Gergely Szakacs

List of Publications by Year in descending order

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81900 36028 9,776 122 39 97 citations h-index g-index papers 124 124 124 12626 docs citations times ranked citing authors all docs

#	Article	IF	Citations
1	Optimized Synthesis and Cytotoxic Activity of α-Aminophosphonates Against a Multidrug Resistant Uterine Sarcoma Cell Line. Letters in Drug Design and Discovery, 2023, 20, 365-371.	0.7	5
2	Efficient Synthesis of Acylated, Dialkyl \hat{l}_{\pm} -Hydroxy-Benzylphosphonates and Their Anticancer Activity. Molecules, 2022, 27, 2067.	3.8	5
3	Identifying Novel Inhibitors for Hepatic Organic Anion Transporting Polypeptides by Machine Learning-Based Virtual Screening. Journal of Chemical Information and Modeling, 2022, 62, 6323-6335.	5.4	11
4	Cytotoxicity of cinchona alkaloid organocatalysts against MES-SA and MES-SA/Dx5 multidrug-resistant uterine sarcoma cell lines. Bioorganic and Medicinal Chemistry, 2022, 67, 116855.	3.0	7
5	Experimental Closed-Loop Control of Breast Cancer in Mice. Complexity, 2022, 2022, 1-10.	1.6	8
6	Structure–Activity Relationships of 8-Hydroxyquinoline-Derived Mannich Bases with Tertiary Amines Targeting Multidrug-Resistant Cancer. Journal of Medicinal Chemistry, 2022, 65, 7729-7745.	6.4	19
7	Half-sandwich organometallic Ru and Rh complexes of (N,N) donor compounds: effect of ligand methylation on solution speciation and anticancer activity. Dalton Transactions, 2021, 50, 8218-8231.	3.3	14
8	Relation of Metal-Binding Property and Selective Toxicity of 8-Hydroxyquinoline Derived Mannich Bases Targeting Multidrug Resistant Cancer Cells. Cancers, 2021, 13, 154.	3.7	8
9	The incredible diversity of structures and functions of ABC transporters. FEBS Letters, 2021, 595, 671-674.	2.8	5
10	REAP: revealing drug tolerant persister cells in cancer using contrast enhanced optical coherence and photoacoustic tomography. JPhys Photonics, 2021, 3, 021001.	4.6	1
11	Data-Driven Ensemble Docking to Map Molecular Interactions of Steroid Analogs with Hepatic Organic Anion Transporting Polypeptides. Journal of Chemical Information and Modeling, 2021, 61, 3109-3127.	5. 4	7
12	Mesenchymal-Stromal Cell-like Melanoma-Associated Fibroblasts Increase IL-10 Production by Macrophages in a Cyclooxygenase/Indoleamine 2,3-Dioxygenase-Dependent Manner. Cancers, 2021, 13, 6173.	3.7	5
13	In vivo characterization of [18F]AVT-011 as a radiotracer for PET imaging of multidrug resistance. European Journal of Nuclear Medicine and Molecular Imaging, 2020, 47, 2026-2035.	6.4	3
14	A novel fluorescenceâ€based functional assay for human OATP1A2 and OATP1C1 identifies interaction between thirdâ€generation Pâ€gp inhibitors and OATP1A2. FEBS Journal, 2020, 287, 2468-2485.	4.7	18
15	Human ABCB1 with an ABCB11-like degenerate nucleotide binding site maintains transport activity by avoiding nucleotide occlusion. PLoS Genetics, 2020, 16, e1009016.	3.5	11
16	Complex formation and cytotoxicity of Triapine derivatives: a comparative solution study on the effect of the chalcogen atom and NH-methylation. Dalton Transactions, 2020, 49, 16887-16902.	3.3	22
17	An inventory of lysosomal ABC transporters. FEBS Letters, 2020, 594, 3965-3985.	2.8	28
18	High Copper Complex Stability and Slow Reduction Kinetics as Key Parameters for Improved Activity, Paraptosis Induction, and Impact on Drug-Resistant Cells of Anticancer Thiosemicarbazones. Antioxidants and Redox Signaling, 2020, 33, 395-414.	5.4	28

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19	Active transport of rhodamine 123 by the human multidrug transporter Pâ€glycoprotein involves two independent outer gates. Pharmacology Research and Perspectives, 2020, 8, e00572.	2.4	4
20	Fluorescent probes for the dual investigation of MRP2 and OATP1B1 function and drug interactions. European Journal of Pharmaceutical Sciences, 2020, 151, 105395.	4.0	16
21	Unshielding Multidrug Resistant Cancer through Selective Iron Depletion of P-Glycoprotein–Expressing Cells. Cancer Research, 2020, 80, 663-674.	0.9	21
22	Conversion of chemical to mechanical energy by the nucleotide binding domains of ABCB1. Scientific Reports, 2020, 10, 2589.	3.3	6
23	Synthesis and Anticancer Cytotoxicity of Azaaurones Overcoming Multidrug Resistance. Molecules, 2020, 25, 764.	3.8	13
24	Establishment and Characterization of a Brca $1\hat{a}$, p53 \hat{a} , p53 \hat{a} Mouse Mammary Tumor Cell Line. International Journal of Molecular Sciences, 2020, 21, 1185.	4.1	10
25	Celecoxib Prevents Doxorubicin-Induced Multidrug Resistance in Canine and Mouse Lymphoma Cell Lines. Cancers, 2020, 12, 1117.	3.7	9
26	Experimental data-driven tumor modeling for chemotherapy. IFAC-PapersOnLine, 2020, 53, 16245-16250.	0.9	22
27	Title is missing!. , 2020, 16, e1009016.		O
28	Title is missing!. , 2020, 16, e1009016.		0
29	Title is missing!. , 2020, 16, e1009016.		0
30	Title is missing!. , 2020, 16, e1009016.		0
31	Synthesis and anticancer cytotoxicity with structural context of an $\hat{l}\pm$ -hydroxyphosphonate based compound library derived from substituted benzaldehydes. New Journal of Chemistry, 2019, 43, 14028-14035.	2.8	15
32	Identifying new topoisomerase II poison scaffolds by combining publicly available toxicity data and 2D/3D-based virtual screening. Journal of Cheminformatics, 2019, 11, 67.	6.1	5
33	The human ABCB6 protein is the functional homologue of HMT-1 proteins mediating cadmium detoxification. Cellular and Molecular Life Sciences, 2019, 76, 4131-4144.	5.4	22
34	Identification of anticancer OATP2B1 substrates by an in vitro triple-fluorescence-based cytotoxicity screen. Archives of Toxicology, 2019, 93, 953-964.	4.2	20
35	Correlation of homologous recombination deficiency induced mutational signatures with sensitivity to PARP inhibitors and cytotoxic agents. Genome Biology, 2019, 20, 240.	8.8	82
36	Anticancer Thiosemicarbazones: Chemical Properties, Interaction with Iron Metabolism, and Resistance Development. Antioxidants and Redox Signaling, 2019, 30, 1062-1082.	5.4	137

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37	Identification of novel cell-impermeant fluorescent substrates for testing the function and drug interaction of Organic Anion-Transporting Polypeptides, OATP1B1/1B3 and 2B1. Scientific Reports, 2018, 8, 2630.	3.3	42
38	Dissecting the Forces that Dominate Dimerization of the Nucleotide Binding Domains of ABCB1. Biophysical Journal, 2018, 114, 331-342.	0.5	19
39	Influence of OATPs on Hepatic Disposition of Erlotinib Measured With Positron Emission Tomography. Clinical Pharmacology and Therapeutics, 2018, 104, 139-147.	4.7	43
40	Impact of copper and iron binding properties on the anticancer activity of 8-hydroxyquinoline derived Mannich bases. Dalton Transactions, 2018, 47, 17032-17045.	3.3	32
41	Expression of calcium pumps is differentially regulated by histone deacetylase inhibitors and estrogen receptor alpha in breast cancer cells. BMC Cancer, 2018, 18, 1029.	2.6	34
42	The thiosemicarbazone Me2NNMe2 induces paraptosis by disrupting the ER thiol redox homeostasis based on protein disulfide isomerase inhibition. Cell Death and Disease, 2018, 9, 1052.	6.3	38
43	Characterization of new, efficient Mycobacterium tuberculosis topoisomerase-I inhibitors and their interaction with human ABC multidrug transporters. PLoS ONE, 2018, 13, e0202749.	2.5	4
44	ABCB6 Resides in Melanosomes and Regulates Early Steps of Melanogenesis Required for PMEL Amyloid Matrix Formation. Journal of Molecular Biology, 2018, 430, 3802-3818.	4.2	17
45	Heterologous expression of CTP:phosphocholine cytidylyltransferase from Plasmodium falciparum rescues Chinese Hamster Ovary cells deficient in the Kennedy phosphatidylcholine biosynthesis pathway. Scientific Reports, 2018, 8, 8932.	3.3	2
46	Development of novel cyclic NGR peptide–daunomycin conjugates with dual targeting property. Beilstein Journal of Organic Chemistry, 2018, 14, 911-918.	2.2	9
47	A new fluorescent dye accumulation assay for parallel measurements of the ABCG2, ABCB1 and ABCC1 multidrug transporter functions. PLoS ONE, 2018, 13, e0190629.	2.5	13
48	Identification of Extracellular Segments by Mass Spectrometry Improves Topology Prediction of Transmembrane Proteins. Scientific Reports, 2017, 7, 42610.	3.3	15
49	Comparative solution equilibrium studies of antitumor ruthenium(Î- ⁶ -p-cymene) and rhodium(Î- ⁵ -C ₅ Me ₅) complexes of 8-hydroxyquinolines. Dalton Transactions, 2017, 46, 4382-4396.	3.3	39
50	Synthesis and SAR Study of Anticancer Protoflavone Derivatives: Investigation of Cytotoxicity and Interaction with ABCB1 and ABCG2 Multidrug Efflux Transporters. ChemMedChem, 2017, 12, 850-859.	3.2	11
51	Nucleotides Control the Conformation of the Motor Domain of ABC Transporters. Biophysical Journal, 2017, 112, 571a.	0.5	0
52	Molecular Mechanism of Taurocholate Transport by the Bile Salt Export Pump, an ABC Transporter Associated with Intrahepatic Cholestasis. Molecular Pharmacology, 2017, 92, 401-413.	2.3	12
53	Pegylated liposomal formulation of doxorubicin overcomes drug resistance in a genetically engineered mouse model of breast cancer. Journal of Controlled Release, 2017, 261, 287-296.	9.9	70
54	Identification and Validation of Compounds Selectively Killing Resistant Cancer: Delineating Cell Line–Specific Effects from P-Glycoprotein–Induced Toxicity. Molecular Cancer Therapeutics, 2017, 16, 45-56.	4.1	34

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55	NGR-peptideâ°drug conjugates with dual targeting properties. PLoS ONE, 2017, 12, e0178632.	2.5	38
56	Cell type-dependent HIF1 \hat{l}_{\pm} -mediated effects of hypoxia on proliferation, migration and metastatic potential of human tumor cells. Oncotarget, 2017, 8, 44498-44510.	1.8	32
57	Characterization of Disease-Associated Mutations in Human Transmembrane Proteins. PLoS ONE, 2016, 11, e0151760.	2.5	46
58	Shotgun Lipidomic Profiling of the NCI60 Cell Line Panel Using Rapid Evaporative Ionization Mass Spectrometry. Analytical Chemistry, 2016, 88, 7507-7514.	6.5	34
59	A single active catalytic site is sufficient to promote transport in P-glycoprotein. Scientific Reports, 2016, 6, 24810.	3.3	42
60	Design, synthesis and biological evaluation of thiosemicarbazones, hydrazinobenzothiazoles and arylhydrazones as anticancer agents with a potential to overcome multidrug resistance. European Journal of Medicinal Chemistry, 2016, 117, 335-354.	5 . 5	79
61	Inborn Errors of the Cellular Expression and Localization of ABCG2 and ABCB6. A Database for ABC Transporter Mutations., 2016,, 341-355.		0
62	Acquired nintedanib resistance in FGFR1-driven small cell lung cancer: role of endothelin-A receptor-activated ABCB1 expression. Oncotarget, 2016, 7, 50161-50179.	1.8	19
63	Abstract 2119: Acquired nintedanib resistance in FGFR1-driven small cell but not non-small cell lung cancer is mediated by ABCB1., 2016,,.		0
64	Generation of a Homozygous Transgenic Rat Strain Stably Expressing a Calcium Sensor Protein for Direct Examination of Calcium Signaling. Scientific Reports, 2015, 5, 12645.	3.3	9
65	A Novel Mathematical Model Describing Adaptive Cellular Drug Metabolism and Toxicity in the Chemoimmune System. PLoS ONE, 2015, 10, e0115533.	2.5	7
66	Role of the N-terminal transmembrane domain in the endo-lysosomal targeting and function of the human ABCB6 protein. Biochemical Journal, 2015, 467, 127-139.	3.7	36
67	Functional expression of the 11 human Organic Anion Transporting Polypeptides in insect cells reveals that sodium fluorescein is a general OATP substrate. Biochemical Pharmacology, 2015, 98, 649-658.	4.4	42
68	Synthesis and characterization of the anticancer and metal binding properties of novel pyrimidinylhydrazone derivatives. Journal of Inorganic Biochemistry, 2015, 144, 18-30.	3.5	25
69	Mutations of the central tyrosines of putative cholesterol recognition amino acid consensus (CRAC) sequences modify folding, activity, and sterol-sensing of the human ABCG2 multidrug transporter. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 477-487.	2.6	23
70	Screening the Expression of ABCB6 in Erythrocytes Reveals an Unexpectedly High Frequency of Lan Mutations in Healthy Individuals. PLoS ONE, 2014, 9, e111590.	2.5	20
71	Sucrose Esters Increase Drug Penetration, But Do Not Inhibit Pâ€Glycoprotein in Cacoâ€2 Intestinal Epithelial Cells. Journal of Pharmaceutical Sciences, 2014, 103, 3107-3119.	3.3	41
72	Expression pattern of the human ABC transporters in pluripotent embryonic stem cells and in their derivatives., 2014, 86, 299-310.		13

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73	Expression pattern of the human ABC transporters in pluripotent embryonic stem cells and in their derivatives. , 2014, , n/a-n/a.		16
74	Targeting the Achilles Heel of Multidrug-Resistant Cancer by Exploiting the Fitness Cost of Resistance. Chemical Reviews, 2014, 114, 5753-5774.	47.7	172
75	Structureâ€"Activity Relationships of Chromone Derivatives toward the Mechanism of Interaction with and Inhibition of Breast Cancer Resistance Protein ABCG2. Journal of Medicinal Chemistry, 2013, 56, 9849-9860.	6.4	33
76	A novel cyclic RGD-containing peptide polymer improves serum-free adhesion of adipose tissue-derived mesenchymal stem cells to bone implant surfaces. Journal of Materials Science: Materials in Medicine, 2013, 24, 479-488.	3.6	14
77	ABCG2 is not able to catalyze glutathione efflux and does not contribute to GSH-dependent collateral sensitivity. Frontiers in Pharmacology, 2013, 4, 138.	3.5	14
78	ABCC6 Is a Basolateral Plasma Membrane Protein. Circulation Research, 2013, 112, e148-51.	4.5	49
79	Shifting the Paradigm: The Putative Mitochondrial Protein ABCB6 Resides in the Lysosomes of Cells and in the Plasma Membrane of Erythrocytes. PLoS ONE, 2012, 7, e37378.	2.5	82
80	Expression Levels of the ABCG2 Multidrug Transporter in Human Erythrocytes Correspond to Pharmacologically Relevant Genetic Variations. PLoS ONE, 2012, 7, e48423.	2.5	37
81	Interaction of the EGFR inhibitors gefitinib, vandetanib, pelitinib and neratinib with the ABCG2 multidrug transporter: Implications for the emergence and reversal of cancer drug resistance. Biochemical Pharmacology, 2012, 84, 260-267.	4.4	65
82	Tyrosine kinase inhibitors as modulators of ATP binding cassette multidrug transporters: substrates, chemosensitizers or inducers of acquired multidrug resistance?. Expert Opinion on Drug Metabolism and Toxicology, 2011, 7, 623-642.	3.3	108
83	Genetic and functional studies of phosphatidyl-inositol 4-kinase type IIIα. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2011, 1811, 476-483.	2.4	14
84	The controversial role of ABC transporters in clinical oncology. Essays in Biochemistry, 2011, 50, 209-232.	4.7	185
85	Evaluation of ABCG2 Expression in Human Embryonic Stem Cells: Crossing the Same River Twice? Â. Stem Cells, 2010, 28, 174-176.	3.2	30
86	Understanding transport through pharmacological barriers â€" are we there yet?. Nature Reviews Drug Discovery, 2010, 9, 897-898.	46.4	15
87	Interaction of ABC Multidrug Transporters with Anticancer Protein Kinase Inhibitors: Substrates and/or Inhibitors?. Current Cancer Drug Targets, 2009, 9, 252-272.	1.6	44
88	A mass spectrometry based functional assay for the quantitative assessment of ABC transporter activity. Rapid Communications in Mass Spectrometry, 2009, 23, 3372-3376.	1.5	7
89	Interaction of nilotinib, dasatinib and bosutinib with ABCB1 and ABCG2: implications for altered antiâ€cancer effects and pharmacological properties. British Journal of Pharmacology, 2009, 158, 1153-1164.	5.4	195
90	Ins and outs of the ABCG2 multidrug transporter: An update on in vitro functional assays. Advanced Drug Delivery Reviews, 2009, 61, 47-56.	13.7	57

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91	Identification of Compounds Selectively Killing Multidrug-Resistant Cancer Cells. Cancer Research, 2009, 69, 8293-8301.	0.9	96
92	Synthesis, Activity, and Pharmacophore Development for Isatin-Î ² -thiosemicarbazones with Selective Activity toward Multidrug-Resistant Cells. Journal of Medicinal Chemistry, 2009, 52, 3191-3204.	6.4	146
93	Multidrug Resistance Mediated by MDR-ABC Transporters. , 2009, , 1-20.		5
94	Relevance of multidrug resistance in the age of targeted therapy. Current Opinion in Drug Discovery & Development, 2009, 12, 246-52.	1.9	23
95	The role of ABC transporters in drug absorption, distribution, metabolism, excretion and toxicity (ADME–Tox). Drug Discovery Today, 2008, 13, 379-393.	6.4	482
96	Profiling SLCO and SLC22 genes in the NCI-60 cancer cell lines to identify drug uptake transporters. Molecular Cancer Therapeutics, 2008, 7, 3081-3091.	4.1	151
97	P glycoprotein and the Mechanism of Multidrug Resistance. Novartis Foundation Symposium, 2008, , 54-68.	1.1	20
98	State-dependent Inhibition of Cystic Fibrosis Transmembrane Conductance Regulator Chloride Channels by a Novel Peptide Toxin. Journal of Biological Chemistry, 2007, 282, 37545-37555.	3.4	38
99	Human ABCB6 Localizes to Both the Outer Mitochondrial Membrane and the Plasma Membrane. Biochemistry, 2007, 46, 9443-9452.	2.5	117
100	Discovery of a Daunorubicin Analogue That Exhibits Potent Antitumor Activity and Overcomes P-gp-Mediated Drug Resistance. Journal of Medicinal Chemistry, 2006, 49, 932-941.	6.4	48
101	Targeting multidrug resistance in cancer. Nature Reviews Drug Discovery, 2006, 5, 219-234.	46.4	3,098
102	Selective Toxicity of NSC73306 in MDR1-Positive Cells as a New Strategy to Circumvent Multidrug Resistance in Cancer. Cancer Research, 2006, 66, 4808-4815.	0.9	162
103	Human Multidrug Resistance ABCB and ABCG Transporters: Participation in a Chemoimmunity Defense System. Physiological Reviews, 2006, 86, 1179-1236.	28.8	637
104	Principal expression of two mRNA isoforms (ABCB  5αandABCB  5β) of the ATP-binding cassette transporte geneABCB 5 in melanoma cells and melanocytes. Pigment Cell & Melanoma Research, 2005, 18, 102-112.	er 3 . 6	82
105	A novel way to spread drug resistance in tumor cells: functional intercellular transfer of P-glycoprotein (ABCB1). Trends in Pharmacological Sciences, 2005, 26, 385-387.	8.7	86
106	Different roles for K+ channels in cisplatin-resistant cell lines argue against a critical role for these channels in cisplatin resistance. Anticancer Research, 2005, 25, 4113-22.	1.1	8
107	Hepatic ABCG5 and ABCG8 Overexpression Increases Hepatobiliary Sterol Transport but Does Not Alter Aortic Atherosclerosis in Transgenic Mice. Journal of Biological Chemistry, 2004, 279, 22913-22925.	3.4	66
108	The Molecular Mysteries Underlying P-glycoprotein-Mediated Multidrug Resistance. Cancer Biology and Therapy, 2004, 3, 382-384.	3.4	15

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109	Analysis of ATP-Binding Cassette Transporter Expression in Drug-Selected Cell Lines by a Microarray Dedicated to Multidrug Resistance. Molecular Pharmacology, 2004, 66, 1397-1405.	2.3	79
110	Predicting drug sensitivity and resistance. Cancer Cell, 2004, 6, 129-137.	16.8	496
111	Comparing Solid Tumors with Cell Lines: Implications for Identifying Drug Resistance Genes in Cancer. Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics, 2004, 4, 323-325.	3.4	21
112	Comparing cDNA and oligonucleotide array data: concordance of gene expression across platforms for the NCI-60 cancer cells. Genome Biology, 2003, 4, R82.	9.6	91
113	Functional Characterization of the Human Multidrug Transporter, ABCG2, Expressed in Insect Cells. Biochemical and Biophysical Research Communications, 2001, 285, 111-117.	2.1	292
114	Characterization of the ATPase Cycle of Human ABCA1: Implications for Its Function as a Regulator Rather Than an Active Transporter. Biochemical and Biophysical Research Communications, 2001, 288, 1258-1264.	2.1	52
115	Role of glycine-534 and glycine-1179 of human multidrug resistance protein (MDR1) in drug-mediated control of ATP hydrolysis. Biochemical Journal, 2001, 356, 71-75.	3.7	40
116	Calcein assay for multidrug resistance reliably predicts therapy response and survival rate in acute myeloid leukaemia. British Journal of Haematology, 2001, 112, 308-314.	2.5	67
117	Role of glycine-534 and glycine-1179 of human multidrug resistance protein (MDR1) in drug-mediated control of ATP hydrolysis. Biochemical Journal, 2001, 356, 71.	3.7	31
118	MDR3 P-glycoprotein, a Phosphatidylcholine Translocase, Transports Several Cytotoxic Drugs and Directly Interacts with Drugs as Judged by Interference with Nucleotide Trapping. Journal of Biological Chemistry, 2000, 275, 23530-23539.	3.4	220
119	Transition-State Formation in ATPase-Negative Mutants of Human MDR1 Protein. Biochemical and Biophysical Research Communications, 2000, 276, 1314-1319.	2.1	28
120	Nucleotide Occlusion in the Human Cystic Fibrosis Transmembrane Conductance Regulator. Journal of Biological Chemistry, 1999, 274, 12209-12212.	3.4	88
121	Diagnostics of multidrug resistance in cancer. Pathology and Oncology Research, 1998, 4, 251-257.	1.9	44
122	Functional Multidrug Resistance Protein (MRP1) Lacking the N-terminal Transmembrane Domain. Journal of Biological Chemistry, 1998, 273, 32167-32175.	3.4	283