# Megerditch Kiledjian

List of Publications by Year
in descending order



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|---|---|---|---|
| 74 papers | 5,918 citations | 87723 38 h-index | 79541 73 g-index |
| 152 all docs | 152 docs citations | 152 times ranked | 5551 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Reversible methylation of m6Am in the 5â€² cap controls mRNA stability. Nature, 2017, 541, 371-375. | 13.7 | 797 |
| 2 | The hDcp2 protein is a mammalian mRNA decapping enzyme. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12663-12668. | 3.3 | 294 |
| 3 | Differential regulation of microRNA stability. Rna, 2010, 16, 1032-1039. | 1.6 | 253 |
| 4 | An mRNA Stability Complex Functions with Poly(A)-Binding Protein To Stabilize mRNA In Vitro. Molecular and Cellular Biology, 1999, 19, 4552-4560. | 1.1 | 226 |
| 5 | Functional Link between the Mammalian Exosome and mRNA Decapping. Cell, 2001, 107, 751-762. | 13.5 | 224 |
| 6 | The scavenger mRNA decapping enzyme DcpS is a member of the HIT family of pyrophosphatases. EMBO Journal, 2002, 21, 4699-4708. | 3.5 | 224 |
| 7 | A long noncoding RNA associated with susceptibility to celiac disease. Science, 2016, 352, 91-95. | 6.0 | 211 |
| 8 | 5â€² End Nicotinamide Adenine Dinucleotide Cap in Human Cells Promotes RNA Decay through DXO-Mediated deNADding. Cell, 2017, 168, 1015-1027.e10. | 13.5 | 184 |
| 9 | Structure and function of the 5â€²â†’3â€² exoribonuclease Rat1 and its activating partner Rai1. Nature, 2009, 458, 784-788. | 13.7 | 177 |
| 10 | Analysis of recombinant yeast decapping enzyme. Rna, 2003, 9, 231-238. | 1.6 | 155 |
| 11 | Identification of a quality-control mechanism for mRNA 5â€²-end capping. Nature, 2010, 467, 608-611. | 13.7 | 150 |
| 12 | Multiple mRNA Decapping Enzymes in Mammalian Cells. Molecular Cell, 2010, 40, 423-432. | 4.5 | 133 |
| 13 | A Mammalian Pre-mRNA 5â€² End Capping Quality Control Mechanism and an Unexpected Link of Capping to Pre-mRNA Processing. Molecular Cell, 2013, 50, 104-115. | 4.5 | 129 |
| 14 | DcpS as a Therapeutic Target for Spinal Muscular Atrophy. ACS Chemical Biology, 2008, 3, 711-722. | 1.6 | 120 |
| 15 | Multiple Nudix family proteins possess mRNA decapping activity. Rna, 2013, 19, 390-399. | 1.6 | 120 |
| 16 | Regulation of mRNA decapping. Wiley Interdisciplinary Reviews RNA, 2010, 1, 253-265. | 3.2 | 119 |
| 17 | New insights into decapping enzymes and selective <scp>mRNA</scp> decay. Wiley Interdisciplinary Reviews RNA, 2017, 8, e1379. | 3.2 | 118 |
| 18 | Insights into the Structure, Mechanism, and Regulation of Scavenger mRNA Decapping Activity. Molecular Cell, 2004, 14, 67-80. | 4.5 | 114 |

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|---|---|---|---|
| 19 | 3â€² Terminal oligo U-tract-mediated stimulation of decapping. Rna, 2007, 13, 2356-2365. | 1.6 | 110 |
| 20 | Functional characterization of the mammalian mRNA decapping enzyme hDcp2. Rna, 2003, 9, 1138-1147. | 1.6 | 105 |
| 21 | Identification of Target Messenger RNA Substrates for the Murine Deleted in Azoospermia-Like RNA-Binding Protein1. Biology of Reproduction, 2002, 66, 475-485. | 1.2 | 97 |
| 22 | Dxo1 is a new type of eukaryotic enzyme with both decapping and 5â€²-3â€² exoribonuclease activity. Nature Structural and Molecular Biology, 2012, 19, 1011-1017. | 3.6 | 93 |
| 23 | The DcpS inhibitor RG3039 improves survival, function and motor unit pathologies in two SMA mouse models. Human Molecular Genetics, 2013, 22, 4084-4101. | 1.4 | 78 |
| 24 | Identification of an erythroid-enriched endoribonuclease activity involved in specific mRNA cleavage. EMBO Journal, 2000, 19, 295-305. | 3.5 | 73 |
| 25 | Functional analysis of mRNA scavenger decapping enzymes. Rna, 2004, 10, 1412-1422. | 1.6 | 71 |
| 26 | Drosophila processing bodies in oogenesis. Developmental Biology, 2008, 322, 276-288. | 0.9 | 71 |
| 27 | The ROQ domain of Roquin recognizes mRNA constitutive-decay element and double-stranded RNA. Nature Structural and Molecular Biology, 2014, 21, 679-685. | 3.6 | 71 |
| 28 | CapZyme-Seq Comprehensively Defines Promoter-Sequence Determinants for RNA 5â€² Capping with NAD+. Molecular Cell, 2018, 70, 553-564.e9. | 4.5 | 64 |
| 29 | Eukaryotic RNA 5â€²-End NAD + Capping and DeNADding. Trends in Cell Biology, 2018, 28, 454-464. | 3.6 | 64 |
| 30 | Highly efficient 5' capping of mitochondrial RNA with NAD+ and NADH by yeast and human mitochondrial RNA polymerase. ELife, 2018, 7, . | 2.8 | 64 |
| 31 | Differential utilization of decapping enzymes in mammalian mRNA decay pathways. Rna, 2011, 17, 419-428. | 1.6 | 60 |
| 32 | Transcript-Specific Decapping and Regulated Stability by the Human Dcp2 Decapping Protein. Molecular and Cellular Biology, 2008, 28, 939-948. | 1.1 | 57 |
| 33 | Poly(A)-binding-protein-mediated regulation of hDcp2 decapping in vitro. EMBO Journal, 2004, 23, 1968-1976. | 3.5 | 54 |
| 34 | Analysis of the human liver/bone/kidney alkaline phosphatase promoterin vivoandin vitro. Nucleic Acids Research, 1990, 18, 957-961. | 6.5 | 52 |
| 35 | Thalamic WNT3 Secretion Spatiotemporally Regulates the Neocortical Ribosome Signature and mRNA Translation to Specify Neocortical Cell Subtypes. Journal of Neuroscience, 2015, 35, 10911-10926. | 1.7 | 50 |
| 36 | Nudt3 is an mRNA decapping enzyme that modulates cell migration. Rna, 2016, 22, 773-781. | 1.6 | 50 |

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| 37 | Structural and mechanistic basis of mammalian Nudt12 RNA deNADding. Nature Chemical Biology, 2019, 15, 575-582. | 3.9 | 49 |
| 38 | Mammalian Nudix proteins cleave nucleotide metabolite caps on RNAs. Nucleic Acids Research, 2020, 48, 6788-6798. | 6.5 | 46 |
| 39 | Finding the right RNA: Identification of cellular mRNA substrates for RNA-binding proteins. Rna, 1999, 5, 1071-1082. | 1.6 | 44 |
| 40 | Mutations in DCPS and EDC3 in autosomal recessive intellectual disability indicate a crucial role for mRNA decapping in neurodevelopment. Human Molecular Genetics, 2015, 24, 3172-3180. | 1.4 | 40 |
| 41 | Dcp2 Decaps m2,2,7GpppN-Capped RNAs, and Its Activity Is Sequence and Context Dependent. Molecular and Cellular Biology, 2005, 25, 8779-8791. | 1.1 | 39 |
| 42 | Scavenger Decapping Activity Facilitates 5â€² to 3â€² mRNA Decay. Molecular and Cellular Biology, 2005, 25, 9764-9772. | 1.1 | 38 |
| 43 | Identification of an mRNA-Decapping Regulator Implicated in X-Linked Mental Retardation. Molecular Cell, 2006, 24, 713-722. | 4.5 | 37 |
| 44 | DcpS scavenger decapping enzyme can modulate pre-mRNA splicing. Rna, 2008, 14, 1132-1142. | 1.6 | 35 |
| 45 | Dcp2 Decapping Protein Modulates mRNA Stability of the Critical Interferon Regulatory Factor (IRF) IRF-7. Molecular and Cellular Biology, 2012, 32, 1164-1172. | 1.1 | 34 |
| 46 | Activation of 5â€²-3â€² exoribonuclease Xrn1 by cofactor Dcs1 is essential for mitochondrial function in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 8264-8269. | 3.3 | 34 |
| 47 | DcpS, a general modulator of cap-binding protein-dependent processes?. RNA Biology, 2008, 5, 216-219. | 1.5 | 33 |
| 48 | Structure and Function of Pre-mRNA 5â€²-End Capping Quality Control and 3â€²-End Processing. Biochemistry, 2014, 53, 1882-1898. | 1.2 | 33 |
| 49 | â€œNAD-capQâ€•detection and quantitation of NAD caps. Rna, 2018, 24, 1418-1425. | 1.6 | 33 |
| 50 | Regulated alpha-globin mRNA decay is a cytoplasmic event proceeding through 3'-to-5' exosome-dependent decapping. Rna, 2002, 8, 1526-37. | 1.6 | 33 |
| 51 | Identification of a Complex that Binds to the CD154 3â€² Untranslated Region: Implications for a Role in Message Stability During T Cell Activation. Journal of Immunology, 2000, 165, 4478-4486. | 0.4 | 30 |
| 52 | InsP<sub>7</sub>is a small-molecule regulator of NUDT3-mediated mRNA decapping and processing-body dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 19245-19253. | 3.3 | 27 |
| 53 | DXO/Rai1 enzymes remove 5â€²-end FAD and dephospho-CoA caps on RNAs. Nucleic Acids Research, 2020, 48, 6136-6148. | 6.5 | 27 |
| 54 | Modulation of Neuritogenesis by a Protein Implicated in X-Linked Mental Retardation. Journal of Neuroscience, 2009, 29, 12419-12427. | 1.7 | 26 |

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| 55 | Mutational analysis of a Dcp2-binding element reveals general enhancement of decapping by 5â€²-end stem-loop structures. Nucleic Acids Research, 2009, 37, 2227-2237. | 6.5 | 25 |
| 56 | Purification and RNA Binding Properties of the Polycytidylate-Binding Proteins Î±CP1 and Î±CP2. Methods, 1999, 17, 84-91. | 1.9 | 23 |
| 57 | DcpS is a transcript-specific modulator of RNA in mammalian cells. Rna, 2015, 21, 1306-1312. | 1.6 | 22 |
| 58 | Characterization and Purification of a Mammalian Endoribonuclease Specific for the Î±-Globin mRNA. Journal of Biological Chemistry, 2002, 277, 2597-2604. | 1.6 | 20 |
| 59 | Mechanistic and Kinetic Analysis of the DcpS Scavenger Decapping Enzyme. Journal of Biological Chemistry, 2008, 283, 16427-16436. | 1.6 | 18 |
| 60 | Nicotinamide-Containing Di- and Trinucleotides as Chemical Tools for Studies of NAD-Capped RNAs. Organic Letters, 2018, 20, 7650-7655. | 2.4 | 17 |
| 61 | Structural and biochemical studies of the distinct activity profiles of Rai1 enzymes. Nucleic Acids Research, 2015, 43, 6596-6606. | 6.5 | 16 |
| 62 | Chapter 1 Analysis of mRNA Decapping. Methods in Enzymology, 2008, 448, 3-21. | 0.4 | 15 |
| 63 | Xrn1 is a deNADding enzyme modulating mitochondrial NAD-capped RNA. Nature Communications, 2022, 13, 889. | 5.8 | 15 |
| 64 | A View to a Kill: Structure of the RNA Exosome. Cell, 2006, 127, 1093-1095. | 13.5 | 13 |
| 65 | More than 1 + 2 in mRNA decapping. Nature Structural and Molecular Biology, 2006, 13, 7-9. | 3.6 | 12 |
| 66 | Recent insights into noncanonical 5â€² capping and decapping of RNA. Journal of Biological Chemistry, 2022, 298, 102171. | 1.6 | 10 |
| 67 | An Erythroid-Enriched Endoribonuclease (ErEN) Involved in α -Globin mRNA Turnover. Protein and Peptide Letters, 2007, 14, 131-136. | 0.4 | 8 |
| 68 | Normal and Aberrantly Capped mRNA Decapping. The Enzymes, 2012, 31, 165-180. | 0.7 | 6 |
| 69 | The Poly(A)-Binding Protein and an mRNA Stability Protein Jointly Regulate an Endoribonuclease Activity. Molecular and Cellular Biology, 2000, 20, 6334-6341. | 1.1 | 6 |
| 70 | Preface. Methods in Enzymology, 2008, 449, xvii-xviii. | 0.4 | 5 |
| 71 | Tri- to be Mono- for Bacterial mRNA Decay. Structure, 2009, 17, 317-319. | 1.6 | 4 |
| 72 | Decapper Comes into Focus. Structure, 2006, 14, 171-172. | 1.6 | 2 |

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|---|---|---|---|
| 73 | mRNA-Decapping Associated DcpS Enzyme Controls Critical Steps of Neuronal Development. Cerebral Cortex, 2022, 32, 1494-1507. | 1.6 | 2 |
| 74 | Twenty years of RNA and mRNA decay. Rna, 2015, 21, 664-666. | 1.6 | 0 |