Aron W Fenton

List of Publications by Year
in descending order

106 papers	3,405 citations	257101 24 h-index	155451 55 g-index
112 all docs	112 docs citations	112 times ranked	4266 citing authors

#	Article	IF	Citations
1	Cloning the gene for an inherited human disorderâ€"chronic granulomatous diseaseâ€"on the basis of its chromosomal location. Nature, 1986, 322, 32-38.	13.7	833
2	Allostery: an illustrated definition for the â€˜second secret of lifeâ€™. Trends in Biochemical Sciences, 2008, 33, 420-425.	3.7	256
3	The Genetic Landscape of Diamond-Blackfan Anemia. American Journal of Human Genetics, 2018, 103, 930-947.	2.6	184
4	Lentiviral gene therapy for X-linked chronic granulomatous disease. Nature Medicine, 2020, 26, 200-206.	15.2	175
5	Evaluation and Management of Patients With Isolated Neutropenia. Seminars in Hematology, 2013, 50, 198-206.	1.8	167
6	Long intergenic non-coding RNA HOTAIRM1 regulates cell cycle progression during myeloid maturation in NB4 human promyelocytic leukemia cells. RNA Biology, 2014, 11, 777-787.	1.5	143
7	Neutrophil Responses to Sterile Implant Materials. PLoS ONE, 2015, 10, e0137550.	1.1	92
8	Congenital sideroblastic anemia due to mutations in the mitochondrial HSP70 homologue HSPA9. Blood, 2015, 126, 2734-2738.	0.6	78
9	Differentiating a Ligand's Chemical Requirements for Allosteric Interactions from Those for Protein Binding. Phenylalanine Inhibition of Pyruvate Kinase,. Biochemistry, 2006, 45, 5421-5429.	1.2	76
10	Cyclic neutropenia and severe congenital neutropenia in patients with a shared ELANE mutation and paternal haplotype: Evidence for phenotype determination by modifying genes. Pediatric Blood and Cancer, 2010, 55, 314-317.	0.8	60
11	Benign ethnic neutropenia. Blood Reviews, 2019, 37, 100586.	2.8	56
12	Wholeâ€protein alanineâ€scanning mutagenesis of allostery: A large percentage of a protein can contribute to mechanism. Human Mutation, 2017, 38, 1132-1143.	1.1	50
13	Genotypeâ€phenotype correlation and molecular heterogeneity in pyruvate kinase deficiency. American Journal of Hematology, 2020, 95, 472-482.	2.0	47
14	Prevalence and management of iron overload in pyruvate kinase deficiency: report from the Pyruvate Kinase Deficiency Natural History Study. Haematologica, 2019, 104, e51-e53.	1.7	46
15	Distinguishing the Interactions in the Fructose 1,6-Bisphosphate Binding Site of Human Liver Pyruvate Kinase That Contribute to Allostery. Biochemistry, 2015, 54, 1516-1524.	1.2	43
16	The pH dependence of the allosteric response of human liver pyruvate kinase to fructose-1,6-bisphosphate, ATP, and alanine. Archives of Biochemistry and Biophysics, 2009, 484, 16-23.	1.4	42
17	Autoimmune and other acquired neutropenias. Hematology American Society of Hematology Education Program, 2016, 2016, 38-42.	0.9	40
18	Trisomy silencing by XIST normalizes Down syndrome cell pathogenesis demonstrated for hematopoietic defects in vitro. Nature Communications, 2018, 9, 5180.	5.8	38

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19	Energetic Coupling between an Oxidizable Cysteine and the Phosphorylatable N-Terminus of Human Liver Pyruvate Kinase. Biochemistry, 2013, 52, 466-476.	1.2	37
20	Recognition and binding of the human selenocysteine insertion sequence by nucleolin. , 2000, 77, 507-516.		32
21	The Impact of Ions on Allosteric Functions in Human Liver Pyruvate Kinase. Methods in Enzymology, 2009, 466, 83-107.	0.4	32
22	Disorders of Neutrophil Number and Function. Hematology American Society of Hematology Education Program, 2006, 2006, 104-110.	0.9	29
23	What Mutagenesis Can and Cannot Reveal About Allostery. Biophysical Journal, 2016, 110, 1912-1923.	0.2	28
24	Disentangling the Web of Allosteric Communication in a Homotetramer: Heterotropic Inhibition in Phosphofructokinase from Escherichia coli. Biochemistry, 2009, 48, 12323-12328.	1.2	27
25	Protein Structural Analysis via Mass Spectrometry-Based Proteomics. Advances in Experimental Medicine and Biology, 2016, 919, 397-431.	0.8	27
26	Identification of Substrate Contact Residues Important for the Allosteric Regulation of Phosphofructokinase fromEschericia coliâ€. Biochemistry, 2003, 42, 6453-6459.	1.2	26
27	Mining for allosteric information: Natural mutations and positional sequence conservation in pyruvate kinase. IUBMB Life, 2006, 58, 31-38.	1.5	26
28	Isolation of a Single Activating Allosteric Interaction in Phosphofructokinase fromEscherichia coliâ€. Biochemistry, 2002, 41, 13410-13416.	1.2	24
29	An Activating Interaction between the Unphosphorylated N-Terminus of Human Liver Pyruvate Kinase and the Main Body of the Protein Is Interrupted by Phosphorylation. Biochemistry, 2009, 48, 3816-3818.	1.2	24
30	Aberrant splicing contributes to severe Î±-spectrinâ€“linked congenital hemolytic anemia. Journal of Clinical Investigation, 2019, 129, 2878-2887.	3.9	24
31	RheoScale: A tool to aggregate and quantify experimentally determined substitution outcomes for multiple variants at individual protein positions. Human Mutation, 2018, 39, 1814-1826.	1.1	23
32	Dissecting ELANE neutropenia pathogenicity by human HSC gene editing. Cell Stem Cell, 2021, 28, 833-845.e5.	5.2	23
33	Exploring the limits of the usefulness of mutagenesis in studies of allosteric mechanisms. Human Mutation, 2017, 38, 1144-1154.	1.1	22
34	A critical review of the role of M2PYK in the Warburg effect. Biochimica Et Biophysica Acta: Reviews on Cancer, 2019, 1871, 225-239.	3.3	22
35	Distinguishing the Chemical Moiety of Phosphoenolpyruvate That Contributes to Allostery in Muscle Pyruvate Kinase. Biochemistry, 2013, 52, 1-3.	1.2	21
36	Heterogeneous Pathways of Oxidizing Radical Production in Human Neutrophils and the HL-60 Cell Line. Pediatric Research, 1982, 16, 856-860.	1.1	19

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37	Mechanism of Substrate Inhibition inEscherichia coliPhosphofructokinaseâ€. Biochemistry, 2003, 42, 12676-12681.	1.2	19
38	Identification of Regions of Rabbit Muscle Pyruvate Kinase Important for Allosteric Regulation by Phenylalanine, Detected by H/D Exchange Mass Spectrometry. Biochemistry, 2013, 52, 1998-2006.	1.2	19
39	The strengths and limitations of using biolayer interferometry to monitor equilibrium titrations of biomolecules. Protein Science, 2020, 29, 1004-1020.	3.1	19
40	A clinically relevant polymorphism in the Na+/taurocholate cotransporting polypeptide (NTCP) occurs at a rheostat position. Journal of Biological Chemistry, 2021, 296, 100047.	1.6	19
41	Selenium-regulated translation control of heterologous gene expression: Normal function of selenocysteine-substituted gene products. Journal of Cellular Biochemistry, 1996, 61, 410-419.	1.2	18
42	Disentangling the Web of Allosteric Communication in a Homotetramer:Â Heterotropic Activation in Phosphofructokinase fromEscherichia coliâ€. Biochemistry, 2004, 43, 14104-14110.	1.2	17
43	The pyruvate kinase model system, a cautionary tale for the use of osmolyte perturbations to support conformational equilibria in allostery. Protein Science, 2010, 19, 1796-1800.	3.1	17
44	Effector Analogues Detect Varied Allosteric Roles for Conserved Proteinâ^'Effector Interactions in Pyruvate Kinase Isozymes. Biochemistry, 2011, 50, 1934-1939.	1.2	17
45	Benchmarking predictions of allostery in liver pyruvate kinase in CAGI4. Human Mutation, 2017, 38, 1123-1131.	1.1	17
46	Changes in Small-Angle X-ray Scattering Parameters Observed upon Binding of Ligand to Rabbit Muscle Pyruvate Kinase Are Not Correlated with Allosteric Transitions. Biochemistry, 2010, 49, 7202-7209.	1.2	16
47	A bioenergetics systems evaluation of ketogenic diet liver effects. Applied Physiology, Nutrition and Metabolism, 2017, 42, 955-962.	0.9	16
48	Rheostat positions: A new classification of protein positions relevant to pharmacogenomics. Medicinal Chemistry Research, 2020, 29, 1133-1146.	1.1	16
49	Functional tunability from a distance: Rheostat positions influence allosteric coupling between two distant binding sites. Scientific Reports, 2019, 9, 16957.	1.6	15
50	How we approach: Severe congenital neutropenia and myelofibrosis due to mutations in VPS45. Pediatric Blood and Cancer, 2019, 66, e27473.	0.8	15
51	Regulation of CYBB Gene Expression in Human Phagocytes by a Distant Upstream NFâ€ºB Binding Site. Journal of Cellular Biochemistry, 2015, 116, 2008-2017.	1.2	14
52	Splenic progenitors aid in maintaining high neutrophil numbers at sites of sterile chronic inflammation. Journal of Leukocyte Biology, 2016, 100, 253-260.	1.5	14
53	A novel homozygous VPS45 p.P468L mutation leading to severe congenital neutropenia with myelofibrosis. Pediatric Blood and Cancer, 2017, 64, e26571.	0.8	14
54	Identification of biochemically neutral positions in liver pyruvate kinase. Proteins: Structure, Function and Bioinformatics, 2020, 88, 1340-1350.	1.5	14

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55	Is There a Role for Anti-Neutrophil Antibody Testing in Predicting Spontaneous Resolution of Neutropenia in Young Children. Blood, 2015, 126, 2211-2211.	0.6	13
56	Changes in the allosteric site of human liver pyruvate kinase upon activator binding include the breakage of an intersubunit cationâ€“Ï€ bond. Acta Crystallographica Section F, Structural Biology Communications, 2019, 75, 461-469.	0.4	12
57	Rheostat functional outcomes occur when substitutions are introduced at nonconserved positions that diverge with speciation. Protein Science, 2021, 30, 1833-1853.	3.1	12
58	Adolescents with cancer: access to clinical trials and age-appropriate care. Current Opinion in Pediatrics, 2002, 14, 1-4.	1.0	11
59	Phagocyte nicotinamide adenine dinucleotide phosphate oxidase activity in patients with inherited IFN-Î³R1 or IFN-Î³R2 deficiency. Journal of Allergy and Clinical Immunology, 2015, 135, 1393-1395.e1.	1.5	11
60	Chokepoints in Mechanical Coupling Associated with Allosteric Proteins: The Pyruvate Kinase Example. Biophysical Journal, 2019, 116, 1598-1608.	0.2	10
61	Identification of Allosteric-Activating Drug Leads for Human Liver Pyruvate Kinase. Methods in Molecular Biology, 2012, 796, 369-382.	0.4	10
62	Hematology and oncology. Current Opinion in Pediatrics, 2005, 17, 1-2.	1.0	8
63	Allosteric Regulation of Human Liver Pyruvate Kinase by Peptides that Mimic the Phosphorylated/Dephosphorylated N-Terminus. Methods in Molecular Biology, 2012, 796, 335-349.	0.4	8
64	Mutations of the Genes for Ribosomal Proteins L5 and L11 Are a Common Cause of Diamond-Blackfan Anemia.. Blood, 2007, 110, 421-421.	0.6	8
65	Platelets and leukocytes: aggregate knowledge. Blood, 2007, 110, 794-795.	0.6	7
66	Monitoring allostery in D2O: a necessary control in studies using hydrogen/deuterium exchange to characterize allosteric regulation. Analytical and Bioanalytical Chemistry, 2011, 401, 1083-1086.	1.9	7
67	Substitutions at a rheostat position in human aldolase A cause a shift in the conformational population. Protein Science, 2022, 31, 357-370.	3.1	7
68	SAIDE: A Semi-Automated Interface for Hydrogen/Deuterium Exchange Mass Spectrometry. ProteÃ³mica, 2010, 6, 63-69.	1.0	7
69	Chemotactic peptide-induced cytoplasmic pH changes in incubated human monocytes. Journal of Leukocyte Biology, 1993, 53, 673-678.	1.5	6
70	Mutational mimics of allosteric effectors: a genome editing design to validate allosteric drug targets. Scientific Reports, 2019, 9, 9031.	1.6	6
71	An oral HemokineTM, Î±-methylhydrocinnamate, enhances myeloid and neutrophil recovery following irradiation in vivo. Blood Cells, Molecules, and Diseases, 2017, 63, 1-8.	0.6	5
72	Within and beyond: Some implications of developmental contexts for reframing school psychology. Psychology in the Schools, 2017, 54, 1252-1259.	1.1	5

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73	Array Comparative Genomic Hybridization of Ribosomal Protein Genes In Diamond-Blackfan Anemia Patients; Evidence for Three New DBA Genes, RPS8, RPS14 and RPL15, with Large Deletion or Duplication. Blood, 2010, 116, 1007-1007.	0.6	5
74	Outcomes of Pregnancies for Women with Severe Chronic Neutropenia with or without G-CSF Treatment.. Blood, 2010, 116, 1490-1490.	0.6	5
75	Odd one out? Functional tuning of <scp>Zymomonas mobilis</scp> pyruvate kinase is narrower than its allosteric, human counterpart. Protein Science, 2022, 31, .	3.1	5
76	Are all regions of folded proteins that undergo ligandâ€dependent orderâ€“disorder transitions targets for allosteric peptide mimetics?. Biopolymers, 2013, 100, 553-557.	1.2	4
77	Molecular Characterization of 140 Patients in the Pyruvate Kinase Deficiency (PKD) Natural History Study (NHS): Report of 20 New Variants. Blood, 2015, 126, 3337-3337.	0.6	4
78	Structural Plasticity Is a Feature of Rheostat Positions in the Human Na+/Taurocholate Cotransporting Polypeptide (NTCP). International Journal of Molecular Sciences, 2022, 23, 3211.	1.8	4
79	IL6 to the rescue. Blood, 2008, 111, 3914-3915.	0.6	3
80	Gene expression in chronic granulomatous disease and interferonâ€Î³ receptorâ€deficient cells treated in vitro with interferonâ€Î³. Journal of Cellular Biochemistry, 2019, 120, 4321-4332.	1.2	3
81	The Risk of Low Bone Mineral Density with Long-Term G-CSF Therapy for Severe Chronic Neutropenia.. Blood, 2010, 116, 1484-1484.	0.6	3
82	H/D Exchange Characterization of Silent Coupling: Entropy-Enthalpy Compensation in Allostery. Biophysical Journal, 2020, 118, 2966-2978.	0.2	3
83	Inhibition of Pyruvate Kinase From Thermoanaerobacterium saccharolyticum by IMP Is Independent of the Extra-C Domain. Frontiers in Microbiology, 2021, 12, 628308.	1.5	2
84	Ribosomal Protein Genes S10 and S26 Are Commonly Mutated in Diamond-Blackfan Anemia.. Blood, 2009, 114, 175-175.	0.6	2
85	Stable Long-Term Risk of Leukemia in Patients with Severe Congenital Neutropenia Maintained On G-CSF Therapy.. Blood, 2009, 114, 3206-3206.	0.6	2
86	Neutrophil Elastase Mutations and the Risk of Leukemia In Patients with Cyclic and Congenital Neutropenia.. Blood, 2010, 116, 3786-3786.	0.6	2
87	Understanding Neutropenia: The 20 Year Experience of the Severe Chronic Neutropenia International Registry (SCNIR). Blood, 2014, 124, 2730-2730.	0.6	2
88	The American Society of Pediatric Hematology/Oncology distinguished career award goes to Laurence A. Boxer, MD. Pediatric Blood and Cancer, 2008, 50, 1121-1122.	0.8	1
89	Mild Microcytic Anemia in an Infant with a Compound Heterozygosity for Hb C (HBB: c.19Gâ€‰>â€‰A) and Hb Osu Christiansborg (HBB: c.157Gâ€‰>â€‰A). Hemoglobin, 2016, 40, 208-209.	0.4	1
90	â€œHow I approachâ€¦â€â€”A new series in Pediatric Blood & Cancer. Pediatric Blood and Cancer, 2018, 65, e26994.	0.8	1

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91	The phosphate moiety of phosphoenolpyruvate does NOT contribute to allosteric regulation of liver pyruvate kinase by fructose-1,6-bisphosphateâœ: Archives of Biochemistry and Biophysics, 2020, 695, 108633.	1.4	1
92	Clinical Outcomes for Patients with Severe Chronic Neutropenia Due to Mutations in the Gene for Neutrophil Elastase, ELANE. Blood, 2012, 120, 3275-3275.	0.6	1
93	Impact of G-CSF on Outcomes of Pregnancy in Women with Severe Chronic Neutropenia. Blood, 2011, 118, 4786-4786.	0.6	1
94	The Phenotypic Spectrum of Pyruvate Kinase Deficiency (PKD) from the PKD Natural History Study (NHS): Description of Four Severity Groups By Anemia Status. Blood, 2015, 126, 2136-2136.	0.6	1
95	Long Term Outcomes for Patients with Cyclic Neutropenia Treated with Granulocyte Colony-Stimulating Factor (G-CSF). Blood, 2015, 126, 996-996.	0.6	1
96	Iron Overload Is Highly Prevalent in All Disease Severity States in Pyruvate Kinase Deficiency (PKD). Blood, 2016, 128, 2430-2430.	0.6	1
97	Health Related Quality of Life and Fatigue in Patients with Pyruvate Kinase Deficiency. Blood, 2018, 132, 4807-4807.	0.6	1
98	Shwachman-Diamond in the rough. Blood, 2005, 106, 1140-1141.	0.6	0
99	Laurence A. Boxer, MD, 1940â€“2017. Pediatric Blood and Cancer, 2017, 64, e26506.	0.8	0
100	Identification of New Rare Sequence Changes in RP Genes in Diamond-Blackfan Anemia and Association of the RPL5 and RPL11 Mutations with Craniofacial and Thumb Malformations. Blood, 2008, 112, 39-39.	0.6	0
101	Regulation of White Cell Development.. Blood, 2009, 114, SCI-9-SCI-9.	0.6	0
102	Clinical Features of Shwachman-Diamond Syndrome Patients Lacking Biallelic SBDS Mutation. Blood, 2011, 118, 4367-4367.	0.6	0
103	ELANE Mutations in Cyclic and Congenital Neutropenia: Genotype-Phenotype Relationships,. Blood, 2011, 118, 3398-3398.	0.6	0
104	Modeling of M2â€PYK to show Possible â€³Drugable Sightsâ€³ in Cancer Cells. FASEB Journal, 2012, 26, lb272.	0.2	0
105	The Natural History of Cyclic Neutropenia: Long-Term Prospective Observations and Current Perspectives.. Blood, 2012, 120, 2141-2141.	0.6	0
106	â€œHard Coreâ€•Acetyl Coenzymeâ€A Carboxylase. FASEB Journal, 2015, 29, LB69.	0.2	0