

Shuya Fukai

List of Publications by Year in descending order

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93
papers

5,965
citations

71102

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h-index

74163

75
g-index

95
all docs

95
docs citations

95
times ranked

9529
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Crystal Structure of the Complex of Human Epidermal Growth Factor and Receptor Extracellular Domains. <i>Cell</i> , 2002, 110, 775-787. | 28.9 | 1,013 |
| 2 | Enzyme Structure with Two Catalytic Sites for Double-Sieve Selection of Substrate. <i>Science</i> , 1998, 280, 578-582. | 12.6 | 347 |
| 3 | Structural basis for specific cleavage of Lys ⁶³ -linked polyubiquitin chains. <i>Nature</i> , 2008, 455, 358-362. | 27.8 | 300 |
| 4 | Structural Basis for Double-Sieve Discrimination of L-Valine from L-Isoleucine and L-Threonine by the Complex of tRNA ^{Val} and Valyl-tRNA Synthetase. <i>Cell</i> , 2000, 103, 793-803. | 28.9 | 268 |
| 5 | Crystal Structure of the Homologous-Pairing Domain from the Human Rad52 Recombinase in the Undecameric Form. <i>Molecular Cell</i> , 2002, 10, 359-371. | 9.7 | 210 |
| 6 | Conformational transition of Sec machinery inferred from bacterial SecYE structures. <i>Nature</i> , 2008, 455, 988-991. | 27.8 | 206 |
| 7 | Structure and function of a membrane component SecDF that enhances protein export. <i>Nature</i> , 2011, 474, 235-238. | 27.8 | 202 |
| 8 | Structural basis for specific recognition of Lys 63-linked polyubiquitin chains by tandem UIMs of RAP80. <i>EMBO Journal</i> , 2009, 28, 2461-2468. | 7.8 | 180 |
| 9 | Crystal structure of the MgtE Mg ²⁺ transporter. <i>Nature</i> , 2007, 448, 1072-1075. | 27.8 | 166 |
| 10 | Snapshots of tRNA sulphuration via an adenylated intermediate. <i>Nature</i> , 2006, 442, 419-424. | 27.8 | 123 |
| 11 | Structural basis for specific recognition of Lys 63-linked polyubiquitin chains by NZF domains of TAB2 and TAB3. <i>EMBO Journal</i> , 2009, 28, 3903-3909. | 7.8 | 118 |
| 12 | Deep Knot Structure for Construction of Active Site and Cofactor Binding Site of tRNA Modification Enzyme. <i>Structure</i> , 2004, 12, 593-602. | 3.3 | 107 |
| 13 | Structures of CYLD USP with Met1- or Lys63-linked diubiquitin reveal mechanisms for dual specificity. <i>Nature Structural and Molecular Biology</i> , 2015, 22, 222-229. | 8.2 | 105 |
| 14 | Structural basis of the interaction between RalA and Sec5, a subunit of the sec6/8 complex. <i>EMBO Journal</i> , 2003, 22, 3267-3278. | 7.8 | 103 |
| 15 | Specific recognition of linear ubiquitin chains by the Npl4 zinc finger (NZF) domain of the HOIL-1L subunit of the linear ubiquitin chain assembly complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 20520-20525. | 7.1 | 97 |
| 16 | Structural basis for template-independent RNA polymerization. <i>Nature</i> , 2004, 430, 700-704. | 27.8 | 96 |
| 17 | Structural basis for the Rho- and phosphoinositide-dependent localization of the exocyst subunit Sec3. <i>Nature Structural and Molecular Biology</i> , 2010, 17, 180-186. | 8.2 | 87 |
| 18 | Structural Basis of RNA-Dependent Recruitment of Glutamine to the Genetic Code. <i>Science</i> , 2006, 312, 1950-1954. | 12.6 | 80 |

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|----|--|------|-----------|
| 19 | Mutational Separation of Two Pathways for Editing by a Class I tRNA Synthetase. <i>Molecular Cell</i> , 2002, 9, 353-362. | 9.7 | 71 |
| 20 | A short peptide insertion crucial for angiostatic activity of human tryptophanyl-tRNA synthetase. <i>Nature Structural and Molecular Biology</i> , 2004, 11, 149-156. | 8.2 | 69 |
| 21 | Crystal structure of the NEMO ubiquitin-binding domain in complex with Lys 63-linked di-ubiquitin. <i>FEBS Letters</i> , 2009, 583, 3317-3322. | 2.8 | 69 |
| 22 | Complete crystallographic analysis of the dynamics of CCA sequence addition. <i>Nature</i> , 2006, 443, 956-960. | 27.8 | 68 |
| 23 | Structural basis for anticodon recognition by methionyl-tRNA synthetase. <i>Nature Structural and Molecular Biology</i> , 2005, 12, 931-932. | 8.2 | 67 |
| 24 | Tuberous Sclerosis Tumor Suppressor Complex-like Complexes Act as GTPase-activating Proteins for Ral GTPases. <i>Journal of Biological Chemistry</i> , 2009, 284, 21580-21588. | 3.4 | 65 |
| 25 | Molecular Basis of Lys-63-linked Polyubiquitination Inhibition by the Interaction between Human Deubiquitinating Enzyme OTUB1 and Ubiquitin-conjugating Enzyme UBC13. <i>Journal of Biological Chemistry</i> , 2012, 287, 25860-25868. | 3.4 | 61 |
| 26 | Structural basis for specific cleavage of Lys6-linked polyubiquitin chains by USP30. <i>Nature Structural and Molecular Biology</i> , 2017, 24, 911-919. | 8.2 | 61 |
| 27 | Crystal Structure of Archaeosine tRNA-guanine Transglycosylase. <i>Journal of Molecular Biology</i> , 2002, 318, 665-677. | 4.2 | 59 |
| 28 | Mechanism of molecular interactions for tRNAVal recognition by valyl-tRNA synthetase. <i>Rna</i> , 2003, 9, 100-111. | 3.5 | 59 |
| 29 | Roles of Conserved Amino Acid Sequence Motifs in the SpoU (TrmH) RNA Methyltransferase Family. <i>Journal of Biological Chemistry</i> , 2005, 280, 10368-10377. | 3.4 | 59 |
| 30 | Biochemical Characterization of the Rho GTPase-regulated Actin Assembly by Diaphanous-related Formins, mDia1 and Daam1, in Platelets. <i>Journal of Biological Chemistry</i> , 2008, 283, 8746-8755. | 3.4 | 55 |
| 31 | Crystal structures of leucyl/phenylalanyl-tRNA-protein transferase and its complex with an aminoacyl-tRNA analog. <i>EMBO Journal</i> , 2006, 25, 5942-5950. | 7.8 | 54 |
| 32 | Mechanisms of splicing-dependent trans-synaptic adhesion by PTP ^{IL1RAPL1/IL-1RACP} for synaptic differentiation. <i>Nature Communications</i> , 2015, 6, 6926. | 12.8 | 54 |
| 33 | Structural basis of epilepsy-related ligand-receptor complex LGI1-ADAM22. <i>Nature Communications</i> , 2018, 9, 1546. | 12.8 | 54 |
| 34 | Structural insight into the membrane insertion of tail-anchored proteins by Get3. <i>Genes To Cells</i> , 2010, 15, 29-41. | 1.2 | 51 |
| 35 | Crystal Structures of the CP1 Domain from <i>Thermus thermophilus</i> Isoleucyl-tRNA Synthetase and Its Complex with l-Valine. <i>Journal of Biological Chemistry</i> , 2004, 279, 8396-8402. | 3.4 | 50 |
| 36 | Crystal structure of the Sec4p·Sec2p complex in the nucleotide exchanging intermediate state. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 8305-8310. | 7.1 | 50 |

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|----|--|------|-----------|
| 37 | Structural basis for CRMP2-induced axonal microtubule formation. <i>Scientific Reports</i> , 2017, 7, 10681. | 3.3 | 50 |
| 38 | LGI1-ADAM22-MAGUK configures transsynaptic nanoalignment for synaptic transmission and epilepsy prevention. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 7.1 | 49 |
| 39 | Structural basis for lysidine formation by ATP pyrophosphatase accompanied by a lysine-specific loop and a tRNA-recognition domain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 7487-7492. | 7.1 | 47 |
| 40 | Mechanism for the definition of elongation and termination by the class II CCA-adding enzyme. <i>EMBO Journal</i> , 2009, 28, 3353-3365. | 7.8 | 46 |
| 41 | Structure of Slitrk2-PTP $\hat{\nu}$ complex reveals mechanisms for splicing-dependent trans-synaptic adhesion. <i>Scientific Reports</i> , 2015, 5, 9686. | 3.3 | 46 |
| 42 | Structural Basis for Sulfur Relay to RNA Mediated by Heterohexameric TusBCD Complex. <i>Structure</i> , 2006, 14, 357-366. | 3.3 | 44 |
| 43 | Regulation of Platelet Dense Granule Secretion by the Ral GTPase-Exocyst Pathway. <i>Journal of Biological Chemistry</i> , 2008, 283, 166-174. | 3.4 | 42 |
| 44 | Crystal structure of human DAAM1 formin homology 2 domain. <i>Genes To Cells</i> , 2007, 12, 1255-1265. | 1.2 | 41 |
| 45 | Distinct Roles for the N- and C-terminal Regions of M-Sec in Plasma Membrane Deformation during Tunneling Nanotube Formation. <i>Scientific Reports</i> , 2016, 6, 33548. | 3.3 | 41 |
| 46 | A <i>scn</i> SNARE geranylgeranyltransferase essential for the organization of the Golgi apparatus. <i>EMBO Journal</i> , 2020, 39, e104120. | 7.8 | 41 |
| 47 | Molecular bases for HOIPINs-mediated inhibition of LUBAC and innate immune responses. <i>Communications Biology</i> , 2020, 3, 163. | 4.4 | 38 |
| 48 | Structure of TCR and antigen complexes at an immunodominant CTL epitope in HIV-1 infection. <i>Scientific Reports</i> , 2013, 3, 3097. | 3.3 | 35 |
| 49 | Structural insights into ubiquitin phosphorylation by PINK1. <i>Scientific Reports</i> , 2018, 8, 10382. | 3.3 | 35 |
| 50 | Functional Categorization of the Conserved Basic Amino Acid Residues in TrmH (tRNA (Gm18)) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 22 | 3.4 | 33 |
| 51 | Structural basis of trans-synaptic interactions between PTP $\hat{\nu}$ and SALMs for inducing synapse formation. <i>Nature Communications</i> , 2018, 9, 269. | 12.8 | 33 |
| 52 | Crystal Structure of Human AUH Protein, a Single-Stranded RNA Binding Homolog of Enoyl-CoA Hydratase. <i>Structure</i> , 2001, 9, 1253-1263. | 3.3 | 31 |
| 53 | Asymmetric Coiled-Coil Structure with Guanine Nucleotide Exchange Activity. <i>Structure</i> , 2007, 15, 245-252. | 3.3 | 29 |
| 54 | Structural insights into modulation and selectivity of transsynaptic neurexin- <i>LRRTM</i> interaction. <i>Nature Communications</i> , 2018, 9, 3964. | 12.8 | 29 |

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|----|--|------|-----------|
| 55 | Structural insights into ubiquitin recognition and Ufd1 interaction of Npl4. <i>Nature Communications</i> , 2019, 10, 5708. | 12.8 | 28 |
| 56 | Insights into the mechanisms of epilepsy from structural biology of LGI1-ADAM22. <i>Cellular and Molecular Life Sciences</i> , 2020, 77, 267-274. | 5.4 | 26 |
| 57 | Purification, crystallization and preliminary X-ray diffraction of SecDF, a translocon-associated membrane protein, from <i>Thermus thermophilus</i> . <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2006, 62, 376-380. | 0.7 | 22 |
| 58 | Get1 Stabilizes an Open Dimer Conformation of Get3 ATPase by Binding Two Distinct Interfaces. <i>Journal of Molecular Biology</i> , 2012, 422, 366-375. | 4.2 | 22 |
| 59 | Structural insights into two distinct binding modules for Lys63-linked polyubiquitin chains in RNF168. <i>Nature Communications</i> , 2018, 9, 170. | 12.8 | 21 |
| 60 | Structural basis of the interaction between Topoisomerase III β and the TDRD3 auxiliary factor. <i>Scientific Reports</i> , 2017, 7, 42123. | 3.3 | 20 |
| 61 | Subquinocin, a small molecule inhibitor of CYLD and USP-family deubiquitinating enzymes, promotes NF- κ B signaling. <i>Biochemical and Biophysical Research Communications</i> , 2020, 524, 1-7. | 2.1 | 20 |
| 62 | Crystallization and preliminary X-ray analysis of the tRNA thiolation enzyme MnmA from <i>Escherichia coli</i> complexed with tRNA ^{Glu} . <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2006, 62, 368-371. | 0.7 | 19 |
| 63 | Canonical versus non-canonical transsynaptic signaling of neuroligin 3 tunes development of sociality in mice. <i>Nature Communications</i> , 2021, 12, 1848. | 12.8 | 19 |
| 64 | Structural basis of ubiquitin recognition by the winged-helix domain of Cockayne syndrome group B protein. <i>Nucleic Acids Research</i> , 2019, 47, 3784-3794. | 14.5 | 17 |
| 65 | A Human DUB Protein Array for Clarification of Linkage Specificity of Polyubiquitin Chain and Application to Evaluation of Its Inhibitors. <i>Biomedicines</i> , 2020, 8, 152. | 3.2 | 17 |
| 66 | Roles of type IIa receptor protein tyrosine phosphatases as synaptic organizers. <i>FEBS Journal</i> , 2021, 288, 6913-6926. | 4.7 | 15 |
| 67 | Crystal structure of Sec10, a subunit of the exocyst complex. <i>Scientific Reports</i> , 2017, 7, 40909. | 3.3 | 14 |
| 68 | Switching and emergence of CTL epitopes in HIV-1 infection. <i>Retrovirology</i> , 2014, 11, 38. | 2.0 | 13 |
| 69 | Structural insights into selective interaction between type IIa receptor protein tyrosine phosphatases and Liprin-1. <i>Nature Communications</i> , 2020, 11, 649. | 12.8 | 12 |
| 70 | Structural Basis for Ubiquitin Recognition by Ubiquitin-Binding Zinc Finger of FAAP20. <i>PLoS ONE</i> , 2015, 10, e0120887. | 2.5 | 11 |
| 71 | 14-3-3 proteins stabilize LGI1-ADAM22 levels to regulate seizure thresholds in mice. <i>Cell Reports</i> , 2021, 37, 110107. | 6.4 | 10 |
| 72 | Crystallization and preliminary X-ray diffraction analysis of the full-length Mg ²⁺ transporter MgtE. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2007, 63, 682-684. | 0.7 | 9 |

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|----|--|-----|-----------|
| 73 | Crystallization and preliminary X-ray diffraction analysis of GCIP/HHM transcriptional regulator. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 21-24. | 0.7 | 9 |
| 74 | Crystallization and preliminary X-ray diffraction analysis of the cytosolic domain of the Mg ²⁺ transporter MgtE. Acta Crystallographica Section F: Structural Biology Communications, 2007, 63, 678-681. | 0.7 | 8 |
| 75 | Neurexins play a crucial role in cerebellar granule cell survival by organizing autocrine machinery for neurotrophins. Cell Reports, 2022, 39, 110624. | 6.4 | 8 |
| 76 | Structural basis of guanine nucleotide exchange for Rab11 by SH3BP5. Life Science Alliance, 2019, 2, e201900297. | 2.8 | 7 |
| 77 | Crystal structure of the central and the C-terminal RNase domains of colicin D implicated its translocation pathway through inner membrane of target cell. Journal of Biochemistry, 2018, 164, 329-339. | 1.7 | 6 |
| 78 | Structural insights into leucine-rich repeat-containing synaptic cleft molecules. Current Opinion in Structural Biology, 2019, 54, 68-77. | 5.7 | 6 |
| 79 | Structural basis for specific recognition of K6-linked polyubiquitin chains by the TAB2 NZF domain. Biophysical Journal, 2021, 120, 3355-3362. | 0.5 | 6 |
| 80 | Crystallization and crystallographic analysis of yeast Sec2p, a guanine nucleotide-exchange factor for the yeast Rab GTPase Sec4p. Acta Crystallographica Section F: Structural Biology Communications, 2007, 63, 616-619. | 0.7 | 2 |
| 81 | Core Structures of Ubiquitin Dictate Its Dynamics and Function. Journal of Molecular Biology, 2014, 426, 1367-1369. | 4.2 | 2 |
| 82 | Features of Aminoacyl-tRNA Synthesis Unique to Archaea. , 0, , 198-208. | | 1 |
| 83 | Functional Structures of Class-I Aminoacyl-tRNA Synthetases. , 1999, , 149-158. | | 0 |
| 84 | 1P358 Structural analysis of the Mammalian Exocyst Complex(13. Membrane transport,Poster) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30 | 0.1 | 0 |
| 85 | 1P014 Snapshots of tRNA sulfuration via an adenylated intermediate(1. Protein structure and dynamics) Tj ETQq1 1 0.784314 rgBT /0 | 0.1 | 0 |
| 86 | 2P151 Crystallization and preliminary X-ray analysis of the bacterial membrane transporters(34.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2 2006, 46, S333. | 0.1 | 0 |
| 87 | 2P168 Structural Basis of RNA-Dependent Recruitment of Glutamine to the Genetic Code(35. RNA) Tj ETQq1 1 0.784314 rgBT /Overlock | 0.1 | 0 |
| 88 | S06A2 Structural insights into the chemical modification in non-coding RNAs(Structural Biology of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 0.1 | 0 |
| 89 | 1P-033 Crystal structures of the cytosolic domain of the Mg ²⁺ transporter MgtE(The 46th) Tj ETQq1 1 0.784314 rgBT /Overlock | 0.1 | 0 |
| 90 | Application of MultiBac System to Large Complexes. Springer Protocols, 2016, , 47-65. | 0.3 | 0 |

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|----|--|-----|-----------|
| 91 | Structural Basis for Specific Recognition and Cleavage of Polyubiquitin Chains. Nihon Kessho Gakkaishi, 2010, 52, 20-24. | 0.0 | 0 |
| 92 | Structural basis for the membrane targeting of the exocyst complex. Acta Crystallographica Section A: Foundations and Advances, 2010, 66, s27-s27. | 0.3 | 0 |
| 93 | Ubiquitin recognition by UBZ and UMI domains for DNA damage response. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C1642-C1642. | 0.1 | 0 |