Lorenz W Meinel

List of Publications by Year in Descending Order

133 papers	9,269 citations	46 h-index	95 g-index
145 ext. papers	10,077 ext. citations	7.9 avg, IF	5.87 L-index

#	Paper	IF	Citations
133	Bioconjugation strategies and clinical implications of Interferon-bioconjugates.. *European Journal of Pharmaceutics and Biopharmaceutics*, **2022**, 172, 157-157	5.7	0
132	Concentration and composition dependent aggregation of Pluronic- and Poly-(2-oxazolin)-Efavirenz formulations in biorelevant media. *Journal of Colloid and Interface Science*, **2022**, 606, 1179-1192	9.3	0
131	Molecular Insights into Site-Specific Interferon-α2a Bioconjugates Originated from PEG, LPG, and PEtOx. *Biomacromolecules*, **2021**, 22, 4521-4534	6.9	4
130	Leveraging bile solubilization of poorly water-soluble drugs by rational polymer selection. *Journal of Controlled Release*, **2021**, 330, 36-48	11.7	4
129	Drug-Induced Dynamics of Bile Colloids. *Langmuir*, **2021**, 37, 2543-2551	4	3
128	Bioactive Electrospun Fibers: Fabrication Strategies and a Critical Review of Surface-Sensitive Characterization and Quantification. *Chemical Reviews*, **2021**, 121, 11194-11237	68.1	10
127	Antibacterial Anacardic Acid Derivatives. *ACS Infectious Diseases*, **2020**, 6, 1674-1685	5.5	3
126	Carbon Monoxide Exerts Functional Neuroprotection After Cardiac Arrest Using Extracorporeal Resuscitation in Pigs. *Critical Care Medicine*, **2020**, 48, e299-e307	1.4	6
125	Frugal Innovation for Point-of-Care Diagnostics Controlling Outbreaks and Epidemics. *ACS Biomaterials Science and Engineering*, **2020**, 6, 2709-2725	5.5	12
124	Targeting interleukin-4 to the arthritic joint. *Journal of Controlled Release*, **2020**, 326, 172-180	11.7	4
123	Nanoparticle Design to Improve Transport Across the Intestinal Barrier. *Environmental Chemistry for A Sustainable World*, **2020**, 271-315	0.8	
122	Biodistribution of Site-Specific PEGylated Fibroblast Growth Factor-2. *ACS Biomaterials Science and Engineering*, **2020**, 6, 425-432	5.5	5
121	Delivery of ionizable hydrophilic drugs based on pharmaceutical formulation of ion pairs and ionic liquids. *European Journal of Pharmaceutics and Biopharmaceutics*, **2020**, 156, 203-218	5.7	14
120	A Complete and Versatile Protocol: Decoration of Cell-Derived Matrices with Mass-Encoded Peptides for Multiplexed Protease Activity Detection. *ACS Biomaterials Science and Engineering*, **2020**, 6, 6598-6617	5.5	0
119	Mass-Encoded Reporters Reporting Proteolytic Activity from within the Extracellular Matrix. *ACS Biomaterials Science and Engineering*, **2020**, 6, 5240-5253	5.5	2
118	Controlling Supramolecular Structures of Drugs by Light. *Molecular Pharmaceutics*, **2020**, 17, 4704-4708	5.6	2
117	Bioinspired Ion Pairs Transforming Papaverine into a Protic Ionic Liquid and Salts. *ACS Omega*, **2020**, 5, 19202-19209	3.9	5

116	Carbon monoxide improves haemodynamics during extracorporeal resuscitation in pigs. *Cardiovascular Research*, **2020**, 116, 158-170	9.9	5
115	Extracorporeal resuscitation with carbon monoxide improves renal function by targeting inflammatory pathways in cardiac arrest in pigs. *American Journal of Physiology - Renal Physiology*, **2019**, 317, F1572-F1581	4.3	5
114	Loading-Dependent Structural Model of Polymeric Micelles Encapsulating Curcumin by Solid-State NMR Spectroscopy. *Angewandte Chemie - International Edition*, **2019**, 58, 18540-18546	16.4	29
113	Metabolic Glycoengineering of Cell-Derived Matrices and Cell Surfaces: A Combination of Key Principles and Step-by-Step Procedures. *ACS Biomaterials Science and Engineering*, **2019**, 5, 215-233	5.5	6
112	Site-Specific Conjugated Insulin-like Growth Factor-I for Anabolic Therapy. *ACS Biomaterials Science and Engineering*, **2018**, 4, 819-825	5.5	8
111	Overcoming safety challenges in CO therapy - Extracorporeal CO delivery under precise feedback control of systemic carboxyhemoglobin levels. *Journal of Controlled Release*, **2018**, 279, 336-344	11.7	19
110	Bioresponsive release of insulin-like growth factor-I from its PEGylated conjugate. *Journal of Controlled Release*, **2018**, 279, 17-28	11.7	19
109	Bioorthogonal strategies for site-directed decoration of biomaterials with therapeutic proteins. *Journal of Controlled Release*, **2018**, 273, 68-85	11.7	25
108	Bioinspired co-crystals of Imatinib providing enhanced kinetic solubility. *European Journal of Pharmaceutics and Biopharmaceutics*, **2018**, 128, 290-299	5.7	16
107	Site-Directed Immobilization of Bone Morphogenetic Protein 2 to Solid Surfaces by Click Chemistry. *Journal of Visualized Experiments*, **2018**,	1.6	4
106	Investigation of orally delivered carbon monoxide for postoperative ileus. *European Journal of Pharmaceutics and Biopharmaceutics*, **2018**, 130, 306-313	5.7	5
105	Geometrical and Structural Dynamics of Imatinib within Biorelevant Colloids. *Molecular Pharmaceutics*, **2018**, 15, 4470-4480	5.6	12
104	Where is the Clinical Breakthrough of Heme Oxygenase-1 / Carbon Monoxide Therapeutics?. *Current Pharmaceutical Design*, **2018**, 24, 2264-2282	3.3	28
103	Characterization of complexes between phenethylamine enantiomers and Ecyclodextrin derivatives by capillary electrophoresis-Determination of binding constants and complex mobilities. *Electrophoresis*, **2017**, 38, 1188-1200	3.6	9
102	Radiolabeled In-FGF-2 Is Suitable for In Vitro/Ex Vivo Evaluations and In Vivo Imaging. *Molecular Pharmaceutics*, **2017**, 14, 639-648	5.6	3
101	Site-Directed Immobilization of BMP-2: Two Approaches for the Production of Innovative Osteoinductive Scaffolds. *Biomacromolecules*, **2017**, 18, 695-708	6.9	22
100	Opening NADPH oxidase inhibitors for in vivo translation. *European Journal of Pharmaceutics and Biopharmaceutics*, **2017**, 115, 206-217	5.7	4
99	Site-Specific POxylation of Interleukin-4. *ACS Biomaterials Science and Engineering*, **2017**, 3, 304-312	5.5	25

98	Topical azithromycin for the prevention of Lyme borreliosis: a randomised, placebo-controlled, phase 3 efficacy trial. *Lancet Infectious Diseases, The*, **2017**, 17, 322-329	25.5	20
97	Mapping the pharmaceutical design space by amorphous ionic liquid strategies. *Journal of Controlled Release*, **2017**, 268, 314-322	11.7	22
96	Cytotoxic properties of the alkaloid rutaecarpine and its oligocyclic derivatives and chemical modifications to enhance water-solubility. *Bioorganic and Medicinal Chemistry Letters*, **2017**, 27, 4937-4941	2.9	12
95	Bioresponsive Diagnostik - die Zunge als Detektor oraler Entzündungen. *BioSpektrum*, **2017**, 23, 782-784	0.1	1
94	Localized delivery of carbon monoxide. *European Journal of Pharmaceutics and Biopharmaceutics*, **2017**, 118, 3-12	5.7	26
93	Matrix Metalloproteinase Responsive Delivery of Myostatin Inhibitors. *Pharmaceutical Research*, **2017**, 34, 58-72	4.5	17
92	Prevention of colitis by controlled oral drug delivery of carbon monoxide. *Journal of Controlled Release*, **2016**, 239, 128-36	11.7	33
91	Impurity profiling of l-asparagine monohydrate by ion pair chromatography applying low wavelength UV detection. *Journal of Pharmaceutical and Biomedical Analysis*, **2016**, 131, 202-207	3.5	3
90	Water-Soluble Triarylborane Chromophores for One- and Two-Photon Excited Fluorescence Imaging of Mitochondria in Cells. *Chemistry - A European Journal*, **2016**, 22, 14701-6	4.8	61
89	Probing unnatural amino acid integration into enhanced green fluorescent protein by genetic code expansion with a high-throughput screening platform. *Journal of Biological Engineering*, **2016**, 10, 11	6.3	13
88	Recent advances in crystalline and amorphous particulate protein formulations for controlled delivery. *Asian Journal of Pharmaceutical Sciences*, **2016**, 11, 469-477	9	9
87	Tamper-proof tablets for distinction between counterfeit and originator drugs through PEG coding. *European Journal of Pharmaceutics and Biopharmaceutics*, **2016**, 99, 1-6	5.7	3
86	Nanotransporters for drug delivery. *Current Opinion in Biotechnology*, **2016**, 39, 35-40	11.4	24
85	A perfluoroaromatic abiotic analog of H2 relaxin enabled by rapid flow-based peptide synthesis. *Organic and Biomolecular Chemistry*, **2016**, 14, 3345-9	3.9	27
84	Luminescent Metal□Organic Framework Mixed-Matrix Membranes from Lanthanide Metal□Organic Frameworks in Polysulfone and Matrimid. *European Journal of Inorganic Chemistry*, **2016**, 2016, 4408-4415	2.3	13
83	Surface functionalization allowing repetitive use of optical sensors for real-time detection of antibody-bacteria interaction. *Journal of Biophotonics*, **2016**, 9, 730-7	3.1	6
82	Natur h□fig Vorbild. *Nachrichten Aus Der Chemie*, **2016**, 64, 605-609	0.1	
81	Biocompatible Azide-Alkyne "Click" Reactions for Surface Decoration of Glyco-Engineered Cells. *ChemBioChem*, **2016**, 17, 866-75	3.8	28

80	Quinolone Amides as Antitrypanosomal Lead Compounds with In Vivo Activity. *Antimicrobial Agents and Chemotherapy*, **2016**, 60, 4442-52	5.9	9
79	Interleukin-4-Clicked Surfaces Drive M2 Macrophage Polarization. *ChemBioChem*, **2016**, 17, 2123-2128	3.8	15
78	Application of natural and semi-synthetic polymers for the delivery of sensitive drugs. *International Materials Reviews*, **2015**, 60, 101-131	16.1	39
77	Ionic liquid versus prodrug strategy to address formulation challenges. *Pharmaceutical Research*, **2015**, 32, 2154-67	4.5	27
76	Pro et contraIonic liquid drugs - Challenges and opportunities for pharmaceutical translation. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 94, 291-304	5.7	69
75	Influence of salt type and ionic strength on self-assembly of dextran sulfate-ciprofloxacin nanoplexes. *International Journal of Pharmaceutics*, **2015**, 486, 21-9	6.5	9
74	From silk spinning in insects and spiders to advanced silk fibroin drug delivery systems. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 97, 392-9	5.7	16
73	Drug delivery of Insulin-like growth factor I. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 97, 329-37	5.7	5
72	Controlled therapeutic gas delivery systems for quality-improved transplants. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 97, 96-106	5.7	14
71	Fatty acid composition analysis in polysorbate 80 with high performance liquid chromatography coupled to charged aerosol detection. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 94, 569-74	5.7	34
70	Simple and rapid high performance liquid chromatography method for the determination of polidocanol as bulk product and in pharmaceutical polymer matrices using charged aerosol detection. *Journal of Pharmaceutical and Biomedical Analysis*, **2015**, 104, 17-20	3.5	5
69	Pathogen- and Host-Directed Antileishmanial Effects Mediated by Polyhexanide (PHMB). *PLoS Neglected Tropical Diseases*, **2015**, 9, e0004041	4.8	16
68	Transformation of acidic poorly water soluble drugs into ionic liquids. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 94, 73-82	5.7	53
67	Bio-orthogonal Immobilization of Fibroblast Growth Factor 2 for Spatial Controlled Cell Proliferation. *ACS Biomaterials Science and Engineering*, **2015**, 1, 740-746	5.5	28
66	Predicting critical micelle concentration and micelle molecular weight of polysorbate 80 using compendial methods. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 94, 559-68	5.7	29
65	Pulmonary Insulin-like Growth Factor I Delivery from Trehalose and Silk-Fibroin Microparticles. *ACS Biomaterials Science and Engineering*, **2015**, 1, 119-129	5.5	15
64	Protein release from electrospun nonwovens: improving the release characteristics through rational combination of polyester blend matrices with polidocanol. *International Journal of Pharmaceutics*, **2014**, 477, 273-81	6.5	12
63	Controlled protein delivery from electrospun non-wovens: novel combination of protein crystals and a biodegradable release matrix. *Molecular Pharmaceutics*, **2014**, 11, 2372-80	5.6	20

62	Oral drug delivery of therapeutic gases - carbon monoxide release for gastrointestinal diseases. *Journal of Controlled Release*, **2014**, 189, 46-53	11.7	40
61	Deciphering the mechanism of protein interaction with silk fibroin for drug delivery systems. *Biomaterials*, **2014**, 35, 3427-34	15.6	27
60	Silk fibroin layer-by-layer microcapsules for localized gene delivery. *Biomaterials*, **2014**, 35, 7929-39	15.6	57
59	Decoration of silk fibroin by click chemistry for biomedical application. *Journal of Structural Biology*, **2014**, 186, 420-30	3.4	42
58	Biocompatibility and osteoconduction of macroporous silk fibroin implants in cortical defects in sheep. *European Journal of Pharmaceutics and Biopharmaceutics*, **2013**, 85, 107-18	5.7	44
57	Remodeling of tissue-engineered bone structures in vivo. *European Journal of Pharmaceutics and Biopharmaceutics*, **2013**, 85, 119-29	5.7	46
56	Impact of IGF-I release kinetics on bone healing: a preliminary study in sheep. *European Journal of Pharmaceutics and Biopharmaceutics*, **2013**, 85, 99-106	5.7	17
55	Insulin-like growth factor-I aerosol formulations for pulmonary delivery. *European Journal of Pharmaceutics and Biopharmaceutics*, **2013**, 85, 61-8	5.7	21
54	Biophysical properties of chitosan/siRNA polyplexes: profiling the polymer/siRNA interactions and bioactivity. *Journal of Controlled Release*, **2012**, 157, 297-304	11.7	70
53	Bone targeting for the treatment of osteoporosis. *Journal of Controlled Release*, **2012**, 161, 198-213	11.7	65
52	Electrospun matrices for localized drug delivery: current technologies and selected biomedical applications. *European Journal of Pharmaceutics and Biopharmaceutics*, **2012**, 81, 1-13	5.7	214
51	Synthesis and structure-activity relationships of new quinolone-type molecules against Trypanosoma brucei. *Journal of Medicinal Chemistry*, **2012**, 55, 2538-48	8.3	29
50	Silk constructs for delivery of musculoskeletal therapeutics. *Advanced Drug Delivery Reviews*, **2012**, 64, 1111-22	18.5	86
49	In situ guided tissue regeneration in musculoskeletal diseases and aging : Implementing pathology into tailored tissue engineering strategies. *Cell and Tissue Research*, **2012**, 347, 725-35	4.2	20
48	Silk fibroin as a vehicle for drug delivery applications. *Journal of Controlled Release*, **2011**, 150, 128-41	11.7	364
47	Design and validation of a novel bioreactor principle to combine online micro-computed tomography monitoring and mechanical loading in bone tissue engineering. *Review of Scientific Instruments*, **2010**, 81, 014303	1.7	27
46	Development of silk fibroin-based beads for immobilized cell fermentations. *Journal of Microencapsulation*, **2010**, 27, 1-9	3.4	8
45	The use of sulfonated silk fibroin derivatives to control binding, delivery and potency of FGF-2 in tissue regeneration. *Biomaterials*, **2010**, 31, 1403-13	15.6	68

44	Biopolymer-based growth factor delivery for tissue repair: from natural concepts to engineered systems. *Tissue Engineering - Part B: Reviews*, **2009**, 15, 263-89	7.9	76
43	Growth factor gradients via microsphere delivery in biopolymer scaffolds for osteochondral tissue engineering. *Journal of Controlled Release*, **2009**, 134, 81-90	11.7	351
42	Optimization strategies for electrospun silk fibroin tissue engineering scaffolds. *Biomaterials*, **2009**, 30, 3058-67	15.6	172
41	Microporous silk fibroin scaffolds embedding PLGA microparticles for controlled growth factor delivery in tissue engineering. *Biomaterials*, **2009**, 30, 2571-81	15.6	89
40	Silk fibroin/hyaluronan scaffolds for human mesenchymal stem cell culture in tissue engineering. *Biomaterials*, **2009**, 30, 5068-76	15.6	115
39	Insulin-like growth factor I releasing silk fibroin scaffolds induce chondrogenic differentiation of human mesenchymal stem cells. *Journal of Controlled Release*, **2008**, 127, 12-21	11.7	176
38	Silk fibroin spheres as a platform for controlled drug delivery. *Journal of Controlled Release*, **2008**, 132, 26-34	11.7	214
37	Effects of chondrogenic and osteogenic regulatory factors on composite constructs grown using human mesenchymal stem cells, silk scaffolds and bioreactors. *Journal of the Royal Society Interface* , **2008**, 5, 929-39	4.1	51
36	The effect of hyaluronic acid on silk fibroin conformation. *Biomaterials*, **2008**, 29, 633-42	15.6	53
35	CONTROL OF TISSUE-ENGINEERED BONE-LIKE STRUCTURES ON SILK FIBROIN SCAFFOLDS. *Journal of Biomechanics*, **2008**, 41, S163	2.9	
34	Control of in vitro tissue-engineered bone-like structures using human mesenchymal stem cells and porous silk scaffolds. *Biomaterials*, **2007**, 28, 1152-62	15.6	270
33	Silk coatings on PLGA and alginate microspheres for protein delivery. *Biomaterials*, **2007**, 28, 4161-9	15.6	161
32	Silk fibroin matrices for the controlled release of nerve growth factor (NGF). *Biomaterials*, **2007**, 28, 4449-60	15.6	164
31	Silk microspheres for encapsulation and controlled release. *Journal of Controlled Release*, **2007**, 117, 360-70	11.7	251
30	Non-invasive time-lapsed monitoring and quantification of engineered bone-like tissue. *Annals of Biomedical Engineering*, **2007**, 35, 1657-67	4.7	43
29	Nondestructive micro-computed tomography for biological imaging and quantification of scaffold-bone interaction in vivo. *Biomaterials*, **2007**, 28, 2479-90	15.6	164
28	BMP-silk composite matrices heal critically sized femoral defects. *Bone*, **2007**, 41, 247-55	4.7	132
27	Silk fibroin as an organic polymer for controlled drug delivery. *Journal of Controlled Release*, **2006**, 111, 219-27	11.7	293

26	Porous silk fibroin 3-D scaffolds for delivery of bone morphogenetic protein-2 in vitro and in vivo. *Journal of Biomedical Materials Research - Part A*, **2006**, 78, 324-34	5.4	185
25	Tissue Engineering of Bone **2006**, 323-373		5
24	Effect of scaffold design on bone morphology in vitro. *Tissue Engineering*, **2006**, 12, 3417-29		117
23	Cartilage-like tissue engineering using silk scaffolds and mesenchymal stem cells. *Tissue Engineering*, **2006**, 12, 2729-38		159
22	Silk based biomaterials to heal critical sized femur defects. *Bone*, **2006**, 39, 922-31	4.7	190
21	The support of adenosine release from adenosine kinase deficient ES cells by silk substrates. *Biomaterials*, **2006**, 27, 4599-607	15.6	31
20	Osteogenesis by human mesenchymal stem cells cultured on silk biomaterials: comparison of adenovirus mediated gene transfer and protein delivery of BMP-2. *Biomaterials*, **2006**, 27, 4993-5002	15.6	157
19	Cartilage-like Tissue Engineering Using Silk Scaffolds and Mesenchymal Stem Cells. *Tissue Engineering*, **2006**, 060915113954001		1
18	Effect of Scaffold Design on Bone Morphologyin Vitro. *Tissue Engineering*, **2006**, 061017080728004		
17	Silk implants for the healing of critical size bone defects. *Bone*, **2005**, 37, 688-98	4.7	371
16	The inflammatory responses to silk films in vitro and in vivo. *Biomaterials*, **2005**, 26, 147-55	15.6	636
15	Bioreactor cultivation of osteochondral grafts. *Orthodontics and Craniofacial Research*, **2005**, 8, 209-18	3	104
14	Insulin-like growth factor I-releasing alginate-tricalciumphosphate composites for bone regeneration. *Pharmaceutical Research*, **2005**, 22, 940-50	4.5	71
13	An experimental animal model of aseptic loosening of hip prostheses in sheep to study early biochemical changes at the interface membrane. *BMC Musculoskeletal Disorders*, **2004**, 5, 7	2.8	18
12	Bone tissue engineering using human mesenchymal stem cells: effects of scaffold material and medium flow. *Annals of Biomedical Engineering*, **2004**, 32, 112-22	4.7	421
11	Engineering cartilage-like tissue using human mesenchymal stem cells and silk protein scaffolds. *Biotechnology and Bioengineering*, **2004**, 88, 379-91	4.9	262
10	Engineering bone-like tissue in vitro using human bone marrow stem cells and silk scaffolds. *Journal of Biomedical Materials Research Part B*, **2004**, 71, 25-34		277
9	Bone morphogenetic protein-2 decorated silk fibroin films induce osteogenic differentiation of human bone marrow stromal cells. *Journal of Biomedical Materials Research Part B*, **2004**, 71, 528-37		258

8	Localized delivery of growth factors for bone repair. *European Journal of Pharmaceutics and Biopharmaceutics*, **2004**, 58, 197-208	5.7	275
7	Localized insulin-like growth factor I delivery to enhance new bone formation. *Bone*, **2003**, 33, 660-72	4.7	123
6	IGF-I and GH stimulate Phex mRNA expression in lungs and bones and 1,25-dihydroxyvitamin D(3) production in hypophysectomized rats. *European Journal of Endocrinology*, **2002**, 146, 97-105	6.5	32
5	Transport of alkamides from Echinacea species through Caco-2 monolayers. *Planta Medica*, **2002**, 68, 469-71	3.1	28
4	Differential distribution of beta-adrenergic receptor subtypes in blood vessels of knockout mice lacking beta(1)- or beta(2)-adrenergic receptors. *Molecular Pharmacology*, **2001**, 60, 955-62	4.3	85
3	Stabilizing insulin-like growth factor-I in poly(D,L-lactide-co-glycolide) microspheres. *Journal of Controlled Release*, **2001**, 70, 193-202	11.7	130
2	Vascular hypertrophy and increased P70S6 kinase in mice lacking the angiotensin II AT(2) receptor. *Circulation*, **2001**, 104, 2602-7	16.7	50
1	Intracellular trafficking of angiotensin II and its AT1 and AT2 receptors: evidence for selective sorting of receptor and ligand. *Molecular Endocrinology*, **1997**, 11, 1266-77		203