

# Rebecca L Carrier

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

4,212  
citations

172207  
29  
h-index

161609  
54  
g-index

58  
all docs

58  
docs citations

58  
times ranked

5659  
citing authors

#	ARTICLE	IF	CITATIONS
1	An <i>in vitro</i> intestinal model captures immunomodulatory properties of the microbiota in inflammation. <i>Gut Microbes</i> , 2022, 14, 2039002.	4.3	3
2	Primary Human Colonic Mucosal Barrier Crosstalk with Super Oxygen-Sensitive <i>Faecalibacterium prausnitzii</i> in Continuous Culture. <i>Med</i> , 2021, 2, 74-98.e9.	2.2	55
3	Synergistic Action of Diclofenac with Endotoxin-Mediated Inflammation Exacerbates Intestinal Injury <i>In Vitro</i> . <i>ACS Infectious Diseases</i> , 2021, 7, 838-848.	1.8	0
4	Coculture of primary human colon monolayer with human gut bacteria. <i>Nature Protocols</i> , 2021, 16, 3874-3900.	5.5	28
5	Reactive oxygen species limit intestinal mucosa-bacteria homeostasis <i>in vitro</i> . <i>Scientific Reports</i> , 2021, 11, 23727.	1.6	2
6	Fully synthetic matrices for <i>in vitro</i> culture of primary human intestinal enteroids and endometrial organoids. <i>Biomaterials</i> , 2020, 254, 120125.	5.7	106
7	Materials and Microenvironments for Engineering the Intestinal Epithelium. <i>Annals of Biomedical Engineering</i> , 2020, 48, 1916-1940.	1.3	10
8	Impact of Developmental Age, Necrotizing Enterocolitis Associated Stress, and Oral Therapeutic Intervention on Mucus Barrier Properties. <i>Scientific Reports</i> , 2020, 10, 6692.	1.6	12
9	Glycosaminoglycans compositional analysis of <i>Urodele axolotl</i> ( <i>Ambystoma mexicanum</i> ) and Porcine Retina. <i>Glycoconjugate Journal</i> , 2019, 36, 165-174.	1.4	6
10	Intestinal mucus is capable of stabilizing supersaturation of poorly water-soluble drugs. <i>Journal of Controlled Release</i> , 2019, 296, 107-113.	4.8	12
11	Emulation of Colonic Oxygen Gradients in a Microdevice. <i>SLAS Technology</i> , 2018, 23, 164-171.	1.0	10
12	Interconnected Microphysiological Systems for Quantitative Biology and Pharmacology Studies. <i>Scientific Reports</i> , 2018, 8, 4530.	1.6	341
13	Interphotoreceptor matrix based biomaterial: Impact on human retinal progenitor cell attachment and differentiation. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018, 106, 891-899.	1.6	9
14	Mucus models to evaluate the diffusion of drugs and particles. <i>Advanced Drug Delivery Reviews</i> , 2018, 124, 34-49.	6.6	146
15	Lipids alter microbial transport through intestinal mucus. <i>PLoS ONE</i> , 2018, 13, e0209151.	1.1	9
16	Acute Exposure to Commonly Ingested Emulsifiers Alters Intestinal Mucus Structure and Transport Properties. <i>Scientific Reports</i> , 2018, 8, 10008.	1.6	68
17	Engineering the Mucus Barrier. <i>Annual Review of Biomedical Engineering</i> , 2018, 20, 197-220.	5.7	92
18	Characterization of colloidal structures during intestinal lipolysis using small-angle neutron scattering. <i>Journal of Colloid and Interface Science</i> , 2017, 499, 189-201.	5.0	39

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19	Integrated gut/liver microphysiological systems elucidates inflammatory inter-tissue crosstalk. <i>Biotechnology and Bioengineering</i> , 2017, 114, 2648-2659.	1.7	151
20	Complex, multi-scale small intestinal topography replicated in cellular growth substrates fabricated via chemical vapor deposition of Parylene C. <i>Biofabrication</i> , 2016, 8, 035011.	3.7	25
21	Lipid-associated oral delivery: Mechanisms and analysis of oral absorption enhancement. <i>Journal of Controlled Release</i> , 2016, 240, 544-560.	4.8	39
22	Decellularized retinal matrix: Natural platforms for human retinal progenitor cell culture. <i>Acta Biomaterialia</i> , 2016, 31, 61-70.	4.1	48
23	Mucus Barriers to Microparticles and Microbes are Altered in Hirschsprung's Disease. <i>Macromolecular Bioscience</i> , 2015, 15, 712-718.	2.1	34
24	Food-associated stimuli enhance barrier properties of gastrointestinal mucus. <i>Biomaterials</i> , 2015, 54, 1-8.	5.7	47
25	Size selectivity of intestinal mucus to diffusing particulates is dependent on surface chemistry and exposure to lipids. <i>Journal of Drug Targeting</i> , 2015, 23, 768-774.	2.1	94
26	Altered Goblet Cell Differentiation and Surface Mucus Properties in Hirschsprung Disease. <i>PLoS ONE</i> , 2014, 9, e99944.	1.1	50
27	Approaches to Cell Delivery: Substrates and Scaffolds for Cell Therapy. <i>Developments in Ophthalmology</i> , 2014, 53, 143-154.	0.1	32
28	Photoinitiated chemical vapor deposition of cytocompatible poly(2-hydroxyethyl methacrylate) films. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 2375-2382.	2.1	10
29	Nanomaterial induction of oxidative stress in lung epithelial cells and macrophages. <i>Journal of Nanoparticle Research</i> , 2014, 16, 1.	0.8	11
30	Three dimensional human small intestine models for ADME-Tox studies. <i>Drug Discovery Today</i> , 2014, 19, 1587-1594.	3.2	36
31	Interphotoreceptor matrix-poly( $\epsilon$ -caprolactone) composite scaffolds for human photoreceptor differentiation. <i>Journal of Tissue Engineering</i> , 2014, 5, 204173141455413.	2.3	13
32	Discovery of low mucus adhesion surfaces. <i>Acta Biomaterialia</i> , 2013, 9, 5201-5207.	4.1	8
33	Label-free Raman microspectral analysis for comparison of cellular uptake and distribution between nontargeted and EGFR-targeted biodegradable polymeric nanoparticles. <i>Drug Delivery and Translational Research</i> , 2013, 3, 575-586.	3.0	20
34	Effect of Ingested Lipids on Drug Dissolution and Release with Concurrent Digestion: A Modeling Approach. <i>Pharmaceutical Research</i> , 2013, 30, 3131-3144.	1.7	13
35	Spatially monitoring oxygen level in 3D microfabricated cell culture systems using optical oxygen sensing beads. <i>Lab on A Chip</i> , 2013, 13, 1586.	3.1	32
36	Precise, Biomimetic Replication of the Multiscale Structure of Intestinal Basement Membrane Using Chemical Vapor Deposition. <i>Tissue Engineering - Part A</i> , 2013, 19, 649-656.	1.6	11

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37	Model predicting impact of complexation with cyclodextrins on oral absorption. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2536-2547.	1.7	5
38	Interactions of Microbicide Nanoparticles with a Simulated Vaginal Fluid. <i>Molecular Pharmaceutics</i> , 2012, 9, 3347-3356.	2.3	65
39	Gastrointestinal contents in fasted state and post-lipid ingestion: In vivo measurements and in vitro models for studying oral drug delivery. <i>Journal of Controlled Release</i> , 2011, 151, 110-122.	4.8	74
40	Modeling the human intestinal Mucin (MUC2) C-terminal cystine knot dimer. <i>Journal of Molecular Modeling</i> , 2011, 17, 2953-2963.	0.8	6
41	Drug Salts and Solubilization: Modeling the Influence of Cyclodextrins on Oral Absorption. <i>Annals of Biomedical Engineering</i> , 2011, 39, 455-468.	1.3	12
42	Predicting the Effect of Fed-State Intestinal Contents on Drug Dissolution. <i>Pharmaceutical Research</i> , 2010, 27, 2646-2656.	1.7	20
43	Impact of emulsion-based drug delivery systems on intestinal permeability and drug release kinetics. <i>Journal of Controlled Release</i> , 2010, 142, 22-30.	4.8	161
44	Barrier Properties of Gastrointestinal Mucus to Nanoparticle Transport. <i>Macromolecular Bioscience</i> , 2010, 10, 1473-1483.	2.1	244
45	Synergic effects of crypt-like topography and ECM proteins on intestinal cell behavior in collagen based membranes. <i>Biomaterials</i> , 2010, 31, 7586-7598.	5.7	56
46	Biocompatibility of Plasma Enhanced Chemical Vapor Deposited Poly(2-hydroxyethyl methacrylate) Films for Biomimetic Replication of the Intestinal Basement Membrane. <i>Biomacromolecules</i> , 2010, 11, 1579-1584.	2.6	16
47	Cross-Linking and Degradation Properties of Plasma Enhanced Chemical Vapor Deposited Poly(2-hydroxyethyl methacrylate). <i>Macromolecular Rapid Communications</i> , 2009, 30, 126-132.	2.0	30
48	Influence of micro-well biomimetic topography on intestinal epithelial Caco-2 cell phenotype. <i>Biomaterials</i> , 2009, 30, 6825-6834.	5.7	81
49	A model predicting delivery of saquinavir in nanoparticles to human monocyte/macrophage (Mo/Mac) cells. <i>Biotechnology and Bioengineering</i> , 2008, 101, 1072-1082.	1.7	24
50	Practical considerations in development of solid dosage forms that contain cyclodextrin. <i>Journal of Pharmaceutical Sciences</i> , 2007, 96, 1691-1707.	1.6	58
51	The utility of cyclodextrins for enhancing oral bioavailability. <i>Journal of Controlled Release</i> , 2007, 123, 78-99.	4.8	464
52	Increased rate of chondrocyte aggregation in a wavy-walled bioreactor. <i>Biotechnology and Bioengineering</i> , 2004, 88, 767-777.	1.7	40
53	Hydrolysis in Pharmaceutical Formulations. <i>Pharmaceutical Development and Technology</i> , 2002, 7, 113-146.	1.1	121
54	Effects of oxygen on engineered cardiac muscle. <i>Biotechnology and Bioengineering</i> , 2002, 78, 617-625.	1.7	130

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55	Perfusion Improves Tissue Architecture of Engineered Cardiac Muscle. Tissue Engineering, 2002, 8, 175-188.	4.9	308
56	Gas exchange is essential for bioreactor cultivation of tissue engineered cartilage. , 1999, 63, 197-205.		202
57	Cardiac tissue engineering: Cell seeding, cultivation parameters, and tissue construct characterization. , 1999, 64, 580-589.		473