Manyuan Long

List of Publications by Year in descending order

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119 papers 11,352 citations

50276 46 h-index 101 g-index

184 all docs

 $\frac{184}{\text{docs citations}}$

times ranked

184

10485 citing authors

| # | Article | IF | CITATIONS |
|----|--|--------------|-----------|
| 1 | Evolution of genes and genomes on the Drosophila phylogeny. Nature, 2007, 450, 203-218. | 27.8 | 1,886 |
| 2 | The origin of new genes: glimpses from the young and old. Nature Reviews Genetics, 2003, 4, 865-875. | 16.3 | 775 |
| 3 | Genomes of 13 domesticated and wild rice relatives highlight genetic conservation, turnover and innovation across the genus Oryza. Nature Genetics, 2018, 50, 285-296. | 21.4 | 413 |
| 4 | Retroposed New Genes Out of the X in Drosophila. Genome Research, 2002, 12, 1854-1859. | 5 . 5 | 399 |
| 5 | Natural Selection and the Origin of <i>jingwei</i> , a Chimeric Processed Functional Gene in <i>Drosophila</i> . Science, 1993, 260, 91-95. | 12.6 | 395 |
| 6 | Extensive Gene Traffic on the Mammalian X Chromosome. Science, 2004, 303, 537-540. | 12.6 | 387 |
| 7 | RNA-based gene duplication: mechanistic and evolutionary insights. Nature Reviews Genetics, 2009, 10, 19-31. | 16.3 | 374 |
| 8 | Intronâ€"exon structures of eukaryotic model organisms. Nucleic Acids Research, 1999, 27, 3219-3228. | 14.5 | 356 |
| 9 | The genome sequence of African rice (Oryza glaberrima) and evidence for independent domestication. Nature Genetics, 2014, 46, 982-988. | 21.4 | 342 |
| 10 | New genes as drivers of phenotypic evolution. Nature Reviews Genetics, 2013, 14, 645-660. | 16.3 | 313 |
| 11 | New Genes in <i>Drosophila</i> Quickly Become Essential. Science, 2010, 330, 1682-1685. | 12.6 | 280 |
| 12 | New Gene Evolution: Little Did We Know. Annual Review of Genetics, 2013, 47, 307-333. | 7.6 | 249 |
| 13 | Natural Selection Shapes Genome-Wide Patterns of Copy-Number Polymorphism in <i>Drosophila melanogaster</i>). Science, 2008, 320, 1629-1631. | 12.6 | 241 |
| 14 | High Rate of Chimeric Gene Origination by Retroposition in Plant Genomes. Plant Cell, 2006, 18, 1791-1802. | 6.6 | 207 |
| 15 | Generation of a Widespread <i>Drosophila</i> Inversion by a Transposable Element. Science, 1999, 285, 415-418. | 12.6 | 200 |
| 16 | Stage-Specific Expression Profiling of Drosophila Spermatogenesis Suggests that Meiotic Sex Chromosome Inactivation Drives Genomic Relocation of Testis-Expressed Genes. PLoS Genetics, 2009, 5, e1000731. | 3 . 5 | 191 |
| 17 | Chromosomal Redistribution of Male-Biased Genes in Mammalian Evolution with Two Bursts of Gene Gain on the X Chromosome. PLoS Biology, 2010, 8, e1000494. | 5.6 | 182 |
| 18 | Evolution of novel genes. Current Opinion in Genetics and Development, 2001, 11, 673-680. | 3.3 | 153 |

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|----|--|------|-----------|
| 19 | Accelerated Recruitment of New Brain Development Genes into the Human Genome. PLoS Biology, 2011, 9, e1001179. | 5.6 | 139 |
| 20 | Age-dependent chromosomal distribution of male-biased genes in <i>Drosophila</i> . Genome Research, 2010, 20, 1526-1533. | 5.5 | 134 |
| 21 | Origin of <i>sphinx</i> , a young chimeric RNA gene in <i>Drosophila</i> elanogaster. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4448-4453. | 7.1 | 127 |
| 22 | General gene movement off the X chromosome in the <i>Drosophila</i> genus. Genome Research, 2009, 19, 897-903. | 5.5 | 122 |
| 23 | Rapid evolution of protein diversity by de novo origination in Oryza. Nature Ecology and Evolution, 2019, 3, 679-690. | 7.8 | 121 |
| 24 | A Rice Gene of De Novo Origin Negatively Regulates Pathogen-Induced Defense Response. PLoS ONE, 2009, 4, e4603. | 2.5 | 114 |
| 25 | Evolving protein functional diversity in new genes of Drosophila. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16246-16250. | 7.1 | 105 |
| 26 | Retroposed New Genes Out of the X in <i>Drosophila</i> . Genome Research, 2002, 12, 1854-1859. | 5.5 | 99 |
| 27 | <i>Ontf-2r</i> , a Young Drosophila Retroposed Gene With Specific Male Expression Under Positive Darwinian Selection. Genetics, 2003, 164, 977-988. | 2.9 | 94 |
| 28 | The Origin of the Jingwei Gene and the Complex Modular Structure of Its Parental Gene, Yellow Emperor, in Drosophila melanogaster. Molecular Biology and Evolution, 2000, 17, 1294-1301. | 8.9 | 93 |
| 29 | Intron presence-absence polymorphism in Drosophila driven by positive Darwinian selection. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 8121-8126. | 7.1 | 91 |
| 30 | Dissection of patulin biosynthesis, spatial control and regulation mechanism in <i>Penicillium expansum</i> . Environmental Microbiology, 2019, 21, 1124-1139. | 3.8 | 91 |
| 31 | Duplication-degeneration as a mechanism of gene fission and the origin of new genes in Drosophila species. Nature Genetics, 2004, 36, 523-527. | 21.4 | 88 |
| 32 | New genes drive the evolution of gene interaction networks in the human and mouse genomes. Genome Biology, 2015, 16, 202. | 8.8 | 88 |
| 33 | Rapid Divergence of Gene Duplicates on the Drosophila melanogaster X Chromosome. Molecular Biology and Evolution, 2002, 19, 918-925. | 8.9 | 83 |
| 34 | Nucleotide Variation Along the Drosophila melanogaster Fourth Chromosome. Science, 2002, 295, 134-137. | 12.6 | 81 |
| 35 | Repetitive Element-Mediated Recombination as a Mechanism for New Gene Origination in Drosophila. PLoS Genetics, 2008, 4, e3. | 3.5 | 80 |
| 36 | The evolution of courtship behaviors through the origination of a new gene in <i>Drosophila</i> Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7478-7483. | 7.1 | 76 |

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|----|---|--------------|-----------|
| 37 | Evolution of the Phosphoglycerate mutase Processed Gene in Human and Chimpanzee Revealing the Origin of a New Primate Gene. Molecular Biology and Evolution, 2002, 19, 654-663. | 8.9 | 70 |
| 38 | Gene duplicates resolving sexual conflict rapidly evolved essential gametogenesis functions. Nature Ecology and Evolution, 2018, 2, 705-712. | 7.8 | 68 |
| 39 | GenTree, an integrated resource for analyzing the evolution and function of primate-specific coding genes. Genome Research, 2019, 29, 682-696. | 5 . 5 | 67 |
| 40 | Origin of new genes and source for N-terminal domain of the chimerical gene, jingwei, in Drosophila. Gene, 1999, 238, 135-141. | 2.2 | 66 |
| 41 | Extensive Structural Renovation of Retrogenes in the Evolution of the Populus Genome. Plant Physiology, 2009, 151, 1943-1951. | 4.8 | 66 |
| 42 | Direct Evidence for Postmeiotic Transcription During <i>Drosophila melanogaster</i> Spermatogenesis. Genetics, 2010, 186, 431-433. | 2.9 | 63 |
| 43 | Adaptive Evolution and the Birth of CTCF Binding Sites in the Drosophila Genome. PLoS Biology, 2012, 10, e1001420. | 5.6 | 60 |
| 44 | Retrogene movement within- and between-chromosomes in the evolution of Drosophila genomes. Gene, 2006, 385, 96-102. | 2,2 | 58 |
| 45 | New genes contribute to genetic and phenotypic novelties in human evolution. Current Opinion in Genetics and Development, 2014, 29, 90-96. | 3.3 | 56 |
| 46 | Introns and gene evolution. Genes To Cells, 1996, 1, 493-505. | 1.2 | 54 |
| 47 | Origin of New Genes: Evidence from Experimental and Computational Analyses. Genetica, 2003, 118, 171-182. | 1.1 | 54 |
| 48 | Recombination Yet Inefficient Selection along the Drosophila melanogaster Subgroup's Fourth Chromosome. Molecular Biology and Evolution, 2010, 27, 848-861. | 8.9 | 54 |
| 49 | New genes expressed in human brains: Implications for annotating evolving genomes. BioEssays, 2012, 34, 982-991. | 2.5 | 54 |
| 50 | Origination of an X-Linked Testes Chimeric Gene by Illegitimate Recombination in Drosophila. PLoS Genetics, 2006, 2, e77. | 3.5 | 51 |
| 51 | Testing the "Proto-splice Sites―Model of Intron Origin: Evidence from Analysis of Intron Phase Correlations. Molecular Biology and Evolution, 2000, 17, 1789-1796. | 8.9 | 47 |
| 52 | Expansion of genome coding regions by acquisition of new genes. Genetica, 2002, 115, 65-80. | 1.1 | 46 |
| 53 | Excess of Amino Acid Substitutions Relative to Polymorphism Between X-Linked Duplications in Drosophila melanogaster. Molecular Biology and Evolution, 2004, 22, 273-284. | 8.9 | 46 |
| 54 | Adaptive Evolution of the Insulin Two-Gene System in Mouse. Genetics, 2008, 178, 1683-1691. | 2.9 | 45 |

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|----|--|-----|-----------|
| 55 | Reshaping of global gene expression networks and sex-biased gene expression by integration of a young gene. EMBO Journal, 2012, 31, 2798-2809. | 7.8 | 44 |
| 56 | LTR-mediated retroposition as a mechanism of RNA-based duplication in metazoans. Genome Research, 2016, 26, 1663-1675. | 5.5 | 42 |
| 57 | Retrogenes Moved Out of the Z Chromosome in the Silkworm. Journal of Molecular Evolution, 2012, 74, 113-126. | 1.8 | 41 |
| 58 | Recurrent Tandem Gene Duplication Gave Rise to Functionally Divergent Genes in Drosophila. Molecular Biology and Evolution, 2008, 25, 1451-1458. | 8.9 | 37 |
| 59 | The Subtelomere of Oryza sativa Chromosome 3 Short Arm as a Hot Bed of New Gene Origination in Rice. Molecular Plant, 2008, 1, 839-850. | 8.3 | 36 |
| 60 | The rapid generation of chimerical genes expanding protein diversity in zebrafish. BMC Genomics, 2010, 11, 657. | 2.8 | 36 |
| 61 | Re-analysis of the larval testis data on meiotic sex chromosome inactivation revealed evidence for tissue-specific gene expression related to the drosophila X chromosome. BMC Biology, 2012, 10, 49; author reply 50. | 3.8 | 36 |
| 62 | Nucleotide Variation and Conservation at the <i>dpp</i> Locus, a Gene Controlling Early Development in Drosophila. Genetics, 1997, 145, 311-323. | 2.9 | 36 |
| 63 | Drosophila Duplication Hotspots Are Associated with Late-Replicating Regions of the Genome. PLoS Genetics, 2011, 7, e1002340. | 3.5 | 31 |
| 64 | Codon usage divergence of homologous vertebrate genes and codon usage clock. Journal of Molecular Evolution, 1991, 32, 6-15. | 1.8 | 30 |
| 65 | Frequent Recent Origination of Brain Genes Shaped the Evolution of Foraging Behavior in Drosophila. Cell Reports, 2012, 1, 118-132. | 6.4 | 30 |
| 66 | Origins of New Male Germ-line Functions from X-Derived Autosomal Retrogenes in the Mouse. Molecular Biology and Evolution, 2007, 24, 2242-2253. | 8.9 | 28 |
| 67 | Rapid Evolution of Gained Essential Developmental Functions of a Young Gene via Interactions with Other Essential Genes. Molecular Biology and Evolution, 2019, 36, 2212-2226. | 8.9 | 28 |
| 68 | New Genes Interacted With Recent Whole-Genome Duplicates in the Fast Stem Growth of Bamboos. Molecular Biology and Evolution, 2021, 38, 5752-5768. | 8.9 | 28 |
| 69 | Genomic analyses of new genes and their phenotypic effects reveal rapid evolution of essential functions in Drosophila development. PLoS Genetics, 2021, 17, e1009654. | 3.5 | 27 |
| 70 | Origin of new genes: evidence from experimental and computational analyses. Genetica, 2003, 118, 171-82. | 1.1 | 27 |
| 71 | Nucleotide Variation and Recombination Along the Fourth Chromosome in Drosophila simulans. Genetics, 2004, 166, 1783-1794. | 2.9 | 25 |
| 72 | Sex Chromosomes and Male Functions: Where Do New Genes Go?. Cell Cycle, 2004, 3, 871-873. | 2.6 | 25 |

| # | Article | IF | Citations |
|----|--|--------------|-----------|
| 73 | The Origin and Evolution of New Genes. Methods in Molecular Biology, 2012, 856, 161-186. | 0.9 | 23 |
| 74 | Evolutionary Dynamics of Abundant 7-bp Satellites in the Genome of (i) Drosophila virilis (i). Molecular Biology and Evolution, 2020, 37, 1362-1375. | 8.9 | 23 |
| 75 | A role for convergent evolution in the secretory life of cells. Trends in Cell Biology, 2007, 17, 157-164. | 7.9 | 22 |
| 76 | A long-term demasculinization of X-linked intergenic noncoding RNAs in Drosophila melanogaster. Genome Research, 2014, 24, 629-638. | 5 . 5 | 22 |
| 77 | Highly Tissue Specific Expression of Sphinx Supports Its Male Courtship Related Role in Drosophila melanogaster. PLoS ONE, 2011, 6, e18853. | 2.5 | 22 |
| 78 | Detection of intergenic non-coding RNAs expressed in the main developmental stages in Drosophila melanogaster. Nucleic Acids Research, 2009, 37, 4308-4314. | 14.5 | 21 |
| 79 | Origination and evolution of orphan genes and de novo genes in the genome of Caenorhabditis elegans. Science China Life Sciences, 2019, 62, 579-593. | 4.9 | 21 |
| 80 | Isolation of Caenorhabditis elegans mutants lacking alcohol dehydrogenase activity. Biochemical Genetics, 1991, 29, 313-323. | 1.7 | 20 |
| 81 | Aspartyl proteinase genes from apicomplexan parasites: evidence for evolution of the gene structure. Trends in Parasitology, 2001, 17, 491-498. | 3.3 | 20 |
| 82 | Mutational bias shaping fly copy number variation: implications for genome evolution. Trends in Genetics, 2010, 26, 243-247. | 6.7 | 20 |
| 83 | Delta-Interacting Protein A and the Origin of Hepatitis Delta Antigen. Science, 1997, 276, 824-825. | 12.6 | 19 |
| 84 | The Yeast Splice Site Revisited: New Exon Consensus from Genomic Analysis. Cell, 1997, 91, 739-740. | 28.9 | 19 |
| 85 | Evolution of Gene Structural Complexity: An Alternative-Splicing-Based Model Accounts for Intron-Containing Retrogenes Â. Plant Physiology, 2014, 165, 412-423. | 4.8 | 19 |
| 86 | Evolution of Enzymatic Activities of Testis-Specific Short-Chain Dehydrogenase/Reductase in Drosophila. Journal of Molecular Evolution, 2010, 71, 241-249. | 1.8 | 18 |
| 87 | A cautionary note for retrocopy identification: DNA-based duplication of intron-containing genes significantly contributes to the origination of single exon genes. Bioinformatics, 2011, 27, 1749-1753. | 4.1 | 18 |
| 88 | An Intronic Signal for Alternative Splicing in the Human Genome. PLoS ONE, 2007, 2, e1246. | 2.5 | 17 |
| 89 | The correlation between introns and the three-dimensional structure of proteins. Gene, 1997, 205, 141-144. | 2.2 | 16 |
| 90 | Whole genome-wide chromosome fusion and new gene birth in the Monopterus albus genome. Cell and Bioscience, 2020, 10, 67. | 4.8 | 16 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 91 | Dynamic programming procedure for searching optimal models to estimate substitution rates based on the maximum-likelihood method. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7860-7865. | 7.1 | 15 |
| 92 | Species-specific partial gene duplication in <i>Arabidopsis thaliana</i> evolved novel phenotypic effects on morphological traits under strong positive selection. Plant Cell, 2022, 34, 802-817. | 6.6 | 15 |
| 93 | Positive selection for the male functionality of a co-retroposed gene in the hominoids. BMC Evolutionary Biology, 2009, 9, 252. | 3.2 | 14 |
| 94 | Nucleotide Variation and Recombination Along the Fourth Chromosome in <i>Drosophila simulans</i> . Genetics, 2004, 166, 1783-1794. | 2.9 | 13 |
| 95 | Evolutionary Patterns of RNA-Based Duplication in Non-Mammalian Chordates. PLoS ONE, 2011, 6, e21466. | 2.5 | 13 |
| 96 | Side effects of Tamiflu: clues from an Asian single nucleotide polymorphism. Cell Research, 2007, 17, 309-310. | 12.0 | 12 |
| 97 | High Occurrence of Functional New Chimeric Genes in Survey of Rice Chromosome 3 Short Arm Genome Sequences. Genome Biology and Evolution, 2013, 5, 1038-1048. | 2.5 | 11 |
| 98 | Genetic Architecture of Natural Variation Underlying Adult Foraging Behavior That Is Essential for Survival of Drosophila melanogaster. Genome Biology and Evolution, 2017, 9, 1357-1369. | 2.5 | 11 |
| 99 | Intron-exon structures. Advances in Genome Biology, 1998, , 143-178. | 0.3 | 10 |
| 100 | A Microarray Based Genomic Hybridization Method for Identification of New Genes in Plants: Case Analyses of Arabidopsis and Oryza. Journal of Integrative Plant Biology, 2007, 49, 915-926. | 8.5 | 10 |
| 101 | Meiotic Sex Chromosome Inactivation: Compensation by Gene Traffic. Current Biology, 2017, 27, R659-R661. | 3.9 | 9 |
| 102 | Evolutionary interactions between sex chromosomes and autosomes. , 2012, , 101-114. | | 9 |
| 103 | Topological evolution of coexpression networks by new gene integration maintains the hierarchical and modular structures in human ancestors. Science China Life Sciences, 2019, 62, 594-608. | 4.9 | 8 |
| 104 | A New Retroposed Gene in Drosophila Heterochromatin Detected by Microarray-Based Comparative Genomic Hybridization. Journal of Molecular Evolution, 2007, 64, 272-283. | 1.8 | 7 |
| 105 | New genes important for development. EMBO Reports, 2014, 15, 460-461. | 4.5 | 7 |
| 106 | Retrogene Duplication and Expression Patterns Shaped by the Evolution of Sex Chromosomes in Malaria Mosquitoes. Genes, 2022, 13, 968. | 2.4 | 7 |
| 107 | Gene fusion as an important mechanism to generate new genes in the genus Oryza. Genome Biology, 2022, 23, . | 8.8 | 7 |
| 108 | Roles of young serine-endopeptidase genes in survival and reproduction revealed rapid evolution of phenotypic effects at adult stages. Fly, 2011, 5, 345-351. | 1.7 | 5 |

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|-----|---|-----|-----------|
| 109 | Significant divergence of sex-related non-coding RNA expression patterns among closely related species in Drosophila. Science Bulletin, 2007, 52, 748-754. | 1.7 | 3 |
| 110 | Rapid Gene Evolution in an Ancient Post-transcriptional and Translational Regulatory System Compensates for Meiotic X Chromosomal Inactivation. Molecular Biology and Evolution, 2022, 39, . | 8.9 | 3 |
| 111 | Deficiency of X-Linked Inverted Duplicates with Male-Biased Expression and the Underlying Evolutionary Mechanisms in the Drosophila Genome. Molecular Biology and Evolution, 2011, 28, 2823-2832. | 8.9 | 2 |
| 112 | Why rodent pseudogenes refuse to retire. Genome Biology, 2012, 13, 178. | 9.6 | 2 |
| 113 | Expressed Structurally Stable Inverted Duplicates in Mammalian Genomes as Functional Noncoding Elements. Genome Biology and Evolution, 2017, 9, 981-992. | 2.5 | 2 |
| 114 | Male non-coding RNA genes identified by comparative genomic analysis of the Drosophila genomes. Science Bulletin, 2007, 52, 721-724. | 1.7 | 1 |
| 115 | Segmental dataset and whole body expression data do not support the hypothesis that non-random movement is an intrinsic property of Drosophila retrogenes. BMC Evolutionary Biology, 2012, 12, 169. | 3.2 | 1 |
| 116 | V.6. Evolution of New Genes. , 2013, , 406-412. | | 1 |
| 117 | Evolution of genes and genomes: an emerging paradigm in life science. Science China Life Sciences, 2019, 62, 435-436. | 4.9 | 1 |
| 118 | A zebrafish-specific chimeric gene evolved essential developmental functions: discussion of conceptual significance. Science China Life Sciences, 2021, 64, 840-842. | 4.9 | 1 |
| 119 | Rapid Cis–Trans Coevolution Driven by a Novel Gene Retroposed from a Eukaryotic Conserved CCR4–NOT Component in Drosophila. Genes, 2022, 13, 57. | 2.4 | 1 |