Hiroshi Maeda

List of Publications by Year
in descending order

160 papers	28,542 citations	11608 70 h-index	6979 154 g-index
168 all docs	168 docs citations	168 times ranked	25893 citing authors

#	Article	IF	Citations
1	The EPR effect: Unique features of tumor blood vessels for drug delivery, factors involved, and limitations and augmentation of the effect. Advanced Drug Delivery Reviews, 2011, 63, 136-151.	6.6	3,020
2	The enhanced permeability and retention (EPR) effect in tumor vasculature: the key role of tumor-selective macromolecular drug targeting. Advances in Enzyme Regulation, 2001, 41, 189-207.	2.9	2,132
3	The EPR effect for macromolecular drug delivery to solid tumors: Improvement of tumor uptake, lowering of systemic toxicity, and distinct tumor imaging in vivo. Advanced Drug Delivery Reviews, 2013, 65, 71-79.	6.6	1,960
4	Exploiting the enhanced permeability and retention effect for tumor targeting. Drug Discovery Today, 2006, 11, 812-818.	3.2	1,633
5	Polymeric drugs for efficient tumor-targeted drug delivery based on EPR-effect. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 71, 409-419.	2.0	1,055
6	Toward a full understanding of the EPR effect in primary and metastatic tumors as well as issues related to its heterogeneity. Advanced Drug Delivery Reviews, 2015, 91, 3-6.	6.6	934
7	Tumor-Selective Delivery of Macromolecular Drugs via the EPR Effect: Background and Future Prospects. Bioconjugate Chemistry, 2010, 21, 797-802.	1.8	874
8	Mechanism of tumor-targeted delivery of macromolecular drugs, including the EPR effect in solid tumor and clinical overview of the prototype polymeric drug SMANCS. Journal of Controlled Release, 2001, 74, 47-61.	4.8	861
9	Macromolecular therapeutics in cancer treatment: The EPR effect and beyond. Journal of Controlled Release, 2012, 164, 138-144.	4.8	705
10	Antagonistic action of imidazolineoxyl N-oxides against endothelium-derived relaxing factor/.bul.NO (nitric oxide) through a radical reaction. Biochemistry, 1993, 32, 827-832.	1.2	575
11	Conjugates of anticancer agents and polymers: advantages of macromolecular therapeutics in vivo. Bioconjugate Chemistry, 1992, 3, 351-362.	1.8	535
12	SMANCS and polymer-conjugated macromolecular drugs: advantages in cancer chemotherapy. Advanced Drug Delivery Reviews, 2001, 46, 169-185.	6.6	514
13	Therapeutic strategies by modulating oxygen stress in cancer and inflammation. Advanced Drug Delivery Reviews, 2009, 61, 290-302.	6.6	476
14	Vascular permeability enhancement in solid tumor: various factors, mechanisms involved and its implications. International Immunopharmacology, 2003, 3, 319-328.	1.7	462
15	Early Phase Tumor Accumulation of Macromolecules: A Great Difference in Clearance Rate between Tumor and Normal Tissues. Japanese Journal of Cancer Research, 1998, 89, 307-314.	1.7	431
16	Exploiting the dynamics of the EPR effect and strategies to improve the therapeutic effects of nanomedicines by using EPR effect enhancers. Advanced Drug Delivery Reviews, 2020, 157, 142-160.	6.6	410
17	Activation of Matrix Metalloproteinases by Peroxynitrite-induced Protein S-Glutathiolation via Disulfide S-Oxide Formation. Journal of Biological Chemistry, 2001, 276, 29596-29602.	1.6	394
18	Analyses of repeated failures in cancer therapy for solid tumors: poor tumorâ€selective drug delivery, low therapeutic efficacy and unsustainable costs. Clinical and Translational Medicine, 2018, 7, 11.	1.7	337

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19	Effect of arterial administration of high-molecular-weight anticancer agent SMANCS with lipid lymphographic agent on hepatoma: a preliminary report. European Journal of Cancer & Clinical Oncology, 1983, 19, 1053-1065.	0.9	318
20	A Retrospective 30Â Years After Discovery of the Enhanced Permeability and Retention Effect of Solid Tumors: Nextâ€Generation Chemotherapeutics and Photodynamic Therapyâ€"Problems, Solutions, and Prospects. Microcirculation, 2016, 23, 173-182.	1.0	273
21	Macromolecular Therapeutics. Clinical Pharmacokinetics, 2003, 42, 1089-1105.	1.6	260
22	Conjugation of poly(styrene-co-maleic acid) derivatives to the antitumor protein neocarzinostatin: pronounced improvements in pharmacological properties. Journal of Medicinal Chemistry, 1985, 28, 455-461.	2.9	234
23	Vascular permeability in cancer and infection as related to macromolecular drug delivery, with emphasis on the EPR effect for tumor-selective drug targeting. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2012, 88, 53-71.	1.6	233
24	Selective targeting of anti-cancer drug and simultaneous image enhancement in solid tumors by arterially administered lipid contrast medium. Cancer, 1984, 54, 2367-2374.	2.0	226
25	Activation of Human Neutrophil Procollagenase by Nitrogen Dioxide and Peroxynitrite: A Novel Mechanism for Procollagenase Activation Involving Nitric Oxide. Archives of Biochemistry and Biophysics, 1997, 342, 261-274.	1.4	217
26	SMANCS and polymer-conjugated macromolecular drugs: advantages in cancer chemotherapy. Advanced Drug Delivery Reviews, 1991, 6, 181-202.	6.6	211
27	Enhanced Vascular Permeability in Solid Tumor Is Mediated by Nitric Oxide and Inhibited by Both New Nitric Oxide Scavenger and Nitric Oxide Synthase Inhibitor. Japanese Journal of Cancer Research, 1994, 85, 331-334.	1.7	200
28	EPR effect based drug design and clinical outlook for enhanced cancer chemotherapy. Advanced Drug Delivery Reviews, 2011, 63, 129-130.	6.6	193
29	Development of next-generation macromolecular drugs based on the EPR effect: challenges and pitfalls. Expert Opinion on Drug Delivery, 2015, 12, 53-64.	2.4	193
30	Factors and Mechanism of â€œEPRâ€• Effect and the Enhanced Antitumor Effects of Macromolecular Drugs Including SMANCS. , 2003, 519, 29-49.		188
31	SMAâ€"doxorubicin, a new polymeric micellar drug for effective targeting to solid tumours. Journal of Controlled Release, 2004, 97, 219-230.	4.8	173
32	Enhanced delivery of macromolecular antitumor drugs to tumors by nitroglycerin application. Cancer Science, 2009, 100, 2426-2430.	1.7	171
33	In vivo antitumor activity of pegylated zinc protoporphyrin: targeted inhibition of heme oxygenase in solid tumor. Cancer Research, 2003, 63, 3567-74.	0.4	166
34	8-Nitroguanosine formation in viral pneumonia and its implication for pathogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 685-690.	3.3	161
35	Elevating Blood Pressure as a Strategy to Increase Tumor-targeted Delivery of Macromolecular Drug SMANCS: Cases of Advanced Solid Tumors. Japanese Journal of Clinical Oncology, 2009, 39, 756-766.	0.6	156
36	Enhancement of chemotherapeutic response of tumor cells by a heme oxygenase inhibitor, pegylated zinc protoporphyrin. International Journal of Cancer, 2004, 109, 1-8.	2.3	153

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37	Image enhancement in computerized tomography for sensitive diagnosis of liver cancer and semiquantitation of tumor selective drug targeting with oily contrast medium. Cancer, 1985, 56, 751-757.	2.0	150
38	Involvement of the Kinin-generating Cascade in Enhanced Vascular Permeability in Tumor Tissue. Japanese Journal of Cancer Research, 1988, 79, 1327-1334.	1.7	150
39	Pathogenesis of Serratial Infection: Activation of the Hageman Factor-Prekallikrein Cascade by Serratial Protease. Journal of Biochemistry, 1984, 96, 739-749.	0.9	143
40	The link between infection and cancer: Tumor vasculature, free radicals, and drug delivery to tumors via the <scp>EPR</scp> effect. Cancer Science, 2013, 104, 779-789.	1.7	143
41	Excessive production of nitric oxide in rat solid tumor and its implication in rapid tumor growth. , 1996, 77, 1598-1604.		140
42	Enhanced Vascular Permeability in Solid Tumor Involving Peroxynitrite and Matrix Metalloproteinases. Japanese Journal of Cancer Research, 2001, 92, 439-451.	1.7	139
43	Free Radicals in Viral Pathogenesis: Molecular Mechanisms Involving Superoxide and NO. Experimental Biology and Medicine, 1998, 217, 64-73.	1.1	137
44	Pivotal role of Cu,Zn-superoxide dismutase in endothelium-dependent hyperpolarization. Journal of Clinical Investigation, 2003, 112, 1871-1879.	3.9	132
45	Excessive production of nitric oxide in rat solid tumor and its implication in rapid tumor growth. Cancer, 1996, 77, 1598-1604.	2.0	120
46	Polymer therapeutics and the EPR effect. Journal of Drug Targeting, 2017, 25, 781-785.	2.1	117
47	Improved anticancer effects of albumin-bound paclitaxel nanoparticle via augmentation of EPR effect and albumin-protein interactions using S-nitrosated human serum albumin dimer. Biomaterials, 2017, 140, 162-169.	5.7	114
48	Role of Microbial Proteases in Pathogenesis. Microbiology and Immunology, 1996, 40, 685-699.	0.7	112
49	Tailor-making of protein drugs by polymer conjugation for tumor targeting: A brief review on smancs. The Protein Journal, 1984, 3, 181-193.	1.1	109
50	Isolation, Identification, and Structure of a Potent Alkyl-Peroxyl Radical Scavenger in Crude Canola Oil, Canolol. Bioscience, Biotechnology and Biochemistry, 2005, 69, 1568-1574.	0.6	109
51	Antioxidative and Antimutagenic Activities of 4-Vinyl-2,6-dimethoxyphenol (Canolol) Isolated from Canola Oil. Journal of Agricultural and Food Chemistry, 2004, 52, 4380-4387.	2.4	106
52	Role of Nitric Oxide in Pathogenesis of Herpes Simplex Virus Encephalitis in Rats. Virology, 1999, 256, 203-212.	1.1	100
53	Copoly(styrene-maleic acid)â˜'Pirarubicin Micelles:â€‰ High Tumor-Targeting Efficiency with Little Toxicity1. Bioconjugate Chemistry, 2005, 16, 230-236.	1.8	100
54	Kinin-generating Cascade in Advanced Cancer Patients andin vitroStudy. Japanese Journal of Cancer Research, 1991, 82, 732-741.	1.7	99

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55	Polymeric micelles of zinc protoporphyrin for tumor targeted delivery based on EPR effect and singlet oxygen generation. Journal of Drug Targeting, 2007, 15, 496-506.	2.1	99
56	Two step mechanisms of tumor selective delivery of N-(2-hydroxypropyl)methacrylamide copolymer conjugated with pirarubicin via an acid-cleavable linkage. Journal of Controlled Release, 2014, 174, 81-87.	4.8	98
57	Oxygen Free Radicals as Pathogenic Molecules in Viral Diseases. Experimental Biology and Medicine, 1991, 198, 721-727.	1.1	94
58	High-loading nanosized micelles of copoly(styreneâ€“maleic acid)â€“zinc protoporphyrin for targeted delivery of a potent heme oxygenase inhibitor. Biomaterials, 2007, 28, 1871-1881.	5.7	91
59	Styrene-maleic acid copolymer-encapsulated CORM2, a water-soluble carbon monoxide (CO) donor with a constant CO-releasing property, exhibits therapeutic potential for inflammatory bowel disease. Journal of Controlled Release, 2014, 187, 14-21.	4.8	90
60	Identification of bradykinin receptors in clinical cancer specimens and murine tumor tissues. International Journal of Cancer, 2002, 98, 29-35.	2.3	88
61	The 35th Anniversary of the Discovery of EPR Effect: A New Wave of Nanomedicines for Tumor-Targeted Drug Deliveryâ€"Personal Remarks and Future Prospects. Journal of Personalized Medicine, 2021, 11, 229.	1.1	87
62	Targeting of heat shock protein 32 (Hsp32)/heme oxygenase-1 (HO-1) in leukemic cells in chronic myeloid leukemia: a novel approach to overcome resistance against imatinib. Blood, 2008, 111, 2200-2210.	0.6	85
63	Augmentation of the Enhanced Permeability and Retention Effect with Nitric Oxideâ€“Generating Agents Improves the Therapeutic Effects of Nanomedicines. Molecular Cancer Therapeutics, 2018, 17, 2643-2653.	1.9	83
64	Tumor-targeted delivery of polyethylene glycol-conjugated D-amino acid oxidase for antitumor therapy via enzymatic generation of hydrogen peroxide. Cancer Research, 2002, 62, 3138-43.	0.4	83
65	Viral mutation accelerated by nitric oxide production during infection<i>in vivo</i>. FASEB Journal, 2000, 14, 1447-1454.	0.2	80
66	Assay of proteolytic enzymes by the fluorescence polarization technique. Analytical Biochemistry, 1979, 92, 222-227.	1.1	75
67	Kallikreinâ€“kinin in infection and cancer. Immunopharmacology, 1999, 43, 115-128.	2.0	75
68	Carbon monoxide, generated by heme oxygenaseâ€1, mediates the enhanced permeability and retention effect in solid tumors. Cancer Science, 2012, 103, 535-541.	1.7	75
69	HPMA Copolymer-Conjugated Pirarubicin in Multimodal Treatment of a Patient with Stage IV Prostate Cancer and Extensive Lung and Bone Metastases. Targeted Oncology, 2016, 11, 101-106.	1.7	75
70	Upregulation of heme oxygenase-1 in colorectal cancer patients with increased circulation carbon monoxide levels, potentially affects chemotherapeutic sensitivity. BMC Cancer, 2014, 14, 436.	1.1	73
71	Potentiation of Nitric Oxide-Mediated Vasorelaxation by Xanthine Oxidase Inhibitors. Experimental Biology and Medicine, 1996, 211, 366-373.	1.1	72
72	Bradykinin and nitric oxide in infectious disease and cancer. Immunopharmacology, 1996, 33, 222-230.	2.0	70

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73	The Serratial 56K Protease as a Major Pathogenic Factor in Serratial Keratitis. Ophthalmology, 1985, 92, 1452-1459.	2.5	68
74	Activation of blood clotting factors by microbial proteinases. FEMS Microbiology Letters, 1994, 121, 327-332.	0.7	62
75	Modulation of Tumor-selective Vascular Blood Flow and Extravasation by the Stable Prostaglandin I2Analogue Beraprost Sodium. Journal of Drug Targeting, 2003, 11, 45-52.	2.1	62
76	Nitric Oxide as an Endogenous Mutagen for Sendai Virus without Antiviral Activity. Journal of Virology, 2004, 78, 8709-8719.	1.5	62
77	Micelles of zinc protoporphyrin conjugated to N-(2-hydroxypropyl)methacrylamide (HPMA) copolymer for imaging and light-induced antitumor effects in vivo. Journal of Controlled Release, 2013, 165, 191-198.	4.8	60
78	4â€Vinylâ€2,6â€dimethoxyphenol (canolol) suppresses oxidative stress and gastric carcinogenesis in <i>Helicobacter pylori</i>â€infected carcinogenâ€treated Mongolian gerbils. International Journal of Cancer, 2008, 122, 1445-1454.	2.3	58
79	Nitroglycerin enhances vascular blood flow and drug delivery in hypoxic tumor tissues: Analogy between angina pectoris and solid tumors and enhancement of the EPR effect. Journal of Controlled Release, 2010, 142, 296-298.	4.8	58
80	Dietary lipid peroxidation products and DNA damage in colon carcinogenesis. European Journal of Lipid Science and Technology, 2002, 104, 439-447.	1.0	57
81	Oxystress inducing antitumor therapeutics <i>via</i> tumorâ€targeted delivery of PEGâ€conjugated <scp>D</scp>â€amino acid oxidase. International Journal of Cancer, 2008, 122, 1135-1144.	2.3	57
82	Chemical modification of superoxide dismutase Extension of plasma half life of the enzyme through its reversible binding to the circulating albumin. International Journal of Peptide and Protein Research, 1988, 32, 153-159.	0.1	57
83	Protein Binding of Macromolecular Anticancer Agent SMANCS: Characterization of Poly(styrene-co-maleic acid) Derivatives as an Albumin Binding Ligand. Journal of Bioactive and Compatible Polymers, 1988, 3, 319-333.	0.8	55
84	Superoxide generation mediated by 8-nitroguanosine, a highly redox-active nucleic acid derivative. Biochemical and Biophysical Research Communications, 2003, 311, 300-306.	1.0	53
85	<i>S</i>-Nitrosated Human Serum Albumin Dimer is not only a Novel Anti-Tumor Drug but also a Potentiator for Anti-Tumor Drugs with Augmented EPR Effects. Bioconjugate Chemistry, 2012, 23, 264-271.	1.8	51
86	<i>In vitro</i> and <i>in vivo</i> evaluation of tumor targeting styreneâ€maleic acid copolymerâ€pirarubicin micelles: Survival improvement and inhibition of liver metastases. Cancer Science, 2010, 101, 1866-1874.	1.7	49
87	Evidence of Direct Generation of Oxygen Free Radicals from Heterocyclic Amines by NADPH/Cytochrome P-450 Reductasein vitro. Japanese Journal of Cancer Research, 1992, 83, 1204-1209.	1.7	48
88	S-Nitrosated human serum albumin dimer as novel nano-EPR enhancer applied to macromolecular anti-tumor drugs such as micelles and liposomes. Journal of Controlled Release, 2015, 217, 1-9.	4.8	48
89	Tumor-selective Blood Flow Decrease Induced by an Angiotensin Converting Enzyme Inhibitor, Temocapril Hydrochloride. Japanese Journal of Cancer Research, 2000, 91, 261-269.	1.7	47
90	Synthesis and therapeutic effect of styreneâ€“maleic acid copolymerâ€conjugated pirarubicin. Cancer Science, 2015, 106, 270-278.	1.7	47

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91	Anticancer effects of arterial administration of the anticancer agent SMANCS with lipiodol on metastatic lymph nodes. Cancer, 1987, 59, 1560-1565.	2.0	46
92	Intracellular uptake and behavior of two types zinc protoporphyrin (ZnPP) micelles, SMA-ZnPP and PEG-ZnPP as anticancer agents; unique intracellular disintegration of SMA micelles. Journal of Controlled Release, 2011, 155, 367-375.	4.8	46
93	Augmentation of EPR Effect and Efficacy of Anticancer Nanomedicine by Carbon Monoxide Generating Agents. Pharmaceutics, 2019, 11, 343.	2.0	46
94	Nitric Oxide Generation from Hydroxyurea via Copper-catalyzed Peroxidation and Implications for Pharmacological Actions of Hydroxyurea. Japanese Journal of Cancer Research, 1997, 88, 1199-1204.	1.7	43
95	Identification of heat shock protein 32 (Hsp32) as a novel survival factor and therapeutic target in neoplastic mast cells. Blood, 2007, 110, 661-669.	0.6	43
96	Therapeutic Potential of Pegylated Hemin for Reactive Oxygen Species-Related Diseases via Induction of Heme Oxygenase-1: Results from a Rat Hepatic Ischemia/Reperfusion Injury Model. Journal of Pharmacology and Experimental Therapeutics, 2011, 339, 779-789.	1.3	43
97	Comparison between linear and star-like HPMA conjugated pirarubicin (THP) in pharmacokinetics and antitumor activity in tumor bearing mice. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 90, 90-96.	2.0	43
98	Synthesis and evaluation of poly(styrene-co-maleic acid) micellar nanocarriers for the delivery of tanespimycin. International Journal of Pharmaceutics, 2011, 420, 111-117.	2.6	41
99	Styrene Maleic Acid-Pirarubicin Disrupts Tumor Microcirculation and Enhances the Permeability of Colorectal Liver Metastases. Journal of Vascular Research, 2009, 46, 218-228.	0.6	40
100	Enhanced Bacterial Tumor Delivery by Modulating the EPR Effect and Therapeutic Potential of Lactobacillus casei. Journal of Pharmaceutical Sciences, 2014, 103, 3235-3243.	1.6	40
101	Tumor-targeted chemotherapy with SMANCS in lipiodol for renal cell carcinoma: longer survival with larger size tumors. Urology, 2000, 55, 495-500.	0.5	38
102	S-Nitrosylated human Î±1-protease inhibitor. BBA - Proteins and Proteomics, 2000, 1477, 90-97.	2.1	37
103	Combined targeting of STAT3 and STAT5: a novel approach to overcome drug resistance in chronic myeloid leukemia. Haematologica, 2017, 102, 1519-1529.	1.7	36
104	N-(2-hydroxypropyl)methacrylamide polymer conjugated pyropheophorbide-a, a promising tumor-targeted theranostic probe for photodynamic therapy and imaging. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 130, 165-176.	2.0	36
105	Free radical generation from heterocyclic amines by cytochrome b5 reductase in the presence of NADH. Cancer Letters, 1999, 143, 117-121.	3.2	35
106	HSP32 (HO-1) inhibitor, copoly(styrene-maleic acid)-zinc protoporphyrin IX, a water-soluble micelle as anticancer agent: In vitro and in vivo anticancer effect. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 81, 540-547.	2.0	34
107	Pronounced Cellular Uptake of Pirarubicin versus That of Other Anthracyclines: Comparison of HPMA Copolymer Conjugates of Pirarubicin and Doxorubicin. Molecular Pharmaceutics, 2016, 13, 4106-4115.	2.3	34
108	pH-sensitive polymeric cisplatin-ion complex with styrene-maleic acid copolymer exhibits tumor-selective drug delivery and antitumor activity as a result of the enhanced permeability and retention effect. Colloids and Surfaces B: Biointerfaces, 2016, 138, 128-137.	2.5	34

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109	Factors affecting the dynamics and heterogeneity of the EPR effect: pathophysiological and pathoanatomic features, drug formulations and physicochemical factors. Expert Opinion on Drug Delivery, 2022, 19, 199-212.	2.4	33
110	Enhanced Tumor Localization of Monoclonal Antibody by Treatment with Kininase II Inhibitor and Angiotensin II. Japanese Journal of Cancer Research, 1992, 83, 240-243.	1.7	31
111	Formation of abasic sites in DNA by t-butyl peroxyl radicals: implication for potent genotoxicity of lipid peroxyl radicals. Cancer Letters, 2000, 156, 51-55.	3.2	30
112	Photodynamic therapy and imaging based on tumor-targeted nanoprobe, polymer-conjugated zinc protoporphyrin. Future Science OA, 2015, 1, FSO4.	0.9	30
113	Role of Bradykinin in Microbial Infection: Enhancement of Septicemia by Microbial Proteases and Kinin. , 1993, 42, 159-165.		29
114	SMAâ€"copolymer conjugate of AHPP: A polymeric inhibitor of xanthine oxidase with potential antihypertensive effect. Journal of Controlled Release, 2009, 135, 211-217.	4.8	27
115	Protective effect of canolol from oxidative stress-induced cell damage in ARPE-19 cells via an ERK mediated antioxidative pathway. Molecular Vision, 2011, 17, 2040-8.	1.1	27
116	Lymphotropic accumulation of an antitumor antibiotic protein, neocarzinostatin. European Journal of Cancer, 1980, 16, 723-731.	1.0	26
117	Polymer Conjugation to Cu,Zn-SOD and Suppression of Hydroxyl Radical Generation on Exposure to H2O2: Improved Stability of SOD in Vitro and in Vivo. Journal of Bioactive and Compatible Polymers, 1996, 11, 169-190.	0.8	25
118	Polyâ€•S â€nitrosated human albumin enhances the antitumor and antimetastasis effect of bevacizumab, partly by inhibiting autophagy through the generation of nitric oxide. Cancer Science, 2015, 106, 194-200.	1.7	24
119	Vascular permeability enhancing activity of Porphyromonas gingivalis protease in guinea pigs. FEMS Microbiology Letters, 1993, 114, 109-114.	0.7	23
120	Styrene-maleic acid-copolymer conjugated zinc protoporphyrin as a candidate drug for tumor-targeted therapy and imaging. Journal of Drug Targeting, 2016, 24, 399-407.	2.1	23
121	Enhanced intestinal absorption of a hydrophobic polymer-conjugated protein drug, smancs, in an oily formulation. Pharmaceutical Research, 1990, 07, 852-855.	1.7	22
122	Phosphorylcholine-Grafted Molecular Bottlebrushâ€"Doxorubicin Conjugates: High Structural Stability, Long Circulation in Blood, and Efficient Anticancer Activity. Biomacromolecules, 2021, 22, 1186-1196.	2.6	22
123	Protective Role of<scp>d</scp>-Amino Acid Oxidase against Staphylococcus aureus Infection. Infection and Immunity, 2012, 80, 1546-1553.	1.0	21
124	Effect of different chemical bonds in pegylation of zinc protoporphyrin that affects drug release, intracellular uptake, and therapeutic effect in the tumor. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 89, 259-270.	2.0	21
125	Polymer-conjugated glucosamine complexed with boric acid shows tumor-selective accumulation and simultaneous inhibition of glycolysis. Biomaterials, 2021, 269, 120631.	5.7	21
126	Metamorphosis of Neocarzinostatin to SMANCS: Chemistry, Biology, Pharmacology, and Clinical Effect of the First Prototype Anticancer Polymer Therapeutic. , 1997, , 227-267.		20

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127	Targeting Chemotherapy of Hepatocellular Carcinoma. , 1987, , 343-352.		20
128	Targeting of heat-shock protein 32/heme oxygenase-1 in canine mastocytoma cells is associated with reduced growth and induction of apoptosis. Experimental Hematology, 2008, 36, 1461-1470.	0.2	19
129	Research Spotlight: Emergence of EPR effect theory and development of clinical applications for cancer therapy. Therapeutic Delivery, 2014, 5, 627-630.	1.2	19
130	Water soluble PEG-conjugate of xanthine oxidase inhibitor, PEGâ€"AHPP micelles, as a novel therapeutic for ROS related inflammatory bowel diseases. Journal of Controlled Release, 2016, 223, 188-196.	4.8	19
131	Pathophysiological Effects of High-Output Production of Nitric Oxide. , 2000, , 733-745.		19
132	Identification of heat shock protein 32 (Hsp32) as a novel target in acute lymphoblastic leukemia. Oncotarget, 2014, 5, 1198-1211.	0.8	19
133	Superior Penetration and Cytotoxicity of HPMA Copolymer Conjugates of Pirarubicin in Tumor Cell Spheroid. Molecular Pharmaceutics, 2019, 16, 3452-3459.	2.3	17
134	Singlet oxygen phosphorescence detection in vivo identifies PDT-induced anoxia in solid tumors. Photochemical and Photobiological Sciences, 2019, 18, 1304-1314.	1.6	17
135	Tumor-targeted chemotherapy with lipid contrast medium and macromolecular anticancer drug (SMANCS) for renal cell carcinoma. Urology, 1991, 37, 288-294.	0.5	16
136	Generation of drugâ€resistant mutants of <i>Helicobacter pylori</i> in the presence of peroxynitrite, a derivative of nitric oxide, at pathophysiological concentration. Microbiology and Immunology, 2009, 53, 1-7.	0.7	15
137	Tissue protective effect of xanthine oxidase inhibitor, polymer conjugate of (styreneâ€"maleic acid) Tj ETQq1 1 0.784314 rgBT /Overlo injury. Experimental Biology and Medicine, 2010, 235, 487-496.	1.1	15
138	Comparison of the pharmacological and biological properties of HPMA copolymer-pirarubicin conjugates: A single-chain copolymer conjugate and its biodegradable tandem-diblock copolymer conjugate. European Journal of Pharmaceutical Sciences, 2017, 106, 10-19.	1.9	15
139	Extracts of Phellinus linteus, Bamboo (Sasa senanensis) Leaf and Chaga Mushroom (Inonotus) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.7	15
140	Tumor-Targeted Macromolecular Drug Delivery Based on the Enhanced Permeability and Retention Effect in Solid Tumor. , 2009, , 93-120.		14
141	HPMA copolymer conjugate with pirarubicin: In vitro and ex vivo stability and drug release study. International Journal of Pharmaceutics, 2018, 536, 108-115.	2.6	14
142	EPR-Effect Enhancers Strongly Potentiate Tumor-Targeted Delivery of Nanomedicines to Advanced Cancers: Further Extension to Enhancement of the Therapeutic Effect. Journal of Personalized Medicine, 2021, 11, 487.	1.1	14
143	Changes in the Microvascular Architecture of Colorectal Liver Metastases Following the Administration of SMANCS/Lipiodol. Journal of Surgical Research, 2002, 103, 47-54.	0.8	13
144	Enhancement of Tumor-Targeted Delivery of Bacteria with Nitroglycerin Involving Augmentation of the EPR Effect. Methods in Molecular Biology, 2016, 1409, 9-23.	0.4	12

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145	Stimulation of non-specific resistance to tumors in the mouse using a poly(maleic-acid-styrene)-conjugated neocarzinostatin. Cancer Immunology, Immunotherapy, 1989, 30, 97-104.	2.0	11
146	Synthesis and evaluation of styrene-maleic acid copolymer conjugated amphotericin B. International Journal of Pharmaceutics, 2019, 572, 118719.	2.6	11
147	Development of an amphotericin B micellar formulation using cholesterol-conjugated styrene-maleic acid copolymer for enhancement of blood circulation and antifungal selectivity. International Journal of Pharmaceutics, 2020, 589, 119813.	2.6	10
148	Enhancement by Verapamil of Neocarzinostatin Action on Multidrug-resistant Chinese Hamster Ovary Cells: Possible Release of Nonprotein Chromophore in Cells. Japanese Journal of Cancer Research, 1991, 82, 351-356.	1.7	9
149	PEGylated <scp>d</scp>-amino acid oxidase restores bactericidal activity of neutrophils in chronic granulomatous disease via hypochlorite. Experimental Biology and Medicine, 2012, 237, 703-708.	1.1	7
150	Overcoming barriers for tumor-targeted drug delivery. , 2020, , 41-58.		7
151	Unraveling the role of Intralipid in suppressing off-target delivery and augmenting the therapeutic effects of anticancer nanomedicines. Acta Biomaterialia, 2021, 126, 372-383.	4.1	7
152	Controlling oxidative stress: therapeutic and delivery strategies. Advanced Drug Delivery Reviews, 2009, 61, 285-286.	6.6	6
153	Development of a Selective Tumor-Targeted Drug Delivery System: Hydroxypropyl-Acrylamide Polymer-Conjugated Pirarubicin (P-THP) for Pediatric Solid Tumors. Cancers, 2021, 13, 3698.	1.7	5
154	4-Amino-6-hydroxypyrazolo [3,4-d]pyrimidine (AHPP) conjugated PEG micelles: Water soluble polymeric xanthine oxidase inhibitor. Journal of Drug Targeting, 2011, 19, 954-966.	2.1	4
155	Treatment with Polyethylene Glycolâ€"Conjugated Fungal d-Amino Acid Oxidase Reduces Lung Inflammation in a Mouse Model of Chronic Granulomatous Disease. Inflammation, 2022, 45, 1668-1679.	1.7	4
156	Weak Interplay between Hydrophobic Part of Water-soluble Polymers and Serum Protein. Chemistry Letters, 2021, 50, 1392-1393.	0.7	3
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