Aron W Fenton

List of Publications by Year
in descending order

106 papers	3,405 citations	257357 24 h-index	155592 55 g-index
112 all docs	112 docs citations	112 times ranked	4266 citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	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
5	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
6	Dissecting ELANE neutropenia pathogenicity by human HSC gene editing. Cell Stem Cell, 2021, 28, 833-845.e5.	5.2	23
7	Rheostat functional outcomes occur when substitutions are introduced at nonconserved positions that diverge with speciation. Protein Science, 2021, 30, 1833-1853.	3.1	12
8	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
9	Identification of biochemically neutral positions in liver pyruvate kinase. Proteins: Structure, Function and Bioinformatics, 2020, 88, 1340-1350.	1.5	14
10	Rheostat positions: A new classification of protein positions relevant to pharmacogenomics. Medicinal Chemistry Research, 2020, 29, 1133-1146.	1.1	16
11	Genotypeâ€phenotype correlation and molecular heterogeneity in pyruvate kinase deficiency. American Journal of Hematology, 2020, 95, 472-482.	2.0	47
12	Lentiviral gene therapy for X-linked chronic granulomatous disease. Nature Medicine, 2020, 26, 200-206.	15.2	175
13	The strengths and limitations of using biolayer interferometry to monitor equilibrium titrations of biomolecules. Protein Science, 2020, 29, 1004-1020.	3.1	19
14	H/D Exchange Characterization of Silent Coupling: Entropy-Enthalpy Compensation in Allostery. Biophysical Journal, 2020, 118, 2966-2978.	0.2	3
15	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
16	Benign ethnic neutropenia. Blood Reviews, 2019, 37, 100586.	2.8	56
17	Mutational mimics of allosteric effectors: a genome editing design to validate allosteric drug targets. Scientific Reports, 2019, 9, 9031.	1.6	6
18	Chokepoints in Mechanical Coupling Associated with Allosteric Proteins: The Pyruvate Kinase Example. Biophysical Journal, 2019, 116, 1598-1608.	0.2	10

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19	Functional tunability from a distance: Rheostat positions influence allosteric coupling between two distant binding sites. Scientific Reports, 2019, 9, 16957.	1.6	15
20	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
21	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
22	How we approach: Severe congenital neutropenia and myelofibrosis due to mutations in VPS45. Pediatric Blood and Cancer, 2019, 66, e27473.	0.8	15
23	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
24	Aberrant splicing contributes to severe Î±-spectrinâ€“linked congenital hemolytic anemia. Journal of Clinical Investigation, 2019, 129, 2878-2887.	3.9	24
25	â€œHow I approachâ€¦â€â€”A new series in Pediatric Blood & Cancer. Pediatric Blood and Cancer, 2018, 65, e26994.	0.8	1
26	The Genetic Landscape of Diamond-Blackfan Anemia. American Journal of Human Genetics, 2018, 103, 930-947.	2.6	184
27	Trisomy silencing by XIST normalizes Down syndrome cell pathogenesis demonstrated for hematopoietic defects in vitro. Nature Communications, 2018, 9, 5180.	5.8	38
28	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
29	Health Related Quality of Life and Fatigue in Patients with Pyruvate Kinase Deficiency. Blood, 2018, 132, 4807-4807.	0.6	1
30	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
31	A novel homozygous VPS45 p.P468L mutation leading to severe congenital neutropenia with myelofibrosis. Pediatric Blood and Cancer, 2017, 64, e26571.	0.8	14
32	Benchmarking predictions of allostery in liver pyruvate kinase in CAGI4. Human Mutation, 2017, 38, 1123-1131.	1.1	17
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 bioenergetics systems evaluation of ketogenic diet liver effects. Applied Physiology, Nutrition and Metabolism, 2017, 42, 955-962.	0.9	16
35	Laurence A. Boxer, MD, 1940â€“2017. Pediatric Blood and Cancer, 2017, 64, e26506.	0.8	0
36	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

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37	Within and beyond: Some implications of developmental contexts for reframing school psychology. Psychology in the Schools, 2017, 54, 1252-1259.	1.1	5
38	Protein Structural Analysis via Mass Spectrometry-Based Proteomics. Advances in Experimental Medicine and Biology, 2016, 919, 397-431.	0.8	27
39	Autoimmune and other acquired neutropenias. Hematology American Society of Hematology Education Program, 2016, 2016, 38-42.	0.9	40
40	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
41	What Mutagenesis Can and Cannot Reveal About Allostery. Biophysical Journal, 2016, 110, 1912-1923.	0.2	28
42	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
43	Iron Overload Is Highly Prevalent in All Disease Severity States in Pyruvate Kinase Deficiency (PKD). Blood, 2016, 128, 2430-2430.	0.6	1
44	Congenital sideroblastic anemia due to mutations in the mitochondrial HSP70 homologue HSPA9. Blood, 2015, 126, 2734-2738.	0.6	78
45	Regulation of CYBB Gene Expression in Human Phagocytes by a Distant Upstream NFâ€‰B Binding Site. Journal of Cellular Biochemistry, 2015, 116, 2008-2017.	1.2	14
46	Neutrophil Responses to Sterile Implant Materials. PLoS ONE, 2015, 10, e0137550.	1.1	92
47	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
48	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
49	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
50	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
51	â€œHard Coreâ€•Acetyl Coenzymeâ€A Carboxylase. FASEB Journal, 2015, 29, LB69.	0.2	0
52	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
53	Long Term Outcomes for Patients with Cyclic Neutropenia Treated with Granulocyte Colony-Stimulating Factor (G-CSF). Blood, 2015, 126, 996-996.	0.6	1
54	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

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55	Understanding Neutropenia: The 20 Year Experience of the Severe Chronic Neutropenia International Registry (SCNIR). Blood, 2014, 124, 2730-2730.	0.6	2
56	Evaluation and Management of Patients With Isolated Neutropenia. Seminars in Hematology, 2013, 50, 198-206.	1.8	167
57	Energetic Coupling between an Oxidizable Cysteine and the Phosphorylatable N-Terminus of Human Liver Pyruvate Kinase. Biochemistry, 2013, 52, 466-476.	1.2	37
58	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
59	Distinguishing the Chemical Moiety of Phosphoenolpyruvate That Contributes to Allostery in Muscle Pyruvate Kinase. Biochemistry, 2013, 52, 1-3.	1.2	21
60	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
61	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
62	Identification of Allosteric-Activating Drug Leads for Human Liver Pyruvate Kinase. Methods in Molecular Biology, 2012, 796, 369-382.	0.4	10
63	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
64	Modeling of M2â€PYK to show Possible â€³Drugable Sightsâ€³ in Cancer Cells. FASEB Journal, 2012, 26, lb272.	0.2	0
65	The Natural History of Cyclic Neutropenia: Long-Term Prospective Observations and Current Perspectives.. Blood, 2012, 120, 2141-2141.	0.6	0
66	Effector Analogues Detect Varied Allosteric Roles for Conserved Proteinâ^'Effector Interactions in Pyruvate Kinase Isozymes. Biochemistry, 2011, 50, 1934-1939.	1.2	17
67	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
68	Clinical Features of Shwachman-Diamond Syndrome Patients Lacking Biallelic SBDS Mutation. Blood, 2011, 118, 4367-4367.	0.6	0
69	ELANE Mutations in Cyclic and Congenital Neutropenia: Genotype-Phenotype Relationships,. Blood, 2011, 118, 3398-3398.	0.6	0
70	Impact of G-CSF on Outcomes of Pregnancy in Women with Severe Chronic Neutropenia. Blood, 2011, 118, 4786-4786.	0.6	1
71	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
72	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

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73	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
74	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
75	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
76	Outcomes of Pregnancies for Women with Severe Chronic Neutropenia with or without G-CSF Treatment.. Blood, 2010, 116, 1490-1490.	0.6	5
77	Neutrophil Elastase Mutations and the Risk of Leukemia In Patients with Cyclic and Congenital Neutropenia.. Blood, 2010, 116, 3786-3786.	0.6	2
78	SAIDE: A Semi-Automated Interface for Hydrogen/Deuterium Exchange Mass Spectrometry. ProteÃ³mica, 2010, 6, 63-69.	1.0	7
79	The Impact of Ions on Allosteric Functions in Human Liver Pyruvate Kinase. Methods in Enzymology, 2009, 466, 83-107.	0.4	32
80	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
81	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
82	Disentangling the Web of Allosteric Communication in a Homotetramer: Heterotropic Inhibition in Phosphofructokinase from Escherichia coli. Biochemistry, 2009, 48, 12323-12328.	1.2	27
83	Ribosomal Protein Genes S10 and S26 Are Commonly Mutated in Diamond-Blackfan Anemia.. Blood, 2009, 114, 175-175.	0.6	2
84	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
85	Regulation of White Cell Development.. Blood, 2009, 114, SCI-9-SCI-9.	0.6	0
86	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
87	Allostery: an illustrated definition for the â€˜second secret of lifeâ€™. Trends in Biochemical Sciences, 2008, 33, 420-425.	3.7	256
88	IL6 to the rescue. Blood, 2008, 111, 3914-3915.	0.6	3
89	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
90	Platelets and leukocytes: aggregate knowledge. Blood, 2007, 110, 794-795.	0.6	7

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91	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
92	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
93	Mining for allosteric information: Natural mutations and positional sequence conservation in pyruvate kinase. IUBMB Life, 2006, 58, 31-38.	1.5	26
94	Disorders of Neutrophil Number and Function. Hematology American Society of Hematology Education Program, 2006, 2006, 104-110.	0.9	29
95	Hematology and oncology. Current Opinion in Pediatrics, 2005, 17, 1-2.	1.0	8
96	Shwachman-Diamond in the rough. Blood, 2005, 106, 1140-1141.	0.6	0
97	Disentangling the Web of Allosteric Communication in a Homotetramer:Â Heterotropic Activation in Phosphofructokinase fromEscherichia coliâ€. Biochemistry, 2004, 43, 14104-14110.	1.2	17
98	Mechanism of Substrate Inhibition inEscherichia coliPhosphofructokinaseâ€. Biochemistry, 2003, 42, 12676-12681.	1.2	19
99	Identification of Substrate Contact Residues Important for the Allosteric Regulation of Phosphofructokinase fromEschericia coliâ€. Biochemistry, 2003, 42, 6453-6459.	1.2	26
100	Adolescents with cancer: access to clinical trials and age-appropriate care. Current Opinion in Pediatrics, 2002, 14, 1-4.	1.0	11
101	Isolation of a Single Activating Allosteric Interaction in Phosphofructokinase fromEscherichia coliâ€. Biochemistry, 2002, 41, 13410-13416.	1.2	24
102	Recognition and binding of the human selenocysteine insertion sequence by nucleolin. , 2000, 77, 507-516.		32
103	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
104	Chemotactic peptide-induced cytoplasmic pH changes in incubated human monocytes. Journal of Leukocyte Biology, 1993, 53, 673-678.	1.5	6
105	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
106	Heterogeneous Pathways of Oxidizing Radical Production in Human Neutrophils and the HL-60 Cell Line. Pediatric Research, 1982, 16, 856-860.	1.1	19