Abraham Jacob Al-Ahmad

List of Publications by Year
in descending order

43 papers	3,010 citations	218677 26 h-index	330143 37 g-index
50 all docs	50 docs citations	50 times ranked	3786 citing authors

#	Article	IF	Citations
1	Derivation of blood-brain barrier endothelial cells from human pluripotent stem cells. Nature Biotechnology, 2012, 30, 783-791.	17.5	623
2	A retinoic acid-enhanced, multicellular human blood-brain barrier model derived from stem cell sources. Scientific Reports, 2014, 4, 4160.	3.3	390
3	Efficient Differentiation of Human Pluripotent Stem Cells to Endothelial Progenitors via Small-Molecule Activation of WNT Signaling. Stem Cell Reports, 2014, 3, 804-816.	4.8	271
4	Modeling Psychomotor Retardation using iPSCs from MCT8-Deficient Patients Indicates a Prominent Role for the Blood-Brain Barrier. Cell Stem Cell, 2017, 20, 831-843.e5.	11.1	181
5	Astrocytes and Pericytes Differentially Modulate Bloodâ€"Brain Barrier Characteristics during Development and Hypoxic Insult. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 693-705.	4.3	160
6	Perlecan domain V is neuroprotective and proangiogenic following ischemic stroke in rodents. Journal of Clinical Investigation, 2011, 121, 3005-3023.	8.2	133
7	Maintaining bloodâ€"brain barrier integrity: Pericytes perform better than astrocytes during prolonged oxygen deprivation. Journal of Cellular Physiology, 2009, 218, 612-622.	4.1	121
8	Modeling the bloodâ€"brain barrier using stem cell sources. Fluids and Barriers of the CNS, 2013, 10, 2.	5.0	105
9	Hypoxia Selectively Disrupts Brain Microvascular Endothelial Tight Junction Complexes Through a Hypoxiaâ€inducible Factorâ€1 (HIFâ€1) Dependent Mechanism. Journal of Cellular Physiology, 2014, 229, 1096-1105.	4.1	102
10	Î±B-Crystallin: A Novel Regulator of Breast Cancer Metastasis to the Brain. Clinical Cancer Research, 2014, 20, 56-67.	7.0	87
11	Effects of glyphosate and aminomethylphosphonic acid on an isogeneic model of the human blood-brain barrier. Toxicology Letters, 2019, 304, 39-49.	0.8	71
12	Cerebral hypoxia/ischemia selectively disrupts tight junctions complexes in stem cell-derived human brain microvascular endothelial cells. Fluids and Barriers of the CNS, 2016, 13, 16.	5.0	64
13	Involvement of oxidative stress in hypoxia-induced bloodâ€"brain barrier breakdown. Microvascular Research, 2012, 84, 222-225.	2.5	61
14	Perlecan Domain V Induces VEGf Secretion in Brain Endothelial Cells through Integrin Î±5Î²1 and ERK-Dependent Signaling Pathways. PLoS ONE, 2012, 7, e45257.	2.5	47
15	HIF-1 at the Blood-Brain Barrier: A Mediator of Permeability?. High Altitude Medicine and Biology, 2012, 13, 153-161.	0.9	46
16	Hyaluronan impairs the barrier integrity of brain microvascular endothelial cells through a CD44-dependent pathway. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1759-1775.	4.3	43
17	Isogenic bloodâ€"brain barrier models based on patientâ€derived stem cells display interâ€individual differences in cell maturation and functionality. Journal of Neurochemistry, 2017, 142, 74-88.	3.9	41
18	Growth-factor reduced Matrigel source influences stem cell derived brain microvascular endothelial cell barrier properties. Fluids and Barriers of the CNS, 2016, 13, 6.	5.0	39

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19	Quercetin and naringenin transport across human intestinal Caco-2 cells. Journal of Pharmacy and Pharmacology, 2009, 61, 1473-1483.	2.4	38
20	Gliotoxin penetrates and impairs the integrity of the human blood-brain barrier in vitro. Mycotoxin Research, 2018, 34, 257-268.	2.3	37
21	Analysis of Cancer-Targeting Alkylphosphocholine Analogue Permeability Characteristics Using a Human Induced Pluripotent Stem Cell Bloodâ€“Brain Barrier Model. Molecular Pharmaceutics, 2016, 13, 3341-3349.	4.6	36
22	CNS organoids: an innovative tool for neurological disease modeling and drug neurotoxicity screening. Drug Discovery Today, 2020, 25, 456-465.	6.4	36
23	Perlecan domain V modulates astrogliosis In vitro and after focal cerebral ischemia through multiple receptors and increased nerve growth factor release. Glia, 2011, 59, 1822-1840.	4.9	33
24	Discovery of Aromatic Carbamates that Confer Neuroprotective Activity by Enhancing Autophagy and Inducing the Anti-Apoptotic Protein B-Cell Lymphoma 2 (Bcl-2). Journal of Medicinal Chemistry, 2017, 60, 9739-9756.	6.4	32
25	Comparative study of expression and activity of glucose transporters between stem cell-derived brain microvascular endothelial cells and hCMEC/D3 cells. American Journal of Physiology - Cell Physiology, 2017, 313, C421-C429.	4.6	27
26	Brain Delivery of a Potent Opioid Receptor Agonist, Biphalin during Ischemic Stroke: Role of Organic Anion Transporting Polypeptide (OATP). Pharmaceutics, 2019, 11, 467.	4.5	27
27	Oxygen-Glucose Deprivation/Reoxygenation-Induced Barrier Disruption at the Human Bloodâ€“Brain Barrier is Partially Mediated Through the HIF-1 Pathway. NeuroMolecular Medicine, 2019, 21, 414-431.	3.4	26
28	Presence of a mutation in PSEN1 or PSEN2 gene is associated with an impaired brain endothelial cell phenotype in vitro. Fluids and Barriers of the CNS, 2021, 18, 3.	5.0	25
29	LCâ€“MS/MS-based in vitro and in vivo investigation of bloodâ€“brain barrier integrity by simultaneous quantitation of mannitol and sucrose. Fluids and Barriers of the CNS, 2020, 17, 61.	5.0	21
30	Endostatin binds nerve growth factor and thereby inhibits neurite outgrowth and neuronal migration in-vitro. Brain Research, 2010, 1360, 28-39.	2.2	18
31	Estimating Brain Permeability Using In Vitro Blood-Brain Barrier Models. Methods in Molecular Biology, 2020, 2367, 47-72.	0.9	17
32	An iPSC-Derived Neuron Model of CLN3 Disease Facilitates Small Molecule Phenotypic Screening. ACS Pharmacology and Translational Science, 2020, 3, 931-947.	4.9	14
33	Neurolysin substrates bradykinin, neurotensin and substance P enhance brain microvascular permeability in a human in vitro model. Journal of Neuroendocrinology, 2021, 33, e12931.	2.6	14
34	Neurological diseases at the blood-brain barrier: Stemming new scientific paradigms using patient-derived induced pluripotent cells. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165358.	3.8	13
35	Abeta peptides disrupt the barrier integrity and glucose metabolism of human induced pluripotent stem cell-derived brain microvascular endothelial cells. NeuroToxicology, 2022, 89, 110-120.	3.0	6
36	Transport of quercetin di-sodium salt in the human intestinal epithelial Caco-2 cell monolayer 139. European Journal of Drug Metabolism and Pharmacokinetics, 2007, 32, 139-147.	1.6	3

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37	Efficient Differentiation of Human Pluripotent Stem Cells to Endothelial Progenitors via Small-Molecule Activation of WNT Signaling. Stem Cell Reports, 2015, 4, 170.	4.8	1
38	DDEL-05DIFFERENTIAL BLOOD-BRAIN BARRIER (BBB) PERMEABILITY OF ALKYLPHOSPHOCHOLINE (APC) ANALOGS ANALYZED USING AN IN VITRO PLURIPOTENT STEM CELL-DERIVED BRAIN MICROVASCULAR ENDOTHELIAL CELL SYSTEM. Neuro-Oncology, 2015, 17, v74.1-v74.	1.2	0
39	In Vitro Models of the Bloodâ€“Brain Barrier to Better Understand the Pathophysiology of Brain Edema. , 2017, , 85-102.		0
40	O2â€12â€03: MUTATIONS IN PSEN GENES ASSOCIATED WITH FAMILIAL FORM OF ALZHEIMER'S DISEASE DISPLAY AN IMPAIRED BLOODâ€BRAIN BARRIER PHENOTYPE IN VITRO. Alzheimer's and Dementia, 2018, 14, P651.	0.8	0
41	Abstract P808: The Main Peptide Ssubstrates of Neurolysin Enhance Brain Microvascular Permeability in a Human in vitro Model. Stroke, 2021, 52, .	2.0	0
42	Determining the effect of the WNT/bâ€catenin pathway on the ischemic bloodâ€brain barrier using induced pluripotent stem cells. FASEB Journal, 2018, 32, 40.6.	0.5	0
43	Determining the effect of the WNT/bâ€catenin pathway on the ischemic bloodâ€brain barrier in vitro and in vivo. FASEB Journal, 2019, 33, 120.3.	0.5	0