Lewis H Romer

List of Publications by Year
in descending order

70 papers	4,405 citations	94433 37 h-index	114465 63 g-index
72 all docs	72 docs citations	72 times ranked	6854 citing authors

#	Article	IF	Citations
1	Nanotopography Modulates Mechanotransduction of Stem Cells and Induces Differentiation through Focal Adhesion Kinase. ACS Nano, 2013, 7, 4785-4798.	14.6	352
2	Surviving sepsis campaign international guidelines for the management of septic shock and sepsis-associated organ dysfunction in children. Intensive Care Medicine, 2020, 46, 10-67.	8.2	331
3	Integrin-Mediated Survival Signals Regulate the Apoptotic Function of Bax through Its Conformation and Subcellular Localization. Journal of Cell Biology, 2000, 149, 431-446.	5.2	261
4	Focal Adhesions. Circulation Research, 2006, 98, 606-616.	4.5	238
5	Integrin-mediated Activation of MAP Kinase Is Independent of FAK: Evidence for Dual Integrin Signaling Pathways in Fibroblasts. Journal of Cell Biology, 1997, 136, 1385-1395.	5.2	235
6	Dissecting the link between stress fibres and focal adhesions by CALI with EGFP fusion proteins. Nature Cell Biology, 2002, 4, 286-293.	10.3	174
7	Oxidized Low-Density Lipoproteinâ€“Dependent Endothelial Arginase II Activation Contributes to Impaired Nitric Oxide Signaling. Circulation Research, 2006, 99, 951-960.	4.5	163
8	An inhibitory role for FAK in regulating proliferation: a link between limited adhesion and RhoA-ROCK signaling. Journal of Cell Biology, 2006, 174, 277-288.	5.2	158
9	Cell Traction Forces Direct Fibronectin Matrix Assembly. Biophysical Journal, 2009, 96, 729-738.	0.5	136
10	FAK Potentiates Rac1 Activation and Localization to Matrix Adhesion Sites: A Role for Î²PIX. Molecular Biology of the Cell, 2007, 18, 253-264.	2.1	111
11	OxLDL-dependent activation of arginase II is dependent on the LOX-1 receptor and downstream RhoA signaling. Atherosclerosis, 2011, 214, 279-287.	0.8	110
12	pp60c-src and related tyrosine kinases: a role in the assembly and reorganization of matrix adhesions. Journal of Cell Science, 2001, 114, 2279-2289.	2.0	108
13	Mitochondrial dysfunction and cytoskeletal disruption during chemical hypoxia to cultured rat hepatic sinusoidal endothelial cells: The pH paradox and cytoprotection by glucose, acidotic pH, and glycine. Hepatology, 1998, 27, 1039-1049.	7.3	103
14	Dual-Gel 4D Printing of Bioinspired Tubes. ACS Applied Materials & Interfaces, 2019, 11, 8492-8498.	8.0	100
15	Caspaseâ€dependent cleavage of myosin light chain kinase (MLCK) is involved in TNFâ€Î±â€mediated bovine pulmonary endothelial cell apoptosis. FASEB Journal, 2003, 17, 407-416.	0.5	96
16	Endothelial cell adhesion, signaling, and morphogenesis in fibroblast-derived matrix. Matrix Biology, 2009, 28, 273-283.	3.6	79
17	Targeting Membrane-localized Focal Adhesion Kinase to Focal Adhesions. Journal of Biological Chemistry, 2003, 278, 29115-29120.	3.4	77
18	Receptor Protein Tyrosine Phosphatase Î¼ Regulates the Paracellular Pathway in Human Lung Microvascular Endothelia. American Journal of Pathology, 2005, 166, 1247-1258.	3.8	75

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19	Integrin Î±2 Mediates Selective Metastasis to the Liver. Cancer Research, 2009, 69, 7320-7328.	0.9	75
20	OxLDL Triggers Retrograde Translocation of Arginase2 in Aortic Endothelial Cells via ROCK and Mitochondrial Processing Peptidase. Circulation Research, 2014, 115, 450-459.	4.5	75
21	Signaling Pathways Involved in Adenosine Triphosphate-Induced Endothelial Cell Barrier Enhancement. Circulation Research, 2005, 97, 115-124.	4.5	72
22	Executive summary: surviving sepsis campaign international guidelines for the management of septic shock and sepsis-associated organ dysfunction in children. Intensive Care Medicine, 2020, 46, 1-9.	8.2	70
23	Frontiers in pulmonary hypertension in infants and children with bronchopulmonary dysplasia. Pediatric Pulmonology, 2012, 47, 1042-1053.	2.0	68
24	3D printing and characterization of a soft and biostable elastomer with high flexibility and strength for biomedical applications. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 104, 103649.	3.1	64
25	Regulation of Hyperoxia-induced NADPH Oxidase Activation in Human Lung Endothelial Cells by the Actin Cytoskeleton and Cortactin. Journal of Biological Chemistry, 2007, 282, 23284-23295.	3.4	63
26	Localization of Multiple Functional Domains on Human PECAM-1 (CD31) by Monoclonal Antibody Epitope Mapping. Cell Adhesion and Communication, 1995, 3, 45-66.	1.7	62
27	Tyrosine Phosphorylation of Rac1: A Role in Regulation of Cell Spreading. PLoS ONE, 2011, 6, e28587.	2.5	59
28	Microelastic properties of lung cell-derived extracellular matrix. Acta Biomaterialia, 2011, 7, 96-105.	8.3	57
29	A Predictive Model of Cell Traction Forces Based on Cell Geometry. Biophysical Journal, 2010, 99, L78-L80.	0.5	56
30	Transcriptional Regulation of Endothelial Arginase 2 by Histone Deacetylase 2. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 1556-1566.	2.4	55
31	Pulmonary Hypertension Therapy and a Systematic Review of Efficacy and Safety of PDE-5 Inhibitors. Pediatrics, 2017, 139, .	2.1	46
32	Cystathionine Î³-lyase protects vascular endothelium: a role for inhibition of histone deacetylase 6. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 312, H711-H720.	3.2	46
33	Trends in Hospitalization for Pediatric Pulmonary Hypertension. Pediatrics, 2015, 136, 241-250.	2.1	44
34	Opsin 3 and 4 mediate light-induced pulmonary vasorelaxation that is potentiated by G protein-coupled receptor kinase 2 inhibition. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018, 314, L93-L106.	2.9	43
35	Direct Ink Writing of Poly(tetrafluoroethylene) (PTFE) with Tunable Mechanical Properties. ACS Applied Materials & Interfaces, 2019, 11, 28289-28295.	8.0	42
36	High Fidelity Functional Patterns of an Extracellular Matrix Protein by Electron Beam-Based Inactivation. Journal of the American Chemical Society, 2007, 129, 59-67.	13.7	38

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37	Shear force at the cell-matrix interface: enhanced analysis for microfabricated post array detectors. Mcb Mechanics and Chemistry of Biosystems, 2005, 2, 1-16.	0.3	37
38	A Self-Folding Hydrogel In Vitro Model for Ductal Carcinoma. Tissue Engineering - Part C: Methods, 2016, 22, 398-407.	2.1	36
39	Intracellular interaction of myosin light chain kinase with macrophage migration inhibition factor (MIF) in endothelium. Journal of Cellular Biochemistry, 2005, 95, 849-858.	2.6	35
40	Perioperative events in children with pulmonary hypertension undergoing nonâ€cardiac procedures. Pulmonary Circulation, 2018, 8, 1-10.	1.7	30
41	Selective fluorescent labeling of S-nitrosothiols (S-FLOS): A novel method for studying S-nitrosation. Nitric Oxide - Biology and Chemistry, 2008, 19, 295-302.	2.7	28
42	Focal adhesion kinase is involved in type III group B streptococcal invasion of human brain microvascular endothelial cells. Microbial Pathogenesis, 2006, 41, 168-173.	2.9	26
43	Inhaled Epoprostenol Therapy for Pulmonary Hypertension: Improves Oxygenation Index More Consistently in Neonates than in Older Children. Pulmonary Circulation, 2012, 2, 61-66.	1.7	26
44	NEDDylation promotes endothelial dysfunction: A role for HDAC2. Journal of Molecular and Cellular Cardiology, 2015, 81, 18-22.	1.9	26
45	CSF HCO3â^' regulation in isosmotic conditions: The role of brain PCO2 and plasma HCO3â^'. Respiration Physiology, 1978, 33, 177-198.	2.7	25
46	Biallelic variants of ATP13A3 cause dose-dependent childhood-onset pulmonary arterial hypertension characterised by extreme morbidity and mortality. Journal of Medical Genetics, 2022, 59, 906-911.	3.2	22
47	Pediatric Residents Do Not Feel Prepared for the Most Unsettling Situations They Face in the Pediatric Intensive Care Unit. Journal of Palliative Medicine, 2011, 14, 25-30.	1.1	21
48	Hypoxia Triggers SENP1 (Sentrin-Specific Protease 1) Modulation of KLF15 (Kruppel-Like Factor 15) and Transcriptional Regulation of Arg2 (Arginase 2) in Pulmonary Endothelium. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 913-926.	2.4	21
49	Single exposure to radiation produces early anti-angiogenic effects in mouse aorta. Radiation and Environmental Biophysics, 2010, 49, 397-404.	1.4	19
50	Microinjection of Protein Tyrosine Phosphatases into Fibroblasts Disrupts Focal Adhesions and Stress Fibers. Cell Adhesion and Communication, 1998, 5, 207-219.	1.7	16
51	Biomimetic human small muscular pulmonary arteries. Science Advances, 2020, 6, eaaz2598.	10.3	16
52	Inositol hexakisphosphate kinase 3 promotes focal adhesion turnover via interactions with dynein intermediate chain 2. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3278-3287.	7.1	14
53	Directing Multicellular Organization by Varying the Aspect Ratio of Soft Hydrogel Microwells. Advanced Science, 2022, 9, e2104649.	11.2	12
54	Patterning of Fibroblast and Matrix Anisotropy within 3D Confinement is Driven by the Cytoskeleton. Advanced Healthcare Materials, 2016, 5, 146-158.	7.6	11

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55	Oriented matrix promotes directional tubulogenesis. Acta Biomaterialia, 2015, 11, 264-273.	8.3	9
56	3D Hybrid Small Scale Devices. Small, 2018, 14, e1702497.	10.0	8
57	Hierarchically Curved Gelatin for 3D Biomimetic Cell Culture. ACS Applied Bio Materials, 2019, 2, 6004-6011.	4.6	7
58	HEYL Regulates Neoangiogenesis Through Overexpression in Both Breast Tumor Epithelium and Endothelium. Frontiers in Oncology, 2020, 10, 581459.	2.8	6
59	Endotoxin, tumor necrosis factor, and dexamethasone effects on human endothelial cell fibronectin dynamics: synthesis, matrix assembly, and receptor expression. Biochemistry and Cell Biology, 1995, 73, 515-524.	2.0	4
60	Micropatterns of an Extracellular Matrix Protein with Defined Information Content. Langmuir, 2007, 23, 10883-10886.	3.5	2
61	Arginase II: Atherogenesis Beyond Enzyme Activity. Journal of the American Heart Association, 2013, 2, e000392.	3.7	2
62	Endothelial Matrix Assembly during Capillary Morphogenesis. Journal of Histochemistry and Cytochemistry, 2014, 62, 774-790.	2.5	2
63	MECHANISMS OF FAK SIGNALING. â€¢ 249. Pediatric Research, 1997, 41, 44-44.	2.3	2
64	Under Pressure: The Pulmonary Vasculature and Its Role in the Pediatric Cardiac ICU. American Journal of Respiratory and Critical Care Medicine, 2021, 204, 391-392.	5.6	0
65	Arginase 2 activation via subcellular trafficking: A novel mechanism for vascular endothelial dysfunction in atherosclerosis. FASEB Journal, 2012, 26, lb654.	0.5	0
66	Transcriptional regulation of endothelial Arginase 2 by Histone Deacetylases and its role in atheresclerosis. FASEB Journal, 2013, 27, 875.2.	0.5	0
67	Abstract 665: Activation of Histone Deacetylase 2: A Novel Strategy for Reversing Vascular Dysfunction in Atherogenesis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, .	2.4	0
68	Neddylation Promotes Vascular Endothelial Dysfunction: A Role For Histone Deacetylases 2 and Arginase 2.. FASEB Journal, 2015, 29, 626.5.	0.5	0
69	Abstract 575: NEDDylation Promotes Endothelial Dysfunction: A Role for HDAC2. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, .	2.4	0
70	Developing and characterizing human biomimetic arteriole for studying pulmonary hypertension. FASEB Journal, 2018, 32, 568.16.	0.5	0