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List of Publications by Year
in descending order

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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	Clinical Applications of Magnetic Drug Targeting. Journal of Surgical Research, 2001, 95, 200-206.	1.6	761
2	Magnetic nanoparticle-based drug delivery for cancer therapy. Biochemical and Biophysical Research Communications, 2015, 468, 463-470.	2.1	350
3	Targeting cancer cells: magnetic nanoparticles as drug carriers. European Biophysics Journal, 2006, 35, 446-450.	2.2	327
4	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
5	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
6	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
7	Lysosomeâ€Targeting Amplifiers of Reactive Oxygen Species as Anticancer Prodrugs. Angewandte Chemie - International Edition, 2017, 56, 15545-15549.	13.8	132
8	Cancer therapy with drug loaded magnetic nanoparticlesâ€"magnetic drug targeting. Journal of Magnetism and Magnetic Materials, 2011, 323, 1404-1407.	2.3	110
9	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
10	Development of a lauric acid/albumin hybrid iron oxide nanoparticle system with improved biocompatibility. International Journal of Nanomedicine, 2014, 9, 4847.	6.7	105
11	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
12	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
13	Nanoparticles for radiooncology: Mission, vision, challenges. Biomaterials, 2017, 120, 155-184.	11.4	87
14	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
15	Nanoparticles for cancer therapy using magnetic forces. Nanomedicine, 2012, 7, 447-457.	3.3	77
16	Magnetic nanoparticles for cancer therapy. Nanotechnology Reviews, 2013, 2, 395-409.	5.8	77
17	ROSâ€Responsive Nâ€Alkylaminoferrocenes for Cancerâ€Cellâ€Specific Targeting of Mitochondria. Angewandte Chemie - International Edition, 2018, 57, 11943-11946.	13.8	74
18	Functionalized Superparamagnetic Iron Oxide Nanoparticles (SPIONs) as Platform for the Targeted Multimodal Tumor Therapy. Frontiers in Oncology, 2019, 9, 59.	2.8	69

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19	Flow cytometry for intracellular SPION quantification: specificity and sensitivity in comparison with spectroscopic methods. International Journal of Nanomedicine, 2015, 10, 4185.	6.7	65
20	Experimental Molecular Communication Testbed Based on Magnetic Nanoparticles in Duct Flow. , 2018, , .		63
21	From design to the clinic: practical guidelines for translating cardiovascular nanomedicine. Cardiovascular Research, 2018, 114, 1714-1727.	3.8	63
22	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
23	Magnetic Drug Targeting Reduces the Chemotherapeutic Burden on Circulating Leukocytes. International Journal of Molecular Sciences, 2013, 14, 7341-7355.	4.1	57
24	Nanoparticles for intravascular applications: physicochemical characterization and cytotoxicity testing. Nanomedicine, 2016, 11, 597-616.	3.3	57
25	Design and Evaluation of Magnetic Fields for Nanoparticle Drug Targeting in Cancer. IEEE Nanotechnology Magazine, 2007, 6, 164-170.	2.0	56
26	The remediation of nano-/microplastics from water. Materials Today, 2021, 48, 38-46.	14.2	56
27	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
28	Iron Oxide Nanoparticles in Regenerative Medicine and Tissue Engineering. Nanomaterials, 2021, 11, 2337.	4.1	48
29	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
30	Hypericin-bearing magnetic iron oxide nanoparticles for selective drug delivery in photodynamic therapy. International Journal of Nanomedicine, 2015, 10, 6985.	6.7	46
31	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
32	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
33	Different Storage Conditions Influence Biocompatibility and Physicochemical Properties of Iron Oxide Nanoparticles. International Journal of Molecular Sciences, 2015, 16, 9368-9384.	4.1	43
34	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
35	Visualization of superparamagnetic nanoparticles in vascular tissue using XÎ¼CT and histology. Histochemistry and Cell Biology, 2011, 135, 153-158.	1.7	42
36	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

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37	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
38	An Endoplasmic Reticulum Specific Proâ€amplifier of Reactive Oxygen Species in Cancer Cells. Angewandte Chemie - International Edition, 2021, 60, 11158-11162.	13.8	34
39	Drug delivery to atherosclerotic plaques using superparamagnetic iron oxide nanoparticles. International Journal of Nanomedicine, 2018, Volume 13, 8443-8460.	6.7	32
40	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
41	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
42	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
43	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
44	Treatment Efficiency of Free and Nanoparticle-Loaded Mitoxantrone for Magnetic Drug Targeting in Multicellular Tumor Spheroids. Molecules, 2015, 20, 18016-18030.	3.8	28
45	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
46	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
47	Surface Modification of SPIONs in PHBV Microspheres for Biomedical Applications. Scientific Reports, 2018, 8, 7286.	3.3	26
48	Nanomedical innovation: the SEON-concept for an improved cancer therapy with magnetic nanoparticles. Nanomedicine, 2015, 10, 3287-3304.	3.3	25
49	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
50	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
51	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
52	Genotoxicity of Superparamagnetic Iron Oxide Nanoparticles in Granulosa Cells. International Journal of Molecular Sciences, 2015, 16, 26280-26290.	4.1	24
53	Tissue Plasminogen Activator Binding to Superparamagnetic Iron Oxide Nanoparticleâ€”Covalent Versus Adsorptive Approach. Nanoscale Research Letters, 2016, 11, 297.	5.7	24
54	Neutrophil Extracellular Traps Promote the Development and Growth of Human Salivary Stones. Cells, 2020, 9, 2139.	4.1	24

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55	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
56	Biomechanical simulation of vocal fold dynamics in adults based on laryngeal high-speed videoendoscopy. PLoS ONE, 2017, 12, e0187486.	2.5	23
57	Pedicled Transplantation of Axially Vascularized Bone Constructs in a Critical Size Femoral Defect. Tissue Engineering - Part A, 2018, 24, 479-492.	3.1	23
58	Endothelial biocompatibility and accumulation of SPION under flow conditions. Journal of Magnetism and Magnetic Materials, 2015, 380, 20-26.	2.3	22
59	Analysis of Hypericin-Mediated Effects and Implications for Targeted Photodynamic Therapy. International Journal of Molecular Sciences, 2017, 18, 1388.	4.1	22
60	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
61	Optimization of cell seeding on electrospun PCL-silk fibroin scaffolds. European Polymer Journal, 2020, 134, 109838.	5.4	21
62	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
63	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
64	Magnetic Tissue Engineering of the Vocal Fold Using Superparamagnetic Iron Oxide Nanoparticles. Tissue Engineering - Part A, 2019, 25, 1470-1477.	3.1	20
65	Nanomedicine in diagnostics and therapy of cardiovascular diseases: beyond atherosclerotic plaque imaging. Nanotechnology Reviews, 2013, 2, 449-472.	5.8	19
66	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
67	Magnetic Nanoparticle-Based Molecular Communication in Microfluidic Environments. IEEE Transactions on Nanobioscience, 2019, 18, 156-169.	3.3	18
68	Brave new world revisited: Focus on nanomedicine. Biochemical and Biophysical Research Communications, 2020, 533, 36-49.	2.1	18
69	Magnetic nanoparticles for magnetic drug targeting. Biomedizinische Technik, 2015, 60, 465-75.	0.8	17
70	Contact Guidance by Microstructured Gelatin Hydrogels for Prospective Tissue Engineering Applications. ACS Applied Materials & Interfaces, 2019, 11, 7450-7458.	8.0	17
71	Synthesis and Characterization of Citrate-Stabilized Gold-Coated Superparamagnetic Iron Oxide Nanoparticles for Biomedical Applications. Molecules, 2020, 25, 4425.	3.8	17
72	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

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73	A novel human artery model to assess the magnetic accumulation of SPIONs under flow conditions. Scientific Reports, 2017, 7, 42314.	3.3	16
74	Biofabrication of vessel grafts based on natural hydrogels. Current Opinion in Biomedical Engineering, 2017, 2, 83-89.	3.4	16
75	Molecular communication using magnetic nanoparticles. , 2018, , .		16
76	N-Alkylaminoferrocene-Based Prodrugs Targeting Mitochondria of Cancer Cells. Molecules, 2020, 25, 2545.	3.8	16
77	Graphene Oxide Nanosheets for Localized Hyperthermiaâ€"Physicochemical Characterization, Biocompatibility, and Induction of Tumor Cell Death. Cells, 2020, 9, 776.	4.1	16
78	Extramedullary plasmacytoma: Tumor occurrence and therapeutic conceptsâ€"A followâ€up. Cancer Medicine, 2022, 11, 4743-4755.	2.8	16
79	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
80	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
81	Cardiovascular applications of magnetic particles. Journal of Magnetism and Magnetic Materials, 2021, 518, 167428.	2.3	14
82	Cellular SPION Uptake and Toxicity in Various Head and Neck Cancer Cell Lines. Nanomaterials, 2021, 11, 726.	4.1	14
83	Contactless Nanoparticle-Based Guiding of Cells by Controllable Magnetic Fields. Nanotechnology, Science and Applications, 2021, Volume 14, 91-100.	4.6	14
84	Novel Receiver for Superparamagnetic Iron Oxide Nanoparticles in a Molecular Communication Setting. , 2019, , .		14
85	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
86	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
87	Epidemiology and survival of HPVâ€related tonsillar carcinoma. Cancer Medicine, 2014, 3, 652-659.	2.8	12
88	Nanoparticles for regenerative medicine. Nanomedicine, 2019, 14, 1929-1933.	3.3	12
89	Magnetic Accumulation of SPIONs under Arterial Flow Conditions: Effect of Serum and Red Blood Cells. Molecules, 2019, 24, 2588.	3.8	12
90	Differential Responses to Bioink-Induced Oxidative Stress in Endothelial Cells and Fibroblasts. International Journal of Molecular Sciences, 2021, 22, 2358.	4.1	12

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91	Tomographic examination of magnetic nanoparticles used as drug carriers. Journal of Magnetism and Magnetic Materials, 2009, 321, 1517-1520.	2.3	11
92	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
93	Shedding Light on Metalâ€Based Nanoparticles in Zebrafish by Computed Tomography with Micrometer Resolution. Small, 2020, 16, e2000746.	10.0	11
94	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
95	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
96	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
97	Cell specificity of magnetic cell seeding approach to hydrogel colonization. Journal of Biomedical Materials Research - Part A, 2017, 105, 2948-2957.	4.0	10
98	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
99	Small Dimensionâ€"Big Impact! Nanoparticle-Enhanced Non-Invasive and Intravascular Molecular Imaging of Atherosclerosis In Vivo. Molecules, 2020, 25, 1029.	3.8	9
100	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
101	Nanomedicine for cardiovascular disorders. Nanomedicine, 2019, 14, 3007-3012.	3.3	8
102	Anticancer Effect of an Electronically Coupled Oligoferrocene. Organometallics, 2020, 39, 3112-3120.	2.3	8
103	Vascularization of the Dorsal Base of the Second Metacarpal Bone. Plastic and Reconstructive Surgery, 2014, 134, 72e-80e.	1.4	7
104	Hydroxyapatite-Coated SPIONs and Their Influence on Cytokine Release. International Journal of Molecular Sciences, 2021, 22, 4143.	4.1	7
105	Imaging modalities using magnetic nanoparticles â€“ overview of the developments in recent years. Nanotechnology Reviews, 2013, 2, 381-394.	5.8	6
106	Comparative analysis of nanosystemsâ€™ effects on human endothelial and monocytic cell functions. Nanotoxicology, 2018, 12, 957-974.	3.0	6
107	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
108	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

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109	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
110	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
111	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
112	Intracellular Amplifiers of Reactive Oxygen Species Affecting Mitochondria as Radiosensitizers. Cancers, 2022, 14, 208.	3.7	5
113	Editorial: Brave new world â€“ Focus on nanomedicine. Biochemical and Biophysical Research Communications, 2015, 468, 409-410.	2.1	3
114	Nanomedicine for neuroprotection. Nanomedicine, 2019, 14, 127-130.	3.3	3
115	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
116	Optical Microscopy Systems for the Detection of Unlabeled Nanoparticles. International Journal of Nanomedicine, 0, Volume 17, 2139-2163.	6.7	3
117	Magnetic nanoparticles for medical applications. Nanomedicine, 2017, 12, 825-829.	3.3	2
118	Innovative toxikologische Untersuchungsmethoden fÃ¼r Eisenoxidnanopartikel in der Nanomedizin. Chemie-Ingenieur-Technik, 2017, 89, 244-251.	0.8	2
119	Nanomedicine for infectious diseases. Nanomedicine, 2020, 15, 1263-1267.	3.3	2
120	Modulation of immune responses by nanoparticles. Nanomedicine, 2021, 16, 1925-1929.	3.3	1
121	Treat or track: nanoagents in the service of health. Nanomedicine, 2017, 12, 2715-2719.	3.3	0
122	â€˜Nano-lysingâ€™ the disease process:Ânovel diagnostic and therapeutic nanoparticles. Nanomedicine, 2018, 13, 1087-1091.	3.3	0
123	Nanomedicine for vaccination and diagnosis of diseases. Nanomedicine, 2021, 16, 165-169.	3.3	0
124	Intranasal delivery of nanoparticles. Nanomedicine, 2022, , .	3.3	0
125	SPION based nanoformulations: bio-inspired design and functionalization strategies for applications in medicine. Precision Nanomedicine, 2022, 5, .	0.8	0