David E Smith

List of Publications by Year
in descending order

102 papers	3,588 citations	117571 34 h-index	155592 55 g-index
102 all docs	102 docs citations	102 times ranked	2760 citing authors

#	Article	IF	Citations
1	Proton-coupled oligopeptide transporter family SLC15: Physiological, pharmacological and pathological implications. Molecular Aspects of Medicine, 2013, 34, 323-336.	2.7	260
2	Peptide and peptide analog transport systems at the blood?CSF barrier. Advanced Drug Delivery Reviews, 2004, 56, 1765-1791.	6.6	145
3	Localization of PEPT1 and PEPT2 proton-coupled oligopeptide transporter mRNA and protein in rat kidney. American Journal of Physiology - Renal Physiology, 1999, 276, F658-F665.	1.3	131
4	Clathrin- and Dynamin-Dependent Endocytic Pathway Regulates Muramyl Dipeptide Internalization and NOD2 Activation. Journal of Immunology, 2009, 182, 4321-4327.	0.4	110
5	Targeted Disruption of Peptide Transporter <i>Pept1</i> Gene in Mice Significantly Reduces Dipeptide Absorption in Intestine. Molecular Pharmaceutics, 2008, 5, 1122-1130.	2.3	106
6	Role of PEPT2 in Peptide/Mimetic Trafficking at the Blood-Cerebrospinal Fluid Barrier: Studies in Rat Choroid Plexus Epithelial Cells in Primary Culture. Journal of Pharmacology and Experimental Therapeutics, 2002, 301, 820-829.	1.3	104
7	Developmental Expression of PEPT1 and PEPT2 in Rat Small Intestine, Colon, and Kidney. Pediatric Research, 2001, 49, 789-795.	1.1	102
8	Targeted Disruption of the PEPT2 Gene Markedly Reduces Dipeptide Uptake in Choroid Plexus. Journal of Biological Chemistry, 2003, 278, 4786-4791.	1.6	86
9	Differential recognition of ACE inhibitors in Xenopus laevis oocytes expressing rat PEPT1 and PEPT2. Pharmaceutical Research, 2000, 17, 526-532.	1.7	85
10	Role and Relevance of Peptide Transporter 2 (PEPT2) in the Kidney and Choroid Plexus: In Vivo Studies with Glycylsarcosine in Wild-Type and PEPT2 Knockout Mice. Journal of Pharmacology and Experimental Therapeutics, 2005, 315, 240-247.	1.3	85
11	Significance and Regional Dependency of Peptide Transporter (PEPT) 1 in the Intestinal Permeability of Glycylsarcosine: In Situ Single-Pass Perfusion Studies in Wild-Type and<i>Pept1</i>Knockout Mice. Drug Metabolism and Disposition, 2010, 38, 1740-1746.	1.7	81
12	Immunolocalization of the Proton-Coupled Oligopeptide Transporter PEPT2 in Developing Rat Brain. Molecular Pharmaceutics, 2004, 1, 248-256.	2.3	79
13	Tubular localization and tissue distribution of peptide transporters in rat kidney. Pharmaceutical Research, 1998, 15, 1244-1249.	1.7	77
14	Role and Relevance of PEPT2 in Drug Disposition, Dynamics, and Toxicity. Drug Metabolism and Pharmacokinetics, 2008, 23, 236-242.	1.1	77
15	Impact of Genetic Knockout of PEPT2 on Cefadroxil Pharmacokinetics, Renal Tubular Reabsorption, and Brain Penetration in Mice. Drug Metabolism and Disposition, 2007, 35, 1209-1216.	1.7	75
16	Influence of genetic knockout of <i>Pept2</i> on the in vivo disposition of endogenous and exogenous carnosine in wild-type and <i>Pept2</i> null mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R986-R991.	0.9	71
17	Steady-state pharmacokinetics of delavirdine in HIV-positive patients: Effect on erythromycin breath test *. Clinical Pharmacology and Therapeutics, 1997, 61, 531-543.	2.3	63
18	Interspecies scaling and prediction of human clearance: comparison of small- and macro-molecule drugs. Xenobiotica, 2011, 41, 972-987.	0.5	63

#	Article	IF	Citations
19	Erythromycin breath test predicts oral clearance of cyclosporine in kidney transplant recipients. Clinical Pharmacology and Therapeutics, 1992, 52, 471-478.	2.3	61
20	Stoichiometry and Kinetics of the High-affinity H+-coupled Peptide Transporter PepT2. Journal of Biological Chemistry, 1999, 274, 2773-2779.	1.6	61
21	Peptide transporter 2 (PEPT2) expression in brain protects against 5â€aminolevulinic acid neurotoxicity. Journal of Neurochemistry, 2007, 103, 2058-2065.	2.1	57
22	Significance of Peptide Transporter 1 in the Intestinal Permeability of Valacyclovir in Wild-Type and <i>PepT1</i> Knockout Mice. Drug Metabolism and Disposition, 2013, 41, 608-614.	1.7	54
23	PEPT2-mediated uptake of neuropeptides in rat choroid plexus. Pharmaceutical Research, 2001, 18, 807-813.	1.7	52
24	SLC15A2 and SLC15A4 Mediate the Transport of Bacterially Derived Di/Tripeptides To Enhance the Nucleotide-Binding Oligomerization Domainâ€"Dependent Immune Response in Mouse Bone Marrowâ€"Derived Macrophages. Journal of Immunology, 2018, 201, 652-662.	0.4	48
25	Carnosine uptake in rat choroid plexus primary cell cultures and choroid plexus whole tissue from PEPT2 null mice. Journal of Neurochemistry, 2004, 89, 375-382.	2.1	44
26	PEPT2-mediated transport of 5-aminolevulinic acid and carnosine in astrocytes. Brain Research, 2006, 1122, 18-23.	1.1	44
27	Regulation and biological role of the peptide/histidine transporter SLC15A3 in Toll-like receptor-mediated inflammatory responses in macrophage. Cell Death and Disease, 2018, 9, 770.	2.7	44
28	Mouse endogenous retroviruses can trigger premature transcriptional termination at a distance. Genome Research, 2012, 22, 870-884.	2.4	43
29	Preliminary investigation into the expression of proton-coupled oligopeptide transporters in neural retina and retinal pigment epithelium (RPE): lack of functional activity in RPE plasma membranes. Pharmaceutical Research, 2003, 20, 1364-1372.	1.7	41
30	Mechanisms of Cefadroxil Uptake in the Choroid Plexus: Studies in Wild-Type and PEPT2 Knockout Mice. Journal of Pharmacology and Experimental Therapeutics, 2004, 308, 462-467.	1.3	39
31	Kinetics, dynamics, and bioavailability of bumetanide in healthy subjects and patients with congestive heart failure. Clinical Pharmacology and Therapeutics, 1988, 44, 487-500.	2.3	38
32	Choroid plexus transport: gene deletion studies. Fluids and Barriers of the CNS, 2011, 8, 26.	2.4	38
33	Functional and Molecular Expression of the Proton-Coupled Oligopeptide Transporters in Spleen and Macrophages from Mouse and Human. Molecular Pharmaceutics, 2013, 10, 1409-1416.	2.3	38
34	Impact of Peptide Transporter 1 on the Intestinal Absorption and Pharmacokinetics of Valacyclovir after Oral Dose Escalation in Wild-Type and <i>PepT1</i> Knockout Mice. Drug Metabolism and Disposition, 2013, 41, 1867-1874.	1.7	37
35	Role of PEPT2 in the Choroid Plexus Uptake of Glycylsarcosine and 5-Aminolevulinic Acid: Studies in Wild-Type and Null Mice. Pharmaceutical Research, 2004, 21, 1680-1685.	1.7	36
36	Kinetics, dynamics, and bioavailability of bumetanide in healthy subjects and patients with chronic renal failure. Clinical Pharmacology and Therapeutics, 1986, 39, 635-645.	2.3	34

#	Article	IF	Citations
37	Influence of Fed-Fasted State on Intestinal PEPT1 Expression and In Vivo Pharmacokinetics of Glycylsarcosine in Wild-Type and Pept1 Knockout Mice. Pharmaceutical Research, 2012, 29, 535-545.	1.7	34
38	Transport Mechanisms of Carnosine in SKPT Cells: Contribution of Apical and Basolateral Membrane Transporters. Pharmaceutical Research, 2009, 26, 172-181.	1.7	32
39	Selective radioprotection of hepatocytes by systemic and portal vein infusions of amifostine in a rat liver tumor model. International Journal of Radiation Oncology Biology Physics, 2001, 50, 473-478.	0.4	31
40	Distribution of Glycylsarcosine and Cefadroxil among Cerebrospinal Fluid, Choroid Plexus, and Brain Parenchyma after Intracerebroventricular Injection is Markedly Different between Wild-Type and Pept2 Null Mice. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 250-261.	2.4	31
41	Competitive inhibition of glycylsarcosine transport by enalapril in rabbit renal brush border membrane vesicles: interaction of ACE inhibitors with high-affinity H+/peptide symporter. Pharmaceutical Research, 1999, 16, 609-615.	1.7	29
42	PEPT2 (Slc15a2)-Mediated Unidirectional Transport of Cefadroxil from Cerebrospinal Fluid into Choroid Plexus. Journal of Pharmacology and Experimental Therapeutics, 2005, 315, 1101-1108.	1.3	29
43	Peptide Transporter 1 Is Responsible for Intestinal Uptake of the Dipeptide Glycylsarcosine: Studies in Everted Jejunal Rings from Wild-type and Pept1 Null Mice. Journal of Pharmaceutical Sciences, 2011, 100, 767-774.	1.6	28
44	[11C]Glycylsarcosine: synthesis and in vivo evaluation as a PET tracer of PepT2 transporter function in kidney of PepT2 null and wild-type mice. Bioorganic and Medicinal Chemistry, 2005, 13, 2993-3001.	1.4	27
45	Relevance of PepT1 in the Intestinal Permeability and Oral Absorption of Cefadroxil. Pharmaceutical Research, 2013, 30, 1017-1025.	1.7	27
46	Revisiting atenolol as a low passive permeability marker. Fluids and Barriers of the CNS, 2017, 14, 30.	2.4	24
47	Enhanced antinociceptive response to intracerebroventricular kyotorphin in <i>Pept2</i> null mice. Journal of Neurochemistry, 2009, 109, 1536-1543.	2.1	23
48	Species differences in the pharmacokinetics of cefadroxil as determined in wildtype and humanized PepT1 mice. Biochemical Pharmacology, 2016, 107, 81-90.	2.0	23
49	Expression and regulation of proton-coupled oligopeptide transporters in colonic tissue and immune cells of mice. Biochemical Pharmacology, 2018, 148, 163-173.	2.0	23
50	Determination of the population pharmacokinetic parameters of sustained-release and enteric-coated oral formulations, and the suppository formulation of diclofenac sodium by simultaneous data fitting using NONMEM. , 1998, 19, 169-174.		22
51	Divergent developmental expression and function of the protonâ€coupled oligopeptide transporters PepT2 and PhT1 in regional brain slices of mouse and rat. Journal of Neurochemistry, 2014, 129, 955-965.	2.1	22
52	Development and Characterization of a Novel Mouse Line Humanized for the Intestinal Peptide Transporter <i>PEPT1</i>. Molecular Pharmaceutics, 2014, 11, 3737-3746.	2.3	22
53	Effect of transporter inhibition on the distribution of cefadroxil in rat brain. Fluids and Barriers of the CNS, 2014, 11, 25.	2.4	21
54	Expression and Regulation of the Proton-Coupled Oligopeptide Transporter PhT2 by LPS in Macrophages and Mouse Spleen. Molecular Pharmaceutics, 2014, 11, 1880-1888.	2.3	21

#	Article	IF	Citations
55	Influence of peptide transporter 2 (PEPT2) on the distribution of cefadroxil in mouse brain: A microdialysis study. Biochemical Pharmacology, 2017, 131, 89-97.	2.0	21
56	Stereoselective systemic disposition of ibuprofen enantiomers in the dog. Pharmaceutical Research, 1991, 08, 1186-1190.	1.7	20
57	Effect of Dose Escalation on the In Vivo Oral Absorption and Disposition of Glycylsarcosine in Wild-Type and<i>Pept1</i>Knockout Mice. Drug Metabolism and Disposition, 2011, 39, 2250-2257.	1.7	20
58	Species-Dependent Uptake of Glycylsarcosine but Not Oseltamivir in <i>Pichia pastoris</i> Expressing the Rat, Mouse, and Human Intestinal Peptide Transporter PEPT1. Drug Metabolism and Disposition, 2012, 40, 1328-1335.	1.7	20
59	In Vivo Absorption and Disposition of Cefadroxil After Escalating Oral Doses in Wild-Type and PepT1 Knockout Mice. Pharmaceutical Research, 2013, 30, 2931-2939.	1.7	20
60	Chemical Modulation of the Human Oligopeptide Transporter 1, hPepT1. Molecular Pharmaceutics, 2017, 14, 4685-4693.	2.3	20
61	Functional Characterization of Human Peptide/Histidine Transporter 1 in Stably Transfected MDCK Cells. Molecular Pharmaceutics, 2018, 15, 385-393.	2.3	18
62	Glycyl-l-Glutamine Disposition in Rat Choroid Plexus Epithelial Cells in Primary Culture: Role of PEPT2. Pharmaceutical Research, 2005, 22, 1281-1286.	1.7	17
63	Determination of quinapril and quinaprilat by high-performance liquid chromatography with radiochemical detection, coupled to liquid scintillation counting spectrometry. Biomedical Applications, 1995, 666, 360-367.	1.7	16
64	Regional Pharmacokinetics of Amifostine in Anesthetized Dogs: Role of the Liver, Gastrointestinal Tract, Lungs, and Kidneys. Drug Metabolism and Disposition, 2002, 30, 1425-1430.	1.7	16
65	Effect of Diabetes Mellitus and Insulin on the Regulation of the PepT 1 Symporter in Rat Jejunum. Molecular Pharmaceutics, 2004, 1, 300-308.	2.3	16
66	Role of PEPT2 in glycylsarcosine transport in astrocyte and glioma cultures. Neuroscience Letters, 2006, 396, 225-229.	1.0	16
67	Stereoselective disposition of ibuprofen enantiomers in the isolated perfused rat kidney. Pharmaceutical Research, 1991, 08, 1520-1524.	1.7	15
68	Impact of Intestinal PepT1 on the Kinetics and Dynamics of <i>N</i>-Formyl-Methionyl-Leucyl-Phenylalanine, a Bacterially-Produced Chemotactic Peptide. Molecular Pharmaceutics, 2013, 10, 677-684.	2.3	15
69	Potential Development of Tumor-Targeted Oral Anti-Cancer Prodrugs: Amino Acid and Dipeptide Monoester Prodrugs of Gemcitabine. Molecules, 2017, 22, 1322.	1.7	15
70	The effect of competitive and non-linear plasma protein binding on the stereoselective disposition and metabolic inversion of ibuprofen in healthy subjects. Biopharmaceutics and Drug Disposition, 1994, 15, 545-561.	1.1	14
71	A novel role for PHT1 in the disposition of l -histidine in brain: In vitro slice and in vivo pharmacokinetic studies in wildtype and Pht1 null mice. Biochemical Pharmacology, 2017, 124, 94-102.	2.0	14
72	Evaluating the intestinal and oral absorption of the prodrug valacyclovir in wildtype and huPepT1 transgenic mice. Biochemical Pharmacology, 2018, 155, 1-7.	2.0	14

#	Article	IF	Citations
73	Determination of WR-1065 in human blood by high-performance liquid chromatography following fluorescent derivatization by a maleimide reagent ThioGloâ„¢3. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2005, 819, 161-167.	1.2	13
74	Impact of Lipopolysaccharide-Induced Inflammation on the Disposition of the Aminocephalosporin Cefadroxil. Antimicrobial Agents and Chemotherapy, 2013, 57, 6171-6178.	1.4	13
75	The protonâ€coupled oligopeptide transporter 1 plays a major role in the intestinal permeability and absorption of 5â€aminolevulinic acid. British Journal of Pharmacology, 2016, 173, 167-176.	2.7	13
76	Pharmacokinetics of gemcitabine and its amino acid ester prodrug following intravenous and oral administrations in mice. Biochemical Pharmacology, 2020, 180, 114127.	2.0	13
77	Tubular transport mechanisms of quinapril and quinaprilat in the isolated perfused rat kidney: Effect of organic anions and cations. Journal of Pharmacokinetics and Pharmacodynamics, 1996, 24, 349-368.	0.6	11
78	Disposition of WR-1065 in the liver of tumor-bearing rats following regional vs systemic administration of amifostine. Biopharmaceutics and Drug Disposition, 2004, 25, 27-35.	1.1	9
79	Kyotorphin transport and metabolism in rat and mouse neonatal astrocytes. Brain Research, 2010, 1347, 11-18.	1.1	9
80	Species Differences in Human and Rodent PEPT2-Mediated Transport of Glycylsarcosine and Cefadroxil in <i>Pichia Pastoris</i> Transformants. Drug Metabolism and Disposition, 2017, 45, 130-136.	1.7	9
81	A sensitive liquid chromatography-tandem mass spectrometry method for the quantification of valacyclovir and its metabolite acyclovir in mouse and human plasma. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2018, 1092, 447-452.	1.2	9
82	Chemoproteomic Identification of Serine Hydrolase RBBP9 as a Valacyclovir-Activating Enzyme. Molecular Pharmaceutics, 2020, 17, 1706-1714.	2.3	9
83	Development of acute tolerance to bumetanide: constant-rate infusion studies. Pharmaceutical Research, 1988, 05, 86-91.	1.7	8
84	Glycylsarcosine uptake in rabbit renal brush border membrane vesicles isolated from outer cortex or outer medulla: Evidence for heterogeneous distribution of oligopeptide transporters. AAPS PharmSci, 1999, 1, 1-6.	1.3	8
85	In Silico Absorption Analysis of Valacyclovir in Wildtype and Pept1 Knockout Mice Following Oral Dose Escalation. Pharmaceutical Research, 2017, 34, 2349-2361.	1.7	8
86	Competitive inhibition of p-aminohippurate transport by quinapril in rabbit renal basolateral membrane vesicles. Journal of Pharmacokinetics and Pharmacodynamics, 1998, 26, 269-287.	0.8	7
87	Population pharmacokinetics of mycophenolic acid in lung transplant recipients with and without cystic fibrosis. European Journal of Clinical Pharmacology, 2015, 71, 673-679.	0.8	7
88	In Silico Prediction of the Absorption and Disposition of Cefadroxil in Humans using an Intestinal Permeability Method Scaled from Humanized <i>PepT1</i> Mice. Drug Metabolism and Disposition, 2019, 47, 173-183.	1.7	7
89	Computing Substrate Selectivity in a Peptide Transporter. Cell Chemical Biology, 2016, 23, 211-213.	2.5	6
90	Stability of trimethoprim-sulfamethoxazole injection in five infusion fluids. American Journal of Health-System Pharmacy, 1982, 39, 1681-1684.	0.5	5

#	Article	IF	Citations
91	Semi-Mechanistic Population Pharmacokinetic Modeling of L-Histidine Disposition and Brain Uptake in Wildtype and Pht1 Null Mice. Pharmaceutical Research, 2018, 35, 19.	1.7	5
92	Effect of angiotensin II-induced changes in perfusion flow rate on chlorothiazide transport in the isolated perfused rat kidney. Journal of Pharmacokinetics and Pharmacodynamics, 1992, 20, 195-207.	0.6	4
93	Pharmacokinetics of Pirmenol Enantiomers and Pharmacodynamics of Pirmenol Racemate in Patients with Premature Ventricular Contractions. Journal of Clinical Pharmacology, 1997, 37, 502-513.	1.0	4
94	Population pharmacokinetic modeling of cefadroxil renal transport in wild-type andPept2knockout mice. Xenobiotica, 2016, 46, 342-349.	0.5	4
95	Effect of biphenyl hydrolase-like (BPHL) gene disruption on the intestinal stability, permeability and absorption of valacyclovir in wildtype and Bphl knockout mice. Biochemical Pharmacology, 2018, 156, 147-156.	2.0	4
96	Mechanisms of gemcitabine oral absorption as determined by in situ intestinal perfusions in mice. Biochemical Pharmacology, 2019, 168, 57-64.	2.0	4
97	Characterization of the cellular transport mechanisms for the antiâ€cachexia candidate compound TCMCB07. Journal of Cachexia, Sarcopenia and Muscle, 2020, 11, 1677-1687.	2.9	4
98	Dedication to Professor Leslie Z. Benet: 50ÂYears of Scientific Excellence and Still Going Strong!. Pharmaceutical Research, 2012, 29, 2345-2353.	1.7	3
99	Importance of Peptide Transporter 2 on the Cerebrospinal Fluid Efflux Kinetics of Glycylsarcosine Characterized by Nonlinear Mixed Effects Modeling. Pharmaceutical Research, 2013, 30, 1423-1434.	1.7	3
100	Oligopeptide Transport at the Bloodâ€"Brain and Blood-CSF Barriers. , 2006, , 1423-1428.		3
101	Oligopeptide and Peptide-Like Drug Transport. , 2013, , 1688-1695.		1
102	Carnosine uptake in rat choroid plexus primary cell cultures and choroid plexus whole tissue from PEPT2 null mice. Journal of Neurochemistry, 2004, 91, 1024-1024.	2.1	0