Jeremy W Prokop

List of Publications by Year
in descending order

86 papers	1,761 citations	331670 21 h-index	345221 36 g-index
94 all docs	94 docs citations	94 times ranked	3397 citing authors

#	Article	IF	Citations
1	Germline and somatic mutations in the MTOR gene in focal cortical dysplasia and epilepsy. Neurology: Genetics, 2016, 2, e118.	1.9	125
2	Leptin in Teleost Fishes: An Argument for Comparative Study. Frontiers in Physiology, 2011, 2, 26.	2.8	98
3	Leptin and leptin receptor: Analysis of a structure to function relationship in interaction and evolution from humans to fish. Peptides, 2012, 38, 326-336.	2.4	84
4	MOLECULAR EVOLUTION OF GPCRS: Melanocortin/melanocortin receptors. Journal of Molecular Endocrinology, 2014, 52, T29-T42.	2.5	80
5	An evolutionarily conserved DNA architecture determines target specificity of the TWIST family bHLH transcription factors. Genes and Development, 2015, 29, 603-616.	5.9	66
6	Genetic Fineâ€Mapping and Identification of Candidate Genes and Variants for Adiposity Traits in Outbred Rats. Obesity, 2018, 26, 213-222.	3.0	64
7	Mutation of SH2B3 (LNK), a Genome-Wide Association Study Candidate for Hypertension, Attenuates Dahl Salt-Sensitive Hypertension via Inflammatory Modulation. Hypertension, 2015, 65, 1111-1117.	2.7	60
8	Discovery of the Elusive Leptin in Birds: Identification of Several â€˜Missing Linksâ€™ in the Evolution of Leptin and Its Receptor. PLoS ONE, 2014, 9, e92751.	2.5	60
9	On the Molecular Evolution of Leptin, Leptin Receptor, and Endospanin. Frontiers in Endocrinology, 2017, 8, 58.	3.5	59
10	Genome sequencing in the clinic: the past, present, and future of genomic medicine. Physiological Genomics, 2018, 50, 563-579.	2.3	59
11	De novo mutations in MED13, a component of the Mediator complex, are associated with a novel neurodevelopmental disorder. Human Genetics, 2018, 137, 375-388.	3.8	46
12	Sry, more than testis determination?. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R561-R571.	1.8	43
13	Characterization of Coding/Noncoding Variants for SHROOM3 in Patients with CKD. Journal of the American Society of Nephrology: JASN, 2018, 29, 1525-1535.	6.1	40
14	SARS-CoV-2 (COVID-19) structural and evolutionary dynamicome: Insights into functional evolution and human genomics. Journal of Biological Chemistry, 2020, 295, 11742-11753.	3.4	40
15	Molecular modeling in the age of clinical genomics, the enterprise of the next generation. Journal of Molecular Modeling, 2017, 23, 75.	1.8	39
16	Chromosome Y genetic variants: impact in animal models and on human disease. Physiological Genomics, 2015, 47, 525-537.	2.3	31
17	Beyond thermoregulation: metabolic function of cetacean blubber in migrating bowhead and beluga whales. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2017, 187, 235-252.	1.5	30
18	LIMD2 Is a Small LIM-Only Protein Overexpressed in Metastatic Lesions That Regulates Cell Motility and Tumor Progression by Directly Binding to and Activating the Integrin-Linked Kinase. Cancer Research, 2014, 74, 1390-1403.	0.9	28

#	Article	IF	Citations
19	High-Density Blood Transcriptomics Reveals Precision Immune Signatures of SARS-CoV-2 Infection in Hospitalized Individuals. Frontiers in Immunology, 2021, 12, 694243.	4.8	26
20	Similarities and differences of X and Y chromosome homologous genes, SRY and SOX3, in regulating the renin-angiotensin system promoters. Physiological Genomics, 2015, 47, 177-186.	2.3	25
21	Genome sequencing for early-onset or atypical dementia: high diagnostic yield and frequent observation of multiple contributory alleles. Journal of Physical Education and Sports Management, 2019, 5, a003491.	1.2	25
22	The Tumor-suppressive Small GTPase DiRas1 Binds the Noncanonical Guanine Nucleotide Exchange Factor SmgGDS and Antagonizes SmgGDS Interactions with Oncogenic Small GTPases. Journal of Biological Chemistry, 2016, 291, 6534-6545.	3.4	24
23	Familial and Somatic BAP1 Mutations Inactivate ASXL1/2-Mediated Allosteric Regulation of BAP1 Deubiquitinase by Targeting Multiple Independent Domains. Cancer Research, 2018, 78, 1200-1213.	0.9	24
24	Differences in the Phosphorylation-Dependent Regulation of Prenylation of Rap1A and Rap1B. Journal of Molecular Biology, 2016, 428, 4929-4945.	4.2	23
25	A Mutation in Î³-Adducin Impairs Autoregulation of Renal Blood Flow and Promotes the Development of Kidney Disease. Journal of the American Society of Nephrology: JASN, 2020, 31, 687-700.	6.1	23
26	Methylation specific targeting of a chromatin remodeling complex from sponges to humans. Scientific Reports, 2017, 7, 40674.	3.3	22
27	Virus-induced genetics revealed by multidimensional precision medicine transcriptional workflow applicable to COVID-19. Physiological Genomics, 2020, 52, 255-268.	2.3	21
28	Lethal NARS2-Related Disorder Associated With Rapidly Progressive Intractable Epilepsy and Global Brain Atrophy. Pediatric Neurology, 2018, 89, 26-30.	2.1	20
29	2015 Guidelines for Establishing Genetically Modified Rat Models for Cardiovascular Research. Journal of Cardiovascular Translational Research, 2015, 8, 269-277.	2.4	19
30	Deleterious Variation in BRSK2 Associates with a Neurodevelopmental Disorder. American Journal of Human Genetics, 2019, 104, 701-708.	6.2	19
31	Analysis of Sry duplications on the Rattus norvegicus Y-chromosome. BMC Genomics, 2013, 14, 792.	2.8	18
32	A method for in silico identification of SNAIL/SLUG DNA binding potentials to the E-box sequence using molecular dynamics and evolutionary conserved amino acids. Journal of Molecular Modeling, 2013, 19, 3463-3469.	1.8	17
33	Gene expression signatures identify paediatric patients with multiple organ dysfunction who require advanced life support in the intensive care unit. EBioMedicine, 2020, 62, 103122.	6.1	17
34	Repurposing eflornithine to treat a patient with a rare ODC1 gain-of-function variant disease. ELife, 2021, 10, .	6.0	17
35	De novo mutations in the GTP/GDP-binding region of RALA, a RAS-like small GTPase, cause intellectual disability and developmental delay. PLoS Genetics, 2018, 14, e1007671.	3.5	16
36	SIGIRR Mutation in Human Necrotizing Enterocolitis (NEC) Disrupts STAT3-Dependent microRNA Expression in Neonatal Gut. Cellular and Molecular Gastroenterology and Hepatology, 2022, 13, 425-440.	4.5	16

#	Article	IF	Citations
37	The phenotypic impact of the male-specific region of chromosome-Y in inbred mating: the role of genetic variants and gene duplications in multiple inbred rat strains. Biology of Sex Differences, 2016, 7, 10.	4.1	15
38	Emerging Role of ODC1 in Neurodevelopmental Disorders and Brain Development. Genes, 2021, 12, 470.	2.4	15
39	From Rat to Human: Regulation of Renin-Angiotensin System Genes by Sry. International Journal of Hypertension, 2012, 2012, 1-7.	1.3	14
40	RNF213 variants in a child with PHACE syndrome and moyamoya vasculopathy. American Journal of Medical Genetics, Part A, 2017, 173, 2557-2561.	1.2	13
41	HDAC2 Regulates Site-Specific Acetylation of MDM2 and Its Ubiquitination Signaling in Tumor Suppression. IScience, 2019, 13, 43-54.	4.1	13
42	SARS-CoV-2-Encoded Proteome and Human Genetics: From Interaction-Based to Ribosomal Biology Impact on Disease and Risk Processes. Journal of Proteome Research, 2020, 19, 4275-4290.	3.7	13
43	Sept8/SEPTIN8 involvement in cellular structure and kidney damage is identified by genetic mapping and a novel human tubule hypoxic model. Scientific Reports, 2021, 11, 2071.	3.3	13
44	Differential Mechanisms of Activation of the Ang Peptide Receptors AT1, AT2, and MAS: Using In Silico Techniques to Differentiate the Three Receptors. PLoS ONE, 2013, 8, e65307.	2.5	12
45	Evolution of the phenotype of craniosynostosis with dental anomalies syndrome and report of IL11RA variant population frequencies in a Crouzonâ€like autosomal recessive syndrome. American Journal of Medical Genetics, Part A, 2019, 179, 668-673.	1.2	12
46	Integrated RNA Sequencing Reveals Epigenetic Impacts of Diesel Particulate Matter Exposure in Human Cerebral Organoids. Developmental Neuroscience, 2020, 42, 195-207.	2.0	12
47	Expanding the phenotype of the CDKL5 deficiency disorder: Are seizures mandatory?. American Journal of Medical Genetics, Part A, 2020, 182, 1217-1222.	1.2	11
48	Refined Mapping of a Hypertension Susceptibility Locus on Rat Chromosome 12. Hypertension, 2014, 64, 883-890.	2.7	10
49	Structural libraries of protein models for multiple species to understand evolution of the renin-angiotensin system. General and Comparative Endocrinology, 2015, 215, 106-116.	1.8	10
50	SARS-CoV-2 infection: molecular mechanisms of severe outcomes to suggest therapeutics. Expert Review of Proteomics, 2021, 18, 105-118.	3.0	10
51	Expanding the phenotype: Four new cases and hope for treatment in <scp>Bachmannâ€Bupp</scp> syndrome. American Journal of Medical Genetics, Part A, 2021, 185, 3485-3493.	1.2	10
52	Breakdown of multiple sclerosis genetics to identify an integrated disease network and potential variant mechanisms. Physiological Genomics, 2019, 51, 562-577.	2.3	9
53	Balancing precision versus cohort transcriptomic analysis of acute and recovery phase of viral bronchiolitis. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2021, 320, L1147-L1157.	2.9	9
54	NAA10 variant in 38-week-gestation male patient: a case study. Journal of Physical Education and Sports Management, 2020, 6, a005868.	1.2	9

#	Article	IF	Citations
55	Amino acid function and docking site prediction through combining disease variants, structure alignments, sequence alignments, and molecular dynamics: a study of the HMG domain. BMC Bioinformatics, 2012, 13, S3.	2.6	8
56	Functional domain analysis of SOX18 transcription factor using a single-chain variable fragment-based approach. MAbs, 2018, 10, 596-606.	5.2	7
57	The C-Terminal Domain of SRA1p Has a Fold More Similar to PRP18 than to an RRM and Does Not Directly Bind to the SRA1 RNA STR7 Region. Journal of Molecular Biology, 2014, 426, 1753-1765.	4.2	6
58	A Human TSC1 Variant Screening Platform in Gabaergic Cortical Interneurons for Genotype to Phenotype Assessments. Frontiers in Molecular Neuroscience, 2020, 13, 573409.	2.9	6
59	SLC6A1 G443D associated with developmental delay and epilepsy. Journal of Physical Education and Sports Management, 2020, 6, a005371.	1.2	6
60	Rapid whole-genome sequencing identifies a homozygous novel variant, His540Arg, in HSD17B4 resulting in D-bifunctional protein deficiency disorder diagnosis. Journal of Physical Education and Sports Management, 2020, 6, a005496.	1.2	6
61	CFTR-mediated monocyte/macrophage dysfunction revealed by cystic fibrosis proband-parent comparisons. JCI Insight, 2022, 7, .	5.0	6
62	MAS promoter regulation: a role for Sry and tyrosine nitration of the KRAB domain of ZNF274 as a feedback mechanism. Clinical Science, 2014, 126, 727-738.	4.3	5
63	Transcriptional analysis of the multiple Sry genes and developmental program at the onset of testis differentiation in the rat. Biology of Sex Differences, 2020, 11, 28.	4.1	5
64	CCR5 and Biological Complexity: The Need for Data Integration and Educational Materials to Address Genetic/Biological Reductionism at the Interface of Ethical, Legal, and Social Implications. Frontiers in Immunology, 2021, 12, 790041.	4.8	5
65	Computational and Experimental Analysis of Genetic Variants. , 2022, 12, 3303-3336.		5
66	Pediatric Multi-Organ Dysfunction Syndrome: Analysis by an Untargeted â€œShotgunâ€•Lipidomic Approach Reveals Low-Abundance Plasma Phospholipids and Dynamic Recovery over 8-Day Period, a Single-Center Observational Study. Nutrients, 2021, 13, 774.	4.1	4
67	Monitoring neutrophil-to-lymphocyte ratio in patients with coronavirus disease 2019 receiving tocilizumab. Annals of Allergy, Asthma and Immunology, 2021, 126, 306-308.	1.0	4
68	PEA15 loss of function and defective cerebral development in the domestic cat. PLoS Genetics, 2020, 16, e1008671.	3.5	4
69	Epiregulin as an Alternative Ligand for Leptin Receptor Alleviates Glucose Intolerance without Change in Obesity. Cells, 2022, 11, 425.	4.1	4
70	Neuronatin is a modifier of estrogen receptor-positive breast cancer incidence and outcome. Breast Cancer Research and Treatment, 2019, 177, 77-91.	2.5	3
71	WD Repeat Domain 1 (WDR1) Deficiency Presenting as a Cause of Infantile Inflammatory Bowel Disease. Journal of Pediatric Gastroenterology and Nutrition, 2020, 71, e113-e117.	1.8	3
72	Genomic, transcriptomic, and protein landscape profile of CFTR and cystic fibrosis. Human Genetics, 2021, 140, 423-439.	3.8	3

#	Article	IF	Citations
73	Perinatal Manifestations of DARS2-Associated Leukoencephalopathy With Brainstem and Spinal Cord Involvement and Lactate Elevation (LBSL). Child Neurology Open, 2021, 8, 2329048X2110191.	1.1	3
74	Combined Plasma and Urinary Metabolomics Uncover Metabolic Perturbations Associated with Severe Respiratory Syncytial Viral Infection and Future Development of Asthma in Infant Patients. Metabolites, 2022, 12, 178.	2.9	3
75	The Feasibility of Studying Metabolites in PICU Multi-Organ Dysfunction Syndrome Patients over an 8-Day Course Using an Untargeted Approach. Children, 2021, 8, 151.	1.5	2
76	Silver Binding to Bacterial Glutaredoxins Observed by NMR. Biophysica, 2021, 1, 359-376.	1.4	2
77	Nâ€methylâ€dâ€aspartate (NMDA) receptor genetics: The power of paralog homology and protein dynamics in defining dominant genetic variants. American Journal of Medical Genetics, Part A, 2022, 188, 556-568.	1.2	2
78	Loss of Health Promoting Bacteria in the Gastrointestinal Microbiome of PICU Infants with Bronchiolitis: A Single-Center Feasibility Study. Children, 2022, 9, 114.	1.5	2
79	Kinetic Characterization of ASXL1/2-Mediated Allosteric Regulation of the BAP1 Deubiquitinase. Molecular Cancer Research, 2021, 19, 1099-1112.	3.4	1
80	Hexosylceramides and Glycerophosphatidylcholine GPC(36:1) Increase in Multi-Organ Dysfunction Syndrome Patients with Pediatric Intensive Care Unit Admission over 8-Day Hospitalization. Journal of Personalized Medicine, 2021, 11, 339.	2.5	1
81	Environmental Epigenetics of Diesel Particulate Matter Toxicogenomics. International Journal of Environmental Research and Public Health, 2020, 17, 7386.	2.6	0
82	Advanced Sequencing of Kidney Tubule Hypoxia Regulated Epithelialâ€toâ€Mesenchymal Transition. FASEB Journal, 2021, 35, .	0.5	0
83	Profiling systemic physiology through bloodâ€based multidimensional RNAseq. FASEB Journal, 2021, 35, .	0.5	0
84	Genetic fineâ€mapping and gene identification of adiposity traits in outbred rats. FASEB Journal, 2015, 29, 665.7.	0.5	0
85	Defining Functional Human Variants in the HMG Box of SOX Genes of >60,000 Human Individuals for Potential Cardiovascular and Cancer Genetic Risk. FASEB Journal, 2018, 32, 863.3.	0.5	0
86	Examination of Molecular Dynamic Simulations for Glucokinase (GCK) Mutations in Type 2 Diabetes. FASEB Journal, 2019, 33, 455.3.	0.5	0