Martin L Yarmush

List of Publications by Year
in descending order

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566 papers	32,230 citations	4370 86 h-index	8370 147 g-index
585 all docs	585 docs citations	585 times ranked	28968 citing authors

#	Article	IF	Citations
1	Organ reengineering through development of a transplantable recellularized liver graft using decellularized liver matrix. Nature Medicine, 2010, 16, 814-820.	15.2	1,215
2	Effect of cellâ€“cell interactions in preservation of cellular phenotype: cocultivation of hepatocytes and nonparenchymal cells. FASEB Journal, 1999, 13, 1883-1900.	0.2	827
3	Hepatocyte function and extracellular matrix geometry: longâ€term culture in a sandwich configuration. FASEB Journal, 1989, 3, 174-177.	0.2	719
4	Long-term in vitro function of adult hepatocytes in a collagen sandwich configuration. Biotechnology Progress, 1991, 7, 237-245.	1.3	658
5	Electroporation-Based Technologies for Medicine: Principles, Applications, and Challenges. Annual Review of Biomedical Engineering, 2014, 16, 295-320.	5.7	655
6	Mesenchymal Stem Cells: Mechanisms of Immunomodulation and Homing. Cell Transplantation, 2010, 19, 667-679.	1.2	611
7	Tissue Engineering and Regenerative Medicine: History, Progress, and Challenges. Annual Review of Chemical and Biomolecular Engineering, 2011, 2, 403-430.	3.3	509
8	Controlling cell interactions by micropatterning in co-cultures: Hepatocytes and 3T3 fibroblasts. , 1997, 34, 189-199.		496
9	Mesenchymal Stem Cell-Derived Molecules Reverse Fulminant Hepatic Failure. PLoS ONE, 2007, 2, e941.	1.1	462
10	Mesenchymal stem cell-derived molecules directly modulate hepatocellular death and regenerationin vitroandin vivo. Hepatology, 2008, 47, 1634-1643.	3.6	461
11	Gut Microbiota-Derived Tryptophan Metabolites Modulate Inflammatory Response in Hepatocytes and Macrophages. Cell Reports, 2018, 23, 1099-1111.	2.9	406
12	Effect of extracellular matrix topology on cell structure, function, and physiological responsiveness: hepatocytes cultured in a sandwich configuration. FASEB Journal, 1996, 10, 1471-1484.	0.2	387
13	Effects of oxygenation and flow on the viability and function of rat hepatocytes cocultured in a microchannel flat-plate bioreactor. Biotechnology and Bioengineering, 2001, 73, 379-389.	1.7	304
14	Reprogramming of Intestinal Glucose Metabolism and Glycemic Control in Rats After Gastric Bypass. Science, 2013, 341, 406-410.	6.0	303
15	Microfabrication of Hepatocyte/Fibroblast Co-cultures: Role of Homotypic Cell Interactions. Biotechnology Progress, 1998, 14, 378-387.	1.3	282
16	Hepatocytes in collagen sandwich: evidence for transcriptional and translational regulation.. Journal of Cell Biology, 1992, 116, 1043-1053.	2.3	281
17	Liver-Specific Functional Studies in a Microfluidic Array of Primary Mammalian Hepatocytes. Analytical Chemistry, 2006, 78, 4291-4298.	3.2	238
18	The growing role of precision and personalized medicine for cancer treatment. Technology, 2018, 06, 79-100.	1.4	237

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19	Apolipoprotein B-dependent hepatitis C virus secretion is inhibited by the grapefruit flavonoid naringenin. Hepatology, 2008, 47, 1437-1445.	3.6	226
20	Immunomodulation of activated hepatic stellate cells by mesenchymal stem cells. Biochemical and Biophysical Research Communications, 2007, 363, 247-252.	1.0	224
21	In Vitro Models of Traumatic Brain Injury. Annual Review of Biomedical Engineering, 2011, 13, 91-126.	5.7	220
22	Culture matrix configuration and composition in the maintenance of hepatocyte polarity and function. Biomaterials, 1996, 17, 373-385.	5.7	211
23	Hepatic Injury in Nonalcoholic Steatohepatitis Contributes to Altered Intestinal Permeability. Cellular and Molecular Gastroenterology and Hepatology, 2015, 1, 222-232.e2.	2.3	209
24	Kinetics of electrically and chemically induced swelling in polyelectrolyte gels. Journal of Chemical Physics, 1990, 93, 4462-4472.	1.2	203
25	A high-throughput microfluidic real-time gene expression living cell array. Lab on A Chip, 2007, 7, 77-85.	3.1	200
26	Oxygen-mediated enhancement of primary hepatocyte metabolism, functional polarization, gene expression, and drug clearance. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15714-15719.	3.3	190
27	A microfluidic hepatic coculture platform for cell-based drug metabolism studies. Biochemical Pharmacology, 2010, 79, 1036-1044.	2.0	190
28	Transcriptional Regulation of Human and Rat Hepatic Lipid Metabolism by the Grapefruit Flavonoid Naringenin: Role of PPARÎ±, PPARÎ³ and LXRÎ±. PLoS ONE, 2010, 5, e12399.	1.1	188
29	Probing heterotypic cell interactions: Hepatocyte function in microfabricated co-cultures. Journal of Biomaterials Science, Polymer Edition, 1998, 9, 1137-1160.	1.9	182
30	Nucleation and growth of ice crystals inside cultured hepatocytes during freezing in the presence of dimethyl sulfoxide. Biophysical Journal, 1993, 65, 2524-2536.	0.2	175
31	Subnormothermic Machine Perfusion for Ex Vivo Preservation and Recovery of the Human Liver for Transplantation. American Journal of Transplantation, 2014, 14, 1400-1409.	2.6	170
32	Nonthermal Irreversible Electroporation: Fundamentals, Applications, and Challenges. IEEE Transactions on Biomedical Engineering, 2013, 60, 707-714.	2.5	164
33	Longâ€term maintenance of a microfluidic 3D human liver sinusoid. Biotechnology and Bioengineering, 2016, 113, 241-246.	1.7	164
34	Self-assembling elastin-like peptides growth factor chimeric nanoparticles for the treatment of chronic wounds. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1034-1039.	3.3	163
35	Polybrene increases retrovirus gene transfer efficiency by enhancing receptor-independent virus adsorption on target cell membranes. Biophysical Chemistry, 2002, 97, 159-172.	1.5	161
36	Dynamic Gene Expression Profiling Using a Microfabricated Living Cell Array. Analytical Chemistry, 2004, 76, 4098-4103.	3.2	158

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37	Supercooling enables long-term transplantation survival following 4 days of liver preservation. Nature Medicine, 2014, 20, 790-793.	15.2	153
38	Evaluation of a microfluidic based cell culture platform with primary human hepatocytes for the prediction of hepatic clearance in human. Biochemical Pharmacology, 2009, 78, 625-632.	2.0	152
39	Microfabrication-based modulation of embryonic stem cell differentiation. Lab on A Chip, 2007, 7, 1018.	3.1	146
40	InÂvitro platforms for evaluating liver toxicity. Experimental Biology and Medicine, 2014, 239, 1180-1191.	1.1	145
41	Three-Dimensional Primary Hepatocyte Culture in Synthetic Self-Assembling Peptide Hydrogel. Tissue Engineering - Part A, 2008, 14, 227-236.	1.6	144
42	Reactive Bone Marrow Stromal Cells Attenuate Systemic Inflammation via sTNFR1. Molecular Therapy, 2010, 18, 1857-1864.	3.7	144
43	Simple Surface Modification of Poly(dimethylsiloxane) via Surface Segregating Smart Polymers for Biomicrofluidics. Scientific Reports, 2019, 9, 7377.	1.6	144
44	Alginate-PLL microencapsulation: Effect on the differentiation of embryonic stem cells into hepatocytes. Biotechnology and Bioengineering, 2006, 93, 581-591.	1.7	143
45	Metabolic preconditioning of donor organs: Defatting fatty livers by normothermic perfusion ex vivo. Metabolic Engineering, 2009, 11, 274-283.	3.6	139
46	Enhancement of Naringenin Bioavailability by Complexation with Hydroxypropoyl-Î²-Cyclodextrin. PLoS ONE, 2011, 6, e18033.	1.1	137
47	Bone Marrow-Derived Mesenchymal Stem Cells Ameliorate Autoimmune Enteropathy Independently of Regulatory T Cells. Stem Cells, 2008, 26, 1913-1919.	1.4	134
48	Hepatic Tissue Engineering: Development of Critical Technologies. Annals of the New York Academy of Sciences, 1992, 665, 238-252.	1.8	132
49	Charged Polymers Modulate Retrovirus Transduction via Membrane Charge Neutralization and Virus Aggregation. Biophysical Journal, 2004, 86, 1234-1242.	0.2	132
50	Keratinocyte growth factor induces hyperproliferation and delays differentiation in a skin equivalent model system. FASEB Journal, 2001, 15, 898-906.	0.2	131
51	Microfabricated grooved substrates as platforms for bioartificial liver reactors. Biotechnology and Bioengineering, 2005, 90, 632-644.	1.7	131
52	Oxygen uptake rates in cultured rat hepatocytes. Biotechnology and Bioengineering, 1992, 40, 1286-1291.	1.7	126
53	Dynamics of cell membrane permeability changes at supraphysiological temperatures. Biophysical Journal, 1995, 68, 2608-2614.	0.2	124
54	Oxygen Consumption Characteristics of Porcine Hepatocytes. Metabolic Engineering, 1999, 1, 49-62.	3.6	122

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55	Living-Cell Microarrays. Annual Review of Biomedical Engineering, 2009, 11, 235-257.	5.7	121
56	Naringenin inhibits the assembly and long-term production of infectious hepatitis C virus particles through a PPAR-mediated mechanism. Journal of Hepatology, 2011, 55, 963-971.	1.8	121
57	Recent advances in nonbiofouling PDMS surface modification strategies applicable to microfluidic technology. Technology, 2017, 05, 1-12.	1.4	120
58	Vitrification by ultra-fast cooling at a low concentration of cryoprotectants in a quartz micro-capillary: A study using murine embryonic stem cells. Cryobiology, 2008, 56, 223-232.	0.3	118
59	Hepatic tissue engineering for adjunct and temporary liver support: Critical technologies. Liver Transplantation, 2004, 10, 1331-1342.	1.3	116
60	Droplet-based microfluidic platforms for single T cell secretion analysis of IL-10 cytokine. Biosensors and Bioelectronics, 2011, 26, 2707-2710.	5.3	116
61	Gap junction inhibition prevents drug-induced liver toxicity and fulminant hepatic failure. Nature Biotechnology, 2012, 30, 179-183.	9.4	116
62	Genetically Modified Human Keratinocytes Overexpressing PDGF-A Enhance the Performance of a Composite Skin Graft. Human Gene Therapy, 1998, 9, 529-539.	1.4	115
63	The fabrication of low-impedance nanoporous gold multiple-electrode arrays for neural electrophysiology studies. Nanotechnology, 2010, 21, 125504.	1.3	115
64	Proteomic analysis of naturally-sourced biological scaffolds. Biomaterials, 2016, 75, 37-46.	5.7	115
65	Evaluation of Human Skin Reconstituted from Composite Grafts of Cultured Keratinocytes and Human Acellular Dermis Transplanted to Athymic Mice. Journal of Investigative Dermatology, 1996, 107, 121-127.	0.3	114
66	Supercooling extends preservation time of human livers. Nature Biotechnology, 2019, 37, 1131-1136.	9.4	113
67	Molecular Machines. Annual Review of Biomedical Engineering, 2004, 6, 363-395.	5.7	110
68	Generation and manipulation of hydrogel microcapsules by droplet-based microfluidics for mammalian cell culture. Lab on A Chip, 2017, 17, 1913-1932.	3.1	110
69	Increased gut permeability early after burns correlates with the extent of burn injury. Critical Care Medicine, 1992, 20, 1508-1512.	0.4	105
70	Designing a Hepatocellular Microenvironment with Protein Microarraying and Poly(ethylene glycol) Photolithography. Langmuir, 2004, 20, 2999-3005.	1.6	104
71	Advances in Proteomic Technologies. Annual Review of Biomedical Engineering, 2002, 4, 349-373.	5.7	103
72	Proteoglycans secreted by packaging cell lines inhibit retrovirus infection. Journal of Virology, 1996, 70, 6468-6473.	1.5	103

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73	Assessment of Artificial Liver Support Technology. Cell Transplantation, 1992, 1, 323-341.	1.2	102
74	Control of hypertrophic scar growth using selective photothermolysis. , 1997, 21, 7-12.		99
75	Bioacoustic-enabled patterning of human iPSC-derived cardiomyocytes into 3D cardiac tissue. Biomaterials, 2017, 131, 47-57.	5.7	99
76	Bone Marrow Mesenchymal Stromal Cells Attenuate Organ Injury Induced by LPS and Burn. Cell Transplantation, 2010, 19, 823-830.	1.2	98
77	Layered patterning of hepatocytes in co-culture systems using microfabricated stencils. BioTechniques, 2010, 48, 47-52.	0.8	98
78	Resolvin <scp>D</scp>2 prevents secondary thrombosis and necrosis in a mouse burn wound model. Wound Repair and Regeneration, 2013, 21, 35-43.	1.5	98
79	Effect of Collagen Gel Configuration on the Cytoskeleton in Cultured Rat Hepatocytes. Experimental Cell Research, 1993, 208, 442-452.	1.2	97
80	A Device to Measure the Oxygen Uptake Rate of Attached Cells: Importance in Bioartificial Organ Design. Cell Transplantation, 1994, 3, 515-527.	1.2	96
81	Excorporeal Normothermic Machine Perfusion Resuscitates Pig DCD Livers with Extended Warm Ischemia. Journal of Surgical Research, 2012, 173, e83-e88.	0.8	96
82	Genetically Modified Human Epidermis Overexpressing PDGF-A Directs the Development of a Cellular and Vascular Connective Tissue Stroma When Transplanted to Athymic Miceâ€"Implications for the Use of Genetically Modified Keratinocytes to Modulate Dermal Regeneration. Journal of Investigative Dermatology, 1995, 105, 756-763.	0.3	95
83	Effects of Hypothermia on the Function, Membrane Integrity, and Cytoskeletal Structure of Hepatocytes. Cryobiology, 1995, 32, 389-403.	0.3	95
84	Large-Scale Processing of Recombinant Retroviruses for Gene Therapy. Biotechnology Progress, 1999, 15, 1-11.	1.3	93
85	Implantable microenvironments to attract hematopoietic stem/cancer cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19638-19643.	3.3	93
86	Subnormothermic Machine Perfusion at Both 20Â°C and 30Â°C Recovers Ischemic Rat Livers for Successful Transplantation. Journal of Surgical Research, 2012, 175, 149-156.	0.8	93
87	Tissue heterogeneity in structure and conductivity contribute to cell survival during irreversible electroporation ablation by â€œelectric field sinksâ€. Scientific Reports, 2015, 5, 8485.	1.6	93
88	Oxygen is a factor determining in vitro tissue assembly: Effects on attachment and spreading of hepatocytes. Biotechnology and Bioengineering, 1994, 43, 654-660.	1.7	90
89	Biotunable Acoustic Node Assembly of Organoids. Advanced Healthcare Materials, 2015, 4, 1937-1943.	3.9	90
90	Multilayered tissue mimicking skin and vessel phantoms with tunable mechanical, optical, and acoustic properties. Medical Physics, 2016, 43, 3117-3131.	1.6	90

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91	Isolation and co-culture of rat parenchymal and non-parenchymal liver cells to evaluate cellular interactions and response. Scientific Reports, 2016, 6, 25329.	1.6	90
92	Metabolic Patterning on a Chip: Towards in vitro Liver Zonation of Primary Rat and Human Hepatocytes. Scientific Reports, 2018, 8, 8951.	1.6	90
93	Metabolic Engineering: Advances in Modeling and Intervention in Health and Disease. Annual Review of Biomedical Engineering, 2003, 5, 349-381.	5.7	89
94	Kinetics of retrovirus production and decay. , 1999, 63, 654-662.		88
95	Dynamic interplay of flow and collagen stabilizes primary hepatocytes culture in a microfluidic platform. Lab on A Chip, 2014, 14, 2033-2039.	3.1	88
96	Ultrasensitive Detection of Lowâ€Abundance Surfaceâ€Marker Protein Using Isothermal Rolling Circle Amplification in a Microfluidic Nanoliter Platform. Small, 2011, 7, 395-400.	5.2	87
97	Conserving energy during molecular dynamics simulations of water, proteins, and proteins in water. Journal of Computational Chemistry, 1990, 11, 1169-1180.	1.5	86
98	Oxygen uptake rates and liver-specific functions of hepatocyte and 3T3 fibroblast co-cultures. Biotechnology and Bioengineering, 2007, 97, 188-199.	1.7	86
99	Long-Term Coculture Strategies for Primary Hepatocytes and Liver Sinusoidal Endothelial Cells. Tissue Engineering - Part C: Methods, 2015, 21, 413-422.	1.1	84
100	Deep learning robotic guidance for autonomous vascular access. Nature Machine Intelligence, 2020, 2, 104-115.	8.3	84
101	Retrovirus infection: effect of time and target cell number. Journal of Virology, 1995, 69, 6994-7000.	1.5	84
102	Radial flow hepatocyte bioreactor using stacked microfabricated grooved substrates. Biotechnology and Bioengineering, 2008, 99, 455-467.	1.7	83
103	A stable long-term hepatocyte culture system for studies of physiologic processes: cytokine stimulation of the acute phase response in rat and human hepatocytes. Biotechnology Progress, 1992, 8, 219-225.	1.3	82
104	Polyelectrolyte Nano-scaffolds for the Design of Layered Cellular Architectures. Tissue Engineering, 2006, 12, 1553-1563.	4.9	82
105	Integration of Technologies for Hepatic Tissue Engineering. , 2007, 103, 309-329.		82
106	Recovery of Warm Ischemic Rat Liver Grafts by Normothermic Extracorporeal Perfusion. Transplantation, 2009, 87, 170-177.	0.5	82
107	Copolymers of lysine and polyethylene glycol: a new family of functionalized drug carriers. Bioconjugate Chemistry, 1993, 4, 54-62.	1.8	81
108	Effect of Oxygen on Isolated Pancreatic Tissue. ASAIO Transactions, 1989, 35, 739-741.	0.2	79

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109	Nonequilibrium freezing of one-cell mouse embryos. Membrane integrity and developmental potential. Biophysical Journal, 1993, 64, 1908-1921.	0.2	79
110	Metabolic Flux Analysis of Postburn Hepatic Hypermetabolism. Metabolic Engineering, 2000, 2, 312-327.	3.6	79
111	Homogeneous differentiation of hepatocyteâ€like cells from embryonic stem cells: applications for the treatment of liver failure. FASEB Journal, 2008, 22, 898-909.	0.2	79
112	Sleeve gastrectomy and Roux-en-Y gastric bypass exhibit differential effects on food preferences, nutrient absorption and energy expenditure in obese rats. International Journal of Obesity, 2012, 36, 1396-1402.	1.6	79
113	Co-delivery of a growth factor and a tissue-protective molecule using elastin biopolymers accelerates wound healing in diabetic mice. Biomaterials, 2017, 141, 149-160.	5.7	79
114	Microfluidic flow-encoded switching for parallel control of dynamic cellular microenvironments. Lab on A Chip, 2008, 8, 107-116.	3.1	78
115	A simplified subnormothermic machine perfusion system restores ischemically damaged liver grafts in a rat model of orthotopic liver transplantation. Transplantation Research, 2012, 1, 6.	1.5	76
116	Live single cell functional phenotyping in droplet nano-liter reactors. Scientific Reports, 2013, 3, 3179.	1.6	76
117	Metabolic flux analysis of cultured hepatocytes exposed to plasma. Biotechnology and Bioengineering, 2003, 81, 33-49.	1.7	75
118	A novel formulation of oxygenâ€carrying matrix enhances liverâ€specific function of cultured hepatocytes. FASEB Journal, 2006, 20, 2531-2533.	0.2	74
119	Building and manipulating neural pathways with microfluidics. Lab on A Chip, 2010, 10, 999.	3.1	74
120	Encapsulated mesenchymal stromal cells for in vivo transplantation. Biotechnology and Bioengineering, 2011, 108, 2747-2758.	1.7	72
121	An analysis of transport resistances in the operation of BIAcoreâ„¢; implications for kinetic studies of biospecific interactions. Molecular Immunology, 1996, 33, 1203-1214.	1.0	71
122	Patterned Co-Culture of Primary Hepatocytes and Fibroblasts Using Polyelectrolyte Multilayer Templates. Macromolecular Bioscience, 2007, 7, 344-353.	2.1	71
123	A new technique for primary hepatocyte expansion in vitro. Biotechnology and Bioengineering, 2008, 101, 345-356.	1.7	71
124	Xenobiotic Metabolism by Cultured Primary Porcine Hepatocytes. Tissue Engineering, 2000, 6, 467-479.	4.9	69
125	Analysis of Oxygen Transport to Hepatocytes in a Flat-Plate Microchannel Bioreactor. Annals of Biomedical Engineering, 2001, 29, 947-955.	1.3	69
126	Elastinâ€like polypeptides: A strategic fusion partner for biologics. Biotechnology and Bioengineering, 2016, 113, 1617-1627.	1.7	69

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127	Effectiveness of Poloxamer 188 in Arresting Calcein Leakage from Thermally Damaged Isolated Skeletal Muscle Cellsa. Annals of the New York Academy of Sciences, 1994, 720, 111-123.	1.8	68
128	Proteomic analysis of altered protein expression in skeletal muscle of rats in a hypermetabolic state induced by burn sepsis. Biochemical Journal, 2006, 397, 149-158.	1.7	68
129	Liver endothelial cells promote LDL-R expression and the uptake of HCV-like particles in primary rat and human hepatocytes. Hepatology, 2006, 43, 257-265.	3.6	68
130	Complexation of Retrovirus with Cationic and Anionic Polymers Increases the Efficiency of Gene Transfer. Human Gene Therapy, 2001, 12, 1611-1621.	1.4	67
131	The use of elastin-like polypeptideâ€“polyelectrolyte complexes to control hepatocyte morphology and function in vitro. Biomaterials, 2008, 29, 625-632.	5.7	67
132	Intrahepatic amino acid and glucose metabolism in a ?-galactosamineâ€“induced rat liver failure model. Hepatology, 2001, 34, 360-371.	3.6	66
133	Control of hepatic differentiation via cellular aggregation in an alginate microenvironment. Biotechnology and Bioengineering, 2007, 98, 631-644.	1.7	66
134	A new approach to the cryopreservation of hepatocytes in a sandwich culture configuration. Cryobiology, 1990, 27, 576-584.	0.3	65
135	Surgical models of Roux-en-Y gastric bypass surgery and sleeve gastrectomy in rats and mice. Nature Protocols, 2015, 10, 495-507.	5.5	64
136	Long-term deep-supercooling of large-volume water and red cell suspensions via surface sealing with immiscible liquids. Nature Communications, 2018, 9, 3201.	5.8	64
137	Transport phenomena during freezing of isolated hepatocytes. AICHE Journal, 1992, 38, 1512-1522.	1.8	63
138	Neural lineage differentiation of embryonic stem cells within alginate microbeads. Biomaterials, 2011, 32, 4489-4497.	5.7	63
139	Application of whole-organ tissue engineering in hepatology. Nature Reviews Gastroenterology and Hepatology, 2012, 9, 738-744.	8.2	63
140	Integrated Energy and Flux Balance Based Multiobjective Framework for Large-Scale Metabolic Networks. Annals of Biomedical Engineering, 2007, 35, 863-885.	1.3	62
141	Immunoadsorption: strategies for antigen elution and production of reusable adsorbents. Biotechnology Progress, 1992, 8, 168-178.	1.3	61
142	Cell-cell interactions are essential for maintenance of hepatocyte function in collagen gel but not on matrigel. , 1997, 56, 706-711.		61
143	Amphipathic Peptide-Based Fusion Peptides and Immunoconjugates for the Targeted Ablation of Prostate Cancer Cells. Cancer Research, 2007, 67, 6368-6375.	0.4	61
144	Identification of neutrophil gelatinase-associated lipocalin (NGAL) as a discriminatory marker of the hepatocyte-secreted protein response to IL-1Î²: a proteomic analysis. Biotechnology and Bioengineering, 2005, 91, 502-515.	1.7	60

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145	Microfluidics and multielectrode array-compatible organotypic slice culture method. Journal of Neuroscience Methods, 2009, 178, 59-64.	1.3	60
146	Long-Term Functional Recovery of Hepatocytes after Cryopreservation in a Three-Dimensional Culture Configuration. Cell Transplantation, 1992, 1, 281-292.	1.2	59
147	Targeted Expression of Insulin-Like Growth Factor to Human Keratinocytes: Modification of the Autocrine Control of Keratinocyte Proliferation. Journal of Investigative Dermatology, 1996, 107, 113-120.	0.3	59
148	Influence of insulin therapy on burn wound healing in rats. Journal of Surgical Research, 2003, 109, 92-100.	0.8	59
149	Long-Term Superior Performance of a Stem Cell/Hepatocyte Device for the Treatment of Acute Liver Failure. Tissue Engineering - Part A, 2009, 15, 3377-3388.	1.6	59
150	Profiling of dynamic changes in hypermetabolic livers. Biotechnology and Bioengineering, 2003, 83, 400-415.	1.7	58
151	Cellâ€“cell interaction modulates neuroectodermal specification of embryonic stem cells. Neuroscience Letters, 2008, 438, 190-195.	1.0	58
152	DNA-triggered innate immune responses are propagated by gap junction communication. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12867-12872.	3.3	58
153	Cell Delivery: From Cell Transplantation to Organ Engineering. Cell Transplantation, 2010, 19, 655-665.	1.2	58
154	Bone Marrow Stromal Cell Transplants Prevent Experimental Enterocolitis and Require Host CD11b+ Splenocytes. Gastroenterology, 2011, 140, 966-975.e4.	0.6	58
155	Supercooling preservation and transplantation of the rat liver. Nature Protocols, 2015, 10, 484-494.	5.5	58
156	A Quantitative Model of Invasive Pseudomonas Infection in Burn Injury. Journal of Burn Care and Research, 1994, 15, 232-235.	1.7	57
157	Metabolic flux analysis of hepatocyte function in hormone- and amino acid-supplemented plasma. Metabolic Engineering, 2003, 5, 1-15.	3.6	57
158	Liver Defatting: An Alternative Approach to Enable Steatotic Liver Transplantation. American Journal of Transplantation, 2012, 12, 3176-3183.	2.6	57
159	Decellularized human liver extracellular matrix (hDLM)â€mediated hepatic differentiation of human induced pluripotent stem cells (hIPSCs). Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1962-e1973.	1.3	57
160	Covalent Proteinâ^'Oligonucleotide Conjugates for Efficient Delivery of Antisense Molecules. Bioconjugate Chemistry, 1997, 8, 935-940.	1.8	56
161	Expression profiling analysis of the metabolic and inflammatory changes following burn injury in rats. Physiological Genomics, 2004, 18, 87-98.	1.0	56
162	Improving functional re-endothelialization of acellular liver scaffold using REDV cell-binding domain. Acta Biomaterialia, 2018, 78, 151-164.	4.1	56

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163	Erratum in print version of "Toward a More Accurate Quantitation of the Activity of Recombinant Retroviruses: Alternatives to Titer and Multiplicity of Infection". Journal of Virology, 2000, 74, 3431-3431.	1.5	55
164	Thermodynamic and Kinetic Characterization of Antisense Oligodeoxynucleotide Binding to a Structured mRNA. Biophysical Journal, 2002, 82, 366-377.	0.2	55
165	Eradication of multidrugâ€resistant pseudomonas biofilm with pulsed electric fields. Biotechnology and Bioengineering, 2016, 113, 643-650.	1.7	55
166	Prolineâ€mediated enhancement of hepatocyte function in a collagen gel sandwich culture configuration. FASEB Journal, 1993, 7, 586-591.	0.2	54
167	Plasmin Triggers Rapid Contraction and Degradation of Fibroblast-Populated Collagen Lattices. Journal of Investigative Dermatology, 2000, 114, 647-653.	0.3	54
168	Towards a three-dimensional microfluidic liver platform for predicting drug efficacy and toxicity in humans. Stem Cell Research and Therapy, 2013, 4, S16.	2.4	54
169	Dynamics of Tissue Neutrophil Sequestration after Cutaneous Burns in Rats. Journal of Surgical Research, 2000, 93, 88-96.	0.8	53
170	Selective Adhesion of Hepatocytes on Patterned Surfaces^a. Annals of the New York Academy of Sciences, 1994, 745, 187-209.	1.8	53
171	Alginate micro-encapsulation of mesenchymal stromal cells enhances modulation of the neuro-inflammatory response. Cytotherapy, 2015, 17, 1353-1364.	0.3	53
172	A Microfabricated Platform for Generating Physiologically-Relevant Hepatocyte Zonation. Scientific Reports, 2016, 6, 26868.	1.6	53
173	DIFFERENCES IN DERMAL ANALOGS INFLUENCE SUBSEQUENT PIGMENTATION, EPIDERMAL DIFFERENTIATION, BASEMENT MEMBRANE, AND RETE RIDGE FORMATION OF TRANSPLANTED COMPOSITE SKIN GRAFTS1. Transplantation, 1997, 64, 454-465.	0.5	53
174	Antibody-targeted Photolysis of Bacteria In Vivo. Nature Biotechnology, 1994, 12, 703-706.	9.4	52
175	Toward a More Accurate Quantitation of the Activity of Recombinant Retroviruses: Alternatives to Titer and Multiplicity of Infection. Journal of Virology, 2000, 74, 1258-1266.	1.5	51
176	Predictivity of dog co-culture model, primary human hepatocytes and HepG2 cells for the detection of hepatotoxic drugs in humans. Toxicology and Applied Pharmacology, 2014, 275, 44-61.	1.3	51
177	The development and characterization of SDF1Î±-elastin-like-peptide nanoparticles for wound healing. Journal of Controlled Release, 2016, 232, 238-247.	4.8	51
178	Nest Making and Oxytocin Comparably Promote Wound Healing in Isolation Reared Rats. PLoS ONE, 2009, 4, e5523.	1.1	50
179	Adaptive Kinematic Control of a Robotic Venipuncture Device Based on Stereo Vision, Ultrasound, and Force Guidance. IEEE Transactions on Industrial Electronics, 2017, 64, 1626-1635.	5.2	50
180	Hepatic gap junctions amplify alcohol liver injury by propagating cGAS-mediated IRF3 activation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11667-11673.	3.3	50

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