# Hubert Dominique Becker

List of Publications by Year
in descending order



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|---|---|---|---|
| 46 papers | 1,886 citations | 236925 25 h-index | 254184 43 g-index |
| 47 all docs | 47 docs citations | 47 times ranked | 1277 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Thermus thermophilus: A link in evolution of the tRNA-dependent amino acid amidation pathways. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 12832-12837. | 7.1 | 153 |
| 2 | Domain-specific recruitment of amide amino acids for protein synthesis. Nature, 2000, 407, 106-110. | 27.8 | 152 |
| 3 | The Adaptor hypothesis revisited. Trends in Biochemical Sciences, 2000, 25, 311-316. | 7.5 | 118 |
| 4 | Yeast mitochondrial Gln-tRNA<sup>Gln</sup> is generated by a GatFAB-mediated transamidation pathway involving Arc1p-controlled subcellular sorting of cytosolic GluRS. Genes and Development, 2009, 23, 1119-1130. | 5.9 | 80 |
| 5 | One Polypeptide with Two Aminoacyl-tRNA Synthetase Activities. Science, 2000, 287, 479-482. | 12.6 | 76 |
| 6 | A Single Amidotransferase Forms Asparaginyl-tRNA and Glutaminyl-tRNA in Chlamydia trachomatis. Journal of Biological Chemistry, 2001, 276, 45862-45867. | 3.4 | 71 |
| 7 | When contemporary aminoacyl-tRNA synthetases invent their cognate amino acid metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9837-9842. | 7.1 | 71 |
| 8 | The Transamidosome: A Dynamic Ribonucleoprotein Particle Dedicated to Prokaryotic tRNA-Dependent Asparagine Biosynthesis. Molecular Cell, 2007, 28, 228-239. | 9.7 | 70 |
| 9 | Identity of Prokaryotic and Eukaryotic tRNAAspfor Aminoacylation by Aspartyl-tRNA Synthetase fromThermus thermophilusâ€. Biochemistry, 1996, 35, 7447-7458. | 2.5 | 67 |
| 10 | Existence of Two Distinct Aspartyl-tRNA Synthetases inThermus thermophilus. Structural and Biochemical Properties of the Two Enzymesâ€. Biochemistry, 1997, 36, 8785-8797. | 2.5 | 61 |
| 11 | Dual-targeted tRNA-dependent amidotransferase ensures both mitochondrial and chloroplastic Gln-tRNA <sup>Gln</sup> synthesis in plants. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6481-6485. | 7.1 | 61 |
| 12 | Thermus thermophilusContains an Eubacterial and an Archaebacterial Aspartyl-tRNA Synthetaseâ€,â€¡. Biochemistry, 2000, 39, 3216-3230. | 2.5 | 54 |
| 13 | From The Cover: An aminoacyl-tRNA synthetase-like protein encoded by the Escherichia coli yadB gene glutamylates specifically tRNAAsp. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7530-7535. | 7.1 | 50 |
| 14 | A single tRNA base pair mediates bacterial tRNA-dependent biosynthesis of asparagine. Nucleic Acids Research, 2006, 34, 6083-6094. | 14.5 | 47 |
| 15 | The Escherichia coli YadB Gene Product Reveals a Novel Aminoacyl-tRNA Synthetase Like Activity. Journal of Molecular Biology, 2004, 337, 273-283. | 4.2 | 45 |
| 16 | A minimalist glutamyl-tRNA synthetase dedicated to aminoacylation of the tRNAAsp QUC anticodon. Nucleic Acids Research, 2004, 32, 2768-2775. | 14.5 | 43 |
| 17 | Crystal structure of a transfer-ribonucleoprotein particle that promotes asparagine formation. EMBO Journal, 2010, 29, 3118-3129. | 7.8 | 43 |
| 18 | Expression of Nuclear and Mitochondrial Genes Encoding ATP Synthase Is Synchronized by Disassembly of a Multisynthetase Complex. Molecular Cell, 2014, 56, 763-776. | 9.7 | 43 |

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|---|---|---|---|
| 19 | The heterotrimericThermus thermophilusAsp-tRNAAsnamidotransferase can also generate Gln-tRNAGln. FEBS Letters, 2000, 476, 140-144. | 2.8 | 41 |
| 20 | Structural elements defining elongation factor Tu mediated suppression of codon ambiguity. Nucleic Acids Research, 2007, 35, 3420-3430. | 14.5 | 41 |
| 21 | Archaeal Aminoacyl-tRNA Synthesis: Diversity Replaces Dogma. Genetics, 1999, 152, 1269-1276. | 2.9 | 40 |
| 22 | On the role of an unusual tRNAGly isoacceptor in Staphylococcus aureus. Biochimie, 2009, 91, 344-351. | 2.6 | 37 |
| 23 | Deinococcus glutaminyl-tRNA synthetase is a chimer between proteins from an ancient and the modern pathways of aminoacyl-tRNA formation. Nucleic Acids Research, 2007, 35, 1421-1431. | 14.5 | 34 |
| 24 | A dualâ€specific Gluâ€tRNA<sup>Gln</sup> and Aspâ€tRNA<sup>Asn</sup> amidotransferase is involved in decoding glutamine and asparagine codons in <i>Acidithiobacillus ferrooxidans</i>. FEBS Letters, 2001, 500, 129-131. | 2.8 | 33 |
| 25 | De Novo and Bi-allelic Pathogenic Variants in NARS1 Cause Neurodevelopmental Delay Due to Toxic Gain-of-Function and Partial Loss-of-Function Effects. American Journal of Human Genetics, 2020, 107, 311-324. | 6.2 | 32 |
| 26 | Glu-Q-tRNAAsp synthetase coded by the yadB gene, a new paralog of aminoacyl-tRNA synthetase that glutamylates tRNAAsp anticodon. Biochimie, 2005, 87, 847-861. | 2.6 | 31 |
| 27 | Two-codon T-box riboswitch binding two tRNAs. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12756-12761. | 7.1 | 28 |
| 28 | Translating organellar glutamine codons : A case by case scenario?. RNA Biology, 2009, 6, 31-34. | 3.1 | 24 |
| 29 | Context-dependent anticodon recognition by class I lysyl-tRNA synthetases. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 14224-14228. | 7.1 | 21 |
| 30 | The asparagine-transamidosome from Helicobacter pylori : a dual-kinetic mode in non-discriminating aspartyl-tRNA synthetase safeguards the genetic code. Nucleic Acids Research, 2012, 40, 4965-4976. | 14.5 | 20 |
| 31 | Assigning mitochondrial localization of dual localized proteins using a yeast Bi-Genomic Mitochondrial-Split-GFP. ELife, 2020, 9, . | 6.0 | 20 |
| 32 | Exploring the evolutionary diversity and assembly modes of multiâ€aminoacylâ€tRNA synthetase complexes: Lessons from unicellular organisms. FEBS Letters, 2014, 588, 4268-4278. | 2.8 | 19 |
| 33 | Riboswitch (T-box)-mediated Control of tRNA-dependent Amidation in Clostridium acetobutylicum Rationalizes Gene and Pathway Redundancy for Asparagine and Asparaginyl-tRNAAsn Synthesis. Journal of Biological Chemistry, 2012, 287, 20382-20394. | 3.4 | 18 |
| 34 | Crystal Structure of Glutamyl-Queuosine tRNAAsp Synthetase Complexed with l-Glutamate: Structural Elements Mediating tRNA-Independent Activation of Glutamate and Glutamylation of tRNAAsp Anticodon. Journal of Molecular Biology, 2008, 381, 1224-1237. | 4.2 | 17 |
| 35 | Idiosyncrasies in decoding mitochondrial genomes. Biochimie, 2014, 100, 95-106. | 2.6 | 17 |
| 36 | Arc1p: Anchoring, routing, coordinating. FEBS Letters, 2010, 584, 427-433. | 2.8 | 16 |

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|---|---|---|---|
| 37 | Improvement of Mitochondria Extract from<i>Saccharomyces cerevisiae</i>Characterization in Shotgun Proteomics Using Sheathless Capillary Electrophoresis Coupled to Tandem Mass Spectrometry. Journal of Chromatographic Science, 2016, 54, 653-663. | 1.4 | 16 |
| 38 | Nonconventional localizations of cytosolic aminoacyl-tRNA synthetases in yeast and human cells. Methods, 2017, 113, 91-104. | 3.8 | 15 |
| 39 | Cytosolic aminoacyl-tRNA synthetases: Unanticipated relocations for unexpected functions. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2018, 1861, 387-400. | 1.9 | 15 |
| 40 | Crystal structure of Cex1p reveals the mechanism of tRNA trafficking between nucleus and cytoplasm. Nucleic Acids Research, 2013, 41, 3901-3914. | 14.5 | 13 |
| 41 | Crystal structure of Saccharomyces cerevisiae mitochondrial GatFAB reveals a novel subunit assembly in tRNA-dependent amidotransferases. Nucleic Acids Research, 2014, 42, 6052-6063. | 14.5 | 12 |
| 42 | RNA-dependent sterol aspartylation in fungi. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14948-14957. | 7.1 | 11 |
| 43 | Disorder Can Exist inside Well-Diffracting Crystals. Crystal Growth and Design, 2007, 7, 2195-2197. | 3.0 | 5 |
| 44 | Noncanonical inputs and outputs of tRNA aminoacylation. The Enzymes, 2020, 48, 117-147. | 1.7 | 3 |
| 45 | Crystallization and preliminary X-ray characterization of the atypical glutaminyl-tRNA synthetase fromDeinococcus radiodurans. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 2361-2363. | 2.5 | 2 |
| 46 | Cex1 is a component of the COPI intracellular trafficking machinery. Biology Open, 2021, 10, . | 1.2 | 0 |