William F Elmquist

List of Publications by Year
in descending order

115 papers	7,748 citations	41344 49 h-index	53230 85 g-index
118 all docs	118 docs citations	118 times ranked	8506 citing authors

#	Article	IF	Citations
1	Preclinical modeling in glioblastoma patient-derived xenograft (GBM PDX) xenografts to guide clinical development of lisavanbulinâ€”a novel tumor checkpoint controller targeting microtubules. Neuro-Oncology, 2022, 24, 384-395.	1.2	7
2	Central Nervous System Distribution of an Opioid Agonist Combination with Synergistic Activity. Journal of Pharmacology and Experimental Therapeutics, 2022, 380, 34-46.	2.5	2
3	The influence of the bloodâ€“brain barrier in the treatment of brain tumours. Journal of Internal Medicine, 2022, 292, 3-30.	6.0	23
4	Brain barriers virtual: an interim solution or future opportunity?. Fluids and Barriers of the CNS, 2022, 19, 19.	5.0	0
5	To Measure is to Know: A Perspective on the Work of Dr. Margareta Hammarlund-Udenaes. Pharmaceutical Research, 2022, , 1.	3.5	1
6	Central Nervous System Delivery of the Catalytic Subunit of DNA-Dependent Protein Kinase Inhibitor Peposertib as Radiosensitizer for Brain Metastases. Journal of Pharmacology and Experimental Therapeutics, 2022, 381, 217-228.	2.5	7
7	Factors Influencing Luciferase-Based Bioluminescent Imaging in Preclinical Models of Brain Tumor. Drug Metabolism and Disposition, 2022, 50, 277-286.	3.3	6
8	Activation of STAT3 through combined SRC and EGFR signaling drives resistance to a mitotic kinesin inhibitor in glioblastoma. Cell Reports, 2022, 39, 110991.	6.4	5
9	Abstract 2598: AZD1390 radio-sensitizes p53-mutant GBM via disrupting homology directed DNA repair. Cancer Research, 2022, 82, 2598-2598.	0.9	0
10	<i>In Vivo</i> Efficacy of Tesevatinib in <i>EGFR</i>-Amplified Patient-Derived Xenograft Glioblastoma Models May Be Limited by Tissue Binding and Compensatory Signaling. Molecular Cancer Therapeutics, 2021, 20, 1009-1018.	4.1	11
11	Heterogeneous delivery across the blood-brain barrier limits the efficacy of an EGFR-targeting antibody drug conjugate in glioblastoma. Neuro-Oncology, 2021, 23, 2042-2053.	1.2	37
12	Efflux Limits Tumor Drug Delivery Despite Disrupted BBB. Trends in Pharmacological Sciences, 2021, 42, 426-428.	8.7	9
13	Lisdexamfetamine Pharmacokinetic Comparison Between Patients Who Underwent Roux-en-Y Gastric Bypass and Nonsurgical Controls. Obesity Surgery, 2021, 31, 4289-4294.	2.1	2
14	Preclinical Risk Evaluation of Normal Tissue Injury With Novel Radiosensitizers. International Journal of Radiation Oncology Biology Physics, 2021, 111, e54-e62.	0.8	7
15	Changes in the vasculature of human brain tumors: Implications for treatment. Neuro-Oncology, 2021, 23, 1995-1997.	1.2	2
16	Brain Distribution of Berzosertib: An Ataxia Telangiectasia and Rad3-Related Protein Inhibitor for the Treatment of Glioblastoma. Journal of Pharmacology and Experimental Therapeutics, 2021, 379, 343-357.	2.5	7
17	Methods for intratumoral microdialysis probe targeting and validation in murine brain tumor models. Journal of Neuroscience Methods, 2021, 363, 109321.	2.5	3
18	Influence of transporters in treating cancers in the CNS. , 2020, , 277-301.		2

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19	Addressing BBB Heterogeneity: A New Paradigm for Drug Delivery to Brain Tumors. Pharmaceutics, 2020, 12, 1205.	4.5	31
20	Enhancing Brain Retention of a KIF11 Inhibitor Significantly Improves its Efficacy in a Mouse Model of Glioblastoma. Scientific Reports, 2020, 10, 6524.	3.3	20
21	Comments on: â€œSynergistic activity of mTORC1/2 kinase and MEK inhibitors suppresses pediatric low-grade glioma tumorigenicity and vascularityâ€. Neuro-Oncology, 2020, 22, 1404-1405.	1.2	0
22	Baseline requirements for novel agents being considered for phase II/III brain cancer efficacy trials: conclusions from the Adult Brain Tumor Consortiumâ€™s first workshop on CNS drug delivery. Neuro-Oncology, 2020, 22, 1422-1424.	1.2	22
23	Localized Metabolomic Gradients in Patient-Derived Xenograft Models of Glioblastoma. Cancer Research, 2020, 80, 1258-1267.	0.9	67
24	Brain Distributional Kinetics of a Novel MDM2 Inhibitor SAR405838: Implications for Use in Brain Tumor Therapy. Drug Metabolism and Disposition, 2019, 47, 1403-1414.	3.3	13
25	Brain Distribution of a Panel of Epidermal Growth Factor Receptor Inhibitors Using Cassette Dosing in Wild-Type and <i>Abcb1/Abcg2</i>-Deficient Mice. Drug Metabolism and Disposition, 2019, 47, 393-404.	3.3	38
26	Brain Distribution and Active Efflux of Three panRAF Inhibitors: Considerations in the Treatment of Melanoma Brain Metastases. Journal of Pharmacology and Experimental Therapeutics, 2019, 368, 446-461.	2.5	15
27	E6201, an intravenous MEK1 inhibitor, achieves an exceptional response in BRAF V600E-mutated metastatic malignant melanoma with brain metastases. Investigational New Drugs, 2019, 37, 636-645.	2.6	22
28	Brain Distribution of a Novel MEK Inhibitor E6201: Implications in the Treatment of Melanoma Brain Metastases. Drug Metabolism and Disposition, 2018, 46, 658-666.	3.3	24
29	Pharmacokinetic Assessment of Cooperative Efflux of the Multitargeted Kinase Inhibitor Ponatinib Across the Blood-Brain Barrier. Journal of Pharmacology and Experimental Therapeutics, 2018, 365, 249-261.	2.5	30
30	Is the bloodâ€“brain barrier really disrupted in all glioblastomas? A critical assessment of existing clinical data. Neuro-Oncology, 2018, 20, 184-191.	1.2	443
31	Integrated mapping of pharmacokinetics and pharmacodynamics in a patient-derived xenograft model of glioblastoma. Nature Communications, 2018, 9, 4904.	12.8	62
32	Efficacy of the MDM2 Inhibitor SAR405838 in Glioblastoma Is Limited by Poor Distribution Across the Bloodâ€“Brain Barrier. Molecular Cancer Therapeutics, 2018, 17, 1893-1901.	4.1	37
33	Barriers to Effective Drug Treatment for Brain Metastases: A Multifactorial Problem in the Delivery of Precision Medicine. Pharmaceutical Research, 2018, 35, 177.	3.5	53
34	Drug delivery to melanoma brain metastases: Can current challenges lead to new opportunities?. Pharmacological Research, 2017, 123, 10-25.	7.1	31
35	Heterogeneous Binding and Central Nervous System Distribution of the Multitargeted Kinase Inhibitor Ponatinib Restrict Orthotopic Efficacy in a Patient-Derived Xenograft Model of Glioblastoma. Journal of Pharmacology and Experimental Therapeutics, 2017, 363, 136-147.	2.5	25
36	Restricted Delivery of Talazoparib Across the Bloodâ€“Brain Barrier Limits the Sensitizing Effects of PARP Inhibition on Temozolomide Therapy in Glioblastoma. Molecular Cancer Therapeutics, 2017, 16, 2735-2746.	4.1	58

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37	Radiogenomics to characterize regional genetic heterogeneity in glioblastoma. Neuro-Oncology, 2017, 19, 128-137.	1.2	170
38	Challenges in the Delivery of Therapies to Melanoma Brain Metastases. Current Pharmacology Reports, 2016, 2, 309-325.	3.0	18
39	ABCG2 and ABCB1 Limit the Efficacy of Dasatinib in a PDGF-Bâ€"Driven Brainstem Glioma Model. Molecular Cancer Therapeutics, 2016, 15, 819-829.	4.1	49
40	Factors Influencing the Central Nervous System Distribution of a Novel Phosphoinositide 3-Kinase/Mammalian Target of Rapamycin Inhibitor GSK2126458: Implications for Overcoming Resistance with Combination Therapy for Melanoma Brain Metastases. Journal of Pharmacology and Experimental Therapeutics, 2016, 356, 251-259.	2.5	18
41	Strategies to improve delivery of anticancer drugs across the bloodâ€"brain barrier to treat glioblastoma. Neuro-Oncology, 2016, 18, 27-36.	1.2	210
42	Impact of BRAF mutation and BRAF inhibition on melanoma brain metastases. Melanoma Research, 2015, 25, 75-79.	1.2	27
43	Improving drug delivery to primary and metastatic brain tumors: Strategies to overcome the bloodâ€"brain barrier. Clinical Pharmacology and Therapeutics, 2015, 97, 336-346.	4.7	104
44	Decreased affinity for efflux transporters increases brain penetrance and molecular targeting of a PI3K/mTOR inhibitor in a mouse model of glioblastoma. Neuro-Oncology, 2015, 17, 1210-9.	1.2	26
45	The Efficacy of the Wee1 Inhibitor MK-1775 Combined with Temozolomide Is Limited by Heterogeneous Distribution across the Bloodâ€"Brain Barrier in Glioblastoma. Clinical Cancer Research, 2015, 21, 1916-1924.	7.0	86
46	Unsanctifying the sanctuary: challenges and opportunities with brain metastases. Neuro-Oncology, 2015, 17, 639-651.	1.2	62
47	Efficacy of PARP Inhibitor Rucaparib in Orthotopic Glioblastoma Xenografts Is Limited by Ineffective Drug Penetration into the Central Nervous System. Molecular Cancer Therapeutics, 2015, 14, 2735-2743.	4.1	75
48	Efflux Transporters at the Blood-Brain Barrier Limit Delivery and Efficacy of Cyclin-Dependent Kinase 4/6 Inhibitor Palbociclib (PD-0332991) in an Orthotopic Brain Tumor Model. Journal of Pharmacology and Experimental Therapeutics, 2015, 355, 264-271.	2.5	84
49	Multi-Parametric MRI and Texture Analysis to Visualize Spatial Histologic Heterogeneity and Tumor Extent in Glioblastoma. PLoS ONE, 2015, 10, e0141506.	2.5	104
50	Factors Influencing the CNS Distribution of a Novel MEK-1/2 Inhibitor: Implications for Combination Therapy for Melanoma Brain Metastases. Drug Metabolism and Disposition, 2014, 42, 1292-1300.	3.3	89
51	Bayesian Approach to Estimate AUC, Partition Coefficient and Drug Targeting Index for Studies with Serial Sacrifice Design. Pharmaceutical Research, 2014, 31, 649-659.	3.5	5
52	Sunitinib LCâ€"MS/MS Assay in Mouse Plasma and Brain Tissue: Application in CNS Distribution Studies. Chromatographia, 2013, 76, 1657-1665.	1.3	28
53	Function of the Blood-Brain Barrier and Restriction of Drug Delivery to Invasive Glioma Cells: Findings in an Orthotopic Rat Xenograft Model of Glioma. Drug Metabolism and Disposition, 2013, 41, 33-39.	3.3	139
54	Brain Metastases from Renal Cell Carcinoma in the Era of Tyrosine Kinase Inhibitors. Clinical Genitourinary Cancer, 2013, 11, 155-160.	1.9	42

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55	Saturable Active Efflux by P-Glycoprotein and Breast Cancer Resistance Protein at the Blood-Brain Barrier Leads to Nonlinear Distribution of Elacridar to the Central Nervous System. Journal of Pharmacology and Experimental Therapeutics, 2013, 345, 111-124.	2.5	35
56	Brain Efflux Index To Investigate the Influence of Active Efflux on Brain Distribution of Pemetrexed and Methotrexate. Drug Metabolism and Disposition, 2013, 41, 659-667.	3.3	34
57	Pharmacokinetic Assessment of Efflux Transport in Sunitinib Distribution to the Brain. Journal of Pharmacology and Experimental Therapeutics, 2013, 347, 755-764.	2.5	66
58	Mechanisms Limiting Distribution of the Threonine-Protein Kinase B-RaF^{V600E} Inhibitor Dabrafenib to the Brain: Implications for the Treatment of Melanoma Brain Metastases. Journal of Pharmacology and Experimental Therapeutics, 2013, 344, 655-664.	2.5	158
59	Development and Evaluation of a Novel Microemulsion Formulation of Elacridar to Improve its Bioavailability. Journal of Pharmaceutical Sciences, 2013, 102, 1343-1354.	3.3	40
60	Brain Distribution and Bioavailability of Elacridar after Different Routes of Administration in the Mouse. Drug Metabolism and Disposition, 2012, 40, 1612-1619.	3.3	51
61	Brain Distribution of Cediranib Is Limited by Active Efflux at the Blood-Brain Barrier. Journal of Pharmacology and Experimental Therapeutics, 2012, 341, 386-395.	2.5	37
62	Active Efflux of Dasatinib from the Brain Limits Efficacy against Murine Glioblastoma: Broad Implications for the Clinical Use of Molecularly Targeted Agents. Molecular Cancer Therapeutics, 2012, 11, 2183-2192.	4.1	85
63	Impact of P-Glycoprotein (ABCB1) and Breast Cancer Resistance Protein (ABCG2) on the Brain Distribution of a Novel BRAF Inhibitor: Vemurafenib (PLX4032). Journal of Pharmacology and Experimental Therapeutics, 2012, 342, 33-40.	2.5	151
64	Quantitative Proteomics of Transporter Expression in Brain Capillary Endothelial Cells Isolated from P-Glycoprotein (P-gp), Breast Cancer Resistance Protein (Bcrp), and P-gp/Bcrp Knockout Mice. Drug Metabolism and Disposition, 2012, 40, 1164-1169.	3.3	112
65	Insight into the Cooperation of P-glycoprotein (ABCB1) and Breast Cancer Resistance Protein (ABCG2) at the Bloodâ€"Brain Barrier: A Case Study Examining Sorafenib Efflux Clearance. Molecular Pharmaceutics, 2012, 9, 678-684.	4.6	65
66	Cardiac Responses to the Intrapericardial Delivery of Metoprolol: Targeted Delivery Compared to Intravenous Administration. Journal of Cardiovascular Translational Research, 2012, 5, 535-540.	2.4	9
67	OCT2 and MATE1 Provide Bidirectional Agmatine Transport. Molecular Pharmaceutics, 2011, 8, 133-142.	4.6	54
68	The Role of the Breast Cancer Resistance Protein (<i>ABCG2</i>) in the Distribution of Sorafenib to the Brain. Journal of Pharmacology and Experimental Therapeutics, 2011, 336, 223-233.	2.5	151
69	Determination of cediranib in mouse plasma and brain tissue using high-performance liquid chromatographyâ€"mass spectrometry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2011, 879, 3812-3817.	2.3	14
70	pH-Dependent Transport of Pemetrexed by Breast Cancer Resistance Protein. Drug Metabolism and Disposition, 2011, 39, 1478-1485.	3.3	28
71	Delivery of molecularly targeted therapy to malignant glioma, a disease of the whole brain. Expert Reviews in Molecular Medicine, 2011, 13, e17.	3.9	266
72	Breast Cancer Resistance Protein and P-Glycoprotein in Brain Cancer: Two Gatekeepers Team Up. Current Pharmaceutical Design, 2011, 17, 2793-2802.	1.9	216

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73	Utilizing transmembrane convection to enhance solute sampling and delivery by microdialysis: Theory and in vitro validation. Journal of Membrane Science, 2010, 348, 131-149.	8.2	15
74	Distribution of Gefitinib to the Brain Is Limited by P-glycoprotein (ABCB1) and Breast Cancer Resistance Protein (ABCG2)-Mediated Active Efflux. Journal of Pharmacology and Experimental Therapeutics, 2010, 334, 147-155.	2.5	221
75	Organic Cation Uptake Is Enhanced in bcrp1-Transfected MDCKII Cells. Molecular Pharmaceutics, 2010, 7, 138-145.	4.6	7
76	Substrate-Dependent Breast Cancer Resistance Protein (Bcrp1/Abcg2)-Mediated Interactions: Consideration of Multiple Binding Sites in in Vitro Assay Design. Drug Metabolism and Disposition, 2009, 37, 560-570.	3.3	69
77	P-glycoprotein and Breast Cancer Resistance Protein Influence Brain Distribution of Dasatinib. Journal of Pharmacology and Experimental Therapeutics, 2009, 330, 956-963.	2.5	181
78	Investigation of the micellar effect of pluronic P85 on P-glycoprotein inhibition: Cell accumulation and equilibrium dialysis studies. Journal of Pharmaceutical Sciences, 2009, 98, 4170-4190.	3.3	26
79	Interactions of pluronic block copolymers on Pâ€gp efflux activity: Experience with HIVâ€1 protease inhibitors. Journal of Pharmaceutical Sciences, 2008, 97, 5421-5433.	3.3	51
80	Investigation of the Role of Breast Cancer Resistance Protein (Bcrp/<i>Abcg2</i>) on Pharmacokinetics and Central Nervous System Penetration of Abacavir and Zidovudine in the Mouse. Drug Metabolism and Disposition, 2008, 36, 1476-1484.	3.3	67
81	P-glycoprotein-Mediated Active Efflux of the Anti-HIV1 Nucleoside Abacavir Limits Cellular Accumulation and Brain Distribution. Drug Metabolism and Disposition, 2007, 35, 2076-2085.	3.3	83
82	Mitoxantrone Permeability in MDCKII Cells Is Influenced by Active Influx Transport. Molecular Pharmaceutics, 2007, 4, 475-483.	4.6	16
83	AAPS-FDA workshop white paper: Microdialysis principles, application, and regulatory perspectives report from the Joint AAPS-FDA Workshop, November 4â€“5, 2005, Nashville, TN. AAPS Journal, 2007, 9, E48-E59.	4.4	16
84	Abcg2/Bcrp1 Mediates the Polarized Transport of Antiretroviral Nucleosides Abacavir and Zidovudine. Drug Metabolism and Disposition, 2007, 35, 1165-1173.	3.3	84
85	Novel Delivery System Enhances Efficacy of Antiretroviral Therapy in Animal Model for HIV-1 Encephalitis. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 1033-1042.	4.3	67
86	Characterization of an in vitro cell culture bioreactor system to evaluate anti-neoplastic drug regimens. Breast Cancer Research and Treatment, 2006, 96, 217-225.	2.5	14
87	Development of a Respirable, Sustained Release Microcarrier for 5-Fluorouracil II: In Vitro and In Vivo Optimization of Lipid Coated Nanoparticles. Journal of Pharmaceutical Sciences, 2006, 95, 1127-1143.	3.3	38
88	Development of a Respirable, Sustained Release Microcarrier for 5-Fluorouracil I: In Vitro Assessment of Liposomes, Microspheres, and Lipid Coated Nanoparticles. Journal of Pharmaceutical Sciences, 2006, 95, 1114-1126.	3.3	87
89	Measurement of drug release from microcarriers by microdialysis. Journal of Pharmaceutical Sciences, 2005, 94, 1456-1466.	3.3	29
90	Quantitative Assessment of HIV-1 Protease Inhibitor Interactions with Drug Efflux Transporters in the Bloodâ€“Brain Barrier. Pharmaceutical Research, 2005, 22, 1259-1268.	3.5	66

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91	Distribution of the Novel Antifolate Pemetrexed to the Brain. Journal of Pharmacology and Experimental Therapeutics, 2005, 315, 222-229.	2.5	43
92	Plasma Membrane Localization of Multidrug Resistance-Associated Protein Homologs in Brain Capillary Endothelial Cells. Journal of Pharmacology and Experimental Therapeutics, 2004, 311, 449-455.	2.5	168
93	Distribution kinetics of a micelle-forming block copolymer Pluronic P85. Journal of Controlled Release, 2004, 100, 389-397.	9.9	113
94	Sensitization of cells overexpressing multidrug-resistant proteins by pluronic P85. Pharmaceutical Research, 2003, 20, 1581-1590.	3.5	115
95	Drug efflux transporters in the CNS. Advanced Drug Delivery Reviews, 2003, 55, 83-105.	13.7	273
96	Separation methods that are capable of revealing bloodâ€"brain barrier permeability. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2003, 797, 241-254.	2.3	28
97	Distribution of STI-571 to the Brain Is Limited by P-Glycoprotein-Mediated Efflux. Journal of Pharmacology and Experimental Therapeutics, 2003, 304, 1085-1092.	2.5	248
98	Transport of Fluorescein in MDCKII-MRP1 Transfected Cells and mrp1-Knockout Mice. Biochemical and Biophysical Research Communications, 2001, 284, 863-869.	2.1	70
99	The use of transgenic mice in pharmacokinetic and pharmacodynamic studies. Journal of Pharmaceutical Sciences, 2001, 90, 422-435.	3.3	10
100	Effect of probenecid on fluorescein transport in the central nervous system using in vitro and in vivo models. Pharmaceutical Research, 2001, 18, 1542-1549.	3.5	48
101	Microdialysis in the study of drug transporters in the CNS. Advanced Drug Delivery Reviews, 2000, 45, 295-307.	13.7	54
102	Expression of various multidrug resistance-associated protein (MRP) homologues in brain microvessel endothelial cells. Brain Research, 2000, 876, 148-153.	2.2	228
103	Cyclosporin a has low potency as a calcineurin inhibitor in cells expressing high levels of P-glycoprotein. Life Sciences, 1998, 62, 2441-2448.	4.3	10
104	Expression of Multidrug Resistance-Associated Protein (MRP) in Brain Microvessel Endothelial Cells. Biochemical and Biophysical Research Communications, 1998, 243, 816-820.	2.1	186
105	Pharmacological characterization of LY335979: A potent cyclopropyldibenzosuberane modulator of P-glycoprotein. Advances in Enzyme Regulation, 1997, 37, 335-347.	2.6	77
106	Application of microdialysis in pharmacokinetic studies. Pharmaceutical Research, 1997, 14, 267-288.	3.5	274
107	The design and validation of a novel intravenous microdialysis probe: application to fluconazole pharmacokinetics in the freely-moving rat model. Pharmaceutical Research, 1997, 14, 1455-1460.	3.5	22
108	Use of rhodamine 123 to examine the functional activity of P-glycoprotein in primary cultured brain microvessel endothelial cell monolayers. Life Sciences, 1996, 59, 1521-1531.	4.3	121

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109	The binding of cyclosporin A to human plasma: an in vitro microdialysis study. Pharmaceutical Research, 1996, 13, 622-627.	3.5	35
110	Comparison of the transport characteristics of D- and L-methionine in a human intestinal epithelial model (Caco-2) and in a perfused rat intestinal model. Pharmaceutical Research, 1994, 11, 1771-1776.	3.5	24
111	Transsynovial drug distribution: synovial mean transit time of diclofenac and other nonsteroidal antiinflammatory drugs. Pharmaceutical Research, 1994, 11, 1689-1697.	3.5	29
112	The relationship between urine and plasma concentrations of carbamazepine: implications for therapeutic drug monitoring. Pharmaceutical Research, 1991, 08, 282-284.	3.5	5
113	Probenecid inhibits the metabolic and renal clearances of zidovudine (AZT) in human volunteers. Pharmaceutical Research, 1990, 07, 411-417.	3.5	67
114	Liquid chromatographic analysis of di(2-ethylhexyl) phthalate: application to pharmacokinetic studies in the mongrel dog. Pharmaceutical Research, 1988, 05, 10-15.	3.5	2
115	Pharmacokinetics of Propylene Glycol in Humans During Multiple Dosing Regimens. Journal of Pharmaceutical Sciences, 1985, 74, 876-879.	3.3	45