

Douglas A Lauffenburger

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2418861/douglas-a-lauffenburger-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

323
papers

26,813
citations

82
h-index

156
g-index

355
ext. papers

31,412
ext. citations

11.9
avg, IF

7.05
L-index

#	Paper	IF	Citations
323	Serological Markers of SARS-CoV-2 Reinfection.. <i>MBio</i> , 2022 , e0214121	7.8	1
322	Towards targeting of shared mechanisms of cancer metastasis and therapy resistance.. <i>Nature Reviews Cancer</i> , 2022 ,	31.3	15
321	Collateral responses to classical cytotoxic chemotherapies are heterogeneous and sensitivities are sparse.. <i>Scientific Reports</i> , 2022 , 12, 5453	4.9	
320	mRNA-1273 and BNT162b2 COVID-19 vaccines elicit antibodies with differences in Fc-mediated effector functions.. <i>Science Translational Medicine</i> , 2022 , 14, eabm2311	17.5	11
319	Defining the determinants of protection against SARS-CoV-2 infection and viral control in a dose-down Ad26.CoV2.S vaccine study in nonhuman primates.. <i>PLoS Biology</i> , 2022 , 20, e3001609	9.7	0
318	Upper and lower respiratory tract correlates of protection against respiratory syncytial virus following vaccination of nonhuman primates. <i>Cell Host and Microbe</i> , 2021 ,	23.4	2
317	Cross-species transcriptomic signatures predict response to MK2 inhibition in mouse models of chronic inflammation. <i>IScience</i> , 2021 , 24, 103406	6.1	
316	Epidemiological and Immunological Features of Obesity and SARS-CoV-2. <i>Viruses</i> , 2021 , 13,	6.2	4
315	Functional convalescent plasma antibodies and pre-infusion titers shape the early severe COVID-19 immune response. <i>Nature Communications</i> , 2021 , 12, 6853	17.4	3
314	Reduced antibody activity against SARS-CoV-2 B.1.617.2 Delta virus in serum of mRNA-vaccinated patients receiving Tumor Necrosis Factor- α inhibitors. <i>Med</i> , 2021 ,	31.7	8
313	Delayed fractional dosing with RTS,S/AS01 improves humoral immunity to malaria via a balance of polyfunctional NANP6- and PF16-specific antibodies.. <i>Med</i> , 2021 , 2, 1269-1286.e9	31.7	0
312	Selective functional antibody transfer into the breastmilk after SARS-CoV-2 infection. <i>Cell Reports</i> , 2021 , 37, 109959	10.6	3
311	COVID-19 mRNA vaccines drive differential antibody Fc-functional profiles in pregnant, lactating, and nonpregnant women. <i>Science Translational Medicine</i> , 2021 , 13, eabi8631	17.5	19
310	Maternal SARS-CoV-2 infection elicits sexually dimorphic placental immune responses. <i>Science Translational Medicine</i> , 2021 , 13, eabi7428	17.5	15
309	Correlates of protection against SARS-CoV-2 in rhesus macaques. <i>Nature</i> , 2021 , 590, 630-634	50.4	498
308	Functional Antibodies in COVID-19 Convalescent Plasma 2021 ,		4
307	Synergistic Action of Diclofenac with Endotoxin-Mediated Inflammation Exacerbates Intestinal Injury. <i>ACS Infectious Diseases</i> , 2021 , 7, 838-848	5.5	

306	Immunogenicity of the Ad26.COVS Vaccine for COVID-19. <i>JAMA - Journal of the American Medical Association</i> , 2021 , 325, 1535-1544	27.4	139
305	Viral Rebound Kinetics Correlate with Distinct HIV Antibody Features. <i>MBio</i> , 2021 , 12,	7.8	4
304	COVID-19 mRNA vaccines drive differential Fc-functional profiles in pregnant, lactating, and non-pregnant women 2021 ,		11
303	IP-10 (CXCL10) Can Trigger Emergence of Dormant Breast Cancer Cells in a Metastatic Liver Microenvironment. <i>Frontiers in Oncology</i> , 2021 , 11, 676135	5.3	3
302	Systematic in silico analysis of clinically tested drugs for reducing amyloid-beta plaque accumulation in Alzheimer's disease. <i>Alzheimer's and Dementia</i> , 2021 , 17, 1487-1498	1.2	6
301	Cell surface integrin $\beta 1$ clustering negatively regulates receptor tyrosine kinase signaling in colorectal cancer cells via glycogen synthase kinase 3. <i>Integrative Biology (United Kingdom)</i> , 2021 , 13, 153-166	3.7	1
300	Therapeutically reprogrammed nutrient signalling enhances nanoparticulate albumin bound drug uptake and efficacy in KRAS-mutant cancer. <i>Nature Nanotechnology</i> , 2021 , 16, 830-839	28.7	15
299	Early cross-coronavirus reactive signatures of protective humoral immunity against COVID-19 2021 ,		8
298	Quantitative phosphoproteomics uncovers dysregulated kinase networks in Alzheimer's disease. <i>Nature Aging</i> , 2021 , 1, 550-565		3
297	Human physiometric model integrating microphysiological systems of the gut, liver, and brain for studies of neurodegenerative diseases. <i>Science Advances</i> , 2021 , 7,	14.3	22
296	Collaboration between the Fab and Fc contribute to maximal protection against SARS-CoV-2 in nonhuman primates following NVX-CoV2373 subunit vaccine with Matrix-M μ vaccination 2021 ,		16
295	Discrete SARS-CoV-2 antibody titers track with functional humoral stability. <i>Nature Communications</i> , 2021 , 12, 1018	17.4	46
294	Collaboration between the Fab and Fc contribute to maximal protection against SARS-CoV-2 following NVX-CoV2373 subunit vaccine with Matrix-M μ vaccination 2021 ,		6
293	Compromised SARS-CoV-2-specific placental antibody transfer. <i>Cell</i> , 2021 , 184, 628-642.e10	56.2	72
292	Humoral signatures of protective and pathological SARS-CoV-2 infection in children. <i>Nature Medicine</i> , 2021 , 27, 454-462	50.5	50
291	Comorbid illnesses are associated with altered adaptive immune responses to SARS-CoV-2. <i>JCI Insight</i> , 2021 , 6,	9.9	11
290	Antibody Subclass and Glycosylation Shift Following Effective TB Treatment. <i>Frontiers in Immunology</i> , 2021 , 12, 679973	8.4	3
289	Subtle immunological differences in mRNA-1273 and BNT162b2 COVID-19 vaccine induced Fc-functional profiles 2021 ,		8

288	A Specific IgG3 Signature of Recurrent Tuberculosis. <i>Frontiers in Immunology</i> , 2021 , 12, 729186	8.4	2
287	Fab and Fc contribute to maximal protection against SARS-CoV-2 following NVX-CoV2373 subunit vaccine with Matrix-M vaccination. <i>Cell Reports Medicine</i> , 2021 , 2, 100405	18	34
286	Early cross-coronavirus reactive signatures of humoral immunity against COVID-19. <i>Science Immunology</i> , 2021 , 6, eabj2901	28	22
285	Computational Interspecies Translation Between Alzheimer's Disease Mouse Models and Human Subjects Identifies Innate Immune Complement, TYROBP, and TAM Receptor Agonist Signatures, Distinct From Influences of Aging. <i>Frontiers in Neuroscience</i> , 2021 , 15, 727784	5.1	
284	Quick COVID-19 Healers Sustain Anti-SARS-CoV-2 Antibody Production. <i>Cell</i> , 2020 , 183, 1496-1507.e16	56.2	127
283	Compromised Humoral Functional Evolution Tracks with SARS-CoV-2 Mortality. <i>Cell</i> , 2020 , 183, 1508-1515.e12	56.2	134
282	Coagulopathy signature precedes and predicts severity of end-organ heat stroke pathology in a mouse model. <i>Journal of Thrombosis and Haemostasis</i> , 2020 , 18, 1900-1910	15.4	11
281	Multiplexed relative and absolute quantitative immunopeptidomics reveals MHC I repertoire alterations induced by CDK4/6 inhibition. <i>Nature Communications</i> , 2020 , 11, 2760	17.4	26
280	Robustness and applicability of transcription factor and pathway analysis tools on single-cell RNA-seq data. <i>Genome Biology</i> , 2020 , 21, 36	18.3	57
279	Translating preclinical models to humans. <i>Science</i> , 2020 , 367, 742-743	33.3	28
278	Efficient blockade of locally reciprocated tumor-macrophage signaling using a TAM-avid nanotherapy. <i>Science Advances</i> , 2020 , 6, eaaz8521	14.3	14
277	Epidemiological and immunological features of obesity and SARS-CoV-2 2020 ,		3
276	T cell and antibody functional correlates of severe COVID-19 2020 ,		6
275	Passive Transfer of Vaccine-Elicited Antibodies Protects against SIV in Rhesus Macaques. <i>Cell</i> , 2020 , 183, 185-196.e14	56.2	11
274	Single-shot Ad26 vaccine protects against SARS-CoV-2 in rhesus macaques. <i>Nature</i> , 2020 , 586, 583-588	50.4	550
273	Mining for humoral correlates of HIV control and latent reservoir size. <i>PLoS Pathogens</i> , 2020 , 16, e1008368	3.8	5
272	In vivo microscopy reveals macrophage polarization locally promotes coherent microtubule dynamics in migrating cancer cells. <i>Nature Communications</i> , 2020 , 11, 3521	17.4	4
271	Dissecting the antibody-OME: past, present, and future. <i>Current Opinion in Immunology</i> , 2020 , 65, 89-96	7.8	4

270	An interspecies translation model implicates integrin signaling in infliximab-resistant inflammatory bowel disease. <i>Science Signaling</i> , 2020 , 13,	8.8	6
269	Mapping functional humoral correlates of protection against malaria challenge following RTS,S/AS01 vaccination. <i>Science Translational Medicine</i> , 2020 , 12,	17.5	46
268	Distinct Early Serological Signatures Track with SARS-CoV-2 Survival. <i>Immunity</i> , 2020 , 53, 524-532.e4	32.3	219
267	SARS-CoV-2-specific ELISA development. <i>Journal of Immunological Methods</i> , 2020 , 484-485, 112832	2.5	45
266	Receptor-Driven ERK Pulses Reconfigure MAPK Signaling and Enable Persistence of Drug-Adapted BRAF-Mutant Melanoma Cells. <i>Cell Systems</i> , 2020 , 11, 478-494.e9	10.6	29
265	Ad26 vaccine protects against SARS-CoV-2 severe clinical disease in hamsters. <i>Nature Medicine</i> , 2020 , 26, 1694-1700	50.5	176
264	Evolution of Early SARS-CoV-2 and Cross-Coronavirus Immunity. <i>MSphere</i> , 2020 , 5,	5	28
263	HIV Antibody Fc N-Linked Glycosylation Is Associated with Viral Rebound. <i>Cell Reports</i> , 2020 , 33, 108502	10.6	10
262	-Associated Antibiotics Alter Human Mucosal Barrier Functions by Microbiome-Independent Mechanisms. <i>Antimicrobial Agents and Chemotherapy</i> , 2020 , 64,	5.9	4
261	Development and Application of the Metalloprotease Activity Multiplexed Bead-Based Immunoassay (MAMBI). <i>Biochemistry</i> , 2019 , 58, 3938-3942	3.2	5
260	Proteogenomic Network Analysis of Context-Specific KRAS Signaling in Mouse-to-Human Cross-Species Translation. <i>Cell Systems</i> , 2019 , 9, 258-270.e6	10.6	18
259	Dissecting N-Glycosylation Dynamics in Chinese Hamster Ovary Cells Fed-batch Cultures using Time Course Omics Analyses. <i>iScience</i> , 2019 , 12, 102-120	6.1	32
258	Fc Glycan-Mediated Regulation of Placental Antibody Transfer. <i>Cell</i> , 2019 , 178, 202-215.e14	56.2	81
257	Small-molecule control of antibody N-glycosylation in engineered mammalian cells. <i>Nature Chemical Biology</i> , 2019 , 15, 730-736	11.7	31
256	IFN-Independent immune markers of Mycobacterium tuberculosis exposure. <i>Nature Medicine</i> , 2019 , 25, 977-987	50.5	104
255	ROS and Oxidative Stress Are Elevated in Mitosis during Asynchronous Cell Cycle Progression and Are Exacerbated by Mitotic Arrest. <i>Cell Systems</i> , 2019 , 8, 163-167.e2	10.6	60
254	Tissue-Specific Oncogenic Activity of KRAS. <i>Cancer Discovery</i> , 2019 , 9, 738-755	24.4	84
253	Computational translation of genomic responses from experimental model systems to humans. <i>PLoS Computational Biology</i> , 2019 , 15, e1006286	5	16

252	Acidification of Tumor at Stromal Boundaries Drives Transcriptome Alterations Associated with Aggressive Phenotypes. <i>Cancer Research</i> , 2019 , 79, 1952-1966	10.1	86
251	Fatty Acid Metabolites Combine with Reduced Oxidation to Activate Th17 Inflammation in Human Type 2 Diabetes. <i>Cell Metabolism</i> , 2019 , 30, 447-461.e5	24.6	50
250	VISAGE Reveals a Targetable Mitotic Spindle Vulnerability in Cancer Cells. <i>Cell Systems</i> , 2019 , 9, 74-92.e8	10.6	14
249	A systems biology pipeline identifies regulatory networks for stem cell engineering. <i>Nature Biotechnology</i> , 2019 , 37, 810-818	44.5	14
248	Substrate-based kinase activity inference identifies MK2 as driver of colitis. <i>Integrative Biology (United Kingdom)</i> , 2019 , 11, 301-314	3.7	11
247	Predicting the broadly neutralizing antibody susceptibility of the HIV reservoir. <i>JCI Insight</i> , 2019 , 4,	9.9	11
246	Deoxycytidine Release from Pancreatic Stellate Cells Promotes Gemcitabine Resistance. <i>Cancer Research</i> , 2019 , 79, 5723-5733	10.1	46
245	Initiation of Antiretroviral Therapy Before Pregnancy Reduces the Risk of Infection-related Hospitalization in Human Immunodeficiency Virus-exposed Uninfected Infants Born in a High-income Country. <i>Clinical Infectious Diseases</i> , 2019 , 68, 1193-1203	11.6	29
244	Reply to Slogrove et al. <i>Clinical Infectious Diseases</i> , 2019 , 68, 2158	11.6	2
243	Inflammatory but not mitogenic contexts prime synovial fibroblasts for compensatory signaling responses to p38 inhibition. <i>Science Signaling</i> , 2018 , 11,	8.8	19
242	Integrated in vivo multiomics analysis identifies p21-activated kinase signaling as a driver of colitis. <i>Science Signaling</i> , 2018 , 11,	8.8	21
241	In vivo systems biology approaches to chronic immune/inflammatory pathophysiology. <i>Current Opinion in Biotechnology</i> , 2018 , 52, 9-16	11.4	3
240	A Model of Dormant-Emergent Metastatic Breast Cancer Progression Enabling Exploration of Biomarker Signatures. <i>Molecular and Cellular Proteomics</i> , 2018 , 17, 619-630	7.6	32
239	Tyros3-mediated phosphorylation of ACTN4 at tyrosines is FAK-dependent and decreases susceptibility to cleavage by m-Calpain. <i>International Journal of Biochemistry and Cell Biology</i> , 2018 , 95, 73-84	5.6	10
238	Temporal variation in HIV-specific IgG subclass antibodies during acute infection differentiates spontaneous controllers from chronic progressors. <i>Aids</i> , 2018 , 32, 443-450	3.5	25
237	Interconnected Microphysiological Systems for Quantitative Biology and Pharmacology Studies. <i>Scientific Reports</i> , 2018 , 8, 4530	4.9	238
236	Functional Genomics Approach Identifies Novel Signaling Regulators of TGF β Ectodomain Shedding. <i>Molecular Cancer Research</i> , 2018 , 16, 147-161	6.6	2
235	ADAM10 Sheddase Activity is a Potential Lung-Cancer Biomarker. <i>Journal of Cancer</i> , 2018 , 9, 2559-2570	4.5	21

234	Systems Modeling Identifies Divergent Receptor Tyrosine Kinase Reprogramming to MAPK Pathway Inhibition. <i>Cellular and Molecular Bioengineering</i> , 2018 , 11, 451-469	3.9	6
233	Antigen-specific antibody Fc glycosylation enhances humoral immunity via the recruitment of complement. <i>Science Immunology</i> , 2018 , 3,	28	41
232	Exploiting glycan topography for computational design of Env glycoprotein antigenicity. <i>PLoS Computational Biology</i> , 2018 , 14, e1006093	5	14
231	A Role for Fc Function in Therapeutic Monoclonal Antibody-Mediated Protection against Ebola Virus. <i>Cell Host and Microbe</i> , 2018 , 24, 221-233.e5	23.4	121
230	The colonic epithelium plays an active role in promoting colitis by shaping the tissue cytokine profile. <i>PLoS Biology</i> , 2018 , 16, e2002417	9.7	26
229	Integrated mapping of pharmacokinetics and pharmacodynamics in a patient-derived xenograft model of glioblastoma. <i>Nature Communications</i> , 2018 , 9, 4904	17.4	39
228	Analysis of Single-Cell RNA-Seq Identifies Cell-Cell Communication Associated with Tumor Characteristics. <i>Cell Reports</i> , 2018 , 25, 1458-1468.e4	10.6	165
227	Multivariate Computational Analysis of Gamma Delta T Cell Inhibitory Receptor Signatures Reveals the Divergence of Healthy and ART-Suppressed HIV+ Aging. <i>Frontiers in Immunology</i> , 2018 , 9, 2783	8.4	17
226	Route of immunization defines multiple mechanisms of vaccine-mediated protection against SIV. <i>Nature Medicine</i> , 2018 , 24, 1590-1598	50.5	73
225	Peritoneal fluid cytokines related to endometriosis in patients evaluated for infertility. <i>Fertility and Sterility</i> , 2017 , 107, 1191-1199.e2	4.8	57
224	On-demand dissolution of modular, synthetic extracellular matrix reveals local epithelial-stromal communication networks. <i>Biomaterials</i> , 2017 , 130, 90-103	15.6	58
223	Integrated Assessment of Diclofenac Biotransformation, Pharmacokinetics, and Omics-Based Toxicity in a Three-Dimensional Human Liver-Immunocompetent Coculture System. <i>Drug Metabolism and Disposition</i> , 2017 , 45, 855-866	4	43
222	Molecular Pathways: Receptor Ectodomain Shedding in Treatment, Resistance, and Monitoring of Cancer. <i>Clinical Cancer Research</i> , 2017 , 23, 623-629	12.9	61
221	An engineering design approach to systems biology. <i>Integrative Biology (United Kingdom)</i> , 2017 , 9, 574-583	5.7	14
220	Simultaneous Detection of Metalloprotease Activities in Complex Biological Samples Using the PrAMA (Proteolytic Activity Matrix Assay) Method. <i>Methods in Molecular Biology</i> , 2017 , 1574, 243-253	1.4	6
219	Studies of TAK1-centered polypharmacology with novel covalent TAK1 inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 1320-1328	3.4	12
218	Profiling of metalloprotease activities in cerebrospinal fluids of patients with neoplastic meningitis. <i>Fluids and Barriers of the CNS</i> , 2017 , 14, 22	7	7
217	Modification of proteolytic activity matrix analysis (PrAMA) to measure ADAM10 and ADAM17 shedase activities in cell and tissue lysates. <i>Journal of Cancer</i> , 2017 , 8, 3916-3932	4.5	3

216	Tyro3 carboxyl terminal region confers stability and contains the autophosphorylation sites. <i>Biochemical and Biophysical Research Communications</i> , 2017 , 490, 1074-1079	3.4	3
215	Apoptotic Bodies Elicit Gas6-Mediated Migration of AXL-Expressing Tumor Cells. <i>Molecular Cancer Research</i> , 2017 , 15, 1656-1666	6.6	19
214	Integrated gut/liver microphysiological systems elucidates inflammatory inter-tissue crosstalk. <i>Biotechnology and Bioengineering</i> , 2017 , 114, 2648-2659	4.9	107
213	Genital-Systemic Chemokine Gradients and the Risk of HIV Acquisition in Women. <i>Journal of Acquired Immune Deficiency Syndromes (1999)</i> , 2017 , 74, 318-325	3.1	31
212	Hepatic Dysfunction Caused by Consumption of a High-Fat Diet. <i>Cell Reports</i> , 2017 , 21, 3317-3328	10.6	37
211	DNA Repair Capacity in Multiple Pathways Predicts Chemoresistance in Glioblastoma Multiforme. <i>Cancer Research</i> , 2017 , 77, 198-206	10.1	68
210	Profiling drugs for rheumatoid arthritis that inhibit synovial fibroblast activation. <i>Nature Chemical Biology</i> , 2017 , 13, 38-45	11.7	38
209	Macrophage-Secreted TNF α and TGF β Influence Migration Speed and Persistence of Cancer Cells in 3D Tissue Culture via Independent Pathways. <i>Cancer Research</i> , 2017 , 77, 279-290	10.1	66
208	Advances in the quantification of mitochondrial function in primary human immune cells through extracellular flux analysis. <i>PLoS ONE</i> , 2017 , 12, e0170975	3.7	37
207	Increased levels of inflammatory cytokines in the female reproductive tract are associated with altered expression of proteases, mucosal barrier proteins, and an influx of HIV-susceptible target cells. <i>Mucosal Immunology</i> , 2016 , 9, 194-205	9.2	137
206	A Functional Role for Antibodies in Tuberculosis. <i>Cell</i> , 2016 , 167, 433-443.e14	56.2	306
205	Synergistic Communication between CD4+ T Cells and Monocytes Impacts the Cytokine Environment. <i>Scientific Reports</i> , 2016 , 6, 34942	4.9	11
204	The alternatively-included 11a sequence modifies the effects of Mena on actin cytoskeletal organization and cell behavior. <i>Scientific Reports</i> , 2016 , 6, 35298	4.9	14
203	TNF-insulin crosstalk at the transcription factor GATA6 is revealed by a model that links signaling and transcriptomic data tensors. <i>Science Signaling</i> , 2016 , 9, ra59	8.8	17
202	Differential selective pressure alters rate of drug resistance acquisition in heterogeneous tumor populations. <i>Scientific Reports</i> , 2016 , 6, 36198	4.9	12
201	Pathway-based network modeling finds hidden genes in shRNA screen for regulators of acute lymphoblastic leukemia. <i>Integrative Biology (United Kingdom)</i> , 2016 , 8, 761-74	3.7	3
200	Tumor Cell-Driven Extracellular Matrix Remodeling Drives Haptotaxis during Metastatic Progression. <i>Cancer Discovery</i> , 2016 , 6, 516-31	24.4	120
199	Reduced Proteolytic Shedding of Receptor Tyrosine Kinases Is a Post-Translational Mechanism of Kinase Inhibitor Resistance. <i>Cancer Discovery</i> , 2016 , 6, 382-99	24.4	113

198	Th17 cytokines differentiate obesity from obesity-associated type 2 diabetes and promote TNF α production. <i>Obesity</i> , 2016 , 24, 102-12	8	70
197	Exploiting Temporal Collateral Sensitivity in Tumor Clonal Evolution. <i>Cell</i> , 2016 , 165, 234-246	56.2	77
196	Modeling Tumor Clonal Evolution for Drug Combinations Design. <i>Trends in Cancer</i> , 2016 , 2, 144-158	12.5	34
195	Inflammatory cytokine biomarkers to identify women with asymptomatic sexually transmitted infections and bacterial vaginosis who are at high risk of HIV infection. <i>Sexually Transmitted Infections</i> , 2016 , 92, 186-93	2.8	36
194	Oncogenic KRAS Regulates Tumor Cell Signaling via Stromal Reciprocation. <i>Cell</i> , 2016 , 165, 910-20	56.2	169
193	Mena1N mediates synergistic cross-talk between signaling pathways driving chemotaxis and haptotaxis. <i>Molecular Biology of the Cell</i> , 2016 , 27, 3085-3094	3.5	9
192	Genital inflammation and the risk of HIV acquisition in women. <i>Clinical Infectious Diseases</i> , 2015 , 61, 260-266	11.6	239
191	Dissecting Polyclonal Vaccine-Induced Humoral Immunity against HIV Using Systems Serology. <i>Cell</i> , 2015 , 163, 988-98	56.2	230
190	CD4+ T cell-dependent and CD4+ T cell-independent cytokine-chemokine network changes in the immune responses of HIV-infected individuals. <i>Science Signaling</i> , 2015 , 8, ra104	8.8	14
189	PTP1B-dependent regulation of receptor tyrosine kinase signaling by the actin-binding protein Mena. <i>Molecular Biology of the Cell</i> , 2015 , 26, 3867-78	3.5	27
188	Molecular Signatures of Immune Activation and Epithelial Barrier Remodeling Are Enhanced during the Luteal Phase of the Menstrual Cycle: Implications for HIV Susceptibility. <i>Journal of Virology</i> , 2015 , 89, 8793-805	6.6	40
187	The AXL Receptor is a Sensor of Ligand Spatial Heterogeneity. <i>Cell Systems</i> , 2015 , 1, 25-36	10.6	34
186	Identification of neurotoxic cytokines by profiling Alzheimer's disease tissues and neuron culture viability screening. <i>Scientific Reports</i> , 2015 , 5, 16622	4.9	40
185	Targeting autocrine HB-EGF signaling with specific ADAM12 inhibition using recombinant ADAM12 prodomain. <i>Scientific Reports</i> , 2015 , 5, 15150	4.9	22
184	Tandem phosphorylation within an intrinsically disordered region regulates ACTN4 function. <i>Science Signaling</i> , 2015 , 8, ra51	8.8	22
183	Network-level effects of kinase inhibitors modulate TNF α -induced apoptosis in the intestinal epithelium. <i>Science Signaling</i> , 2015 , 8, ra129	8.8	13
182	ADAM8 as a drug target in pancreatic cancer. <i>Nature Communications</i> , 2015 , 6, 6175	17.4	67
181	Addressing genetic tumor heterogeneity through computationally predictive combination therapy. <i>Cancer Discovery</i> , 2014 , 4, 166-74	24.4	73

180	An Inflammatory Profile that Predicts the Development of Neutralizing Antibody Breadth. <i>AIDS Research and Human Retroviruses</i> , 2014 , 30, A35-A36	1.6	2
179	Cell-specific labeling enzymes for analysis of cell-cell communication in continuous co-culture. <i>Molecular and Cellular Proteomics</i> , 2014 , 13, 1866-76	7.6	26
178	Reply to Azuaje: Predicting effective combined therapies for heterogeneous tumors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E4288	11.5	
177	Intratumor heterogeneity alters most effective drugs in designed combinations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 10773-8	11.5	70
176	Qualitatively different T cell phenotypic responses to IL-2 versus IL-15 are unified by identical dependences on receptor signal strength and duration. <i>Journal of Immunology</i> , 2014 , 192, 123-35	5.3	38
175	A microphysiological system model of therapy for liver micrometastases. <i>Experimental Biology and Medicine</i> , 2014 , 239, 1170-9	3.7	45
174	Approaches to in vitro tissue regeneration with application for human disease modeling and drug development. <i>Drug Discovery Today</i> , 2014 , 19, 754-62	8.8	33
173	Prioritisation and network analysis of Crohn's disease susceptibility genes. <i>PLoS ONE</i> , 2014 , 9, e108624	3.7	4
172	Molecular network analysis of endometriosis reveals a role for c-Jun-regulated macrophage activation. <i>Science Translational Medicine</i> , 2014 , 6, 222ra16	17.5	96
171	Microfluidic probe for single-cell analysis in adherent tissue culture. <i>Nature Communications</i> , 2014 , 5, 3421	17.4	80
170	Identification of signaling pathways related to drug efficacy in hepatocellular carcinoma via integration of phosphoproteomic, genomic and clinical data. <i>Proceedings-- IEEE International Symposium on Bioinformatics and Bioengineering</i> , 2013 , 2013,	1	2
169	Multiplexed protease activity assay for low-volume clinical samples using droplet-based microfluidics and its application to endometriosis. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1645-8	16.4	67
168	Integrated network analyses for functional genomic studies in cancer. <i>Seminars in Cancer Biology</i> , 2013 , 23, 213-8	12.7	14
167	Targeting tumor cell motility as a strategy against invasion and metastasis. <i>Trends in Pharmacological Sciences</i> , 2013 , 34, 283-9	13.2	136
166	Molecular network analysis of phosphotyrosine and lipid metabolism in hepatic PTP1b deletion mice. <i>Integrative Biology (United Kingdom)</i> , 2013 , 5, 940-63	3.7	13
165	Receptor tyrosine kinases fall into distinct classes based on their inferred signaling networks. <i>Science Signaling</i> , 2013 , 6, ra58	8.8	51
164	Defining principles of combination drug mechanisms of action. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, E170-9	11.5	121
163	Regulated ADAM17-dependent EGF family ligand release by substrate-selecting signaling pathways. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, 9776-81	11.5	63

162	ADAM-10 and -17 regulate endometriotic cell migration via concerted ligand and receptor shedding feedback on kinase signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013 , 110, E2074-83	11.5	71
161	Vascular endothelial growth factor (VEGF) and platelet (PF-4) factor 4 inputs modulate human microvascular endothelial signaling in a three-dimensional matrix migration context. <i>Molecular and Cellular Proteomics</i> , 2013 , 12, 3704-18	7.6	8
160	HIV-1 infection induces strong production of IP-10 through TLR7/9-dependent pathways. <i>Aids</i> , 2013 , 27, 2505-17	3.5	66
159	The receptor AXL diversifies EGFR signaling and limits the response to EGFR-targeted inhibitors in triple-negative breast cancer cells. <i>Science Signaling</i> , 2013 , 6, ra66	8.8	196
158	PKC ζ localization at the membrane increases matrix traction force dependent on PLC ζ /EGFR signaling. <i>PLoS ONE</i> , 2013 , 8, e77434	3.7	2
157	A computer-controlled system for simulating heat stroke in vitro. <i>FASEB Journal</i> , 2013 , 27, 1201.8	0.9	
156	Polyfunctional responses by human T cells result from sequential release of cytokines. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 1607-12	11.5	243
155	Mena binds β integrin directly and modulates β function. <i>Journal of Cell Biology</i> , 2012 , 198, 657-76	7.3	49
154	2D protrusion but not motility predicts growth factor-induced cancer cell migration in 3D collagen. <i>Journal of Cell Biology</i> , 2012 , 197, 721-9	7.3	77
153	CellNOptR: a flexible toolkit to train protein signaling networks to data using multiple logic formalisms. <i>BMC Systems Biology</i> , 2012 , 6, 133	3.5	132
152	Querying quantitative logic models (Q2LM) to study intracellular signaling networks and cell-cytokine interactions. <i>Biotechnology Journal</i> , 2012 , 7, 374-86	5.6	6
151	Quantitative analysis of gradient sensing: towards building predictive models of chemotaxis in cancer. <i>Current Opinion in Cell Biology</i> , 2012 , 24, 284-91	9	18
150	Interrogating signaling nodes involved in cellular transformations using kinase activity probes. <i>Chemistry and Biology</i> , 2012 , 19, 210-7		31
149	Multi-scale in vivo systems analysis reveals the influence of immune cells on TNF-induced apoptosis in the intestinal epithelium. <i>PLoS Biology</i> , 2012 , 10, e1001393	9.7	36
148	ADAM9 inhibition increases membrane activity of ADAM10 and controls β secretase processing of amyloid precursor protein. <i>Journal of Biological Chemistry</i> , 2011 , 286, 40443-51	5.4	42
147	A mammalian functional-genetic approach to characterizing cancer therapeutics. <i>Nature Chemical Biology</i> , 2011 , 7, 92-100	11.7	74
146	Controlling multipotent stromal cell migration by integrating "course-graining" materials and "fine-tuning" small molecules via decision tree signal-response modeling. <i>Biomaterials</i> , 2011 , 32, 7524-31	15.6	17
145	Marrow-derived stem cell motility in 3D synthetic scaffold is governed by geometry along with adhesivity and stiffness. <i>Biotechnology and Bioengineering</i> , 2011 , 108, 1181-93	4.9	89

144	Proteolytic Activity Matrix Analysis (PrAMA) for simultaneous determination of multiple protease activities. <i>Integrative Biology (United Kingdom)</i> , 2011 , 3, 422-38	3.7	66
143	In vivo systems analysis identifies spatial and temporal aspects of the modulation of TNF- β -induced apoptosis and proliferation by MAPKs. <i>Science Signaling</i> , 2011 , 4, ra16	8.8	73
142	Mena invasive (MenaINV) promotes multicellular streaming motility and transendothelial migration in a mouse model of breast cancer. <i>Journal of Cell Science</i> , 2011 , 124, 2120-31	5.3	136
141	ROCK in a stiff place. <i>Science Translational Medicine</i> , 2011 , 3, 112fs12	17.5	1
140	Comparing signaling networks between normal and transformed hepatocytes using discrete logical models. <i>Cancer Research</i> , 2011 , 71, 5400-11	10.1	113
139	Signaling network state predicts twist-mediated effects on breast cell migration across diverse growth factor contexts. <i>Molecular and Cellular Proteomics</i> , 2011 , 10, M111.008433	7.6	23
138	Signaling thresholds govern heterogeneity in IL-7-receptor-mediated responses of naive CD8(+) T cells. <i>Immunology and Cell Biology</i> , 2011 , 89, 581-94	5	51
137	Training signaling pathway maps to biochemical data with constrained fuzzy logic: quantitative analysis of liver cell responses to inflammatory stimuli. <i>PLoS Computational Biology</i> , 2011 , 7, e1001099	5	100
136	MCAM: multiple clustering analysis methodology for deriving hypotheses and insights from high-throughput proteomic datasets. <i>PLoS Computational Biology</i> , 2011 , 7, e1002119	5	28
135	Cellular Regulatory Networks 2010 , 57-108		2
134	Combination antibody treatment down-regulates epidermal growth factor receptor by inhibiting endosomal recycling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 13252-7	11.5	118
133	Networks inferred from biochemical data reveal profound differences in toll-like receptor and inflammatory signaling between normal and transformed hepatocytes. <i>Molecular and Cellular Proteomics</i> , 2010 , 9, 1849-65	7.6	92
132	Logic-based models for the analysis of cell signaling networks. <i>Biochemistry</i> , 2010 , 49, 3216-24	3.2	249
131	Cytokine-associated drug toxicity in human hepatocytes is associated with signaling network dysregulation. <i>Molecular BioSystems</i> , 2010 , 6, 1195-206		52
130	A multipathway phosphoproteomic signaling network model of idiosyncratic drug- and inflammatory cytokine-induced toxicity in human hepatocytes. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 5452-5	0.9	5
129	Discrete logic modelling as a means to link protein signalling networks with functional analysis of mammalian signal transduction. <i>Molecular Systems Biology</i> , 2009 , 5, 331	12.2	252
128	Synergistic drug-cytokine induction of hepatocellular death as an in vitro approach for the study of inflammation-associated idiosyncratic drug hepatotoxicity. <i>Toxicology and Applied Pharmacology</i> , 2009 , 237, 317-30	4.6	115
127	Transforming Boolean models to continuous models: methodology and application to T-cell receptor signaling. <i>BMC Systems Biology</i> , 2009 , 3, 98	3.5	158

126	Quantitative modeling perspectives on the ErbB system of cell regulatory processes. <i>Experimental Cell Research</i> , 2009 , 315, 717-25	4.2	29
125	Sustained epidermal growth factor receptor levels and activation by tethered ligand binding enhances osteogenic differentiation of multi-potent marrow stromal cells. <i>Journal of Cellular Physiology</i> , 2009 , 221, 306-17	7	60
124	Multipathway kinase signatures of multipotent stromal cells are predictive for osteogenic differentiation: tissue-specific stem cells. <i>Stem Cells</i> , 2009 , 27, 2804-14	5.8	40
123	Fuzzy logic analysis of kinase pathway crosstalk in TNF/EGF/insulin-induced signaling. <i>PLoS Computational Biology</i> , 2009 , 5, e1000340	5	119
122	An integrated comparative phosphoproteomic and bioinformatic approach reveals a novel class of MPM-2 motifs upregulated in EGFRvIII-expressing glioblastoma cells. <i>Molecular BioSystems</i> , 2009 , 5, 59-67		25
121	Integration of Nanoscale and Macroscale cues in Bone Regeneration. <i>FASEB Journal</i> , 2009 , 23, 69.2	0.9	
120	A Mena invasion isoform potentiates EGF-induced carcinoma cell invasion and metastasis. <i>Developmental Cell</i> , 2008 , 15, 813-28	10.2	216
119	Multipathway model enables prediction of kinase inhibitor cross-talk effects on migration of Her2-overexpressing mammary epithelial cells. <i>Molecular Pharmacology</i> , 2008 , 73, 1668-78	4.3	47
118	Fusing Tissue Engineering and Systems Biology Toward Fulfilling Their Promise. <i>Cellular and Molecular Bioengineering</i> , 2008 , 1, 33-41	3.9	18
117	An inducible autocrine cascade regulates rat hepatocyte proliferation and apoptosis responses to tumor necrosis factor-alpha. <i>Hepatology</i> , 2008 , 48, 276-88	11.2	63
116	Common effector processing mediates cell-specific responses to stimuli. <i>Nature</i> , 2007 , 448, 604-8	50.4	169
115	Decision tree modeling predicts effects of inhibiting contractility signaling on cell motility. <i>BMC Systems Biology</i> , 2007 , 1, 9	3.5	18
114	Quantitative network signal combinations downstream of TCR activation can predict IL-2 production response. <i>Journal of Immunology</i> , 2007 , 178, 4984-92	5.3	48
113	Modeling HER2 effects on cell behavior from mass spectrometry phosphotyrosine data. <i>PLoS Computational Biology</i> , 2007 , 3, e4	5	84
112	EGF-receptor-mediated mammary epithelial cell migration is driven by sustained ERK signaling from autocrine stimulation. <i>Journal of Cell Science</i> , 2007 , 120, 3688-99	5.3	77
111	Quantitative analysis of Akt phosphorylation and activity in response to EGF and insulin treatment. <i>Biochemical and Biophysical Research Communications</i> , 2007 , 354, 14-20	3.4	21
110	Effects of HER2 overexpression on cell signaling networks governing proliferation and migration. <i>Molecular Systems Biology</i> , 2006 , 2, 54	12.2	188
109	Migration of tumor cells in 3D matrices is governed by matrix stiffness along with cell-matrix adhesion and proteolysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 10889-94	11.5	913

108	Multiple signaling pathways mediate compaction of collagen matrices by EGF-stimulated fibroblasts. <i>Experimental Cell Research</i> , 2006 , 312, 1970-82	4.2	19
107	A high-throughput migration assay reveals HER2-mediated cell migration arising from increased directional persistence. <i>Biophysical Journal</i> , 2006 , 91, L32-4	2.9	20
106	Integrated mechanistic and data-driven modelling for multivariate analysis of signalling pathways. <i>Journal of the Royal Society Interface</i> , 2006 , 3, 515-26	4.1	44
105	The response of human epithelial cells to TNF involves an inducible autocrine cascade. <i>Cell</i> , 2006 , 124, 1225-39	56.2	165
104	Physicochemical modelling of cell signalling pathways. <i>Nature Cell Biology</i> , 2006 , 8, 1195-203	23.4	471
103	Collecting and organizing systematic sets of protein data. <i>Nature Reviews Molecular Cell Biology</i> , 2006 , 7, 803-12	48.7	90
102	A biological approach to computational models of proteomic networks. <i>Current Opinion in Chemical Biology</i> , 2006 , 10, 73-80	9.7	100
101	Bioengineering and systems biology. <i>Annals of Biomedical Engineering</i> , 2006 , 34, 1226-33	4.7	24
100	Motility signaled from the EGF receptor and related systems. <i>Methods in Molecular Biology</i> , 2006 , 327, 159-77	1.4	5
99	Causal protein-signaling networks derived from multiparameter single-cell data. <i>Science</i> , 2005 , 308, 523-33	33.3	1020
98	Bayesian analysis of signaling networks governing embryonic stem cell fate decisions. <i>Bioinformatics</i> , 2005 , 21, 741-53	7.2	98
97	A compendium of signals and responses triggered by prodeath and prosurvival cytokines. <i>Molecular and Cellular Proteomics</i> , 2005 , 4, 1569-90	7.6	116
96	Time-resolved mass spectrometry of tyrosine phosphorylation sites in the epidermal growth factor receptor signaling network reveals dynamic modules. <i>Molecular and Cellular Proteomics</i> , 2005 , 4, 1240-50	7.6	453
95	Directional persistence of EGF-induced cell migration is associated with stabilization of lamellipodial protrusions. <i>Biophysical Journal</i> , 2005 , 88, 1479-88	2.9	104
94	A systems model of signaling identifies a molecular basis set for cytokine-induced apoptosis. <i>Science</i> , 2005 , 310, 1646-53	33.3	443
93	Integrating cell-level kinetic modeling into the design of engineered protein therapeutics. <i>Nature Biotechnology</i> , 2005 , 23, 191-4	44.5	43
92	A multiplexed homogeneous fluorescence-based assay for protein kinase activity in cell lysates. <i>Nature Methods</i> , 2005 , 2, 277-83	21.6	183
91	Quantitative methods for developing Fc mutants with extended half-lives. <i>Biotechnology and Bioengineering</i> , 2005 , 92, 748-60	4.9	25

90	Modeling of signal-response cascades using decision tree analysis. <i>Bioinformatics</i> , 2005 , 21, 2027-35	7.2	52
89	Calpain proteases in cell adhesion and motility. <i>International Review of Cytology</i> , 2005 , 245, 1-16		69
88	Cue-signal-response analysis of TNF-induced apoptosis by partial least squares regression of dynamic multivariate data. <i>Journal of Computational Biology</i> , 2004 , 11, 544-61	1.7	99
87	Multivariate proteomic analysis of murine embryonic stem cell self-renewal versus differentiation signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 2900-5	11.5	99
86	Epidermal growth factor induces fibroblast contractility and motility via a protein kinase C delta-dependent pathway. <i>Journal of Biological Chemistry</i> , 2004 , 279, 14551-60	5.4	117
85	Cell population dynamics model for deconvolution of murine embryonic stem cell self-renewal and differentiation responses to cytokines and extracellular matrix. <i>Biotechnology and Bioengineering</i> , 2004 , 88, 264-72	4.9	24
84	Interleukin 2 (IL-2) Variants Engineered for Increased IL-2 Receptor β Subunit Affinity Exhibit Increased Potency Arising from a Cell Surface Ligand Reservoir Effect. <i>Molecular Pharmacology</i> , 2004 , 66, 864-869	4.3	38
83	Computational modeling of the EGF-receptor system: a paradigm for systems biology. <i>Trends in Cell Biology</i> , 2003 , 13, 43-50	18.3	276
82	Building with a scaffold: emerging strategies for high- to low-level cellular modeling. <i>Trends in Biotechnology</i> , 2003 , 21, 255-62	15.1	158
81	Supplementation-dependent differences in the rates of embryonic stem cell self-renewal, differentiation, and apoptosis. <i>Biotechnology and Bioengineering</i> , 2003 , 84, 505-17	4.9	42
80	Parsing the effects of binding, signaling, and trafficking on the mitogenic potencies of granulocyte colony-stimulating factor analogues. <i>Biotechnology Progress</i> , 2003 , 19, 955-64	2.8	25
79	pH Dependence of structural stability of interleukin-2 and granulocyte colony-stimulating factor. <i>Protein Science</i> , 2003 , 12, 1030-8	6.3	33
78	Quantitative parsing of cell multi-tasking in wound repair and tissue morphogenesis. <i>Biophysical Journal</i> , 2003 , 84, 3499-500	2.9	4
77	Cell-level pharmacokinetic model of granulocyte colony-stimulating factor: implications for ligand lifetime and potency in vivo. <i>Molecular Pharmacology</i> , 2003 , 63, 147-58	4.3	35
76	A high-throughput quantitative multiplex kinase assay for monitoring information flow in signaling networks: application to sepsis-apoptosis. <i>Molecular and Cellular Proteomics</i> , 2003 , 2, 463-73	7.6	81
75	Quantitative analysis of HER2-mediated effects on HER2 and epidermal growth factor receptor endocytosis: distribution of homo- and heterodimers depends on relative HER2 levels. <i>Journal of Biological Chemistry</i> , 2003 , 278, 23343-51	5.4	136
74	Cutting to the chase: calpain proteases in cell motility. <i>Trends in Cell Biology</i> , 2002 , 12, 46-54	18.3	322
73	Epidermal growth factor induces acute matrix contraction and subsequent calpain-modulated relaxation. <i>Wound Repair and Regeneration</i> , 2002 , 10, 67-76	3.6	35

72	Control of self-assembling oligopeptide matrix formation through systematic variation of amino acid sequence. <i>Biomaterials</i> , 2002 , 23, 219-27	15.6	226
71	Rational cytokine design for increased lifetime and enhanced potency using pH-activated "histidine switching". <i>Nature Biotechnology</i> , 2002 , 20, 908-13	44.5	133
70	Effects of systematic variation of amino acid sequence on the mechanical properties of a self-assembling, oligopeptide biomaterial. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2002 , 13, 225-36	3.5	70
69	Methylation of episomal plasmids as a barrier to transient gene expression via a synthetic delivery vector. <i>New Biotechnology</i> , 2001 , 18, 185-92		51
68	Tumor invasion as dysregulated cell motility. <i>Seminars in Cancer Biology</i> , 2001 , 11, 105-17	12.7	134
67	A computational study of feedback effects on signal dynamics in a mitogen-activated protein kinase (MAPK) pathway model. <i>Biotechnology Progress</i> , 2001 , 17, 227-39	2.8	130
66	Molecular properties in cell adhesion: a physical and engineering perspective. <i>Trends in Biotechnology</i> , 2001 , 19, 310-6	15.1	82
65	Membrane proximal ERK signaling is required for M-calpain activation downstream of epidermal growth factor receptor signaling. <i>Journal of Biological Chemistry</i> , 2001 , 276, 23341-8	5.4	169
64	Autocrine epidermal growth factor signaling stimulates directionally persistent mammary epithelial cell migration. <i>Journal of Cell Biology</i> , 2001 , 155, 1123-8	7.3	71
63	Quantitative analysis of synthetic gene delivery vector design properties. <i>Molecular Therapy</i> , 2001 , 4, 438-46	11.7	101
62	Vector unpacking as a potential barrier for receptor-mediated polyplex gene delivery. <i>Biotechnology and Bioengineering</i> , 2000 , 67, 598-606	4.9	413
61	Mathematical modeling of epidermal growth factor receptor signaling through the phospholipase C pathway: Mechanistic insights and predictions for molecular interventions. <i>Biotechnology and Bioengineering</i> , 2000 , 70, 225-238	4.9	36
60	Receptor-mediated targeting of gene delivery vectors: insights from molecular mechanisms for improved vehicle design. <i>Biotechnology and Bioengineering</i> , 2000 , 70, 593-605	4.9	105
59	Computational model for effects of ligand/receptor binding properties on interleukin-2 trafficking dynamics and T cell proliferation response. <i>Biotechnology Progress</i> , 2000 , 16, 905-16	2.8	46
58	A ligand-receptor signaling threshold model of stem cell differentiation control: a biologically conserved mechanism applicable to hematopoiesis. <i>Blood</i> , 2000 , 96, 1215-1222	2.2	94
57	Epidermal growth factor receptor activation of calpain is required for fibroblast motility and occurs via an ERK/MAP kinase signaling pathway. <i>Journal of Biological Chemistry</i> , 2000 , 275, 2390-8	5.4	221
56	Increased endosomal sorting of ligand to recycling enhances potency of an interleukin-2 analog. <i>Journal of Biological Chemistry</i> , 2000 , 275, 6790-7	5.4	39
55	Bioengineering models of cell signaling. <i>Annual Review of Biomedical Engineering</i> , 2000 , 2, 31-53	12	104

54	Self-assembly of a beta-sheet protein governed by relief of electrostatic repulsion relative to van der Waals attraction. <i>Biomacromolecules</i> , 2000 , 1, 627-31	6.9	238
53	A ligand-receptor signaling threshold model of stem cell differentiation control: a biologically conserved mechanism applicable to hematopoiesis. <i>Blood</i> , 2000 , 96, 1215-1222	2.2	1
52	Effect of epidermal growth factor receptor internalization on regulation of the phospholipase C-gamma1 signaling pathway. <i>Journal of Biological Chemistry</i> , 1999 , 274, 8958-65	5.4	100
51	Kinetic model for integrin-mediated adhesion release during cell migration. <i>Annals of Biomedical Engineering</i> , 1999 , 27, 219-35	4.7	45
50	Shaping up for shipping out: PLCgamma signaling of morphology changes in EGF-stimulated fibroblast migration. <i>Cytoskeleton</i> , 1999 , 44, 227-33		63
49	Biophysical integration of effects of epidermal growth factor and fibronectin on fibroblast migration. <i>Biophysical Journal</i> , 1999 , 76, 2814-23	2.9	138
48	Integrin Adhesion in Cell Migration. <i>Advances in Molecular and Cell Biology</i> , 1999 , 367-388		2
47	Analysis of receptor internalization as a mechanism for modulating signal transduction. <i>Journal of Theoretical Biology</i> , 1998 , 195, 187-218	2.3	49
46	Deconstructing (and reconstructing) cell migration. <i>Microscopy Research and Technique</i> , 1998 , 43, 358-68	2.8	63
45	Scratching the (cell) surface: cytokine engineering for improved ligand/receptor trafficking dynamics. <i>Chemistry and Biology</i> , 1998 , 5, R257-63		30
44	Mechanical properties of a self-assembling oligopeptide matrix. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998 , 9, 297-312	3.5	80
43	Optimization of cell surface binding enhances efficiency and specificity of molecular conjugate gene delivery. <i>Journal of Biological Chemistry</i> , 1998 , 273, 28004-9	5.4	107
42	Deconstructing (and reconstructing) cell migration 1998 , 43, 358		2
41	Regulation of cell migration by the calcium-dependent protease calpain. <i>Journal of Biological Chemistry</i> , 1997 , 272, 32719-22	5.4	303
40	Use of the Green Fluorescent Protein as a Quantitative Reporter of Epidermal Growth Factor Receptor-Mediated Gene Delivery. <i>Tissue Engineering</i> , 1997 , 3, 53-63		7
39	Integrin-ligand binding properties govern cell migration speed through cell-substratum adhesiveness. <i>Nature</i> , 1997 , 385, 537-40	50.4	1187
38	Controlling receptor/ligand trafficking: effects of cellular and molecular properties on endosomal sorting. <i>Annals of Biomedical Engineering</i> , 1997 , 25, 690-707	4.7	21
37	Cell migration: a physically integrated molecular process. <i>Cell</i> , 1996 , 84, 359-69	56.2	3289

36	Endocytic Relay as a Potential Means for Enhancing Ligand Transport through Cellular Tissue Matrices: Analysis and Possible Implications for Drug Delivery. <i>Tissue Engineering</i> , 1996 , 2, 17-38		10
35	Intracellular receptor/ligand sorting based on endosomal retention components. <i>Biotechnology and Bioengineering</i> , 1996 , 51, 281-97	4.9	19
34	Engineering dynamics of growth factors and other therapeutic ligands. <i>Biotechnology and Bioengineering</i> , 1996 , 52, 61-80	4.9	11
33	Receptor-mediated effects on ligand availability influence relative mitogenic potencies of epidermal growth factor and transforming growth factor alpha. <i>Journal of Cellular Physiology</i> , 1996 , 166, 512-22	7	54
32	Engineering epidermal growth factor for enhanced mitogenic potency. <i>Nature Biotechnology</i> , 1996 , 14, 1696-9	44.5	92
31	Adhesion mediated by bonds in series. <i>Biotechnology Progress</i> , 1996 , 12, 682-99	2.8	28
30	Studies on engineered autocrine systems: requirements for ligand release from cells producing an artificial growth factor. <i>Tissue Engineering</i> , 1995 , 1, 81-94		12
29	Intracellular trafficking of epidermal growth factor family ligands is directly influenced by the pH sensitivity of the receptor/ligand interaction. <i>Journal of Biological Chemistry</i> , 1995 , 270, 4334-40	5.4	178
28	Probability of autocrine ligand capture by cell-surface receptors: implications for ligand secretion measurements. <i>Journal of Computational Biology</i> , 1994 , 1, 15-23	1.7	21
27	Integrin-binding peptide in solution inhibits or enhances endothelial cell migration, predictably from cell adhesion. <i>Annals of Biomedical Engineering</i> , 1994 , 22, 144-52	4.7	46
26	Proliferative response of fibroblasts expressing internalization-deficient epidermal growth factor (EGF) receptors is altered via differential EGF depletion effect. <i>Biotechnology Progress</i> , 1994 , 10, 377-84	2.8	46
25	The role of low-affinity interleukin-2 receptors in autocrine ligand binding: alternative mechanisms for enhanced binding effect. <i>Molecular Immunology</i> , 1994 , 31, 739-51	4.3	24
24	Molecules, Mechanics, and Migration of Cells. <i>Applied Mechanics Reviews</i> , 1994 , 47, S287-S290	8.6	1
23	Mathematical model for the effects of epidermal growth factor receptor trafficking dynamics on fibroblast proliferation responses. <i>Biotechnology Progress</i> , 1992 , 8, 132-43	2.8	78
22	Measurement of individual cell migration parameters for human tissue cells. <i>AIChE Journal</i> , 1992 , 38, 1092-1104	3.6	53
21	Measurement of Cell Adhesion and Migration on Protein-Coated Surfaces. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 252, 205		2
20	Analysis of chemotactic bacterial distributions in population migration assays using a mathematical model applicable to steep or shallow attractant gradients. <i>Bulletin of Mathematical Biology</i> , 1991 , 53, 721-49	2.1	54
19	Measurement of bacterial random motility and chemotaxis coefficients: I. Stopped-flow diffusion chamber assay. <i>Biotechnology and Bioengineering</i> , 1991 , 37, 647-60	4.9	96

18	Measurement of bacterial random motility and chemotaxis coefficients: II. Application of single-cell-based mathematical model. <i>Biotechnology and Bioengineering</i> , 1991 , 37, 661-72	4.9	68
17	Stopped-flow chamber and image analysis system for quantitative characterization of bacterial population migration: Motility and chemotaxis of <i>Escherichia coli</i> K12 to fucose. <i>Microbial Ecology</i> , 1991 , 22, 127-38	4.4	5
16	Quantitative relationships between single-cell and cell-population model parameters for chemosensory migration responses of alveolar macrophages to C5a. <i>Cytoskeleton</i> , 1990 , 16, 279-93		44
15	Epidermal growth factor binding and trafficking dynamics in fibroblasts: relationship to cell proliferation. <i>Chemical Engineering Science</i> , 1990 , 45, 2367-2373	4.4	14
14	Cell transport in the millipore filter assay. <i>AIChE Journal</i> , 1989 , 35, 459-465	3.6	7
13	Analysis of intracellular receptor/ligand sorting in endosomes. <i>Journal of Theoretical Biology</i> , 1988 , 132, 203-45	2.3	54
12	Concentration gradients of chemotactic factors in chemotaxis assays. <i>Methods in Enzymology</i> , 1988 , 162, 85-101	1.7	13
11	MATHEMATICAL ANALYSIS OF CELL TRANSPORT PHENOMENA: BACTERIAL CHEMOTAXIS IN THE CAPILLARY ASSAY. <i>Chemical Engineering Communications</i> , 1987 , 58, 339-351	2.2	9
10	Effects of Nonspecific Cell/Surface Interactions on Cell Affinity Chromatographic Separations. <i>Materials Research Society Symposia Proceedings</i> , 1987 , 110, 739		
9	Quantification of bacterial chemotaxis by measurement of model parameters using the capillary assay. <i>Biotechnology and Bioengineering</i> , 1986 , 28, 1178-90	4.9	22
8	Consequences of chemosensory phenomena for leukocyte chemotactic orientation. <i>Cell Biophysics</i> , 1986 , 8, 1-46		15
7	Chemotaxis: analysis for quantitative studies. <i>Biotechnology Progress</i> , 1985 , 1, 151-60	2.8	5
6	Common ground. <i>Biotechnology Progress</i> , 1985 , 1, d3	2.8	
5	Localized bacterial infection in a distributed model for tissue inflammation. <i>Journal of Mathematical Biology</i> , 1983 , 16, 141-63	2	38
4	Effects of Cell Motility Properties on Cell Populations in Ecosystems. <i>ACS Symposium Series</i> , 1983 , 265-292		24
3	Future Perspectives of Biological Engineering in Pharmaceutical Research: The Paradigm of Modeling, Mining, Manipulation, and Measurements		349-379
2	Sporadic ERK pulses drive non-genetic resistance in drug-adapted BRAFV600E melanoma cells		3
1	Reduced antibody activity against SARS-CoV-2 B.1.617.2 Delta virus in serum of mRNA-vaccinated patients receiving TNF- α inhibitors		1

