

Helen Piontkivska

List of Publications by Year in descending order

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Version: 2024-02-01

71
papers

2,521
citations

201575

27
h-index

206029

48
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79
all docs

79
docs citations

79
times ranked

4581
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Interferons and viruses induce a novel truncated ACE2 isoform and not the full-length SARS-CoV-2 receptor. <i>Nature Genetics</i> , 2020, 52, 1283-1293. | 9.4 | 217 |
| 2 | COVID-19 and emerging viral infections: The case for interferon lambda. <i>Journal of Experimental Medicine</i> , 2020, 217, . | 4.2 | 177 |
| 3 | Novel Protein Genes in Animal mtDNA: A New Sex Determination System in Freshwater Mussels (<i>Bivalvia: Unionoida</i>)?. <i>Molecular Biology and Evolution</i> , 2011, 28, 1645-1659. | 3.5 | 156 |
| 4 | Purifying selection and birth-and-death evolution in the ubiquitin gene family. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 10866-10871. | 3.3 | 137 |
| 5 | Comparative Mitochondrial Genomics of Freshwater Mussels (<i>Bivalvia: Unionoida</i>) With Doubly Uniparental Inheritance of mtDNA: Gender-Specific Open Reading Frames and Putative Origins of Replication. <i>Genetics</i> , 2009, 183, 1575-1589. | 1.2 | 114 |
| 6 | Purifying Selection and Birth-and-death Evolution in the Histone H4 Gene Family. <i>Molecular Biology and Evolution</i> , 2002, 19, 689-697. | 3.5 | 98 |
| 7 | A Dominant Role for CD8 + -T-Lymphocyte Selection in Simian Immunodeficiency Virus Sequence Variation. <i>Journal of Virology</i> , 2004, 78, 14012-14022. | 1.5 | 89 |
| 8 | Molecular Evolution of the Nontandemly Repeated Genes of the Histone 3 Multigene Family. <i>Molecular Biology and Evolution</i> , 2002, 19, 68-75. | 3.5 | 86 |
| 9 | CD8+ T Cells from SIV Elite Controller Macaques Recognize Mamu-B*08-Bound Epitopes and Select for Widespread Viral Variation. <i>PLoS ONE</i> , 2007, 2, e1152. | 1.1 | 75 |
| 10 | Phylogeny of Trypanosomatidae and Bodonidae (Kinetoplastida) Based on 18S rRNA: Evidence for Paraphyly of Trypanosoma and Six Other Genera. <i>Molecular Biology and Evolution</i> , 2003, 20, 644-652. | 3.5 | 73 |
| 11 | Birth-and-Death Evolution in Primate MHC Class I Genes: Divergence Time Estimates. <i>Molecular Biology and Evolution</i> , 2003, 20, 601-609. | 3.5 | 70 |
| 12 | Functional diversification of the toll-like receptor gene family. <i>Immunogenetics</i> , 2008, 60, 249-256. | 1.2 | 64 |
| 13 | Analysis of gene expression in prostate cancer epithelial and interstitial stromal cells using laser capture microdissection. <i>BMC Cancer</i> , 2010, 10, 165. | 1.1 | 57 |
| 14 | Comprehensive Immunological Evaluation Reveals Surprisingly Few Differences between Elite Controller and Progressor Mamu-B*17-Positive Simian Immunodeficiency Virus-Infected Rhesus Macaques. <i>Journal of Virology</i> , 2008, 82, 5245-5254. | 1.5 | 56 |
| 15 | Evolutionary analysis of glycosyl hydrolase family 28 (GH28) suggests lineage-specific expansions in necrotrophic fungal pathogens. <i>Gene</i> , 2011, 479, 29-36. | 1.0 | 56 |
| 16 | Biom mineralization-related specialization of hemocytes and mantle tissues of the Pacific oysters <i>Crassostrea gigas</i> . <i>Journal of Experimental Biology</i> , 2017, 220, 3209-3221. | 0.8 | 56 |
| 17 | Aspartic Proteinase Phylogeny and the Origin of Pregnancy-Associated Glycoproteins. <i>Molecular Biology and Evolution</i> , 2003, 20, 1940-1945. | 3.5 | 48 |
| 18 | Molecular characterization and mRNA expression of two key enzymes of hypoxia-sensing pathways in eastern oysters <i>Crassostrea virginica</i> (Gmelin): Hypoxia-inducible factor 1 \pm (HIF-1 \pm) and HIF-prolyl hydroxylase (PHD). <i>Comparative Biochemistry and Physiology Part D: Genomics and Proteomics</i> , 2011, 6, 103-114. | 0.4 | 44 |

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|----|---|-----|-----------|
| 19 | DNA repeat arrays in chicken and human genomes and the adaptive evolution of avian genome size. <i>BMC Evolutionary Biology</i> , 2005, 5, 12. | 3.2 | 43 |
| 20 | Identification of novel light-induced genes in the suprachiasmatic nucleus. <i>BMC Neuroscience</i> , 2007, 8, 98. | 0.8 | 42 |
| 21 | RNA editing by the host ADAR system affects the molecular evolution of the Zika virus. <i>Ecology and Evolution</i> , 2017, 7, 4475-4485. | 0.8 | 39 |
| 22 | Extreme primary and secondary protein structure variability in the chimeric male-transmitted cytochrome c oxidase subunit II protein in freshwater mussels: Evidence for an elevated amino acid substitution rate in the face of domain-specific purifying selection. <i>BMC Evolutionary Biology</i> , 2008, 8, 165. | 3.2 | 37 |
| 23 | Multi-species sequence comparison reveals dynamic evolution of the elastin gene that has involved purifying selection and lineage-specific insertions/deletions. <i>BMC Genomics</i> , 2004, 5, 31. | 1.2 | 35 |
| 24 | Effects of intermittent hypoxia on the cell survival and inflammatory responses in the intertidal marine bivalves <i>Mytilus edulis</i> and <i>Crassostrea gigas</i> . <i>Journal of Experimental Biology</i> , 2020, 223, . | 0.8 | 33 |
| 25 | Machine Learning Maps Research Needs in COVID-19 Literature. <i>Patterns</i> , 2020, 1, 100123. | 3.1 | 31 |
| 26 | Molecular phylogenetics of Trypanosomatidae: contrasting results from 18S rRNA and protein phylogenies. <i>Parasites and Vectors</i> , 2003, 2, 15. | 1.9 | 30 |
| 27 | HIV type 1 tropism and inhibitors of viral entry: clinical implications. <i>AIDS Reviews</i> , 2006, 8, 60-77. | 0.5 | 30 |
| 28 | Effects of cadmium exposure and intermittent anoxia on nitric oxide metabolism in eastern oysters, <i>Crassostrea virginica</i> . <i>Journal of Experimental Biology</i> , 2010, 213, 433-444. | 0.8 | 27 |
| 29 | Cross-species mapping of bidirectional promoters enables prediction of unannotated 5' UTRs and identification of species-specific transcripts. <i>BMC Genomics</i> , 2009, 10, 189. | 1.2 | 25 |
| 30 | Efficiencies of maximum likelihood methods of phylogenetic inferences when different substitution models are used. <i>Molecular Phylogenetics and Evolution</i> , 2004, 31, 865-873. | 1.2 | 24 |
| 31 | Pyganodon (Bivalvia: Unionoida: Unionidae) phylogenetics: A male- and female-transmitted mitochondrial DNA perspective. <i>Molecular Phylogenetics and Evolution</i> , 2012, 63, 430-444. | 1.2 | 23 |
| 32 | Interactive effects of salinity variation and exposure to ZnO nanoparticles on the innate immune system of a sentinel marine bivalve, <i>Mytilus edulis</i> . <i>Science of the Total Environment</i> , 2020, 712, 136473. | 3.9 | 23 |
| 33 | ADAR Editing in Viruses: An Evolutionary Force to Reckon with. <i>Genome Biology and Evolution</i> , 2021, 13, . | 1.1 | 23 |
| 34 | Nucleotide sequence polymorphism in circoviruses. <i>Infection, Genetics and Evolution</i> , 2008, 8, 130-138. | 1.0 | 22 |
| 35 | Evolutionary conservation of zinc finger transcription factor binding sites in promoters of genes co-expressed with WT1 in prostate cancer. <i>BMC Genomics</i> , 2008, 9, 337. | 1.2 | 21 |
| 36 | A secondary structure within a human piRNA modulates its functionality. <i>Biochimie</i> , 2019, 157, 72-80. | 1.3 | 19 |

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|----|---|-----|-----------|
| 37 | Molecular Biomarkers of the Mitochondrial Quality Control Are Differently Affected by Hypoxia-Reoxygenation Stress in Marine Bivalves <i>Crassostrea gigas</i> and <i>Mytilus edulis</i> . <i>Frontiers in Marine Science</i> , 2020, 7, . | 1.2 | 18 |
| 38 | Stable G-quadruplex enabling sequences are selected against by the context-dependent codon bias. <i>Gene</i> , 2019, 696, 149-161. | 1.0 | 17 |
| 39 | Patterns of sequence evolution at epitopes for host antibodies and cytotoxic T-lymphocytes in human immunodeficiency virus type 1. <i>Virus Research</i> , 2006, 116, 98-105. | 1.1 | 16 |
| 40 | Evolutionary diversification of the avian fatty acid-binding proteins. <i>Gene</i> , 2011, 490, 1-5. | 1.0 | 16 |
| 41 | Potential trade-offs between biomineralization and immunity revealed by shell properties and gene expression profiles of two closely related <i>Crassostrea</i> species. <i>Journal of Experimental Biology</i> , 2018, 221, . | 0.8 | 15 |
| 42 | Transcriptional response of key metabolic and stress response genes of a nuculanid bivalve, <i>Lembulus bicuspidatus</i> from an oxygen minimum zone exposed to hypoxia-reoxygenation. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2021, 256, 110617. | 0.7 | 15 |
| 43 | Within-host evolution of CD8+TL epitopes encoded by overlapping and non-overlapping reading frames of simian immunodeficiency virus. <i>Bioinformatics</i> , 2005, 21, iii39-iii44. | 1.8 | 14 |
| 44 | Frequent associations between CTL and T-Helper epitopes in HIV-1 genomes and implications for multi-epitope vaccine designs. <i>BMC Microbiology</i> , 2010, 10, 212. | 1.3 | 14 |
| 45 | Explaining Pathogenicity of Congenital Zika and Guillain-Barré Syndromes: Does Dysregulation of RNA Editing Play a Role?. <i>BioEssays</i> , 2019, 41, 1800239. | 1.2 | 14 |
| 46 | Between-Host Evolution of Cytotoxic T-Lymphocyte Epitopes in Human Immunodeficiency Virus Type 1: an Approach Based on Phylogenetically Independent Comparisons. <i>Journal of Virology</i> , 2004, 78, 11758-11765. | 1.5 | 13 |
| 47 | Role of Host-Driven Mutagenesis in Determining Genome Evolution of Sigma Virus (DMelSV); Tj ETQq1 1 0.784314, rgBT /Overlock 10 | 1.1 | 13 |
| 48 | The Role of Reversible Protein Phosphorylation in Regulation of the Mitochondrial Electron Transport System During Hypoxia and Reoxygenation Stress in Marine Bivalves. <i>Frontiers in Marine Science</i> , 2020, 7, . | 1.2 | 13 |
| 49 | Evolution of Vertebrate Voltage-Gated Ion Channel \pm Chains by Sequential Gene Duplication. <i>Journal of Molecular Evolution</i> , 2003, 56, 277-285. | 0.8 | 12 |
| 50 | Lipid-protein interactions for ECA1 an N-ANTH domain protein involved in stress signaling in plants. <i>Chemistry and Physics of Lipids</i> , 2020, 231, 104919. | 1.5 | 12 |
| 51 | Environmental kinetoplastid-like 18S rRNA sequences and phylogenetic relationships among Trypanosomatidae: Paraphyly of the genus <i>Trypanosoma</i> . <i>Molecular and Biochemical Parasitology</i> , 2005, 144, 94-99. | 0.5 | 11 |
| 52 | Seasonality of birth defects in West Africa: could congenital Zika syndrome be to blame?. <i>F1000Research</i> , 2018, 7, 159. | 0.8 | 10 |
| 53 | Discovery of novel targets for multi-epitope vaccines: Screening of HIV-1 genomes using association rule mining. <i>Retrovirology</i> , 2009, 6, 62. | 0.9 | 9 |
| 54 | Molecular Trajectories Leading to the Alternative Fates of Duplicate Genes. <i>PLoS ONE</i> , 2012, 7, e38958. | 1.1 | 8 |

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|----|--|-----|-----------|
| 55 | Identification of Surface Epitopes Associated with Protection against Highly Immune-Evasive VlsE-Expressing Lyme Disease Spirochetes. <i>Infection and Immunity</i> , 2018, 86, . | 1.0 | 8 |
| 56 | Evolutionary Relationships Of <i>Popenaias popeii</i> and the Early Evolution Of Lampsiline Bivalves (Unionidae): Phylogenetic Analyses Of Dna and Amino Acid Sequences From F and M Mitochondrial Genomes. <i>Malacologia</i> , 2008, 50, 303-318. | 0.2 | 7 |
| 57 | Seasonality of birth defects in West Africa: could congenital Zika syndrome be to blame?. <i>F1000Research</i> , 2018, 7, 159. | 0.8 | 7 |
| 58 | Rapid fixation of a distinctive sequence motif in the 3' noncoding region of the clade of West Nile virus invading North America. <i>Gene</i> , 2007, 399, 152-161. | 1.0 | 6 |
| 59 | Molecular characterization and expression of a novel homolog of uncoupling protein 5 (UCP5) from the eastern oyster <i>Crassostrea virginica</i> (Bivalvia: Ostreidae). <i>Comparative Biochemistry and Physiology Part D: Genomics and Proteomics</i> , 2009, 4, 121-127. | 0.4 | 5 |
| 60 | Delineating Surface Epitopes of Lyme Disease Pathogen Targeted by Highly Protective Antibodies of New Zealand White Rabbits. <i>Infection and Immunity</i> , 2019, 87, . | 1.0 | 5 |
| 61 | Proteome Dynamics and Bioinformatics Reveal Major Alterations in the Turnover Rate of Functionally Related Cardiac and Plasma Proteins in a Dog Model of Congestive Heart Failure. <i>Journal of Cardiac Failure</i> , 2022, 28, 588-600. | 0.7 | 4 |
| 62 | Shedding light on lipid metabolism in Kinetoplastida: A phylogenetic analysis of phospholipase D protein homologs. <i>Gene</i> , 2018, 656, 95-105. | 1.0 | 3 |
| 63 | Retained duplications and deletions of CYP2C genes among primates. <i>Molecular Phylogenetics and Evolution</i> , 2018, 125, 204-212. | 1.2 | 3 |
| 64 | The Role of the Vascular Endothelial Growth Factor (VEGF) Signaling in Biomineralization of the Oyster <i>Crassostrea gigas</i> . <i>Frontiers in Marine Science</i> , 2018, 5, . | 1.2 | 3 |
| 65 | Automated Isoform Diversity Detector (AIDD): a pipeline for investigating transcriptome diversity of RNA-seq data. <i>BMC Bioinformatics</i> , 2020, 21, 578. | 1.2 | 3 |
| 66 | Expanding Inclusivity with Learner-Generated Study Aids in Three Different Science Courses. <i>Journal of Chemical Education</i> , 2021, 98, 3379-3383. | 1.1 | 2 |
| 67 | Matchmaking in Bioinformatics. <i>F1000Research</i> , 2018, 7, 171. | 0.8 | 2 |
| 68 | Diversifying selection detected in only a minority of xenobiotic-metabolizing <i>CYP1-3</i> genes among primate species. <i>Xenobiotica</i> , 2020, 50, 1406-1412. | 0.5 | 1 |
| 69 | Coevolutionary Analysis Identifies Protein-Protein Interaction Sites between HIV-1 Reverse Transcriptase and Integrase. <i>Virus Evolution</i> , 2016, 2, vew002. | 2.2 | 0 |
| 70 | Identification Of Candidate Genes Contributing To Exercise Performance Phenotype Using Bioinformatics Analysis. <i>Medicine and Science in Sports and Exercise</i> , 2016, 48, 729. | 0.2 | 0 |
| 71 | ADAR Editing Landscapes Predict Biomarkers for Neuropsychiatric Disorders. <i>FASEB Journal</i> , 2020, 34, 1-1. | 0.2 | 0 |