Xia Yang

List of Publications by Citations

100 papers	6,990 citations	37 h-index	83 g-index
115 ext. papers	8,646 ext. citations	8.9 avg, IF	5.42 L-index

#	Paper	IF	Citations
100	An integrative genomics approach to infer causal associations between gene expression and disease. *Nature Genetics*, **2005**, 37, 710-7	36.3	820
99	Mapping the genetic architecture of gene expression in human liver. *PLoS Biology*, **2008**, 6, e107	9.7	768
98	Variations in DNA elucidate molecular networks that cause disease. *Nature*, **2008**, 452, 429-35	50.4	723
97	Tissue-specific expression and regulation of sexually dimorphic genes in mice. *Genome Research*, **2006**, 16, 995-1004	9.7	628
96	Dosage compensation is less effective in birds than in mammals. *Journal of Biology*, **2007**, 6, 2		255
95	Impact of type 2 diabetes susceptibility variants on quantitative glycemic traits reveals mechanistic heterogeneity. *Diabetes*, **2014**, 63, 2158-71	0.9	235
94	Validation of candidate causal genes for obesity that affect shared metabolic pathways and networks. *Nature Genetics*, **2009**, 41, 415-23	36.3	224
93	Integrating pathway analysis and genetics of gene expression for genome-wide association studies. *American Journal of Human Genetics*, **2010**, 86, 581-91	11	202
92	Systematic genetic and genomic analysis of cytochrome P450 enzyme activities in human liver. *Genome Research*, **2010**, 20, 1020-36	9.7	193
91	Co-regulatory networks of human serum proteins link genetics to disease. *Science*, **2018**, 361, 769-773	33.3	183
90	Integrative genomics reveals novel molecular pathways and gene networks for coronary artery disease. *PLoS Genetics*, **2014**, 10, e1004502	6	147
89	Liver and adipose expression associated SNPs are enriched for association to type 2 diabetes. *PLoS Genetics*, **2010**, 6, e1000932	6	139
88	A systems biology framework identifies molecular underpinnings of coronary heart disease. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2013**, 33, 1427-34	9.4	125
87	Extended Multiplexing of Tandem Mass Tags (TMT) Labeling Reveals Age and High Fat Diet Specific Proteome Changes in Mouse Epididymal Adipose Tissue. *Molecular and Cellular Proteomics*, **2017**, 16, 873-890	7.6	122
86	Applications and Limitations of Mouse Models for Understanding Human Atherosclerosis. *Cell Metabolism*, **2017**, 25, 248-261	24.6	102
85	Common dysregulation network in the human prefrontal cortex underlies two neurodegenerative diseases. *Molecular Systems Biology*, **2014**, 10, 743	12.2	101
84	Targeting BCAA Catabolism to Treat Obesity-Associated Insulin Resistance. *Diabetes*, **2019**, 68, 1730-1746	0.9	100

83	Systems analysis of eleven rodent disease models reveals an inflammatome signature and key drivers. *Molecular Systems Biology*, **2012**, 8, 594	12.2	95
82	A meta-analysis of gene expression signatures of blood pressure and hypertension. *PLoS Genetics*, **2015**, 11, e1005035	6	83
81	Integrative network analysis reveals molecular mechanisms of blood pressure regulation. *Molecular Systems Biology*, **2015**, 11, 799	12.2	72
80	Integration of Multi-omics Data from Mouse Diversity Panel Highlights Mitochondrial Dysfunction in Non-alcoholic Fatty Liver Disease. *Cell Systems*, **2018**, 6, 103-115.e7	10.6	69
79	Identification and validation of N-acetyltransferase 2 as an insulin sensitivity gene. *Journal of Clinical Investigation*, **2015**, 125, 1739-51	15.9	67
78	Exposure to the BPA-Substitute Bisphenol S Causes Unique Alterations of Germline Function. *PLoS Genetics*, **2016**, 12, e1006223	6	65
77	Prediction of Causal Candidate Genes in Coronary Artery Disease Loci. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2015**, 35, 2207-17	9.4	64
76	Single cell molecular alterations reveal target cells and pathways of concussive brain injury. *Nature Communications*, **2018**, 9, 3894	17.4	64
75	Single cell analysis reveals immune cell-adipocyte crosstalk regulating the transcription of thermogenic adipocytes. *ELife*, **2019**, 8,	8.9	61
74	Traumatic Brain Injury Induces Genome-Wide Transcriptomic, Methylomic, and Network Perturbations in Brain and Blood Predicting Neurological Disorders. *EBioMedicine*, **2017**, 16, 184-194	8.8	56
73	Mergeomics: multidimensional data integration to identify pathogenic perturbations to biological systems. *BMC Genomics*, **2016**, 17, 874	4.5	56
72	Integrative analysis of a cross-loci regulation network identifies App as a gene regulating insulin secretion from pancreatic islets. *PLoS Genetics*, **2012**, 8, e1003107	6	49
71	Shared genetic regulatory networks for cardiovascular disease and type 2 diabetes in multiple populations of diverse ethnicities in the United States. *PLoS Genetics*, **2017**, 13, e1007040	6	48
70	Dissecting the roles of microRNAs in coronary heart disease via integrative genomic analyses. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2015**, 35, 1011-21	9.4	46
69	Systems Nutrigenomics Reveals Brain Gene Networks Linking Metabolic and Brain Disorders. *EBioMedicine*, **2016**, 7, 157-66	8.8	46
68	Network-Based Identification and Prioritization of Key Regulators of Coronary Artery Disease Loci. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2016**, 36, 928-41	9.4	42
67	Identification and validation of genes affecting aortic lesions in mice. *Journal of Clinical Investigation*, **2010**, 120, 2414-22	15.9	42
66	Systems Biology Approaches and Applications in Obesity, Diabetes, and Cardiovascular Diseases. *Current Cardiovascular Risk Reports*, **2013**, 7, 73-83	0.9	41

65   Tissue-specific pathways and networks underlying sexual dimorphism in non-alcoholic fatty liver disease. *Biology of Sex Differences*, **2018**, 9, 46   9.3   40

64   Molecular and genetic inflammation networks in major human diseases. *Molecular BioSystems*, **2016**, 12, 2318-41   39

63   Characterization of TCF21 Downstream Target Regions Identifies a Transcriptional Network Linking Multiple Independent Coronary Artery Disease Loci. *PLoS Genetics*, **2015**, 11, e1005202   6   36

62   Shared molecular pathways and gene networks for cardiovascular disease and type 2 diabetes mellitus in women across diverse ethnicities. *Circulation: Cardiovascular Genetics*, **2014**, 7, 911-9   35

61   The Genetic Architecture of Diet-Induced Hepatic Fibrosis in Mice. *Hepatology*, **2018**, 68, 2182-2196   11.2   34

60   Mergeomics: a web server for identifying pathological pathways, networks, and key regulators via multidimensional data integration. *BMC Genomics*, **2016**, 17, 722   4.5   33

59   The Memory of Environmental Chemical Exposure in C. elegans Is Dependent on the Jumonji Demethylases jmjd-2 and jmjd-3/utx-1. *Cell Reports*, **2018**, 23, 2392-2404   10.6   32

58   Integrating genetic association, genetics of gene expression, and single nucleotide polymorphism set analysis to identify susceptibility Loci for type 2 diabetes mellitus. *American Journal of Epidemiology*, **2012**, 176, 423-30   3.8   28

57   Oxidized phospholipids regulate amino acid metabolism through MTHFD2 to facilitate nucleotide release in endothelial cells. *Nature Communications*, **2018**, 9, 2292   17.4   26

56   Integrative genomics strategies to elucidate the complexity of drug response. *Pharmacogenomics*, **2011**, 12, 1695-715   2.6   25

55   Prenatal Bisphenol A Exposure in Mice Induces Multitissue Multiomics Disruptions Linking to Cardiometabolic Disorders. *Endocrinology*, **2019**, 160, 409-429   4.8   23

54   Shared mechanisms among neurodegenerative diseases: from genetic factors to gene networks. *Journal of Genetics*, **2018**, 97, 795-806   1.2   22

53   Use of functional genomics to identify candidate genes underlying human genetic association studies of vascular diseases. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2012**, 32, 216-22   9.4   22

52   Multi-omics integration reveals molecular networks and regulators of psoriasis. *BMC Systems Biology*, **2019**, 13, 8   3.5   22

51   Network modeling of single-cell omics data: challenges, opportunities, and progresses. *Emerging Topics in Life Sciences*, **2019**, 3, 379-398   3.5   21

50   Nutritional systems biology of type 2 diabetes. *Genes and Nutrition*, **2015**, 10, 481   4.3   20

49   Hypothalamic estrogen receptor alpha establishes a sexually dimorphic regulatory node of energy expenditure. *Nature Metabolism*, **2020**, 2, 351-363   14.6   20

48   Multitissue Multiomics Systems Biology to Dissect Complex Diseases. *Trends in Molecular Medicine*, **2020**, 26, 718-728   11.5   19

47	Conservation and divergence of vulnerability and responses to stressors between human and mouse astrocytes. *Nature Communications*, **2021**, 12, 3958	17.4	19
46	JCAD, a Gene at the 10p11 Coronary Artery Disease Locus, Regulates Hippo Signaling in Endothelial Cells. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2018**, 38, 1711-1722	9.4	19
45	Multidimensional Integrative Genomics Approaches to Dissecting Cardiovascular Disease. *Frontiers in Cardiovascular Medicine*, **2017**, 4, 8	5.4	18
44	The pathogenesis of obesity from a genomic and systems biology perspective. *Yale Journal of Biology and Medicine*, **2014**, 87, 113-26	2.4	17
43	Network Modeling Approaches and Applications to Unravelling Non-Alcoholic Fatty Liver Disease. *Genes*, **2019**, 10,	4.2	16
42	Systems genetics applications in metabolism research. *Nature Metabolism*, **2019**, 1, 1038-1050	14.6	15
41	Single-cell RNA-seq analysis of the brainstem of mutant SOD1 mice reveals perturbed cell types and pathways of amyotrophic lateral sclerosis. *Neurobiology of Disease*, **2020**, 141, 104877	7.5	14
40	Liver ChREBP Protects Against Fructose-Induced Glycogenic Hepatotoxicity by Regulating L-Type Pyruvate Kinase. *Diabetes*, **2020**, 69, 591-602	0.9	13
39	Shared mechanisms among neurodegenerative diseases: from genetic factors to gene networks. *Journal of Genetics*, **2018**, 97, 795-806	1.2	13
38	Differential metabolic and multi-tissue transcriptomic responses to fructose consumption among genetically diverse mice. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2020**, 1866, 165569	6.9	13
37	Novel Treatment of Hypertension by Specifically Targeting E2F for Restoration of Endothelial Dihydrofolate Reductase and eNOS Function Under Oxidative Stress. *Hypertension*, **2019**, 73, 179-189	8.5	13
36	Translating GWAS Findings to Novel Therapeutic Targets for Coronary Artery Disease. *Frontiers in Cardiovascular Medicine*, **2018**, 5, 56	5.4	12
35	GM-CSF driven myeloid cells in adipose tissue link weight gain and insulin resistance via formation of 2-aminoadipate. *Scientific Reports*, **2018**, 8, 11485	4.9	12
34	MethylResolver-a method for deconvoluting bulk DNA methylation profiles into known and unknown cell contents. *Communications Biology*, **2020**, 3, 422	6.7	12
33	Systems toxicogenomics of prenatal low-dose BPA exposure on liver metabolic pathways, gut microbiota, and metabolic health in mice. *Environment International*, **2021**, 146, 106260	12.9	12
32	Biglycan gene connects metabolic dysfunction with brain disorder. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2018**, 1864, 3679-3687	6.9	11
31	A systems genetics study of swine illustrates mechanisms underlying human phenotypic traits. *BMC Genomics*, **2015**, 16, 88	4.5	10
30	Transcription Factor MAFF (MAF Basic Leucine Zipper Transcription Factor F) Regulates an Atherosclerosis Relevant Network Connecting Inflammation and Cholesterol Metabolism. *Circulation*, **2021**, 143, 1809-1823	16.7	10

29	Single-Cell Study of Two Rat Models of Pulmonary Arterial Hypertension Reveals Connections to Human Pathobiology and Drug Repositioning. *American Journal of Respiratory and Critical Care Medicine*, **2021**, 203, 1006-1022	10.2	10
28	System biology approach intersecting diet and cell metabolism with pathogenesis of brain disorders. *Progress in Neurobiology*, **2018**, 169, 76-90	10.9	9
27	Joint cell segmentation and cell type annotation for spatial transcriptomics. *Molecular Systems Biology*, **2021**, 17, e10108	12.2	8
26	Integrative Genomics Analysis Unravels Tissue-Specific Pathways, Networks, and Key Regulators of Blood Pressure Regulation. *Frontiers in Cardiovascular Medicine*, **2019**, 6, 21	5.4	7
25	Functional genomics- and network-driven systems biology approaches for pharmacogenomics and toxicogenomics. *Current Drug Metabolism*, **2012**, 13, 952-67	3.5	7
24	Diesel exhaust particles dysregulate multiple immunological pathways in murine macrophages: Lessons from microarray and scRNA-seq technologies. *Archives of Biochemistry and Biophysics*, **2019**, 678, 108116	4.1	6
23	Oral 15-Hydroxyeicosatetraenoic Acid Induces Pulmonary Hypertension in Mice by Triggering T Cell-Dependent Endothelial Cell Apoptosis. *Hypertension*, **2020**, 76, 985-996	8.5	6
22	Host Genetic Background and Gut Microbiota Contribute to Differential Metabolic Responses to Fructose Consumption in Mice. *Journal of Nutrition*, **2020**, 150, 2716-2728	4.1	6
21	Brain Trauma Disrupts Hepatic Lipid Metabolism: Blame It on Fructose?. *Molecular Nutrition and Food Research*, **2019**, 63, e1801054	5.9	5
20	Therapeutic IDOL Reduction Ameliorates Amyloidosis and Improves Cognitive Function in APP/PS1 Mice. *Molecular and Cellular Biology*, **2020**, 40,	4.8	5
19	Omega-3 fatty acids increase OXPHOS energy for immune therapy of Alzheimer disease patients. *FASEB Journal*, **2020**, 34, 9982-9994	0.9	5
18	IDOL regulates systemic energy balance through control of neuronal VLDLR expression. *Nature Metabolism*, **2019**, 1, 1089-1100	14.6	5
17	Maternal High-Protein and Low-Protein Diets Perturb Hypothalamus and Liver Transcriptome and Metabolic Homeostasis in Adult Mouse Offspring. *Frontiers in Genetics*, **2018**, 9, 642	4.5	5
16	Innate Immune Cells Are Regulated by Axl in Hypertensive Kidney. *American Journal of Pathology*, **2018**, 188, 1794-1806	5.8	4
15	Mergeomics 2.0: a web server for multi-omics data integration to elucidate disease networks and predict therapeutics. *Nucleic Acids Research*, **2021**, 49, W375-W387	20.1	4
14	Host Genetic Background and Gut Microbiota Contribute to Differential Metabolic Responses to High Fructose Consumption in Mice. *Diabetes*, **2018**, 67, 290-LB	0.9	3
13	IAPP-induced beta cell stress recapitulates the islet transcriptome in type 2 diabetes. *Diabetologia*, **2022**, 65, 173-187	10.3	3
12	Estrogen receptor alpha in the brain mediates tamoxifen-induced changes in physiology in mice. *ELife*, **2021**, 10,	8.9	2

List of Publications

11	Disparate Metabolomic Responses to Fructose Consumption between Different Mouse Strains and the Role of Gut Microbiota. *Metabolites*, **2021**, 11,	5.6	2
10	Unveiling the Pathogenesis of Psychiatric Disorders Using Network Models. *Genes*, **2021**, 12,	4.2	2
9	Gene networks and pathways for plasma lipid traits via multitissue multiomics systems analysis. *Journal of Lipid Research*, **2021**, 62, 100019	6.3	2
8	Conservation and divergence of vulnerability and responses to stressors between human and mouse astrocytes		1
7	Cold-associated mammokines preserve adipocyte identity		1
6	PharmOmics: A Species- and Tissue-specific Drug Signature Database and Online Tool for Drug Repurposing		1
5	Multi-Tissue Multi-Omics Nutrigenomics Indicates Context-Specific Effects of Docosahexaenoic Acid on Rat Brain. *Molecular Nutrition and Food Research*, **2020**, 64, e2000788	5.9	0
4	PharmOmics: A species- and tissue-specific drug signature database and gene-network-based drug repositioning tool.. *IScience*, **2022**, 25, 104052	6.1	0
3	Novel Treatment of Hypertension by Specifically Targeting E2F for Restoration of Endothelial Dihydrofolate Reductase and eNOS Function Under Oxidative Stress. *FASEB Journal*, **2019**, 33, 835.15	0.9	
2	The 2020 FASEB virtual Catalyst Conference on Integrative Approach for Complex Diseases Prevention and Management and Beyond, December 16, 2020. *FASEB Journal*, **2021**, 35, e21500	0.9	
1	Bioinformatics network analyses of growth differentiation factor 11.. *Open Life Sciences*, **2022**, 17, 426-437	3.1	