

# Kenneth V Mills

## List of Publications by Year in descending order

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73  
papers

605  
citations

840119

11  
h-index

610482

24  
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74  
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74  
docs citations

74  
times ranked

482  
citing authors

#	ARTICLE	IF	CITATIONS
1	Protein Splicing: How Inteins Escape from Precursor Proteins. <i>Journal of Biological Chemistry</i> , 2014, 289, 14498-14505.	1.6	115
2	Recent advances in in vivo applications of intein-mediated protein splicing. <i>Mobile DNA</i> , 2014, 5, 5.	1.3	85
3	Reversible Inhibition of Protein Splicing by Zinc Ion. <i>Journal of Biological Chemistry</i> , 2001, 276, 10832-10838.	1.6	66
4	Protein Splicing of a <i>Pyrococcus abyssi</i> Intein with a C-terminal Glutamine. <i>Journal of Biological Chemistry</i> , 2004, 279, 20685-20691.	1.6	50
5	Intramolecular Disulfide Bond between Catalytic Cysteines in an Intein Precursor. <i>Journal of the American Chemical Society</i> , 2012, 134, 2500-2503.	6.6	44
6	Kinetic Analysis of the Individual Steps of Protein Splicing for the <i>Pyrococcus abyssi</i> PolII Intein. <i>Journal of Biological Chemistry</i> , 2005, 280, 2714-2720.	1.6	31
7	The Mechanism of Intein-Mediated Protein Splicing: Variations on a Theme. <i>Protein and Peptide Letters</i> , 2005, 12, 751-755.	0.4	30
8	Internal Disulfide Bond Acts as a Switch for Intein Activity. <i>Biochemistry</i> , 2013, 52, 5920-5927.	1.2	30
9	Salt-Dependent Conditional Protein Splicing of an Intein from <i>Halobacterium salinarum</i> . <i>Biochemistry</i> , 2016, 55, 1279-1282.	1.2	29
10	Structural and Mutational Studies of a Hyperthermophilic Intein from DNA Polymerase II of <i>Pyrococcus abyssi</i> . <i>Journal of Biological Chemistry</i> , 2011, 286, 38638-38648.	1.6	27
11	Protein purification via temperature-dependent, intein-mediated cleavage from an immobilized metal affinity resin. <i>Analytical Biochemistry</i> , 2006, 356, 86-93.	1.1	11
12	Biochemical Mechanisms of Intein-Mediated Protein Splicing. , 2005, , 233-255.		10
13	Intein-Promoted Cyclization of Aspartic Acid Flanking the Intein Leads to Atypical N-Terminal Cleavage. <i>Biochemistry</i> , 2017, 56, 1042-1050.	1.2	10
14	V67L Mutation Fills an Internal Cavity To Stabilize RecA <i>Mtu</i> Intein. <i>Biochemistry</i> , 2017, 56, 2715-2722.	1.2	9
15	Thermochemical Analysis of Neutralization Reactions: An Introductory Discovery Experiment. <i>Journal of Chemical Education</i> , 2007, 84, 326.	1.1	8
16	Introducing Undergraduate Students to Electrochemistry: A Two-Week Discovery Chemistry Experiment. <i>Journal of Chemical Education</i> , 2008, 85, 1116.	1.1	8
17	Protein splicing of the three <i>Pyrococcus abyssi</i> ribonucleotide reductase inteins. <i>Biochemical and Biophysical Research Communications</i> , 2009, 387, 153-157.	1.0	8
18	A Discovery Chemistry Experiment on Buffers. <i>Journal of Chemical Education</i> , 2014, 91, 1207-1211.	1.1	8

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19	Protein Splicing Activity of the <i>Haloferax volcanii</i> PolB-c Intein Is Sensitive to Homing Endonuclease Domain Mutations. <i>Biochemistry</i> , 2020, 59, 3359-3367.	1.2	5
20	Intein Inhibitors as Novel Antimicrobials: Protein Splicing in Human Pathogens, Screening Methods, and Off-Target Considerations. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 752824.	1.6	5
21	Mechanism of protein splicing of the <i>Pyrococcus abyssi</i> lon protease intein. <i>Biochemical and Biophysical Research Communications</i> , 2010, 403, 457-461.	1.0	4
22	Data Pooling in a Chemical Kinetics Experiment: The Aquation of a Series of Cobalt(III) Complexes: A Discovery Chemistry Experiment. <i>Journal of Chemical Education</i> , 2008, 85, 1120.	1.1	3
23	<sup>1</sup> H, <sup>13</sup> C, and <sup>15</sup> N NMR assignments of the <i>Pyrococcus abyssi</i> DNA polymerase II intein. <i>Biomolecular NMR Assignments</i> , 2011, 5, 233-235.	0.4	3
24	Biochemistry in an undergraduate writing-intensive first-year program: Seminar courses in drugs and bioethics. <i>Biochemistry and Molecular Biology Education</i> , 2015, 43, 263-272.	0.5	1
25	Coordination of the third step of protein splicing in two cyanobacterial inteins. <i>FEBS Letters</i> , 2017, 591, 2147-2154.	1.3	1
26	Allosteric Influence of Extremophile Hairpin Motif Mutations on the Protein Splicing Activity of a Hyperthermophilic Intein. <i>Biochemistry</i> , 2020, 59, 2459-2467.	1.2	1
27	An alternative domain-swapped structure of the <i>Pyrococcus horikoshii</i> PolII mini-intein. <i>Scientific Reports</i> , 2021, 11, 11680.	1.6	1
28	Catalysis of individual steps of protein splicing of the <i>Pyrococcus abyssi</i> PolII intein. <i>FASEB Journal</i> , 2006, 20, A40.	0.2	1
29	Conditional Alternative Protein Splicing Promoted by Inteins from <i>Haloquadratum walsbyi</i> . <i>Biochemistry</i> , 2022, , .	1.2	1
30	Self-Splicing Proteins. , 2013, , 315-321.		0
31	Protein splicing of a non-canonical <i>Clostridium thermocellum</i> intein with N-terminal Gln. <i>FASEB Journal</i> , 2006, 20, A964.	0.2	0
32	The dependence of three <i>P. abyssi</i> inteins on extein sequence for efficient protein splicing. <i>FASEB Journal</i> , 2008, 22, 611.3.	0.2	0
33	The influence of extein residues on the protein splicing of three <i>Pyrococcus abyssi</i> inteins. <i>FASEB Journal</i> , 2009, 23, 502.3.	0.2	0
34	Alternate protein splicing mechanisms: A directed evolution approach. <i>FASEB Journal</i> , 2009, 23, 502.4.	0.2	0
35	Protein splicing of the <i>Pyrococcus abyssi</i> lon protease intein. <i>FASEB Journal</i> , 2009, 23, 502.2.	0.2	0
36	Manipulation of protein splicing side-reactions to facilitate protein purification and expressed protein ligation. <i>FASEB Journal</i> , 2010, 24, 463.13.	0.2	0

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37	A kinetic analysis of each step of protein splicing of the <i>Pyrococcus abyssi</i> PolII intein. FASEB Journal, 2010, 24, 463.5.	0.2	0
38	Estimating the activation barrier to each step of protein splicing for the non-canonical <i>P. abyssi</i> PolII intein. FASEB Journal, 2010, 24, 463.18.	0.2	0
39	Non-canonical inteins: Alternate mechanisms for protein splicing. FASEB Journal, 2010, 24, 463.12.	0.2	0
40	Post-translational autoprocessing of a <i>Pyrococcus abyssi</i> intein and a <i>Cryptosporidium</i> hedgehog-like domain. FASEB Journal, 2011, 25, 754.10.	0.2	0
41	Non-canonical inteins: Alternate mechanisms for protein splicing. FASEB Journal, 2011, 25, .	0.2	0
42	Utilizing a protein splicing side reaction to generate a fragment for expressed protein ligation. FASEB Journal, 2011, 25, .	0.2	0
43	Determining the activation barrier and pH-dependence of each step of protein splicing. FASEB Journal, 2011, 25, 520.6.	0.2	0
44	The influence of conserved catalytic residues on the mechanism of protein splicing of the <i>Pyrococcus abyssi</i> PolII intein. FASEB Journal, 2011, 25, 520.10.	0.2	0
45	Post-translational autoprocessing by an <i>Oryza sativa</i> hedgehog-like domain. FASEB Journal, 2011, 25, 754.16.	0.2	0
46	Protein splicing facilitated by highly similar inteins from two extreme thermophiles. FASEB Journal, 2012, 26, 756.4.	0.2	0
47	Intein-mediated peptide bond cleavage adjacent to asparagine or glutamine. FASEB Journal, 2012, 26, 963.6.	0.2	0
48	Protein splicing of a temperature-dependent intein from an extreme thermophile. FASEB Journal, 2012, 26, 756.3.	0.2	0
49	Protein Splicing of inteins from <i>Synechococcus</i> sp. PCC 7002 and <i>Pyrococcus abyssi</i> . FASEB Journal, 2012, 26, 756.5.	0.2	0
50	Non-canonical inteins: Protein splicing by alternate mechanisms. FASEB Journal, 2012, 26, .	0.2	0
51	Expression and auto-processing of hedgehog-like proteins from <i>Brugia malayi</i> . FASEB Journal, 2012, 26, .	0.2	0
52	Side-chain cyclization of Gln or Asn residues coupled to peptide bond cleavage in an intein and a model peptide. FASEB Journal, 2012, 26, .	0.2	0
53	Conditional protein splicing of inteins with a non-canonical C-terminal glutamine. FASEB Journal, 2012, 26, 959.1.	0.2	0
54	Expression and auto-processing of hedgehog-like proteins from <i>Brugia malayi</i> and <i>Cryptosporidium</i> . FASEB Journal, 2013, 27, 789.4.	0.2	0

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55	Conditional protein splicing via disulfide bond formation. FASEB Journal, 2013, 27, 789.3.	0.2	0
56	Protein splicing of inteins from <i>Synechococcus</i> sp. PCC 7002 and <i>Trichodesmium erythraeum</i> . FASEB Journal, 2013, 27, 789.7.	0.2	0
57	Peptide bond cleavage adjacent to asparagine or glutamine. FASEB Journal, 2013, 27, 789.6.	0.2	0
58	The role of an extended beta-sheet in stabilizing the structure of a thermophilic intein. FASEB Journal, 2013, 27, 1005.2.	0.2	0
59	Structural analysis of an intein from an extreme thermophile. FASEB Journal, 2013, 27, 1005.1.	0.2	0
60	The structure, regulation and activity of non-canonical inteins. FASEB Journal, 2013, 27, 998.2.	0.2	0
61	Splicing of a non-canonical class three intein from <i>Clostridium thermocellum</i> . FASEB Journal, 2013, 27, 789.5.	0.2	0
62	Structure and Activity of Inteins from <i>Pyrococcus abyssi</i> and <i>Pyrococcus horikoshii</i> . FASEB Journal, 2015, 29, 722.4.	0.2	0
63	Relating Intein Flexibility to the Temperature Dependence of Activity. FASEB Journal, 2015, 29, 722.3.	0.2	0
64	Integrating Biochemistry into a First-year Undergraduate Rhetoric-intensive Seminar Program. FASEB Journal, 2015, 29, 559.1.	0.2	0
65	The Influence of Conserved Residues and Structural Elements on the Stability and Activity of a Thermophilic Intein. FASEB Journal, 2016, 30, .	0.2	0
66	Homing Endonuclease and Protein Splicing Activity of Inteins from Extreme Thermophiles. FASEB Journal, 2018, 32, 655.7.	0.2	0
67	The Variable Salt Dependence of Mini-inteins from <i>Haloquadratum walsbyi</i> . FASEB Journal, 2018, 32, 655.22.	0.2	0
68	“The relationship of structural stability to temperature-dependent activity in a family of thermophilic inteins” FASEB Journal, 2018, 32, 655.15.	0.2	0
69	Salt-Dependent Protein Splicing: In Vitro Enzymology and In vivo Physiological Relevance. FASEB Journal, 2018, 32, .	0.2	0
70	Conditional Protein Splicing of Inteins from Extremophiles. FASEB Journal, 2019, 33, 633.20.	0.2	0
71	“Fitness Cost of Two Inteins in <i>Halobacterium salinarum</i> ” FASEB Journal, 2019, 33, 633.9.	0.2	0
72	Falling Apart: the Self-Catalyzed Process of Protein Splicing. FASEB Journal, 2019, 33, 633.4.	0.2	0

#	ARTICLE	IF	CITATIONS
73	Methods to Study the Structure and Catalytic Activity of cis-Splicing Inteins. Methods in Molecular Biology, 2020, 2133, 55-73.	0.4	0