Douglas Kell

List of Publications by Year
in descending order

562 papers	50,261 citations	1612 108 h-index	2750 198 g-index
633 all docs	633 docs citations	633 times ranked	45670 citing authors

#	Article	IF	Citations
1	Engineering ergothioneine production in <i>Yarrowia lipolytica</i>. FEBS Letters, 2022, 596, 1356-1364.	1.3	12
2	Engineering precursor supply for the high-level production of ergothioneine in Saccharomyces cerevisiae. Metabolic Engineering, 2022, 70, 129-142.	3.6	20
3	The Role of Lipopolysaccharide-Induced Cell Signalling in Chronic Inflammation. Chronic Stress, 2022, 6, 247054702210763.	1.7	68
4	Untargeted metabolomics of COVID-19 patient serum reveals potential prognostic markers of both severity and outcome. Metabolomics, 2022, 18, 6.	1.4	60
5	A central role for amyloid fibrin microclots in long COVID/PASC: origins and therapeutic implications. Biochemical Journal, 2022, 479, 537-559.	1.7	126
6	Immuno-Thrombotic Complications of COVID-19: Implications for Timing of Surgery and Anticoagulation. Frontiers in Surgery, 2022, 9, .	0.6	23
7	Membrane transporter identification and modulation via adaptive laboratory evolution. Metabolic Engineering, 2022, 72, 376-390.	3.6	16
8	A protet-based, protonic charge transfer model of energy coupling in oxidative and photosynthetic phosphorylation. Advances in Microbial Physiology, 2021, 78, 1-177.	1.0	11
9	A palette of fluorophores that are differentially accumulated by wild-type and mutant strains of Escherichia coli: surrogate ligands for profiling bacterial membrane transporters. Microbiology (United Kingdom), 2021, 167, .	0.7	15
10	FragNet, a Contrastive Learning-Based Transformer Model for Clustering, Interpreting, Visualizing, and Navigating Chemical Space. Molecules, 2021, 26, 2065.	1.7	14
11	Harnessing the yeast <i>Saccharomyces cerevisiae</i> for the production of fungal secondary metabolites. Essays in Biochemistry, 2021, 65, 277-291.	2.1	16
12	Persistent clotting protein pathology in Long COVID/Post-Acute Sequelae of COVID-19 (PASC) is accompanied by increased levels of antiplasmin. Cardiovascular Diabetology, 2021, 20, 172.	2.7	271
13	An Overview of Cell-Based Assay Platforms for the Solute Carrier Family of Transporters. Frontiers in Pharmacology, 2021, 12, 722889.	1.6	31
14	SARS-CoV-2 spike protein S1 induces fibrin(ogen) resistant to fibrinolysis: implications for microclot formation in COVID-19. Bioscience Reports, 2021, 41, .	1.1	104
15	Membrane Transporters Involved in the Antimicrobial Activities of Pyrithione in Escherichia coli. Molecules, 2021, 26, 5826.	1.7	6
16	The Transporter-Mediated Cellular Uptake and Efflux of Pharmaceutical Drugs and Biotechnology Products: How and Why Phospholipid Bilayer Transport Is Negligible in Real Biomembranes. Molecules, 2021, 26, 5629.	1.7	14
17	Spectral artefacts induced by moving targets in live hyperspectral stimulated Raman spectroscopy: The case of lipid droplets in yeast cells. Clinical Spectroscopy, 2021, 3, 100014.	0.6	1
18	Iron Dysregulation and Inflammagens Related to Oral and Gut Health Are Central to the Development of Parkinson's Disease. Biomolecules, 2021, 11, 30.	1.8	13

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19	Intelligent host engineering for metabolic flux optimisation in biotechnology. Biochemical Journal, 2021, 478, 3685-3721.	1.7	8
20	MassGenie: A Transformer-Based Deep Learning Method for Identifying Small Molecules from Their Mass Spectra. Biomolecules, 2021, 11, 1793.	1.8	29
21	TEGÂ®, Microclot and Platelet Mapping for Guiding Early Management of Severe COVID-19 Coagulopathy. Journal of Clinical Medicine, 2021, 10, 5381.	1.0	30
22	L-(+)-Ergothioneine Significantly Improves the Clinical Characteristics of Preeclampsia in the Reduced Uterine Perfusion Pressure Rat Model. Hypertension, 2020, 75, 561-568.	1.3	53
23	An untargeted metabolomics strategy to measure differences in metabolite uptake and excretion by mammalian cell lines. Metabolomics, 2020, 16, 107.	1.4	26
24	Automating Cloning by Natural Transformation. ACS Synthetic Biology, 2020, 9, 3228-3235.	1.9	11
25	Prevalence of readily detected amyloid blood clots in â€˜unclottedâ€™ Type 2 Diabetes Mellitus and COVID-19 plasma: a preliminary report. Cardiovascular Diabetology, 2020, 19, 193.	2.7	44
26	Structural Similarities between Some Common Fluorophores Used in Biology, Marketed Drugs, Endogenous Metabolites, and Natural Products. Marine Drugs, 2020, 18, 582.	2.2	14
27	Covid-19: The Rollercoaster of Fibrin(Ogen), D-Dimer, Von Willebrand Factor, P-Selectin and Their Interactions with Endothelial Cells, Platelets and Erythrocytes. International Journal of Molecular Sciences, 2020, 21, 5168.	1.8	135
28	Gingipain R1 and Lipopolysaccharide From Porphyromonas gingivalis Have Major Effects on Blood Clot Morphology and Mechanics. Frontiers in Immunology, 2020, 11, 1551.	2.2	13
29	A Quantitative Survey of Bacterial Persistence in the Presence of Antibiotics: Towards Antipersister Antimicrobial Discovery. Antibiotics, 2020, 9, 508.	1.5	21
30	VAE-Sim: A Novel Molecular Similarity Measure Based on a Variational Autoencoder. Molecules, 2020, 25, 3446.	1.7	23
31	DeepGraphMolGen, a multi-objective, computational strategy for generating molecules with desirable properties: a graph convolution and reinforcement learning approach. Journal of Cheminformatics, 2020, 12, 53.	2.8	42
32	Detection of Citrullinated Fibrin in Plasma Clots of Rheumatoid Arthritis Patients and Its Relation to Altered Structural Clot Properties, Disease-Related Inflammation and Prothrombotic Tendency. Frontiers in Immunology, 2020, 11, 577523.	2.2	14
33	Erythrocyte, Platelet, Serum Ferritin, and P-Selectin Pathophysiology Implicated in Severe Hypercoagulation and Vascular Complications in COVID-19. International Journal of Molecular Sciences, 2020, 21, 8234.	1.8	70
34	The Biology of Lactoferrin, an Iron-Binding Protein That Can Help Defend Against Viruses and Bacteria. Frontiers in Immunology, 2020, 11, 1221.	2.2	251
35	Hitchhiking into the cell. Nature Chemical Biology, 2020, 16, 367-368.	3.9	11
36	Is Porphyromonas gingivalis involved in Parkinsonâ€™s disease?. European Journal of Clinical Microbiology and Infectious Diseases, 2020, 39, 2013-2018.	1.3	21

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37	Effect of L-Ergothioneine on the metabolic plasma profile of the RUPP rat model of pre-eclampsia. PLoS ONE, 2020, 15, e0230977.	1.1	14
38	The biology of ergothioneine, an antioxidant nutraceutical. Nutrition Research Reviews, 2020, 33, 190-217.	2.1	122
39	The RESOLUTE consortium: unlocking SLC transporters for drug discovery. Nature Reviews Drug Discovery, 2020, 19, 429-430.	21.5	53
40	Deep learning and generative methods in cheminformatics and chemical biology: navigating small molecule space intelligently. Biochemical Journal, 2020, 477, 4559-4580.	1.7	29
41	<scp>SBML</scp> Level 3: an extensible format for the exchange and reuse of biological models. Molecular Systems Biology, 2020, 16, e9110.	3.2	178
42	Parkinson's Disease: A Systemic Inflammatory Disease Accompanied by Bacterial Inflammagens. Frontiers in Aging Neuroscience, 2019, 11, 210.	1.7	76
43	A brain-permeable inhibitor of the neurodegenerative disease target kynurenine 3-monooxygenase prevents accumulation of neurotoxic metabolites. Communications Biology, 2019, 2, 271.	2.0	36
44	Involvement of multiple influx and efflux transporters in the accumulation of cationic fluorescent dyes by Escherichia coli. BMC Microbiology, 2019, 19, 195.	1.3	31
45	A top priority in pre-eclampsia research: development of a reliable and inexpensive urinary screening test. The Lancet Global Health, 2019, 7, e1312-e1313.	2.9	7
46	Engineering the Yeast Saccharomyces cerevisiae for the Production of L-(+)-Ergothioneine. Frontiers in Bioengineering and Biotechnology, 2019, 7, 262.	2.0	40
47	GeneORator: An Effective Strategy for Navigating Protein Sequence Space More Efficiently through Boolean OR-Type DNA Libraries. ACS Synthetic Biology, 2019, 8, 1371-1378.	1.9	15
48	Serum amyloid A binds to fibrin(ogen), promoting fibrin amyloid formation. Scientific Reports, 2019, 9, 3102.	1.6	71
49	Bacterial Dysbiosis and Translocation in Psoriasis Vulgaris. Frontiers in Cellular and Infection Microbiology, 2019, 9, 7.	1.8	86
50	A Possible Role of Amyloidogenic Blood Clotting in the Evolving Haemodynamics of Female Migraine-With-Aura: Results From a Pilot Study. Frontiers in Neurology, 2019, 10, 1262.	1.1	8
51	The role and robustness of the Gini coefficient as an unbiased tool for the selection of Gini genes for normalising expression profiling data. Scientific Reports, 2019, 9, 17960.	1.6	25
52	Very rapid flow cytometric assessment of antimicrobial susceptibility during the apparent lag phase of microbial (re)growth. Microbiology (United Kingdom), 2019, 165, 439-454.	0.7	14
53	Generation of a Small Library of Natural Products Designed to Cover Chemical Space Inexpensively. , 2019, 1, e190005.		6
54	PartsGenie: an integrated tool for optimizing and sharing synthetic biology parts. Bioinformatics, 2018, 34, 2327-2329.	1.8	25

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55	No effects without causes: the Iron Dysregulation and Dormant Microbes hypothesis for chronic, inflammatory diseases. Biological Reviews, 2018, 93, 1518-1557.	4.7	92
56	GeneGini: Assessment via the Gini Coefficient of Reference â€œHousekeepingâ€•Genes and Diverse Human Transporter Expression Profiles. Cell Systems, 2018, 6, 230-244.e1.	2.9	61
57	Selenzyme: enzyme selection tool for pathway design. Bioinformatics, 2018, 34, 2153-2154.	1.8	75
58	Engineering the â€œMissing Linkâ€•in Biosynthetic (âˆ')-Menthol Production: Bacterial Isopulegone Isomerase. ACS Catalysis, 2018, 8, 2012-2020.	5.5	20
59	The potential therapeutic effects of ergothioneine in pre-eclampsia. Free Radical Biology and Medicine, 2018, 117, 145-157.	1.3	48
60	Analysing and Navigating Natural Products Space for Generating Small, Diverse, But Representative Chemical Libraries. Biotechnology Journal, 2018, 13, 1700503.	1.8	25
61	To What Extent Are the Terminal Stages of Sepsis, Septic Shock, Systemic Inflammatory Response Syndrome, and Multiple Organ Dysfunction Syndrome Actually Driven by a Prion/Amyloid Form of Fibrin?. Seminars in Thrombosis and Hemostasis, 2018, 44, 224-238.	1.5	45
62	Both lipopolysaccharide and lipoteichoic acids potently induce anomalous fibrin amyloid formation: assessment with novel Amytrackerâ„¢ stains<sup />. Journal of the Royal Society Interface, 2018, 15, 20170941.	1.5	50
63	Correlative Light-Electron Microscopy detects lipopolysaccharide and its association with fibrin fibres in Parkinsonâ€™s Disease, Alzheimerâ€™s Disease and Type 2 Diabetes Mellitus. Scientific Reports, 2018, 8, 16798.	1.6	39
64	Iron Dysregulation and Dormant Microbes as Causative Agents for Impaired Blood Rheology and Pathological Clotting in Alzheimerâ€™s Type Dementia. Frontiers in Neuroscience, 2018, 12, 851.	1.4	17
65	The Potential of LPS-Binding Protein to Reverse Amyloid Formation in Plasma Fibrin of Individuals With Alzheimer-Type Dementia. Frontiers in Aging Neuroscience, 2018, 10, 257.	1.7	32
66	Ultra-high throughput functional enrichment of large monoamine oxidase (MAO-N) libraries by fluorescence activated cell sorting. Analyst, The, 2018, 143, 4747-4755.	1.7	19
67	Energetic evolution of cellular Transportomes. BMC Genomics, 2018, 19, 418.	1.2	21
68	Fast and Flexible Synthesis of Combinatorial Libraries for Directed Evolution. Methods in Enzymology, 2018, 608, 59-79.	0.4	11
69	An automated Design-Build-Test-Learn pipeline for enhanced microbial production of fine chemicals. Communications Biology, 2018, 1, 66.	2.0	159
70	Lipopolysaccharide-binding protein (LBP) can reverse the amyloid state of fibrin seen or induced in Parkinson's disease. PLoS ONE, 2018, 13, e0192121.	1.1	31
71	Computing exponentially faster: implementing a non-deterministic universal Turing machine using DNA. Journal of the Royal Society Interface, 2017, 14, 20160990.	1.5	30
72	Mass spectrometry imaging shows major derangements in neurogranin and in purine metabolism in the triple-knockout 3A—Tg Alzheimer mouse model. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 747-754.	1.1	31

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73	Commentary on "Goodacre R, Timmins É‰M, Rooney PJ, Rowland JJ, Kell DB: Rapid identification of Streptococcus and Enterococcus species using diffuse reflectance-absorbance Fourier transform infrared spectroscopy and artificial neural networks. FEMS Microbiol Lett 1996; 140:233-239", the most cited paper in the Journal for that year. FEMS Microbiology Letters, 2017, 364, fnx018.	0.7	42
74	Analysis of drug–endogenous human metabolite similarities in terms of their maximum common substructures. Journal of Cheminformatics, 2017, 9, 18.	2.8	25
75	Lipopolysaccharide-binding protein (LBP) reverses the amyloid state of fibrin seen in plasma of type 2 diabetics with cardiovascular co-morbidities. Scientific Reports, 2017, 7, 9680.	1.6	42
76	Stability in metabolic phenotypes and inferred metagenome profiles before the onset of colitis-induced inflammation. Scientific Reports, 2017, 7, 8836.	1.6	11
77	Evolutionary algorithms and synthetic biology for directed evolution: commentary on "on the mapping of genotype to phenotype in evolutionary algorithms"by Peter A. Whigham, Grant Dick, and James Maclaurin. Genetic Programming and Evolvable Machines, 2017, 18, 373-378.	1.5	6
78	Proteins behaving badly. Substoichiometric molecular control and amplification of the initiation and nature of amyloid fibril formation: lessons from and for blood clotting. Progress in Biophysics and Molecular Biology, 2017, 123, 16-41.	1.4	64
79	SpeedyGenes: Exploiting an Improved Gene Synthesis Method for the Efficient Production of Synthetic Protein Libraries for Directed Evolution. Methods in Molecular Biology, 2017, 1472, 63-78.	0.4	12
80	Major involvement of bacterial components in rheumatoid arthritis and its accompanying oxidative stress, systemic inflammation and hypercoagulability. Experimental Biology and Medicine, 2017, 242, 355-373.	1.1	72
81	Enhancing Drug Efficacy and Therapeutic Index through Cheminformatics-Based Selection of Small Molecule Binary Weapons That Improve Transporter-Mediated Targeting: A Cytotoxicity System Based on Gemcitabine. Frontiers in Pharmacology, 2017, 8, 155.	1.6	18
82	biochem4j: Integrated and extensible biochemical knowledge through graph databases. PLoS ONE, 2017, 12, e0179130.	1.1	31
83	Substantial fibrin amyloidogenesis in type 2 diabetes assessed using amyloid-selective fluorescent stains. Cardiovascular Diabetology, 2017, 16, 141.	2.7	49
84	Consensus rank orderings of molecular fingerprints illustrate the most genuine similarities between marketed drugs and small endogenous human metabolites, but highlight exogenous natural products as the most important 'natural' drug transporter substrates. ADMET and DMPK, 2017, 5, 85.	1.1	36
85	Immunological Tolerance, Pregnancy, and Preeclampsia: The Roles of Semen Microbes and the Father. Frontiers in Medicine, 2017, 4, 239.	1.2	46
86	A Dormant Microbial Component in the Development of Preeclampsia. Frontiers in Medicine, 2016, 3, 60.	1.2	64
87	MetMaxStruct: A Tversky-Similarity-Based Strategy for Analysing the (Sub)Structural Similarities of Drugs and Endogenous Metabolites. Frontiers in Pharmacology, 2016, 7, 266.	1.6	26
88	A Bacterial Component to Alzheimer's-Type Dementia Seen via a Systems Biology Approach that Links Iron Dysregulation and Inflammagen Shedding to Disease. Journal of Alzheimer's Disease, 2016, 53, 1237-1256.	1.2	56
89	Response to 'The Need for Speed', by Matsson et al .. Trends in Pharmacological Sciences, 2016, 37, 245-246.	4.0	2
90	Acute induction of anomalous and amyloidogenic blood clotting by molecular amplification of highly substoichiometric levels of bacterial lipopolysaccharide. Journal of the Royal Society Interface, 2016, 13, 20160539.	1.5	74

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91	SYNBIOCHEMâ€"a SynBio foundry for the biosynthesis and sustainable production of fine and speciality chemicals. Biochemical Society Transactions, 2016, 44, 675-677.	1.6	7
92	The metabolome 18 years on: a concept comes of age. Metabolomics, 2016, 12, 148.	1.4	95
93	Recon 2.2: from reconstruction to model of human metabolism. Metabolomics, 2016, 12, 109.	1.4	243
94	Microbes and Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2016, 51, 979-984.	1.2	426
95	Implications of endogenous roles of transporters for drug discovery: hitchhiking and metabolite-likeness. Nature Reviews Drug Discovery, 2016, 15, 143-143.	21.5	31
96	How drugs pass through biological cell membranes â€" a paradigm shift in our understanding?. Beilstein Magazine, 2016, , .	0.4	11
97	Software review: the KNIME workflow environment and its applications in genetic programming and machine learning. Genetic Programming and Evolvable Machines, 2015, 16, 387-391.	1.5	33
98	The transporter-mediated cellular uptake of pharmaceutical drugs is based on their metabolite-likeness and not on their bulk biophysical properties: Towards a systems pharmacology. Perspectives in Science, 2015, 6, 66-83.	0.6	18
99	The apparent permeabilities of Caco-2 cells to marketed drugs: magnitude, and independence from both biophysical properties and endogenite similarities. PeerJ, 2015, 3, e1405.	0.9	39
100	Understanding the foundations of the structural similarities between marketed drugs and endogenous human metabolites. Frontiers in Pharmacology, 2015, 6, 105.	1.6	27
101	Fitting Transporter Activities to Cellular Drug Concentrations and Fluxes: Why the Bumblebee Can Fly. Trends in Pharmacological Sciences, 2015, 36, 710-723.	4.0	24
102	The virtue of innovation: innovation through the lenses of biological evolution. Journal of the Royal Society Interface, 2015, 12, 20141183.	1.5	17
103	A â€˜rule of 0.5â€™ for the metabolite-likeness of approved pharmaceutical drugs. Metabolomics, 2015, 11, 323-339.	1.4	84
104	What would be the observable consequences if phospholipid bilayer diffusion of drugs into cells is negligible?. Trends in Pharmacological Sciences, 2015, 36, 15-21.	4.0	46
105	Synthetic biology for the directed evolution of protein biocatalysts: navigating sequence space intelligently. Chemical Society Reviews, 2015, 44, 1172-1239.	18.7	316
106	Event-based text mining for biology and functional genomics. Briefings in Functional Genomics, 2015, 14, 213-230.	1.3	58
107	The dormant blood microbiome in chronic, inflammatory diseases. FEMS Microbiology Reviews, 2015, 39, 567-591.	3.9	362
108	Molecular phenotyping of a UK population: defining the human serum metabolome. Metabolomics, 2015, 11, 9-26.	1.4	202

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109	Poorly controlled type 2 diabetes is accompanied by significant morphological and ultrastructural changes in both erythrocytes and in thrombin-generated fibrin: implications for diagnostics. Cardiovascular Diabetology, 2015, 14, 30.	2.7	72
110	Membrane transporter engineering in industrial biotechnology and whole cell biocatalysis. Trends in Biotechnology, 2015, 33, 237-246.	4.9	167
111	On the translocation of bacteria and their lipopolysaccharides between blood and peripheral locations in chronic, inflammatory diseases: the central roles of LPS and LPS-induced cell death. Integrative Biology (United Kingdom), 2015, 7, 1339-1377.	0.6	140
112	The simultaneous occurrence of both hypercoagulability and hypofibrinolysis in blood and serum during systemic inflammation, and the roles of iron and fibrin(ogen). Integrative Biology (United) Tj ETQq0 0 0 rgBT0.6verlock710 Tf 50 6		
113	Individuality, phenotypic differentiation, dormancy and â€˜persistenceâ€™ in culturable bacterial systems: commonalities shared by environmental, laboratory, and clinical microbiology. F1000Research, 2015, 4, 179.	0.8	46
114	Individuality, phenotypic differentiation, dormancy and â€˜persistenceâ€™ in culturable bacterial systems: commonalities shared by environmental, laboratory, and clinical microbiology. F1000Research, 2015, 4, 179.	0.8	49
115	Viscoelastic and ultrastructural characteristics of whole blood and plasma in Alzheimer-type dementia, and the possible role of bacterial lipopolysaccharides (LPS). Oncotarget, 2015, 6, 35284-35303.	0.8	74
116	Eryptosis as a marker of Parkinson's disease. Aging, 2014, 6, 788-819.	1.4	84
117	Profound Morphological Changes in the Erythrocytes and Fibrin Networks of Patients with Hemochromatosis or with Hyperferritinemia, and Their Normalization by Iron Chelators and Other Agents. PLoS ONE, 2014, 9, e85271.	1.1	59
118	SpeedyGenes: an improved gene synthesis method for the efficient production of error-corrected, synthetic protein libraries for directed evolution. Protein Engineering, Design and Selection, 2014, 27, 273-280.	1.0	40
119	How drugs get into cells: tested and testable predictions to help discriminate between transporter-mediated uptake and lipoidal bilayer diffusion. Frontiers in Pharmacology, 2014, 5, 231.	1.6	136
120	Mental health: Drug search on risky path. Nature, 2014, 508, 458-458.	13.7	0
121	GeneGenie: optimized oligomer design for directed evolution. Nucleic Acids Research, 2014, 42, W395-W400.	6.5	33
122	Metabolomics and systems pharmacology: why and how to model the human metabolic network for drug discovery. Drug Discovery Today, 2014, 19, 171-182.	3.2	140
123	Serum ferritin is an important inflammatory disease marker, as it is mainly a leakage product from damaged cells. Metallomics, 2014, 6, 748-773.	1.0	442
124	Diagnostic morphology: biophysical indicators for iron-driven inflammatory diseases. Integrative Biology (United Kingdom), 2014, 6, 486-510.	0.6	127
125	Yeast cells with impaired drug resistance accumulate glycerol and glucose. Molecular BioSystems, 2014, 10, 93-102.	2.9	12
126	Evidence That Multiple Defects in Lipid Regulation Occur before Hyperglycemia during the Prodrome of Type-2 Diabetes. PLoS ONE, 2014, 9, e103217.	1.1	40

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127	A novel method for assessing the role of iron and its functional chelation in fibrin fibril formation: the use of scanning electron microscopy. Toxicology Mechanisms and Methods, 2013, 23, 352-359.	1.3	57
128	An analysis of a 'community-driven' reconstruction of the human metabolic network. Metabolomics, 2013, 9, 757-764.	1.4	30
129	Path2Models: large-scale generation of computational models from biochemical pathway maps. BMC Systems Biology, 2013, 7, 116.	3.0	145
130	The promiscuous binding of pharmaceutical drugs and their transporter-mediated uptake into cells: what we (need to) know and how we can do so. Drug Discovery Today, 2013, 18, 218-239.	3.2	130
131	A model of yeast glycolysis based on a consistent kinetic characterisation of all its enzymes. FEBS Letters, 2013, 587, 2832-2841.	1.3	113
132	Finding novel pharmaceuticals in the systems biology era using multiple effective drug targets, phenotypic screening and knowledge of transporters: where drug discovery went wrong and how to fix it. FEBS Journal, 2013, 280, 5957-5980.	2.2	95
133	A community-driven global reconstruction of human metabolism. Nature Biotechnology, 2013, 31, 419-425.	9.4	920
134	Genetics and iron in the systems biology of Parkinson's disease and some related disorders. Neurochemistry International, 2013, 62, 637-652.	1.9	56
135	A method for integrating and ranking the evidence for biochemical pathways by mining reactions from text. Bioinformatics, 2013, 29, i44-i52.	1.8	34
136	High ferritin levels have major effects on the morphology of erythrocytes in Alzheimer's disease. Frontiers in Aging Neuroscience, 2013, 5, 88.	1.7	50
137	Automated workflows for accurate mass-based putative metabolite identification in LC/MS-derived metabolomic datasets. Bioinformatics, 2012, 28, 149-149.	1.8	2
138	Large-scale sequestration of atmospheric carbon via plant roots in natural and agricultural ecosystems: why and how. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1589-1597.	1.8	217
139	Reviews turn facts into understanding. Nature, 2012, 490, 37-37.	13.7	3
140	Extracting semantically enriched events from biomedical literature. BMC Bioinformatics, 2012, 13, 108.	1.2	52
141	The genetic control of growth rate: a systems biology study in yeast. BMC Systems Biology, 2012, 6, 4.	3.0	49
142	Improving metabolic flux predictions using absolute gene expression data. BMC Systems Biology, 2012, 6, 73.	3.0	126
143	Short- and long-term dynamic responses of the metabolic network and gene expression in yeast to a transient change in the nutrient environment. Molecular BioSystems, 2012, 8, 1760.	2.9	6
144	The metabolome of human placental tissue: investigation of first trimester tissue and changes related to preeclampsia in late pregnancy. Metabolomics, 2012, 8, 579-597.	1.4	51

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145	A systematic survey of the response of a model NF-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0020.gif" overflow="scroll"><mml:mi>κ</mml:mi><mml:mi mathvariant="normal">B</mml:mi></mml:math> signalling pathway to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0021.gif" overflow="scroll"><mml:mi>TNF</mml:mi><mml:mi>α</mml:mi></mml:math> stimulation. Journal of Theoretical Biology, 2012, 297, 137-147.	0.8	25
146	Genomeâ€wide analysis of longevity in nutrientâ€deprived <i>Saccharomyces cerevisiae</i> reveals importance of recycling in maintaining cell viability. Environmental Microbiology, 2012, 14, 1249-1260.	1.8	21
147	Scientific discovery as a combinatorial optimisation problem: How best to navigate the landscape of possible experiments?. BioEssays, 2012, 34, 236-244.	1.2	44
148	Exploiting Genomic Knowledge in Optimising Molecular Breeding Programmes: Algorithms from Evolutionary Computing. PLoS ONE, 2012, 7, e48862.	1.1	15
149	Automated workflows for accurate mass-based putative metabolite identification in LC/MS-derived metabolomic datasets. Bioinformatics, 2011, 27, 1108-1112.	1.8	173
150	Concussion's impact. New Scientist, 2011, 211, 38.	0.0	0
151	Procedures for large-scale metabolic profiling of serum and plasma using gas chromatography and liquid chromatography coupled to mass spectrometry. Nature Protocols, 2011, 6, 1060-1083.	5.5	2,236
152	The SuBliMinaL Toolbox: automating steps in the reconstruction of metabolic networks. Journal of Integrative Bioinformatics, 2011, 8, 187-203.	1.0	67
153	Metabolites do social networking. Nature Chemical Biology, 2011, 7, 7-8.	3.9	9
154	Genome-wide assessment of the carriers involved in the cellular uptake of drugs: a model system in yeast. BMC Biology, 2011, 9, 70.	1.7	59
155	Pharmaceutical drug transport: the issues and the implications that it is essentially carrier-mediated only. Drug Discovery Today, 2011, 16, 704-714.	3.2	160
156	Metabolic Profiling Uncovers a Phenotypic Signature of Small for Gestational Age in Early Pregnancy. Journal of Proteome Research, 2011, 10, 3660-3673.	1.8	99
157	Mining metabolites: extracting the yeast metabolome from the literature. Metabolomics, 2011, 7, 94-101.	1.4	37
158	Interactions among oscillatory pathways in NF-kappa B signaling. BMC Systems Biology, 2011, 5, 23.	3.0	30
159	Predicting the points of interaction of small molecules in the NF-κB pathway. BMC Systems Biology, 2011, 5, 32.	3.0	0
160	Absolute Quantification of the Glycolytic Pathway in Yeast:. Molecular and Cellular Proteomics, 2011, 10, M111.007633.	2.5	70
161	Breeding crop plants with deep roots: their role in sustainable carbon, nutrient and water sequestration. Annals of Botany, 2011, 108, 407-418.	1.4	313
162	Controlled vocabularies and semantics in systems biology. Molecular Systems Biology, 2011, 7, 543.	3.2	246

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163	Efficient discovery of anti-inflammatory small-molecule combinations using evolutionary computing. Nature Chemical Biology, 2011, 7, 902-908.	3.9	61
164	The SuBliMinaL Toolbox: automating steps in the reconstruction of metabolic networks. Journal of Integrative Bioinformatics, 2011, 8, 186.	1.0	51
165	Defrosting the Digital Library. , 2011, , 13-51.		4
166	Towards a unifying, systems biology understanding of large-scale cellular death and destruction caused by poorly liganded iron: Parkinsonâ€™s, Huntingtonâ€™s, Alzheimerâ€™s, prions, bactericides, chemical toxicology and others as examples. Archives of Toxicology, 2010, 84, 825-889.	1.9	330
167	Changes in the Metabolic Footprint of Placental Explant-Conditioned Medium Cultured in Different Oxygen Tensions from Placentas of Small for Gestational Age and Normal Pregnancies. Placenta, 2010, 31, 893-901.	0.7	55
168	Event extraction for systems biology by text mining the literature. Trends in Biotechnology, 2010, 28, 381-390.	4.9	160
169	Systematic integration of experimental data and models in systems biology. BMC Bioinformatics, 2010, 11, 582.	1.2	28
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