: Analysis of PGSE- NMR data and comparison with drug release properties. Journal of Controlled Release, 2019, 305, 110-119.	9.9	13
81	Synthesis and degradation of agarâ€¢arbomer based hydrogels for tissue engineering applications. Journal of Applied Polymer Science, 2012, 123, 398-408.	2.6	12
82	PEGylation influences drug delivery from nanogels. Journal of Drug Delivery Science and Technology, 2018, 46, 87-92.	3.0	12
83	Design of polymer-based antimicrobial hydrogels through physico-chemical transition. Materials Science and Engineering C, 2019, 103, 109791.	7.3	12
84	Effect of surface decoration on properties and drug release ability of nanogels. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 614, 126164.	4.7	12
85	Nano-encapsulation of hydroxytyrosol into formulated nanogels improves therapeutic effects against hepatic steatosis: An in vitro study. Materials Science and Engineering C, 2021, 124, 112080.	7.3	12
86	Graphene Oxide-Chitosan Aerogels: Synthesis, Characterization, and Use as Adsorbent Material for Water Contaminants. Gels, 2021, 7, 149.	4.5	12
87	Simple and efficient strategy to synthesize PEGâ€¢aldehyde derivatives for hydrazone orthogonal chemistry. Polymers for Advanced Technologies, 2015, 26, 1456-1460.	3.2	11
88	Polymer-based thermoresponsive hydrogels for controlled drug delivery. Expert Opinion on Drug Delivery, 2022, 19, 1203-1215.	5.0	11
89	Synthesis and processing ofÂhydrogels for medical applications. , 2017, , 205-228.		9
90	Biohybrid Bovine Bone Matrix for Controlled Release of Mesenchymal Stem/Stromal Cell Lyosecretome: A Device for Bone Regeneration. International Journal of Molecular Sciences, 2021, 22, 4064.	4.1	9

#	Article	IF	Citations
91	Is nanoparticle functionalization a versatile approach to meet the challenges of drug and gene delivery?. Therapeutic Delivery, 2020, 11, 401-404.	2.2	9
92	Biomaterial-Mediated Factor Delivery for Spinal Cord Injury Treatment. Biomedicines, 2022, 10, 1673.	3.2	9
93	On the parallelism between the mechanisms behind chromatography and drug delivery: the role of interactions with a stationary phase. Physical Chemistry Chemical Physics, 2017, 19, 11518-11528.	2.8	8
94	Simultaneous crosslinking induces macroscopically phase-separated microgel from a homogeneous mixture of multiple polymers. Applied Materials Today, 2021, 22, 100937.	4.3	8
95	The Synthesis of RGD-functionalized Hydrogels as a Tool for Therapeutic Applications. Journal of Visualized Experiments, 2016, , .	0.3	8
96	Effects of primary amine-based coatings on microglia internalization of nanogels. Colloids and Surfaces B: Biointerfaces, 2020, 185, 110574.	5.0	7
97	Tyrosine phosphorylation and subcellular redistribution of p125 ras guanosine triphosphatase-activating protein in human neutrophils stimulated with FMLP. FEBS Letters, 1996, 383, 181-184.	2.8	6
98	Influence of the Core Formulation on Features and Drug Delivery Ability of Carbamate-Based Nanogels. International Journal of Molecular Sciences, 2020, 21, 6621.	4.1	6
99	Multidrug encapsulation within self-assembled 3D structures formed by biodegradable nanoparticles. European Polymer Journal, 2015, 68, 216-225.	5.4	5
100	Click chemistry for improving properties of bioresorbable polymers for medical applications. , 2017, , 303-329.		5
101	Synthesis and characterization of carbomer-based hydrogels for drug delivery applications. International Journal of Polymeric Materials and Polymeric Biomaterials, 2021, 70, 743-753.	3.4	5
102	Functionalization of Nylon-6,6 with Polyetheramine Improves Wettability and Antibacterial Properties. Industrial & Engineering Chemistry Research, 2021, 60, 10666-10673.	3.7	5
103	Graphene nanoplatelets can improve the performances of graphene oxide â€“ polyaniline composite gas sensing aerogels. Carbon Trends, 2021, 5, 100123.	3.0	5
104	The addition of hyaluronic acid in chemical hydrogels can tune the physical properties and degradability. European Polymer Journal, 2021, 161, 110843.	5.4	5
105	Synthesis and characterization of lanthanum bonded agar-carbomer hydrogel: a promising tool for biomedical research. Journal of Rare Earths, 2011, 29, 259-264.	4.8	4
106	Comparison of SFA lesion treatment with Zilver PTX in diabetics vs. non-diabetics: 2-year clinical and functional results. Journal of Cardiovascular Surgery, 2017, 58, 565-573.	0.6	4
107	Can nanostructures improve hydrogel-based biosensors performance?. Nanomedicine, 2021, 16, 681-683.	3.3	4
108	Biphasic Porous Structures formed by Monomer/Water Interface Stabilization with Colloidal Nanoparticles. Advanced Materials Interfaces, 2021, 8, 2100991.	3.7	4

#	Article	IF	Citations
109	Mathematical modelling of cross-linked polyacrylic-based hydrogels: physical properties and drug delivery. Drug Delivery and Translational Research, 2022, 12, 1928-1942.	5.8	4
110	Methylprednisolone release from agar-Carbomer-based hydrogel: a promising tool for local drug delivery. Chemical Papers, 2011, 65, .	2.2	3
111	Polysaccharide-based scaffold for tissue-regeneration. , 2019, , 189-212.		3
112	How can nanovectors be used to treat spinal cord injury?. Nanomedicine, 2019, 14, 3123-3125.	3.3	3
113	Introduction to spinal cord injury as clinical pathology. , 2020, , 1-12.		3
114	Electrodeposition of Tin onto Zinc for the Electrochemical Synthesis of Zn/Sn/Cu Precursor Stack for CZTSâ€Based Photoconversion Devices. ChemElectroChem, 2020, 7, 4084-4092.	3.4	3
115	Theoretical Investigation of Design Space for Multi Layer Drug Eluting Bioresorbable Suture Threads. Current Pharmaceutical Biotechnology, 2019, 20, 332-345.	1.6	3
116	Antimicrobial Ionic Liquidâ€Based Materials for Biomedical Applications (Adv. Funct. Mater. 42/2021). Advanced Functional Materials, 2021, 31, 2170312.	14.9	3
117	Layer-by-Layer Fabrication of Hydrogel Microsystems for Controlled Drug Delivery From Untethered Microrobots. Frontiers in Bioengineering and Biotechnology, 2021, 9, 692648.	4.1	3
118	Controlled Drug Delivery Systems. SpringerBriefs in Applied Sciences and Technology, 2016, , .	0.4	2
119	Hydrogel supported chiral imidazolidinone for organocatalytic enantioselective reduction of olefins in water. Chemical Papers, 2016, 70, .	2.2	2
120	Editorial: Nanosized Drug Delivery Systems: Colloids and Gels for Site Specific Targeting. Frontiers in Bioengineering and Biotechnology, 2020, 8, 803.	4.1	2
121	Overview on Polymeric Drug Delivery Systems. SpringerBriefs in Applied Sciences and Technology, 2016, , 35-59.	0.4	1
122	A mathematical model of a slurry reactor for the direct synthesis of hydrogen peroxide. Reaction Chemistry and Engineering, 2019, 4, 2117-2128.	3.7	1
123	Optimized Design and Development of a Bioresorbable High Rotational Stability Fixation System for Small Bone Fragments. Advanced Engineering Materials, 2020, 22, 1901505.	3.5	1
124	Effect of Different Physical Cross-Linkers on Drug Release from Hydrogel Layers Coated on Magnetically Steerable 3D-Printed Microdevices. Technologies, 2021, 9, 43.	5.1	1
125	Can gold nanoparticles improve delivery performance of polymeric drug-delivery systems?. Therapeutic Delivery, 2021, 12, 489-492.	2.2	1
126	Chemical engineering approach to regenerative medicine. Chemical Papers, 2012, 66, .	2.2	0

#	Article	IF	Citations
127	Device Design: Functional Polymers for Drug Delivery. SpringerBriefs in Applied Sciences and Technology, 2016, , 61-81.	0.4	0
128	Case Study: Drug Eluting Stent. SpringerBriefs in Applied Sciences and Technology, 2016, , 83-100.	0.4	0
129	On the ability of chromatographic mass balance to predict solute diffusivity in drug delivery systems. AICHE Journal, 2019, 65, e16709.	3.6	0
130	Trends in regenerative therapies, combination approaches, and clinical highlights for spinal cord injury (SCI) regeneration. , 2020, , 307-312.		0
131	Sensing Materials: Hydrogels and Their Applications. , 2021, , .		0
132	Principles of Controlled Drug Release: A Mass Transport Matter. SpringerBriefs in Applied Sciences and Technology, 2016, , 9-33.	0.4	0
133	Selective nanovector mediated treatment of activated microglia in spinal cord injury. Frontiers in Bioengineering and Biotechnology, 0, 4, .	4.1	0
134	In Silico Study of Polymer Sheet Drying Process. International Polymer Processing, 2017, 32, 474-482.	0.5	0
135	G7 Young Scientists Meeting: Citizen science for updating â€œscienceâ€• in the SDGs era. Trends in the Sciences, 2020, 25, 4_46-4_48.	0.0	0
136	Biphasic Porous Structures formed by Monomer/Water Interface Stabilization with Colloidal Nanoparticles (Adv. Mater. Interfaces 21/2021). Advanced Materials Interfaces, 2021, 8, 2170119.	3.7	0
137	Layer-by-layer polymeric deposition as an efficient strategy to sustain drug release. Current Pharmaceutical Biotechnology, 2022, 23, .	1.6	0
138	Biomaterials, spinal cord injury, and rehabilitation: A new narrative. , 2022, , 549-562.		0