Rocio Herrero Vanrell

List of Publications by Year
in descending order

89 papers	2,850 citations	147801 31 h-index	189892 50 g-index
97 all docs	97 docs citations	97 times ranked	3119 citing authors

#	Article	IF	Citations
1	Self-assembled particles of an elastin-like polymer as vehicles for controlled drug release. Journal of Controlled Release, 2005, 102, 113-122.	9.9	211
2	Biodegradable microspheres for vitreoretinal drug delivery. Advanced Drug Delivery Reviews, 2001, 52, 5-16.	13.7	180
3	Biodegradable ibuprofen-loaded PLGA microspheres for intraarticular administration. International Journal of Pharmaceutics, 2004, 279, 33-41.	5.2	99
4	The potential of using biodegradable microspheres in retinal diseases and other intraocular pathologies. Progress in Retinal and Eye Research, 2014, 42, 27-43.	15.5	96
5	Retinal ganglion cells survival in a glaucoma model by GDNF/Vit E PLGA microspheres prepared according to a novel microencapsulation procedure. Journal of Controlled Release, 2011, 156, 92-100.	9.9	89
6	Biocompatibility of elastin-like polymer poly(VPAVG) microparticles:in vitro andin vivo studies. Journal of Biomedical Materials Research - Part A, 2006, 78A, 343-351.	4.0	86
7	Novel biodegradable polyesteramide microspheres for controlled drug delivery in Ophthalmology. Journal of Controlled Release, 2015, 211, 105-117.	9.9	85
8	Biodegradable PLGA microspheres loaded with ganciclovir for intraocular administration. Encapsulation technique, in vitro release profiles, and sterilization process. Pharmaceutical Research, 2000, 17, 1323-1328.	3.5	78
9	Robust cell integration from co-transplantation of biodegradable MMP2-PLGA microspheres with retinal progenitor cells. Biomaterials, 2011, 32, 1041-1050.	11.4	70
10	Study of gamma-irradiation effects on aciclovir poly(d,l-lactic-co-glycolic) acid microspheres for intravitreal administration. Journal of Controlled Release, 2004, 99, 41-52.	9.9	68
11	The effect of preservative-free HP-Guar on dry eye after phacoemulsification: a flow cytometric study. Eye, 2010, 24, 1331-1337.	2.1	67
12	Downregulation of endotoxin-induced uveitis by intravitreal injection of polylactic-glycolic acid (PLGA) microspheres loaded with dexamethasone. Experimental Eye Research, 2009, 89, 238-245.	2.6	65
13	Clinical applications of the sustained-release dexamethasone implant for treatment of macular edema. Clinical Ophthalmology, 2011, 5, 139.	1.8	63
14	Simultaneous co-delivery of neuroprotective drugs from multi-loaded PLGA microspheres for the treatment of glaucoma. Journal of Controlled Release, 2019, 297, 26-38.	9.9	57
15	Interfacial Interaction between Transmembrane Ocular Mucins and Adhesive Polymers and Dendrimers Analyzed by Surface Plasmon Resonance. Pharmaceutical Research, 2012, 29, 2329-2340.	3.5	56
16	Novel Water-Soluble Mucoadhesive Carbosilane Dendrimers for Ocular Administration. Molecular Pharmaceutics, 2016, 13, 2966-2976.	4.6	50
17	Artificial Tears: Biological Role of Their Ingredients in the Management of Dry Eye Disease. International Journal of Molecular Sciences, 2022, 23, 2434.	4.1	50
18	Mineralocorticoid receptor antagonism limits experimental choroidal neovascularization and structural changes associated with neovascular age-related macular degeneration. Nature Communications, 2019, 10, 369.	12.8	47

#	Article	IF	Citations
19	Ganciclovir-loaded polymer microspheres in rabbit eyes inoculated with human cytomegalovirus. Investigative Ophthalmology and Visual Science, 1997, 38, 665-75.	3.3	46
20	Enhancement of the Mydriatic Response to Tropicamide by Bioadhesive Polymers. Journal of Ocular Pharmacology and Therapeutics, 2000, 16, 419-428.	1.4	43
21	Optimisation of aciclovir poly(?,?-lactide-co-glycolide) microspheres for intravitreal administration using a factorial design study. International Journal of Pharmaceutics, 2004, 273, 45-56.	5.2	42
22	Radiosterilisation of indomethacin PLGA/PEG-derivative microspheres: Protective effects of low temperature during gamma-irradiation. International Journal of Pharmaceutics, 2006, 313, 129-135.	5.2	42
23	Design and Characterization of an Ocular Topical Liposomal Preparation to Replenish the Lipids of the Tear Film. Investigative Ophthalmology and Visual Science, 2014, 55, 7839-7847.	3.3	42
24	Novel liposome-based and in situ gelling artificial tear formulation for dry eye disease treatment. Contact Lens and Anterior Eye, 2018, 41, 93-96.	1.7	41
25	Controlled delivery of tauroursodeoxycholic acid from biodegradable microspheres slows retinal degeneration and vision loss in P23H rats. PLoS ONE, 2017, 12, e0177998.	2.5	39
26	Performance of the rebound, noncontact and Goldmann applanation tonometers in routine clinical practice. Acta Ophthalmologica, 2011, 89, 676-680.	1.1	38
27	Optimising the controlled release of dexamethasone from a new generation of PLGA-based microspheres intended for intravitreal administration. European Journal of Pharmaceutical Sciences, 2016, 92, 287-297.	4.0	37
28	Evaluation of polyesteramide (PEA) and polyester (PLGA) microspheres as intravitreal drug delivery systems in albino rats. Biomaterials, 2017, 124, 157-168.	11.4	37
29	Current Perspectives on the Use of Anti-VEGF Drugs as Adjuvant Therapy in Glaucoma. Advances in Therapy, 2017, 34, 378-395.	2.9	37
30	Liposomes as vehicles for topical ophthalmic drug delivery and ocular surface protection. Expert Opinion on Drug Delivery, 2021, 18, 1-29.	5.0	36
31	Poly (D,L-lactide-co-glycolide) microspheres for long-term intravitreal delivery of aciclovir: Influence of fatty and non-fatty additives. Journal of Microencapsulation, 2003, 20, 799-810.	2.8	35
32	Vitamin A palmitate and aciclovir biodegradable microspheres for intraocular sustained release. International Journal of Pharmaceutics, 2006, 326, 100-106.	5.2	31
33	Nano and microtechnologies for ophthalmic administration, an overview. Journal of Drug Delivery Science and Technology, 2013, 23, 75-102.	3.0	31
34	Sterilized ibuprofen-loaded poly(D,L-lactide-co-glycolide) microspheres for intra-articular administration: effect ofI³-irradiation and storage. Journal of Microencapsulation, 2004, 21, 653-665.	2.8	29
35	Comparative Analysis of Carmellose 0.5% Versus Hyaluronate 0.15% in Dry Eye: A Flow Cytometric Study. Cornea, 2010, 29, 167-171.	1.7	29
36	Six month delivery of GDNF from PLGA/vitamin E biodegradable microspheres after intravitreal injection in rabbits. European Journal of Pharmaceutical Sciences, 2017, 103, 19-26.	4.0	29

#	Article	IF	Citations
37	Tolerance of high and low amounts of PLGA microspheres loaded with mineralocorticoid receptor antagonist in retinal target site. Journal of Controlled Release, 2017, 266, 187-197.	9.9	29
38	Hybrid Formulations of Liposomes and Bioadhesive Polymers Improve the Hypotensive Effect of the Melatonin Analogue 5-MCA-NAT in Rabbit Eyes. PLoS ONE, 2014, 9, e110344.	2.5	29
39	Comparison of the In Vitro Tolerance and In Vivo Efficacy of Traditional Timolol Maleate Eye Drops versus New Formulations with Bioadhesive Polymers. , 2011, 52, 3548.		28
40	Microspheres as intraocular therapeutic tools in chronic diseases of the optic nerve and retina. Advanced Drug Delivery Reviews, 2018, 126, 127-144.	13.7	28
41	Novel Nano-Liposome Formulation for Dry Eyes with Components Similar to the Preocular Tear Film. Polymers, 2018, 10, 425.	4.5	28
42	Pharmaceutical microscale and nanoscale approaches for efficient treatment of ocular diseases. Drug Delivery and Translational Research, 2016, 6, 686-707.	5.8	27
43	Ophthalmic formulations of the intraocular hypotensive melatonin agent 5-MCA-NAT. Experimental Eye Research, 2009, 88, 504-511.	2.6	26
44	Thermo-Responsive PLGA-PEG-PLGA Hydrogels as Novel Injectable Platforms for Neuroprotective Combined Therapies in the Treatment of Retinal Degenerative Diseases. Pharmaceutics, 2021, 13, 234.	4.5	24
45	Preservation of biological activity of glial cell line-derived neurotrophic factor (GDNF) after microencapsulation and sterilization by gamma irradiation. International Journal of Pharmaceutics, 2012, 436, 545-554.	5.2	23
46	Gelatin Nanoparticles-HPMC Hybrid System for Effective Ocular Topical Administration of Antihypertensive Agents. Pharmaceutics, 2020, 12, 306.	4.5	23
47	The Use of Mucoadhesive Polymers to Enhance the Hypotensive Effect of a Melatonin Analogue, 5-MCA-NAT, in Rabbit Eyes. , 2011, 52, 1507.		21
48	Osmoprotectants in Hybrid Liposome/HPMC Systems as Potential Glaucoma Treatment. Polymers, 2019, 11, 929.	4.5	20
49	Hyaluronic Acid Combined with Serum Rich in Growth Factors in Corneal Epithelial Defects. International Journal of Molecular Sciences, 2019, 20, 1655.	4.1	19
50	Combination therapy and co-delivery strategies to optimize treatment of posterior segment neurodegenerative diseases. Drug Discovery Today, 2019, 24, 1644-1653.	6.4	18
51	Novel technologies for the delivery of ocular therapeutics in glaucoma. Journal of Drug Delivery Science and Technology, 2017, 42, 181-192.	3.0	17
52	Biodegradable poly(DL-lactic-co-glycolic acid) microspheres containing tetracaine hydrochloride. In-vitro release profile. Journal of Microencapsulation, 1999, 16, 105-115.	2.8	16
53	Ketorolac Administration Attenuates Retinal Ganglion Cell Death After Axonal Injury. , 2016, 57, 1183.		16
54	Dexamethasone PLGA Microspheres for Sub-Tenon Administration: Influence of Sterilization and Tolerance Studies. Pharmaceutics, 2021, 13, 228.	4.5	16

#	Article	IF	Citations
55	Photoreceptor preservation induced by intravitreal controlled delivery of GDNF and GDNF/melatonin in rhodopsin knockout mice. Molecular Vision, 2018, 24, 733-745.	1.1	15
56	Mineralocorticoid Receptor Pathway and Its Antagonism in a Model of Diabetic Retinopathy. Diabetes, 2021, 70, 2668-2682.	0.6	14
57	Poly (D,L-lactide-co-glycolide) microspheres for long-term intravitreal delivery of aciclovir: influence of fatty and non-fatty additives. Journal of Microencapsulation, 2003, 20, 799-810.	2.8	13
58	Chronic Glaucoma Using Biodegradable Microspheres to Induce Intraocular Pressure Elevation. Six-Month Follow-Up. Biomedicines, 2021, 9, 682.	3.2	13
59	Novel anti-inflammatory liposomal formulation for the pre-ocular tear film: InÂvitro and exÂvivo functionality studies in corneal epithelial cells. Experimental Eye Research, 2017, 154, 79-87.	2.6	12
60	Combined hyperosmolarity and inflammatory conditions in stressed human corneal epithelial cells and macrophages to evaluate osmoprotective agents as potential DED treatments. Experimental Eye Research, 2021, 211, 108723.	2.6	12
61	Novel Use of PLGA Microspheres to Create an Animal Model of Glaucoma with Progressive Neuroretinal Degeneration. Pharmaceutics, 2021, 13, 237.	4.5	11
62	Controlled transscleral drug delivery formulations to the eye: establishing new concepts and paradigms in ocular anti-inflammatory therapeutics and antibacterial prophylaxis. Expert Opinion on Drug Delivery, 2010, 7, 955-965.	5.0	10
63	Design, optimization, and in vitro characterization of idebenone-loaded PLGA microspheres for LHON treatment. International Journal of Pharmaceutics, 2022, 616, 121504.	5.2	10
64	A Safe GDNF and GDNF/BDNF Controlled Delivery System Improves Migration in Human Retinal Pigment Epithelial Cells and Survival in Retinal Ganglion Cells: Potential Usefulness in Degenerative Retinal Pathologies. Pharmaceuticals, 2021, 14, 50.	3.8	9
65	Biodegradable Additives Modulate Ganciclovir Release Rate From PLGA Microspheres Destined to Intraocular Administration. Letters in Drug Design and Discovery, 2005, 2, 148-149.	0.7	8
66	Co-delivery of glial cellâ€“derived neurotrophic factor (GDNF) and tauroursodeoxycholic acid (TUDCA) from PLGA microspheres: potential combination therapy for retinal diseases. Drug Delivery and Translational Research, 2021, 11, 566-580.	5.8	8
67	Validation of a Rapid and Easy-to-Apply Method to Simultaneously Quantify Co-Loaded Dexamethasone and Melatonin PLGA Microspheres by HPLC-UV: Encapsulation Efficiency and In Vitro Release. Pharmaceutics, 2022, 14, 288.	4.5	8
68	Block Copolypeptide Nanoparticles for the Delivery of Ocular Therapeutics. Macromolecular Bioscience, 2015, 15, 138-145.	4.1	7
69	Improved in vitro corneal delivery of a thrombospondin-1-derived peptide using a liposomal formulation. Experimental Eye Research, 2018, 167, 118-121.	2.6	7
70	Influence of Sex on Neuroretinal Degeneration: Six-Month Follow-Up in Rats With Chronic Glaucoma. , 2021, 62, 9.		7
71	Long-term corticosteroid-induced chronic glaucoma model produced by intracameral injection of dexamethasone-loaded PLGA microspheres. Drug Delivery, 2021, 28, 2427-2446.	5.7	7
72	Ocular pharmacokinetic, drug bioavailability, and intraocular drug delivery systems. , 2010, , 60-66.		6

#	Article	IF	Citations
73	Effects of corneal thickness on the intraocular penetration of travoprost 0.004%. Eye, 2012, 26, 972-975.	2.1	6
74	Recent Patents and Developments in Glaucoma Biomarkers. Recent Patents on Endocrine, Metabolic & Immune Drug Discovery, 2012, 6, 224-234.	0.6	6
75	Amphiphilic Acrylic Nanoparticles Containing the Poloxamer Star BayfitÂ® 10WF15 as Ophthalmic Drug Carriers. Polymers, 2019, 11, 1213.	4.5	6
76	Chronopharmacokinetics and calcium in the prevention of gentamicin-induced nephrotoxicity in rabbits. , 1998, 19, 407-412.		5
77	Analysis of Parainflammation in Chronic Glaucoma Using Vitreous-OCT Imaging. Biomedicines, 2021, 9, 1792.	3.2	5
78	Trojan Microparticles Potential for Ophthalmic Drug Delivery. Current Medicinal Chemistry, 2020, 27, 570-582.	2.4	4
79	Novel Osmoprotective DOPC-DMPC Liposomes Loaded with Antihypertensive Drugs as Potential Strategy for Glaucoma Treatment. Pharmaceutics, 2022, 14, 1405.	4.5	4
80	Random Co-Polymers Based on the Poloxamer BayfitÂ® 10WF15 for Biomedical Applications. Journal of Biomaterials Science, Polymer Edition, 2011, 22, 1895-1916.	3.5	3
81	The Effect of a Triple Combination of Bevacizumab, Sodium Hyaluronate and a Collagen Matrix Implant in a Trabeculectomy Animal Model. Pharmaceutics, 2021, 13, 896.	4.5	3
82	Microparticles as Drug Delivery Systems for the Back of the Eye. AAPS Advances in the Pharmaceutical Sciences Series, 2011, , 231-259.	0.6	3
83	Development of an osmoprotective microemulsion as a therapeutic platform for ocular surface protection. International Journal of Pharmaceutics, 2022, 623, 121948.	5.2	3
84	Comparative study of the dissolution profiles of a commercial theophylline product after storage. Archives of Pharmacal Research, 2001, 24, 568-571.	6.3	2
85	A novel osmoprotective liposomal formulation from synthetic phospholipids to reduce inÂvitro hyperosmolar stress in dry eye treatments. Journal of Liposome Research, 2023, 33, 117-128.	3.3	2
86	Influence of Chronic Ocular Hypertension on Emmetropia: Refractive, Structural and Functional Study in Two Rat Models. Journal of Clinical Medicine, 2021, 10, 3697.	2.4	1
87	Design and Application of a Computer Tool to Evaluate the Goodness of Fit for Tests Designed to Be Self-Taught. Proceedings (mdpi), 2018, 2, .	0.2	0
88	Novel liposomal artificial tear formulation containing gellan gum for dry eye disease treatment. Contact Lens and Anterior Eye, 2018, 41, S77.	1.7	0
89	In vivo toxicity evaluation of mannitol included in freezed dry PEA-III microparticles. Acta Ophthalmologica, 2013, 91, 0-0.	1.1	0