Serkan Erdin

List of Publications by Year
in descending order

68 papers	7,809 citations	236925 25 h-index	98798 67 g-index
81 all docs	81 docs citations	81 times ranked	16563 citing authors

#	Article	IF	Citations
1	TFEB Links Autophagy to Lysosomal Biogenesis. Science, 2011, 332, 1429-1433.	12.6	2,513
2	A lysosome-to-nucleus signalling mechanism senses and regulates the lysosome via mTOR and TFEB. EMBO Journal, 2012, 31, 1095-1108.	7.8	1,507
3	A large-scale evaluation of computational protein function prediction. Nature Methods, 2013, 10, 221-227.	19.0	789
4	Low Incidence of Off-Target Mutations in Individual CRISPR-Cas9 and TALEN Targeted Human Stem Cell Clones Detected by Whole-Genome Sequencing. Cell Stem Cell, 2014, 15, 27-30.	11.1	456
5	CHD8 regulates neurodevelopmental pathways associated with autism spectrum disorder in neural progenitors. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E4468-77.	7.1	297
6	Genes that Affect Brain Structure and Function Identified by Rare Variant Analyses of Mendelian Neurologic Disease. Neuron, 2015, 88, 499-513.	8.1	258
7	Human CLP1 Mutations Alter tRNA Biogenesis, Affecting Both Peripheral and Central Nervous System Function. Cell, 2014, 157, 636-650.	28.9	189
8	Recurrent De Novo and Biallelic Variation of ATAD3A , Encoding a Mitochondrial Membrane Protein, Results in Distinct Neurological Syndromes. American Journal of Human Genetics, 2016, 99, 831-845.	6.2	146
9	SMCHD1 mutations associated with a rare muscular dystrophy can also cause isolated arhinia and Bosma arhinia microphthalmia syndrome. Nature Genetics, 2017, 49, 238-248.	21.4	131
10	Transcriptional Consequences of 16p11.2 Deletion and Duplication in Mouse Cortex and Multiplex Autism Families. American Journal of Human Genetics, 2014, 94, 870-883.	6.2	116
11	NetWalker: a contextual network analysis tool for functional genomics. BMC Genomics, 2012, 13, 282.	2.8	99
12	Topological Textures in a Ferromagnet-Superconductor Bilayer. Physical Review Letters, 2001, 88, 017001.	7.8	84
13	Engineering microdeletions and microduplications by targeting segmental duplications with CRISPR. Nature Neuroscience, 2016, 19, 517-522.	14.8	72
14	Prediction of enzyme function based on 3D templates of evolutionarily important amino acids. BMC Bioinformatics, 2008, 9, 17.	2.6	70
15	Interaction of mesoscopic magnetic textures with superconductors. Physical Review B, 2002, 66, .	3.2	66
16	Whole-Exome Sequencing Identifies Homozygous GPR161 Mutation in a Family with Pituitary Stalk Interruption Syndrome. Journal of Clinical Endocrinology and Metabolism, 2015, 100, E140-E147.	3.6	60
17	Evolutionary Trace for Prediction and Redesign of Protein Functional Sites. Methods in Molecular Biology, 2012, 819, 29-42.	0.9	59
18	Modeling the structure and electronic properties ofTiO2nanoparticles. Physical Review B, 2006, 73, .	3.2	53

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19	Htt CAG repeat expansion confers pleiotropic gains of mutant huntingtin function in chromatin regulation. Human Molecular Genetics, 2015, 24, 2442-2457.	2.9	53
20	Rare variants in the notch signaling pathway describe a novel type of autosomal recessive Klippelâ€“Feil syndrome. American Journal of Medical Genetics, Part A, 2015, 167, 2795-2799.	1.2	47
21	Protein function prediction: towards integration of similarity metrics. Current Opinion in Structural Biology, 2011, 21, 180-188.	5.7	42
22	Evolutionary Trace Annotation of Protein Function in the Structural Proteome. Journal of Molecular Biology, 2010, 396, 1451-1473.	4.2	38
23	Prediction and experimental validation of enzyme substrate specificity in protein structures. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E4195-202.	7.1	37
24	Kctd13-deficient mice display short-term memory impairment and sex-dependent genetic interactions. Human Molecular Genetics, 2019, 28, 1474-1486.	2.9	32
25	TSC patient-derived isogenic neural progenitor cells reveal altered early neurodevelopmental phenotypes and rapamycin-induced MNK-eIF4E signaling. Molecular Autism, 2020, 11, 2.	4.9	29
26	Evolutionary Trace Annotation Server: automated enzyme function prediction in protein structures using 3D templates. Bioinformatics, 2009, 25, 1426-1427.	4.1	28
27	The use of evolutionary patterns in protein annotation. Current Opinion in Structural Biology, 2012, 22, 316-325.	5.7	28
28	New gene discoveries highlight functional convergence in autism and related neurodevelopmental disorders. Current Opinion in Genetics and Development, 2020, 65, 195-206.	3.3	27
29	A deep learning approach to identify gene targets of a therapeutic for human splicing disorders. Nature Communications, 2021, 12, 3332.	12.8	26
30	Sequence and structure continuity of evolutionary importance improves protein functional site discovery and annotation. Protein Science, 2010, 19, 1296-1311.	7.6	23
31	Accounting for epistatic interactions improves the functional analysis of protein structures. Bioinformatics, 2013, 29, 2714-2721.	4.1	22
32	De-Orphaning the Structural Proteome through Reciprocal Comparison of Evolutionarily Important Structural Features. PLoS ONE, 2008, 3, e2136.	2.5	21
33	Whole exome sequencing identifies three novel mutations in ANTXR1 in families with GAPO syndrome. American Journal of Medical Genetics, Part A, 2014, 164, 2328-2334.	1.2	20
34	Pain correlates with germline mutation in schwannomatosis. Medicine (United States), 2018, 97, e9717.	1.0	20
35	WNT/Î²-Catenin Pathway and Epigenetic Mechanisms Regulate the Pitt-Hopkins Syndrome and Schizophrenia Risk Gene TCF4. Molecular Neuropsychiatry, 2017, 3, 53-71.	2.9	19
36	Brigatinib causes tumor shrinkage in both NF2-deficient meningioma and schwannoma through inhibition of multiple tyrosine kinases but not ALK. PLoS ONE, 2021, 16, e0252048.	2.5	19

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37	Traditional and systems biology based drug discovery for the rare tumor syndrome neurofibromatosis type 2. PLoS ONE, 2018, 13, e0197350.	2.5	17
38	Accurate Protein Structure Annotation through Competitive Diffusion of Enzymatic Functions over a Network of Local Evolutionary Similarities. PLoS ONE, 2010, 5, e14286.	2.5	16
39	Symmetry violation in a superconducting film with a square array of ferromagnetic dots. Physica C: Superconductivity and Its Applications, 2003, 391, 140-146.	1.2	15
40	Biallelic GRM7 variants cause epilepsy, microcephaly, and cerebral atrophy. Annals of Clinical and Translational Neurology, 2020, 7, 610-627.	3.7	15
41	Potential molecular consequences of transgene integration: The R6/2 mouse example. Scientific Reports, 2017, 7, 41120.	3.3	14
42	London study of vortex states in a superconducting film due to a magnetic dot. Physical Review B, 2005, 72, .	3.2	13
43	Low Incidence of Off-Target Mutations in Individual CRISPR-Cas9 and TALEN Targeted Human Stem Cell Clones Detected by Whole-Genome Sequencing. Cell Stem Cell, 2014, 15, 254.	11.1	13
44	Hypomorphic mutation of the mouse Huntingtonâ€™s disease gene orthologue. PLoS Genetics, 2019, 15, e1007765.	3.5	13
45	Dystonia-specific mutations in THAP1 alter transcription of genes associated with neurodevelopment and myelin. American Journal of Human Genetics, 2021, 108, 2145-2158.	6.2	13
46	ETAscape: analyzing protein networks to predict enzymatic function and substrates in Cytoscape. Bioinformatics, 2012, 28, 2186-2188.	4.1	12
47	Correlation between NF1 genotype and imaging phenotype on whole-body MRI. Neurology, 2020, 94, e2521-e2531.	1.1	12
48	Vortex penetration in magnetic superconducting heterostructures. Physical Review B, 2004, 69, .	3.2	11
49	Transcriptional consequences of MBD5 disruption in mouse brain and CRISPR-derived neurons. Molecular Autism, 2020, 11, 45.	4.9	11
50	Orgo-Seq integrates single-cell and bulk transcriptomic data to identify cell type specific-driver genes associated with autism spectrum disorder. Nature Communications, 2022, 13, .	12.8	11
51	Self-consistent tight-binding study of low-index titanium surfaces. Physical Review B, 2005, 72, .	3.2	10
52	Physiological Characterization and Transcriptomic Properties of GnRH Neurons Derived From Human Stem Cells. Endocrinology, 2021, 162, .	2.8	10
53	Vortex chain states in a ferromagnet/superconductor bilayer. Physical Review B, 2006, 73, .	3.2	9
54	Photoinduced Magnetism Caused by Charge-Transfer Excitations in Tetracyanoethylene-Based Organic Magnets. Physical Review Letters, 2006, 97, 247202.	7.8	9

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55	Self-consistent tight binding molecular dynamics study of TiO2 nanoclusters in water. Journal of Electroanalytical Chemistry, 2007, 607, 147-157.	3.8	9
56	Function prediction from networks of local evolutionary similarity in protein structure. BMC Bioinformatics, 2013, 14, S6.	2.6	9
57	Histone deacetylase knockouts modify transcription, CAG instability and nuclear pathology in Huntington disease mice. ELife, 2020, 9, .	6.0	9
58	mTOR kinase inhibition disrupts neuregulin 1-ERBB3 autocrine signaling and sensitizes NF2-deficient meningioma cellular models to IGF1R inhibition. Journal of Biological Chemistry, 2021, 296, 100157.	3.4	8
59	OSCILLATIONS OF SPHERICAL AND CYLINDRICAL SHELLS. International Journal of Modern Physics B, 2001, 15, 3099-3105.	2.0	7
60	A novel microduplication of ARID1B: Clinical, genetic, and proteomic findings. American Journal of Medical Genetics, Part A, 2017, 173, 2478-2484.	1.2	7
61	De novo variants in SIAH1, encoding an E3 ubiquitin ligase, are associated with developmental delay, hypotonia and dysmorphic features. Journal of Medical Genetics, 2021, 58, 205-212.	3.2	6
62	Developmental regulation of neuronal gene expression by Elongator complex protein 1 dosage. Journal of Genetics and Genomics, 2022, 49, 654-665.	3.9	6
63	Ab initio studies of tetracyanoethylene-based organic magnets. Physica B: Condensed Matter, 2008, 403, 1964-1970.	2.7	5
64	Double-exchange model for molecule-based magnets. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 493-497.	2.1	3
65	De novo variant in AMOTL1 in infant with cleft lip and palate, imperforate anus and dysmorphic features. American Journal of Medical Genetics, Part A, 2021, 185, 190-195.	1.2	3
66	Age dependent association of inbreeding with risk for schizophrenia in Egypt. Schizophrenia Research, 2020, 216, 450-459.	2.0	1
67	Heterogeneous Magnetic Superconducting Systems. , 2005, , 425-457.		0
68	CSIG-42. HIGH THROUGHPUT KINOME AND TRANSCRIPTOME ANALYSES REVEAL NOVEL THERAPEUTIC TARGETS IN NF2-DEFICIENT MENINGIOMA. Neuro-Oncology, 2018, 20, vi52-vi52.	1.2	0