David C Hay

List of Publications by Year
in descending order

101 papers	5,148 citations	109321 35 h-index	88630 70 g-index
126 all docs	126 docs citations	126 times ranked	6440 citing authors

#	Article	IF	Citations
1	Human biliary epithelial cells from discarded donor livers rescue bile duct structure and function in a mouse model of biliary disease. Cell Stem Cell, 2022, 29, 355-371.e10.	11.1	19
2	Pluripotent Stem Cell-Derived Hepatocytes Inhibit T Cell Proliferation In Vitro through Tryptophan Starvation. Cells, 2022, 11, 24.	4.1	6
3	Nuclear factor programming improves stem-cell-derived hepatocyte phenotype. Cell Stem Cell, 2022, 29, 657-658.	11.1	0
4	HIV-1 lentivirus tethering to the genome is associated with transcription factor binding sites found in genes that favour virus survival. Gene Therapy, 2022, 29, 720-729.	4.5	2
5	Maternal over-the-counter analgesics use during pregnancy and adverse perinatal outcomes: cohort study of 151â‰141 singleton pregnancies. BMJ Open, 2022, 12, e048092.	1.9	13
6	Over-the-counter analgesics during pregnancy: a comprehensive review of global prevalence and offspring safety. Human Reproduction Update, 2021, 27, 67-95.	10.8	35
7	Mathematical modelling of oxygen gradients in stem cell-derived liver tissue. PLoS ONE, 2021, 16, e0244070.	2.5	9
8	Dimethyl fumarate reduces hepatocyte senescence following paracetamol exposure. IScience, 2021, 24, 102552.	4.1	9
9	Protocol for automated production of human stem cell derived liver spheres. STAR Protocols, 2021, 2, 100502.	1.2	6
10	Modeling human hepatic steatosis in pluripotent stem cell-derived hepatocytes. STAR Protocols, 2021, 2, 100493.	1.2	2
11	A human pluripotent stem cell model for the analysis of metabolic dysfunction in hepatic steatosis. IScience, 2021, 24, 101931.	4.1	19
12	Development of a cost-effective automated platform to produce human liver spheroids for basic and applied research. Biofabrication, 2021, 13, 015009.	7.1	26
13	Serum-Free Production of Three-Dimensional Hepatospheres from Pluripotent Stem Cells. Methods in Molecular Biology, 2021, , 1.	0.9	0
14	Inflammation-associated suppression of metabolic gene networks in acute and chronic liver disease. Archives of Toxicology, 2020, 94, 205-217.	4.2	32
15	Human PSC-Derived Hepatocytes Express Low Levels of Viral Pathogen Recognition Receptors, but Are Capable of Mounting an Effective Innate Immune Response. International Journal of Molecular Sciences, 2020, 21, 3831.	4.1	7
16	Liver stem cells. , 2020, , 723-736.		1
17	Hepatic Progenitor Specification from Pluripotent Stem Cells using a Defined Differentiation System. Journal of Visualized Experiments, 2020, , .	0.3	1
18	Introducing Point Mutations into Human Pluripotent Stem Cells using Seamless Genome Editing. Journal of Visualized Experiments, 2020, , .	0.3	0

#	ARTICLE	IF	CITATIONS
19	Serum Free Production of Three-dimensional Human Hepatospheres from Pluripotent Stem Cells. Journal of Visualized Experiments, 2019, , .	0.3	11
20	Metabolic control of gene transcription in non-alcoholic fatty liver disease: the role of the epigenome. Clinical Epigenetics, 2019, 11, 104.	4.1	34
21	Liver biopsy derived induced pluripotent stem cells provide unlimited supply for the generation of hepatocyte-like cells. PLoS ONE, 2019, 14, e0221762.	2.5	10
22	Multiomics Analyses of HNF4α Protein Domain Function during Human Pluripotent Stem Cell Differentiation. IScience, 2019, 16, 206-217.	4.1	15
23	Blended electrospinning with human liver extracellular matrix for engineering new hepatic microenvironments. Scientific Reports, 2019, 9, 6293.	3.3	71
24	The Hippo Pathway Regulates Caveolae Expression and Mediates Flow Response via Caveolae. Current Biology, 2019, 29, 242-255.e6.	3.9	56
25	Combining stem cell-derived hepatocytes with impedance sensing to better predict human drug toxicity. Expert Opinion on Drug Metabolism and Toxicology, 2019, 15, 77-83.	3.3	6
26	Pluripotent Stem Cell-Derived Human Tissue: Platforms to Evaluate Drug Metabolism and Safety. AAPS Journal, 2018, 20, 20.	4.4	15
27	Liver cell therapy: is this the end of the beginning?. Cellular and Molecular Life Sciences, 2018, 75, 1307-1324.	5.4	56
28	Quantification of ethyl glucuronide, ethyl sulfate, nicotine, and its metabolites in human fetal liver and placenta. Forensic Toxicology, 2018, 36, 102-112.	2.4	6
29	Science-based assessment of source materials for cell-based medicines: report of a stakeholders workshop. Regenerative Medicine, 2018, 13, 935-944.	1.7	12
30	Developing defined substrates for stem cell culture and differentiation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170230.	4.0	52
31	Modelling non-alcoholic fatty liver disease in human hepatocyte-like cells. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170362.	4.0	29
32	Designer human tissue: coming to a lab near you. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170212.	4.0	0
33	Innate immunity in stem cell-derived hepatocytes. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170220.	4.0	2
34	A human iPSC line capable of differentiating into functional macrophages expressing ZsGreen: a tool for the study and *in vivo* tracking of therapeutic cells. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170219.	4.0	35
35	From scaffold to structure: the synthetic production of cell derived extracellular matrix for liver tissue engineering. Biomedical Physics and Engineering Express, 2018, 4, 065015.	1.2	28
36	Semi-automated Production of Hepatocyte Like Cells from Pluripotent Stem Cells. Journal of Visualized Experiments, 2018, , .	0.3	9

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37	3D human liver tissue from pluripotent stem cells displays stable phenotype in vitro and supports compromised liver function in vivo. Archives of Toxicology, 2018, 92, 3117-3129.	4.2	89
38	A Drug-Induced Hybrid Electrospun Poly-Capro-Lactone: Cell-Derived Extracellular Matrix Scaffold for Liver Tissue Engineering. Tissue Engineering - Part A, 2017, 23, 650-662.	3.1	49
39	Modelling foetal exposure to maternal smoking using hepatoblasts from pluripotent stem cells. Archives of Toxicology, 2017, 91, 3633-3643.	4.2	22
40	Defined and Scalable Generation of Hepatocyte-like Cells from Human Pluripotent Stem Cells. Journal of Visualized Experiments, 2017, , .	0.3	35
41	Distinct Gene Expression and Epigenetic Signatures in Hepatocyte-like Cells Produced by Different Strategies from the Same Donor. Stem Cell Reports, 2017, 9, 1813-1824.	4.8	37
42	Stem cellâ€"derived models to improve mechanistic understanding and prediction of human drugâ€‐induced liver injury. Hepatology, 2017, 65, 710-721.	7.3	54
43	Real-time monitoring of hepatocyte differentiation and impedimetric activity using impedance sensing. , 2017, , .		0
44	Pluripotent stem cell derived hepatocytes: using materials to define cellular differentiation and tissue engineering. Journal of Materials Chemistry B, 2016, 4, 3433-3442.	5.8	26
45	Mass production of stem cell derived human hepatocytes for experimental medicine. Expert Review of Gastroenterology and Hepatology, 2016, 10, 769-771.	3.0	1
46	Concise Review: Advances in Generating Hepatocytes from Pluripotent Stem Cells for Translational Medicine. Stem Cells, 2016, 34, 1421-1426.	3.2	36
47	Reducing Hepatocyte Injury and Necrosis in Response to Paracetamol Using Noncoding RNAs. Stem Cells Translational Medicine, 2016, 5, 764-772.	3.3	36
48	Low-Density Lipoprotein Uptake Demonstrates a Hepatocyte Phenotype in the Dog, but Is Nonspecific. Stem Cells and Development, 2016, 25, 90-100.	2.1	2
49	Fluid shear stress modulation of hepatocyte-like cell function. Archives of Toxicology, 2016, 90, 1757-1761.	4.2	89
50	Polyurethane: Stable Cell Phenotype Requires Plasticity: Polymer Supported Directed Differentiation Reveals a Unique Gene Signature Predicting Stable Hepatocyte Performance (Adv. Healthcare Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	7.6	1
51	Recombinant Laminins Drive the Differentiation and Self-Organization of hESC-Derived Hepatocytes. Stem Cell Reports, 2015, 5, 1250-1262.	4.8	123
52	Polymer Supported Directed Differentiation Reveals a Unique Gene Signature Predicting Stable Hepatocyte Performance. Advanced Healthcare Materials, 2015, 4, 1820-1825.	7.6	20
53	Discovery of a Novel Polymer for Human Pluripotent Stem Cell Expansion and Multilineage Differentiation. Advanced Materials, 2015, 27, 4006-4012.	21.0	75
54	Concise Review: Workshop Review: Understanding and Assessing the Risks of Stem Cell-Based Therapies. Stem Cells Translational Medicine, 2015, 4, 389-400.	3.3	98

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55	Hepatic progenitor cells of biliary origin with liver repopulation capacity. Nature Cell Biology, 2015, 17, 971-983.	10.3	374
56	Maternal Smoking Dysregulates Protein Expression in Second Trimester Human Fetal Livers in a Sex-Specific Manner. Journal of Clinical Endocrinology and Metabolism, 2015, 100, E861-E870.	3.6	25
57	Gene networks and transcription factor motifs defining the differentiation of stem cells into hepatocyte-like cells. Journal of Hepatology, 2015, 63, 934-942.	3.7	165
58	Galectin-3 regulates hepatic progenitor cell expansion during liver injury. Gut, 2015, 64, 312-321.	12.1	48
59	Serum-Free Directed Differentiation of Human Embryonic Stem Cells to Hepatocytes. Methods in Molecular Biology, 2015, 1250, 105-111.	0.9	19
60	Accurate Prediction of Drug-Induced Liver Injury Using Stem Cell-Derived Populations. Stem Cells Translational Medicine, 2014, 3, 141-148.	3.3	96
61	Deriving Functional Hepatocytes from Pluripotent Stem Cells. Current Protocols in Stem Cell Biology, 2014, 30, 1G.5.1-12.	3.0	51
62	Modulating Innate Immunity Improves Hepatitis C Virus Infection and Replication in Stem Cell-Derived Hepatocytes. Stem Cell Reports, 2014, 3, 204-214.	4.8	43
63	Stabilizing Hepatocellular Phenotype Using Optimized Synthetic Surfaces. Journal of Visualized Experiments, 2014, , 51723.	0.3	2
64	Rapid and Scalable Human Stem Cell Differentiation: Now in 3D. Stem Cells and Development, 2013, 22, 2691-2692.	2.1	10
65	Development of an Embryoid Bodyâ€"Based Screening Strategy for Assessing the Hepatocyte Differentiation Potential of Human Embryonic Stem Cells Following Single-Cell Dissociation. Cellular Reprogramming, 2013, 15, 9-14.	0.9	10
66	Pluripotent Stem Cellâ€"Derived Hepatocytes: Potential and Challenges in Pharmacology. Annual Review of Pharmacology and Toxicology, 2013, 53, 147-159.	9.4	48
67	Modeling Human Liver Biology Using Stem Cell-Derived Hepatocytes. International Journal of Molecular Sciences, 2013, 14, 22011-22021.	4.1	6
68	Liver tissue engineering and cell sources: issues and challenges. Liver International, 2013, 33, 666-676.	3.9	103
69	Developing High-Fidelity Hepatotoxicity Models From Pluripotent Stem Cells. Stem Cells Translational Medicine, 2013, 2, 505-509.	3.3	122
70	SUMOylation of HNF4Î± regulates protein stability and hepatocyte function. Journal of Cell Science, 2012, 125, 4686-4686.	2.0	2
71	SUMOylation of HNF4Î± regulates protein stability and hepatocyte function. Journal of Cell Science, 2012, 125, 3630-3635.	2.0	43
72	Identification and Application of Polymers as Biomaterials for Tissue Engineering and Regenerative Medicine. , 2012, , 1-30.		3

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73	Maintaining Hepatic Stem Cell Gene Expression on Biological and Synthetic Substrata. BioResearch Open Access, 2012, 1, 50-53.	2.6	7
74	Novel Biopolymers to Enhance Endothelialisation of Intra€vascular Devices. Advanced Healthcare Materials, 2012, 1, 646-656.	7.6	25
75	Stem Cell-Based Toxicity Screening. Pharmaceutical Medicine, 2012, 26, 85-89.	1.9	10
76	Stem cell differentiation and human liver disease. World Journal of Gastroenterology, 2012, 18, 2018.	3.3	16
77	Robust Generation of Hepatocyte-like Cells from Human Embryonic Stem Cell Populations. Journal of Visualized Experiments, 2011, , e2969.	0.3	19
78	Persistence of functional hepatocyte-like cells in immune-compromised mice. Liver International, 2011, 31, 254-262.	3.9	37
79	Unbiased screening of polymer libraries to define novel substrates for functional hepatocytes with inducible drug metabolism. Stem Cell Research, 2011, 6, 92-102.	0.7	95
80	The Role of Activin/Nodal and Wnt Signaling in Endoderm Formation. Vitamins and Hormones, 2011, 85, 207-216.	1.7	21
81	Lineage-specific distribution of high levels of genomic. Cell Research, 2011, 21, 1332-1342.	12.0	174
82	Deriving Metabolically Active Hepatic Endoderm from Pluripotent Stem Cells. Springer Protocols, 2011, , 369-386.	0.3	0
83	Hepatic Endoderm Differentiation from Human Embryonic Stem Cells. Current Stem Cell Research and Therapy, 2010, 5, 233-244.	1.3	12
84	Role of stem-cell-derived hepatic endoderm in human drug discovery. Biochemical Society Transactions, 2010, 38, 1033-1036.	3.4	15
85	The effect of SUMO modification on hepatic differentiation from hESCs. Toxicology, 2010, 278, 352.	4.2	0
86	Generation of functional human hepatic endoderm from human induced pluripotent stem cells. Hepatology, 2010, 51, 329-335.	7.3	389
87	Pluripotent stem cell derived hepatocyte like cells and their potential in toxicity screening. Toxicology, 2010, 278, 250-255.	4.2	72
88	Post-translational modification by SUMO. Toxicology, 2010, 278, 288-293.	4.2	105
89	The Complexities of Engineering Human Stem Cell-Derived Therapeutics. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-2.	3.0	0
90	Three-Dimensional Culture of Human Embryonic Stem Cell Derived Hepatic Endoderm and Its Role in Bioartificial Liver Construction. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-12.	3.0	31

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91	Cadaveric Hepatocytes Repopulate Diseased Livers: Life After Death. Gastroenterology, 2010, 139, 729-731.	1.3	8
92	The Comparison between Conditioned Media and Serum-Free Media in Human Embryonic Stem Cell Culture and Differentiation. Cellular Reprogramming, 2010, 12, 133-140.	0.9	39
93	Progress and future challenges in stem cell-derived liver technologies. American Journal of Physiology - Renal Physiology, 2009, 297, G241-G248.	3.4	76
94	Efficient Differentiation of Hepatocytes from Human Embryonic Stem Cells Exhibiting Markers Recapitulating Liver Development In Vivo. Stem Cells, 2008, 26, 894-902.	3.2	387
95	Highly efficient differentiation of hESCs to functional hepatic endoderm requires ActivinA and Wnt3a signaling. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12301-12306.	7.1	392
96	The Inhibitory Role of Stromal Cell Mesenchyme on Human Embryonic Stem Cell Hepatocyte Differentiation is Overcome by Wnt3a Treatment. Cloning and Stem Cells, 2008, 10, 331-340.	2.6	30
97	Modelling Hepatic Endoderm Development: Highly Efficient Differentiation of Human Embryonic Stem Cells to Functional Hepatic Endoderm Requires ActivinA and Wnt3a Signalling.. Nature Precedings, 2008, , .	0.1	0
98	Progenitor Cell Characterization and Location in the Developing Human Liver. Stem Cells and Development, 2007, 16, 771-778.	2.1	43
99	Direct Differentiation of Human Embryonic Stem Cells to Hepatocyte-like Cells Exhibiting Functional Activities. Cloning and Stem Cells, 2007, 9, 51-62.	2.6	149
100	Oct-4 Knockdown Induces Similar Patterns of Endoderm and Trophoblast Differentiation Markers in Human and Mouse Embryonic Stem Cells. Stem Cells, 2004, 22, 225-235.	3.2	340
101	Interaction between hnRNPA1 and IκBα Is Required for Maximal Activation of NF-κB-Dependent Transcription. Molecular and Cellular Biology, 2001, 21, 3482-3490.	2.3	55