Christoph Alexiou

List of Publications by Year
in descending order

125 papers	5,260 citations	117625 34 h-index	98798 67 g-index
125 all docs	125 docs citations	125 times ranked	6814 citing authors

#	Article	IF	Citations
1	Intranasal delivery of nanoparticles. Nanomedicine, 2022, , .	3.3	0
2	Scavenging of bacteria or bacterial products by magnetic particles functionalized with a broad-spectrum pathogen recognition receptor motif offers diagnostic and therapeutic applications. Acta Biomaterialia, 2022, 141, 418-428.	8.3	11
3	Intracellular Amplifiers of Reactive Oxygen Species Affecting Mitochondria as Radiosensitizers. Cancers, 2022, 14, 208.	3.7	5
4	SPION based nanoformulations: bio-inspired design and functionalization strategies for applications in medicine. Precision Nanomedicine, 2022, 5, .	0.8	0
5	Extramedullary plasmacytoma: Tumor occurrence and therapeutic conceptsâ€"A followâ€up. Cancer Medicine, 2022, 11, 4743-4755.	2.8	16
6	A Printâ€andâ€Fuse Strategy for Sacrificial Filaments Enables Biomimetically Structured Perfusable Microvascular Networks with Functional Endothelium Inside 3D Hydrogels. Advanced Materials, 2022, 34, .	21.0	24
7	Cardiovascular applications of magnetic particles. Journal of Magnetism and Magnetic Materials, 2021, 518, 167428.	2.3	14
8	Negatively charged magnetic nanoparticles pass the blood-placenta barrier under continuous flow conditions in a time-dependent manner. Journal of Magnetism and Magnetic Materials, 2021, 521, 167535.	2.3	5
9	Nanomedicine for vaccination and diagnosis of diseases. Nanomedicine, 2021, 16, 165-169.	3.3	0
10	Differential Responses to Bioink-Induced Oxidative Stress in Endothelial Cells and Fibroblasts. International Journal of Molecular Sciences, 2021, 22, 2358.	4.1	12
11	Cellular SPION Uptake and Toxicity in Various Head and Neck Cancer Cell Lines. Nanomaterials, 2021, 11, 726.	4.1	14
12	An Endoplasmic Reticulum Specific Proâ€amplifier of Reactive Oxygen Species in Cancer Cells. Angewandte Chemie - International Edition, 2021, 60, 11158-11162.	13.8	34
13	Contactless Nanoparticle-Based Guiding of Cells by Controllable Magnetic Fields. Nanotechnology, Science and Applications, 2021, Volume 14, 91-100.	4.6	14
14	Hydroxyapatite-Coated SPIONs and Their Influence on Cytokine Release. International Journal of Molecular Sciences, 2021, 22, 4143.	4.1	7
15	The remediation of nano-/microplastics from water. Materials Today, 2021, 48, 38-46.	14.2	56
16	Citrate-Coated Superparamagnetic Iron Oxide Nanoparticles Enable a Stable Non-Spilling Loading of T Cells and Their Magnetic Accumulation. Cancers, 2021, 13, 4143.	3.7	11
17	Modulation of immune responses by nanoparticles. Nanomedicine, 2021, 16, 1925-1929.	3.3	1
18	Iron Oxide Nanoparticles in Regenerative Medicine and Tissue Engineering. Nanomaterials, 2021, 11, 2337.	4.1	48

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19	Mitoxantrone-Loaded Nanoparticles for Magnetically Controlled Tumor Therapyâ€“Induction of Tumor Cell Death, Release of Danger Signals and Activation of Immune Cells. Pharmaceutics, 2020, 12, 923.	4.5	6
20	Neutrophil Extracellular Traps Promote the Development and Growth of Human Salivary Stones. Cells, 2020, 9, 2139.	4.1	24
21	Synthesis and Characterization of Citrate-Stabilized Gold-Coated Superparamagnetic Iron Oxide Nanoparticles for Biomedical Applications. Molecules, 2020, 25, 4425.	3.8	17
22	Brave new world revisited: Focus on nanomedicine. Biochemical and Biophysical Research Communications, 2020, 533, 36-49.	2.1	18
23	Intracellular Quantification and Localization of Label-Free Iron Oxide Nanoparticles by Holotomographic Microscopy . Nanotechnology, Science and Applications, 2020, Volume 13, 119-130.	4.6	11
24	Anticancer Effect of an Electronically Coupled Oligoferrocene. Organometallics, 2020, 39, 3112-3120.	2.3	8
25	Superparamagnetic Iron Oxide Nanoparticles Carrying Chemotherapeutics Improve Drug Efficacy in Monolayer and Spheroid Cell Culture by Enabling Active Accumulation. Nanomaterials, 2020, 10, 1577.	4.1	13
26	Nanomedicine for infectious diseases. Nanomedicine, 2020, 15, 1263-1267.	3.3	2
27	Optimization of cell seeding on electrospun PCL-silk fibroin scaffolds. European Polymer Journal, 2020, 134, 109838.	5.4	21
28	Shedding Light on Metalâ€Based Nanoparticles in Zebrafish by Computed Tomography with Micrometer Resolution. Small, 2020, 16, e2000746.	10.0	11
29	N-Alkylaminoferrocene-Based Prodrugs Targeting Mitochondria of Cancer Cells. Molecules, 2020, 25, 2545.	3.8	16
30	Graphene Oxide Nanosheets for Localized Hyperthermiaâ€”Physicochemical Characterization, Biocompatibility, and Induction of Tumor Cell Death. Cells, 2020, 9, 776.	4.1	16
31	Small Dimensionâ€”Big Impact! Nanoparticle-Enhanced Non-Invasive and Intravascular Molecular Imaging of Atherosclerosis In Vivo. Molecules, 2020, 25, 1029.	3.8	9
32	Loading of Primary Human T Lymphocytes with Citrate-Coated Superparamagnetic Iron Oxide Nanoparticles Does Not Impair Their Activation after Polyclonal Stimulation. Cells, 2020, 9, 342.	4.1	14
33	Comparative Evaluation of a New Sensor for Superparamagnetic Iron Oxide Nanoparticles in a Molecular Communication Setting. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2020, , 303-316.	0.3	10
34	Cellular effects of paclitaxel-loaded iron oxide nanoparticles on breast cancer using different 2D and 3D cell culture models. International Journal of Nanomedicine, 2019, Volume 14, 161-180.	6.7	35
35	Nanoparticles for regenerative medicine. Nanomedicine, 2019, 14, 1929-1933.	3.3	12
36	Magnetic Accumulation of SPIONs under Arterial Flow Conditions: Effect of Serum and Red Blood Cells. Molecules, 2019, 24, 2588.	3.8	12

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37	Functionalization Of T Lymphocytes With Citrate-Coated Superparamagnetic Iron Oxide Nanoparticles For Magnetically Controlled Immune Therapy . International Journal of Nanomedicine, 2019, Volume 14, 8421-8432.	6.7	46
38	Nanomedicine for neuroprotection. Nanomedicine, 2019, 14, 127-130.	3.3	3
39	Functionalized Superparamagnetic Iron Oxide Nanoparticles (SPIONs) as Platform for the Targeted Multimodal Tumor Therapy. Frontiers in Oncology, 2019, 9, 59.	2.8	69
40	Magnetically responsive composites: electron beam assisted magnetic nanoparticle arrest in gelatin hydrogels for bioactuation. Physical Chemistry Chemical Physics, 2019, 21, 14654-14662.	2.8	14
41	Non-magnetic chromatographic separation of colloidally metastable superparamagnetic iron oxide nanoparticles and suspension cells. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2019, 1122-1123, 83-89.	2.3	5
42	Magnetic Nanoparticle-Based Molecular Communication in Microfluidic Environments. IEEE Transactions on Nanobioscience, 2019, 18, 156-169.	3.3	18
43	Magnetic Tissue Engineering of the Vocal Fold Using Superparamagnetic Iron Oxide Nanoparticles. Tissue Engineering - Part A, 2019, 25, 1470-1477.	3.1	20
44	Nanomedicine for cardiovascular disorders. Nanomedicine, 2019, 14, 3007-3012.	3.3	8
45	SPIONs functionalized with small peptides for binding of lipopolysaccharide, a pathophysiologically relevant microbial product. Colloids and Surfaces B: Biointerfaces, 2019, 174, 95-102.	5.0	6
46	Contact Guidance by Microstructured Gelatin Hydrogels for Prospective Tissue Engineering Applications. ACS Applied Materials & Interfaces, 2019, 11, 7450-7458.	8.0	17
47	Functionalization of T lymphocytes for magnetically controlled immune therapy: Selection of suitable superparamagnetic iron oxide nanoparticles. Journal of Magnetism and Magnetic Materials, 2019, 473, 61-67.	2.3	28
48	Novel Receiver for Superparamagnetic Iron Oxide Nanoparticles in a Molecular Communication Setting. , 2019, , .		14
49	Magnetic Steering of Superparamagnetic Nanoparticles in Duct Flow for Molecular Communication: A Feasibility Study. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 161-174.	0.3	3
50	Studies on the adsorption and desorption of mitoxantrone to lauric acid/albumin coated iron oxide nanoparticles. Colloids and Surfaces B: Biointerfaces, 2018, 161, 18-26.	5.0	21
51	Pedicled Transplantation of Axially Vascularized Bone Constructs in a Critical Size Femoral Defect. Tissue Engineering - Part A, 2018, 24, 479-492.	3.1	23
52	Tuning the structure of aminoferrocene-based anticancer prodrugs to prevent their aggregation in aqueous solution. Journal of Inorganic Biochemistry, 2018, 178, 9-17.	3.5	30
53	Drug delivery to atherosclerotic plaques using superparamagnetic iron oxide nanoparticles. International Journal of Nanomedicine, 2018, Volume 13, 8443-8460.	6.7	32
54	Comparative analysis of nanosystemsâ€™ effects on human endothelial and monocytic cell functions. Nanotoxicology, 2018, 12, 957-974.	3.0	6

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55	Inert Coats of Magnetic Nanoparticles Prevent Formation of Occlusive Intravascular Co-aggregates With Neutrophil Extracellular Traps. Frontiers in Immunology, 2018, 9, 2266.	4.8	29
56	Experimental Molecular Communication Testbed Based on Magnetic Nanoparticles in Duct Flow. , 2018, , .		63
57	From design to the clinic: practical guidelines for translating cardiovascular nanomedicine. Cardiovascular Research, 2018, 114, 1714-1727.	3.8	63
58	Molecular communication using magnetic nanoparticles. , 2018, , .		16
59	Targeting of drug-loaded nanoparticles to tumor sites increases cell death and release of danger signals. Journal of Controlled Release, 2018, 285, 67-80.	9.9	19
60	ROSâ€Responsive Nâ€Alkylaminoferrocenes for Cancerâ€Cellâ€Specific Targeting of Mitochondria. Angewandte Chemie - International Edition, 2018, 57, 11943-11946.	13.8	74
61	Dextran-coated superparamagnetic iron oxide nanoparticles for magnetic resonance imaging: evaluation of size-dependent imaging properties, storage stability and safety. International Journal of Nanomedicine, 2018, Volume 13, 1899-1915.	6.7	105
62	Surface Modification of SPIONs in PHBV Microspheres for Biomedical Applications. Scientific Reports, 2018, 8, 7286.	3.3	26
63	â€˜Nano-lysingâ€™ the disease process:Ânovel diagnostic and therapeutic nanoparticles. Nanomedicine, 2018, 13, 1087-1091.	3.3	0
64	A novel human artery model to assess the magnetic accumulation of SPIONs under flow conditions. Scientific Reports, 2017, 7, 42314.	3.3	16
65	Impact of Superparamagnetic Iron Oxide Nanoparticles on Vocal Fold Fibroblasts: Cell Behavior and Cellular Iron Kinetics. Nanoscale Research Letters, 2017, 12, 284.	5.7	10
66	Biofabrication of vessel grafts based on natural hydrogels. Current Opinion in Biomedical Engineering, 2017, 2, 83-89.	3.4	16
67	Cell specificity of magnetic cell seeding approach to hydrogel colonization. Journal of Biomedical Materials Research - Part A, 2017, 105, 2948-2957.	4.0	10
68	Magnetic nanoparticles for medical applications. Nanomedicine, 2017, 12, 825-829.	3.3	2
69	Nanoparticles for radiooncology: Mission, vision, challenges. Biomaterials, 2017, 120, 155-184.	11.4	87
70	Lysosomeâ€Targeting Amplifiers of Reactive Oxygen Species as Anticancer Prodrugs. Angewandte Chemie - International Edition, 2017, 56, 15545-15549.	13.8	132
71	Innovative toxikologische Untersuchungsmethoden fÃ¼r Eisenoxidnanopartikel in der Nanomedizin. Chemie-Ingenieur-Technik, 2017, 89, 244-251.	0.8	2
72	The involvement of E6, p53, p16, MDM2 and Gal-3 in the clinical outcome of patients with cervical cancer. Oncology Letters, 2017, 14, 4467-4476.	1.8	31

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73	Treat or track: nanoagents in the service of health. Nanomedicine, 2017, 12, 2715-2719.	3.3	0
74	Synthesis of Magneticâ€Nanoparticle/Ansamitocin Conjugatesâ€"Inductive Heating Leads to Decreased Cell Proliferation In Vitro and Attenuation Of Tumour Growth In Vivo. Chemistry - A European Journal, 2017, 23, 12326-12337.	3.3	13
75	Macromolecular interactions in alginateâ€"gelatin hydrogels regulate the behavior of human fibroblasts. Journal of Bioactive and Compatible Polymers, 2017, 32, 309-324.	2.1	34
76	Strategies to optimize the biocompatibility of iron oxide nanoparticles â€" â€œSPIONs safe by designâ€• Journal of Magnetism and Magnetic Materials, 2017, 431, 281-284.	2.3	43
77	Selection of potential iron oxide nanoparticles for breast cancer treatment based on in vitro cytotoxicity and cellular uptake. International Journal of Nanomedicine, 2017, Volume 12, 3207-3220.	6.7	60
78	Non-immunogenic dextran-coated superparamagnetic iron oxide nanoparticles: a biocompatible, size-tunable contrast agent for magnetic resonance imaging. International Journal of Nanomedicine, 2017, Volume 12, 5223-5238.	6.7	82
79	Synthesis and Characterization of Tissue Plasminogen Activatorâ€"Functionalized Superparamagnetic Iron Oxide Nanoparticles for Targeted Fibrin Clot Dissolution. International Journal of Molecular Sciences, 2017, 18, 1837.	4.1	29
80	Analysis of Hypericin-Mediated Effects and Implications for Targeted Photodynamic Therapy. International Journal of Molecular Sciences, 2017, 18, 1388.	4.1	22
81	Biomechanical simulation of vocal fold dynamics in adults based on laryngeal high-speed videoendoscopy. PLoS ONE, 2017, 12, e0187486.	2.5	23
82	Evaluation of hydrogel matrices for vessel bioplotting: Vascular cell growth and viability. Journal of Biomedical Materials Research - Part A, 2016, 104, 577-585.	4.0	25
83	Tissue Plasminogen Activator Binding to Superparamagnetic Iron Oxide Nanoparticleâ€"Covalent Versus Adsorptive Approach. Nanoscale Research Letters, 2016, 11, 297.	5.7	24
84	Nanoparticles for intravascular applications: physicochemical characterization and cytotoxicity testing. Nanomedicine, 2016, 11, 597-616.	3.3	57
85	Mitoxantrone-loaded superparamagnetic iron oxide nanoparticles as drug carriers for cancer therapy: Uptake and toxicity in primary human tubular epithelial cells. Nanotoxicology, 2016, 10, 557-566.	3.0	20
86	Shell matters: Magnetic targeting of SPIONs and in vitro effects on endothelial and monocytic cell function. Clinical Hemorheology and Microcirculation, 2015, 61, 259-277.	1.7	24
87	Flow cytometry for intracellular SPION quantification: specificity and sensitivity in comparison with spectroscopic methods. International Journal of Nanomedicine, 2015, 10, 4185.	6.7	65
88	Genotoxicity of Superparamagnetic Iron Oxide Nanoparticles in Granulosa Cells. International Journal of Molecular Sciences, 2015, 16, 26280-26290.	4.1	24
89	Tangential Flow Ultrafiltration Allows Purification and Concentration of Lauric Acid-/Albumin-Coated Particles for Improved Magnetic Treatment. International Journal of Molecular Sciences, 2015, 16, 19291-19307.	4.1	26
90	Treatment Efficiency of Free and Nanoparticle-Loaded Mitoxantrone for Magnetic Drug Targeting in Multicellular Tumor Spheroids. Molecules, 2015, 20, 18016-18030.	3.8	28

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91	Hypericin-bearing magnetic iron oxide nanoparticles for selective drug delivery in photodynamic therapy. International Journal of Nanomedicine, 2015, 10, 6985.	6.7	46
92	Editorial: Brave new world â€“ Focus on nanomedicine. Biochemical and Biophysical Research Communications, 2015, 468, 409-410.	2.1	3
93	Endothelial biocompatibility and accumulation of SPION under flow conditions. Journal of Magnetism and Magnetic Materials, 2015, 380, 20-26.	2.3	22
94	Different Storage Conditions Influence Biocompatibility and Physicochemical Properties of Iron Oxide Nanoparticles. International Journal of Molecular Sciences, 2015, 16, 9368-9384.	4.1	43
95	Magnetic nanoparticle-based drug delivery for cancer therapy. Biochemical and Biophysical Research Communications, 2015, 468, 463-470.	2.1	350
96	Nanomedical innovation: the SEON-concept for an improved cancer therapy with magnetic nanoparticles. Nanomedicine, 2015, 10, 3287-3304.	3.3	25
97	Magnetic nanoparticles for magnetic drug targeting. Biomedizinische Technik, 2015, 60, 465-75.	0.8	17
98	Boron containing magnetic nanoparticles for neutron capture therapyÂâ€“ an innovative approach for specifically targeting tumors. Applied Radiation and Isotopes, 2015, 106, 151-155.	1.5	16
99	Magnetic microgels for drug targeting applications: Physicalâ€“chemical properties and cytotoxicity evaluation. Journal of Magnetism and Magnetic Materials, 2015, 380, 307-314.	2.3	25
100	Development of a lauric acid/albumin hybrid iron oxide nanoparticle system with improved biocompatibility. International Journal of Nanomedicine, 2014, 9, 4847.	6.7	105
101	Vascularization of the Dorsal Base of the Second Metacarpal Bone. Plastic and Reconstructive Surgery, 2014, 134, 72e-80e.	1.4	7
102	3-Dimensional quantitative detection of nanoparticle content in biological tissue samples after local cancer treatment. Journal of Magnetism and Magnetic Materials, 2014, 360, 92-97.	2.3	8
103	Epidemiology and survival of HPVâ€related tonsillar carcinoma. Cancer Medicine, 2014, 3, 652-659.	2.8	12
104	Development and characterization of magnetic iron oxide nanoparticles with a cisplatin-bearing polymer coating for targeted drug delivery. International Journal of Nanomedicine, 2014, 9, 3659.	6.7	90
105	Magnetic nanoparticles for cancer therapy. Nanotechnology Reviews, 2013, 2, 395-409.	5.8	77
106	Cancer research by means of tissue engineering â€“ is there a rationale?. Journal of Cellular and Molecular Medicine, 2013, 17, 1197-1206.	3.6	47
107	Efficient drug-delivery using magnetic nanoparticles â€” biodistribution and therapeutic effects in tumour bearing rabbits. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 961-971.	3.3	186
108	Nanomedicine in diagnostics and therapy of cardiovascular diseases: beyond atherosclerotic plaque imaging. Nanotechnology Reviews, 2013, 2, 449-472.	5.8	19

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109	Magnetic Drug Targeting Reduces the Chemotherapeutic Burden on Circulating Leukocytes. International Journal of Molecular Sciences, 2013, 14, 7341-7355.	4.1	57
110	Imaging modalities using magnetic nanoparticles â€“ overview of the developments in recent years. Nanotechnology Reviews, 2013, 2, 381-394.	5.8	6
111	Nanoparticles for cancer therapy using magnetic forces. Nanomedicine, 2012, 7, 447-457.	3.3	77
112	Visualization of superparamagnetic nanoparticles in vascular tissue using XÎ¼CT and histology. Histochemistry and Cell Biology, 2011, 135, 153-158.	1.7	42
113	Cancer therapy with drug loaded magnetic nanoparticlesâ€"magnetic drug targeting. Journal of Magnetism and Magnetic Materials, 2011, 323, 1404-1407.	2.3	110
114	Mitoxantrone Loaded Superparamagnetic Nanoparticles for Drug Targeting: A Versatile and Sensitive Method for Quantification of Drug Enrichment in Rabbit Tissues Using HPLC-UV. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-8.	3.0	20
115	Quantification of drug-loaded magnetic nanoparticles in rabbit liver and tumor after in vivo administration. Journal of Magnetism and Magnetic Materials, 2009, 321, 1465-1468.	2.3	43
116	Tomographic examination of magnetic nanoparticles used as drug carriers. Journal of Magnetism and Magnetic Materials, 2009, 321, 1517-1520.	2.3	11
117	Design and Evaluation of Magnetic Fields for Nanoparticle Drug Targeting in Cancer. IEEE Nanotechnology Magazine, 2007, 6, 164-170.	2.0	56
118	In vitro investigation of the behaviour of magnetic particles by a circulating artery model. Journal of Magnetism and Magnetic Materials, 2007, 311, 358-362.	2.3	48
119	Distribution of Mitoxantrone after Magnetic Drug Targeting: Fluorescence Microscopic Investigations on VX2 Squamous Cell Carcinoma Cells. Zeitschrift Fur Physikalische Chemie, 2006, 220, 235-240.	2.8	5
120	Targeting cancer cells: magnetic nanoparticles as drug carriers. European Biophysics Journal, 2006, 35, 446-450.	2.2	327
121	In vitro and in vivo investigations of targeted chemotherapy with magnetic nanoparticles. Journal of Magnetism and Magnetic Materials, 2005, 293, 389-393.	2.3	163
122	Magnetic Drug Targeting--Biodistribution of the Magnetic Carrier and the Chemotherapeutic agent Mitoxantrone after Locoregional Cancer Treatment. Journal of Drug Targeting, 2003, 11, 139-149.	4.4	109
123	Clinical Applications of Magnetic Drug Targeting. Journal of Surgical Research, 2001, 95, 200-206.	1.6	761
124	Magnetic mitoxantrone nanoparticle detection by histology, X-ray and MRI after magnetic tumor targeting. Journal of Magnetism and Magnetic Materials, 2001, 225, 187-193.	2.3	134
125	Optical Microscopy Systems for the Detection of Unlabeled Nanoparticles. International Journal of Nanomedicine, 0, Volume 17, 2139-2163.	6.7	3