# Kristiina M Huttunen

List of Publications by Year
in descending order



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|---|---|---|---|
| 80 papers | 2,503 citations | 236925 25 h-index | 223800 46 g-index |
| 82 all docs | 82 docs citations | 82 times ranked | 3042 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Sulfonamide metformin derivatives induce mitochondrial-associated apoptosis and cell cycle arrest in breast cancer cells. Chemico-Biological Interactions, 2022, 352, 109795. | 4.0 | 7 |
| 2 | Pharmacoproteomics of Brain Barrier Transporters and Substrate Design for the Brain Targeted Drug Delivery. Pharmaceutical Research, 2022, 39, 1363-1392. | 3.5 | 19 |
| 3 | Current Chemical, Biological, and Physiological Views in the Development of Successful Brain-Targeted Pharmaceutics. Neurotherapeutics, 2022, 19, 942-976. | 4.4 | 10 |
| 4 | Structural Comparison of Sulfonamide-Based Derivatives That Can Improve Anti-Coagulation Properties of Metformin. International Journal of Molecular Sciences, 2022, 23, 4132. | 4.1 | 5 |
| 5 | Comparison of Experimental Strategies to Study l-Type Amino Acid Transporter 1 (LAT1) Utilization by Ligands. Molecules, 2022, 27, 37. | 3.8 | 5 |
| 6 | Increased/Targeted Brain (Pro)Drug Delivery via Utilization of Solute Carriers (SLCs). Pharmaceutics, 2022, 14, 1234. | 4.5 | 3 |
| 7 | Exploring the Biochemical Foundations of a Successful GLUT1-Targeting Strategy to BNCT: Chemical Synthesis and In Vitro Evaluation of the Entire Positional Isomer Library of ortho-Carboranylmethyl-Bearing Glucoconjugates. Molecular Pharmaceutics, 2021, 18, 285-304. | 4.6 | 15 |
| 8 | Species differences in the intra-brain distribution of an L-type amino acid transporter 1 (LAT1) -utilizing compound between mice and rats. International Journal of Pharmaceutics, 2021, 596, 120300. | 5.2 | 5 |
| 9 | Orchestrated modulation of rheumatoid arthritis via crosstalking intracellular signaling pathways. Inflammopharmacology, 2021, 29, 965-974. | 3.9 | 17 |
| 10 | Improved l-Type amino acid transporter 1 (LAT1)-mediated delivery of anti-inflammatory drugs into astrocytes and microglia with reduced prostaglandin production. International Journal of Pharmaceutics, 2021, 601, 120565. | 5.2 | 12 |
| 11 | Oral genistein-loaded phytosomes with enhanced hepatic uptake, residence and improved therapeutic efficacy against hepatocellular carcinoma. International Journal of Pharmaceutics, 2021, 601, 120564. | 5.2 | 28 |
| 12 | Ganciclovir and Its Hemocompatible More Lipophilic Derivative Can Enhance the Apoptotic Effects of Methotrexate by Inhibiting Breast Cancer Resistance Protein (BCRP). International Journal of Molecular Sciences, 2021, 22, 7727. | 4.1 | 8 |
| 13 | Molecular characteristics supporting l-Type amino acid transporter 1 (LAT1)-mediated translocation. Bioorganic Chemistry, 2021, 112, 104921. | 4.1 | 7 |
| 14 | Hemocompatible L-Type amino acid transporter 1 (LAT1)-Utilizing prodrugs of perforin inhibitors can accumulate into the pancreas and alleviate inflammation-induced apoptosis. Chemico-Biological Interactions, 2021, 345, 109560. | 4.0 | 4 |
| 15 | Neurosteroids: Structure-Uptake Relationships and Computational Modeling of Organic Anion Transporting Polypeptides (OATP)1A2. Molecules, 2021, 26, 5662. | 3.8 | 6 |
| 16 | Pleiotropic Activity of Metformin and Its Sulfonamide Derivatives on Vascular and Platelet Haemostasis. Molecules, 2020, 25, 125. | 3.8 | 17 |
| 17 | Novel halogenated sulfonamide biguanides with anti-coagulation properties. Bioorganic Chemistry, 2020, 94, 103444. | 4.1 | 10 |
| 18 | L-Type Amino Acid Transporter 1 Enables the Efficient Brain Delivery of Small-Sized Prodrug across the Bloodâ€“Brain Barrier and into Human and Mouse Brain Parenchymal Cells. ACS Chemical Neuroscience, 2020, 11, 4301-4315. | 3.5 | 30 |

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|---|---|---|---|
| 19 | Targeting of Perforin Inhibitor into the Brain Parenchyma Via a Prodrug Approach Can Decrease Oxidative Stress and Neuroinflammation and Improve Cell Survival. Molecular Neurobiology, 2020, 57, 4563-4577. | 4.0 | 15 |
| 20 | Novel Sulfonamide-Based Analogs of Metformin Exert Promising Anti-Coagulant Effects without Compromising Glucose-Lowering Activity. Pharmaceuticals, 2020, 13, 323. | 3.8 | 9 |
| 21 | Is metformin a geroprotector? A peek into the current clinical and experimental data. Mechanisms of Ageing and Development, 2020, 191, 111350. | 4.6 | 12 |
| 22 | Addressing the Biochemical Foundations of a Glucose-Based â€œTrojan Horseâ€•Strategy to Boron Neutron Capture Therapy: From Chemical Synthesis to In Vitro Assessment. Molecular Pharmaceutics, 2020, 17, 3885-3899. | 4.6 | 15 |
| 23 | L-Type amino acid transporter 1 as a target for drug delivery. Pharmaceutical Research, 2020, 37, 88. | 3.5 | 97 |
| 24 | Hemocompatible LAT1-inhibitor can induce apoptosis in cancer cells without affecting brain amino acid homeostasis. Apoptosis: an International Journal on Programmed Cell Death, 2020, 25, 426-440. | 4.9 | 12 |
| 25 | L-type amino acid transporter 1 (LAT1)-utilizing efflux transporter inhibitors can improve the brain uptake and apoptosis-inducing effects of vinblastine in cancer cells. International Journal of Pharmaceutics, 2020, 586, 119585. | 5.2 | 7 |
| 26 | An investigation into the pleiotropic activity of metformin. A glimpse of haemostasis. European Journal of Pharmacology, 2020, 872, 172984. | 3.5 | 15 |
| 27 | L-Type Amino Acid Transporter 1-Utilizing Prodrugs of Ketoprofen Can Efficiently Reduce Brain Prostaglandin Levels. Pharmaceutics, 2020, 12, 344. | 4.5 | 7 |
| 28 | L-Type amino acid transporter 1 (LAT1)-utilizing prodrugs are carrier-selective despite having low affinity for organic anion transporting polypeptides (OATPs). International Journal of Pharmaceutics, 2019, 571, 118714. | 5.2 | 23 |
| 29 | l-Type Amino Acid Transporter 1 (LAT1/Lat1)-Utilizing Prodrugs Can Improve the Delivery of Drugs into Neurons, Astrocytes and Microglia. Scientific Reports, 2019, 9, 12860. | 3.3 | 53 |
| 30 | Mechanistic Study on the Use of thel-Type Amino Acid Transporter 1 for Brain Intracellular Delivery of Ketoprofen via Prodrug: A Novel Approach Supporting the Development of Prodrugs for Intracellular Targets. Molecular Pharmaceutics, 2019, 16, 3261-3274. | 4.6 | 22 |
| 31 | Generation 2 (G2) â€“ Generation 4 (G4) PAMAM dendrimers disrupt key plasma coagulation parameters. Toxicology in Vitro, 2019, 59, 87-99. | 2.4 | 6 |
| 32 | Sulfenamide and Sulfonamide Derivatives of Metformin â€“ A New Option to Improve Endothelial Function and Plasma Haemostasis. Scientific Reports, 2019, 9, 6573. | 3.3 | 21 |
| 33 | Sulfenamide derivatives can improve transporter-mediated cellular uptake of metformin and induce cytotoxicity in human breast adenocarcinoma cell lines. Bioorganic Chemistry, 2019, 87, 321-334. | 4.1 | 20 |
| 34 | Astrocyte-Targeted Transporter-Utilizing Derivatives of Ferulic Acid Can Have Multifunctional Effects Ameliorating Inflammation and Oxidative Stress in the Brain. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-13. | 4.0 | 17 |
| 35 | Biocompatibility Studies of Gadolinium Complexes with Iminodiacetic Acid Derivatives. Biological Trace Element Research, 2019, 189, 426-436. | 3.5 | 9 |
| 36 | L-type amino acid transporter 1 utilizing prodrugs of ferulic acid revealed structural features supporting the design of prodrugs for brain delivery. European Journal of Pharmaceutical Sciences, 2019, 129, 99-109. | 4.0 | 41 |

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|---|---|---|---|
| 37 | Alzheimerâ€™s Disease Phenotype or Inflammatory Insult Does Not Alter Function of L-Type Amino Acid Transporter 1 in Mouse Blood-Brain Barrier and Primary Astrocytes. Pharmaceutical Research, 2019, 36, 17. | 3.5 | 30 |
| 38 | Sulfenamide and sulfonamide derivatives of metformin can exert anticoagulant and profibrinolytic properties. Chemico-Biological Interactions, 2018, 284, 126-136. | 4.0 | 20 |
| 39 | Structural properties for selective and efficient l-type amino acid transporter 1 (LAT1) mediated cellular uptake. International Journal of Pharmaceutics, 2018, 544, 91-99. | 5.2 | 19 |
| 40 | Biocompatible sulfenamide and sulfonamide derivatives of metformin can exert beneficial effects on plasma haemostasis. Chemico-Biological Interactions, 2018, 280, 15-27. | 4.0 | 21 |
| 41 | Metformin and its sulphonamide derivative simultaneously potentiateanti-cholinesterase activity of donepezil and inhibit beta-amyloid aggregation. Journal of Enzyme Inhibition and Medicinal Chemistry, 2018, 33, 1309-1322. | 5.2 | 18 |
| 42 | Identification of human, rat and mouse hydrolyzing enzymes bioconverting amino acid ester prodrug of ketoprofen. Bioorganic Chemistry, 2018, 81, 494-503. | 4.1 | 18 |
| 43 | Secondary carbamate linker can facilitate the sustained release of dopamine from brain-targeted prodrug. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 2856-2860. | 2.2 | 21 |
| 44 | Targeted efflux transporter inhibitors â€“ A solution to improve poor cellular accumulation of anti-cancer agents. International Journal of Pharmaceutics, 2018, 550, 278-289. | 5.2 | 19 |
| 45 | Benzenesulphonamide inhibitors of the cytolytic protein perforin. Bioorganic and Medicinal Chemistry Letters, 2017, 27, 1050-1054. | 2.2 | 12 |
| 46 | New prodrugs of metformin do not influence the overall haemostasis potential and integrity of the erythrocyte membrane. European Journal of Pharmacology, 2017, 811, 208-221. | 3.5 | 22 |
| 47 | Metformin â€“ a Future Therapy for Neurodegenerative Diseases. Pharmaceutical Research, 2017, 34, 2614-2627. | 3.5 | 187 |
| 48 | Substituted arylsulphonamides as inhibitors of perforin-mediated lysis. European Journal of Medicinal Chemistry, 2017, 137, 139-155. | 5.5 | 7 |
| 49 | L-type amino acid transporter 1 utilizing prodrugs: How to achieve effective brain delivery and low systemic exposure of drugs. Journal of Controlled Release, 2017, 261, 93-104. | 9.9 | 62 |
| 50 | Metformin and Its Sulfenamide Prodrugs Inhibit Human Cholinesterase Activity. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-11. | 4.0 | 15 |
| 51 | Is Metformin a Perfect Drug? Updates in Pharmacokinetics and Pharmacodynamics. Current Pharmaceutical Design, 2017, 23, 2532-2550. | 1.9 | 69 |
| 52 | Amino Acid Promoieties Alter Valproic Acid Pharmacokinetics and Enable Extended Brain Exposure. Neurochemical Research, 2016, 41, 2797-2809. | 3.3 | 38 |
| 53 | A Selective and Slowly Reversible Inhibitor of <scp>l</scp>-Type Amino Acid Transporter 1 (LAT1) Potentiates Antiproliferative Drug Efficacy in Cancer Cells. Journal of Medicinal Chemistry, 2016, 59, 5740-5751. | 6.4 | 52 |
| 54 | Systemic and Brain Pharmacokinetics of Perforin Inhibitor Prodrugs. Molecular Pharmaceutics, 2016, 13, 2484-2491. | 4.6 | 32 |

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| 55 | Diarylthiophenes as inhibitors of the pore-forming protein perforin. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 355-360. | 2.2 | 22 |
| 56 | l -Type amino acid transporter 1 (lat1)-mediated targeted delivery of perforin inhibitors. International Journal of Pharmaceutics, 2016, 498, 205-216. | 5.2 | 34 |
| 57 | Stability of erythrocyte membrane and overall hemostasis potential â€“ A biocompatibility study of mebrofenin and other iminodiacetic acid derivatives. Pharmacological Reports, 2015, 67, 1230-1239. | 3.3 | 12 |
| 58 | Amino acid ester prodrugs conjugated to the Î±-carboxylic acid group do not display affinity for the L-type amino acid transporter 1 (LAT1). European Journal of Pharmaceutical Sciences, 2015, 66, 36-40. | 4.0 | 10 |
| 59 | Quantitative Insight into the Design of Compounds Recognized by the <scp>L</scp>â€Type Amino Acid Transporterâ€…1 (LAT1). ChemMedChem, 2014, 9, 2699-2707. | 3.2 | 52 |
| 60 | Extract of Aronia melanocarpa-modified hemostasis: in vitro studies. European Journal of Nutrition, 2014, 53, 1493-1502. | 3.9 | 32 |
| 61 | Sustained Release of Metformin via Red Blood Cell Accumulated Sulfenamide Prodrug. Journal of Pharmaceutical Sciences, 2014, 103, 2207-2210. | 3.3 | 15 |
| 62 | Glutathione-S-transferase selective release of metformin from its sulfonamide prodrug. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 5034-5036. | 2.2 | 23 |
| 63 | Studies towards biocompatibility of PAMAM dendrimers â€“ Overall hemostasis potential and integrity of the human aortic endothelial barrier. International Journal of Pharmaceutics, 2014, 473, 158-169. | 5.2 | 30 |
| 64 | Design, Synthesis and Brain Uptake of LAT1-Targeted Amino Acid Prodrugs of Dopamine. Pharmaceutical Research, 2013, 30, 2523-2537. | 3.5 | 102 |
| 65 | Convenient microwave-assisted synthesis of lipophilic sulfenamide prodrugs of metformin. European Journal of Pharmaceutical Sciences, 2013, 49, 624-628. | 4.0 | 24 |
| 66 | Exploration of a Series of 5-Arylidene-2-thioxoimidazolidin-4-ones as Inhibitors of the Cytolytic Protein Perforin. Journal of Medicinal Chemistry, 2013, 56, 9542-9555. | 6.4 | 30 |
| 67 | Amino acids as promoieties in prodrug design and development. Advanced Drug Delivery Reviews, 2013, 65, 1370-1385. | 13.7 | 100 |
| 68 | Design, Synthesis, and Evaluation of Novel Cyclic Phosphates of 5-Aminosalicylic Acid as Cytochrome P450-Activated Prodrugs. Molecular Pharmaceutics, 2013, 10, 532-537. | 4.6 | 9 |
| 69 | In Vitro and In Vivo Evaluation of a Sulfenamide Prodrug of Basic Metformin. Journal of Pharmaceutical Sciences, 2012, 101, 2854-2860. | 3.3 | 12 |
| 70 | Inhibition of the pore-forming protein perforin by a series of aryl-substituted isobenzofuran-1(3H)-ones. Bioorganic and Medicinal Chemistry, 2012, 20, 1319-1336. | 3.0 | 18 |
| 71 | Prodrugsâ€”from Serendipity to Rational Design. Pharmacological Reviews, 2011, 63, 750-771. | 16.0 | 410 |
| 72 | Inhibition of the cellular function of perforin by 1-amino-2,4-dicyanopyrido[1,2-a]benzimidazoles. Bioorganic and Medicinal Chemistry, 2011, 19, 4091-4100. | 3.0 | 25 |

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|---|---|---|---|
| 73 | Prodrugs - An Efficient Way to Breach Delivery and Targeting Barriers. Current Topics in Medicinal Chemistry, 2011, 11, 2265-2287. | 2.1 | 64 |
| 74 | Determination of metformin and its prodrugs in human and rat blood by hydrophilic interaction liquid chromatography. Journal of Pharmaceutical and Biomedical Analysis, 2009, 50, 469-474. | 2.8 | 40 |
| 75 | The First Bioreversible Prodrug of Metformin with Improved Lipophilicity and Enhanced Intestinal Absorption. Journal of Medicinal Chemistry, 2009, 52, 4142-4148. | 6.4 | 58 |
| 76 | Towards Metformin Prodrugs. Synthesis, 2008, 2008, 3619-3624. | 2.3 | 14 |
| 77 | Cytochrome P450-Activated Prodrugs: Targeted Drug Delivery. Current Medicinal Chemistry, 2008, 15, 2346-2365. | 2.4 | 56 |
| 78 | Novel Cyclic Phosphate Prodrug Approach for Cytochrome P450-activated Drugs Containing an Alcohol Functionality. Pharmaceutical Research, 2007, 24, 679-687. | 3.5 | 20 |
| 79 | Synthesis and CB1 receptor activities of dimethylheptyl derivatives of 2-arachidonoyl glycerol (2-AG) and 2-arachidonyl glyceryl ether (2-AGE). Bioorganic and Medicinal Chemistry, 2006, 14, 2850-2858. | 3.0 | 11 |
| 80 | Efficient Strategy to Prepare Water-Soluble Prodrugs of Ketones. Synlett, 2006, 2006, 0701-0704. | 1.8 | 4 |