Kenneth V Mills

List of Publications by Citations

65 papers	493 citations	11 h-index	22 g-index
74 ext. papers	550 ext. citations	2 avg, IF	3.66 L-index

#	Paper	IF	Citations
65	Protein splicing: how inteins escape from precursor proteins. *Journal of Biological Chemistry*, **2014**, 289, 14498-505	5.4	82
64	Recent advances in in vivo applications of intein-mediated protein splicing. *Mobile DNA*, **2014**, 5, 5	4.4	63
63	Reversible inhibition of protein splicing by zinc ion. *Journal of Biological Chemistry*, **2001**, 276, 10832-8	5.4	55
62	Protein splicing of a Pyrococcus abyssi intein with a C-terminal glutamine. *Journal of Biological Chemistry*, **2004**, 279, 20685-91	5.4	47
61	Intramolecular disulfide bond between catalytic cysteines in an intein precursor. *Journal of the American Chemical Society*, **2012**, 134, 2500-3	16.4	41
60	Kinetic analysis of the individual steps of protein splicing for the Pyrococcus abyssi PolII intein. *Journal of Biological Chemistry*, **2005**, 280, 2714-20	5.4	29
59	The mechanism of intein-mediated protein splicing: variations on a theme. *Protein and Peptide Letters*, **2005**, 12, 751-5	1.9	27
58	Internal disulfide bond acts as a switch for intein activity. *Biochemistry*, **2013**, 52, 5920-7	3.2	26
57	Salt-Dependent Conditional Protein Splicing of an Intein from Halobacterium salinarum. *Biochemistry*, **2016**, 55, 1279-82	3.2	23
56	Structural and mutational studies of a hyperthermophilic intein from DNA polymerase II of Pyrococcus abyssi. *Journal of Biological Chemistry*, **2011**, 286, 38638-38648	5.4	23
55	Protein purification via temperature-dependent, intein-mediated cleavage from an immobilized metal affinity resin. *Analytical Biochemistry*, **2006**, 356, 86-93	3.1	11
54	Biochemical Mechanisms of Intein-Mediated Protein Splicing **2005**, 233-255		9
53	Intein-Promoted Cyclization of Aspartic Acid Flanking the Intein Leads to Atypical N-Terminal Cleavage. *Biochemistry*, **2017**, 56, 1042-1050	3.2	8
52	V67L Mutation Fills an Internal Cavity To Stabilize RecA Mtu Intein. *Biochemistry*, **2017**, 56, 2715-2722	3.2	8
51	Introducing Undergraduate Students to Electrochemistry: A Two-Week Discovery Chemistry Experiment. *Journal of Chemical Education*, **2008**, 85, 1116	2.4	8
50	Protein splicing of the three Pyrococcus abyssi ribonucleotide reductase inteins. *Biochemical and Biophysical Research Communications*, **2009**, 387, 153-7	3.4	7
49	Thermochemical Analysis of Neutralization Reactions: An Introductory Discovery Experiment. *Journal of Chemical Education*, **2007**, 84, 326	2.4	7

48	A Discovery Chemistry Experiment on Buffers. *Journal of Chemical Education*, **2014**, 91, 1207-1211	2.4	5
47	Mechanism of protein splicing of the Pyrococcus abyssi lon protease intein. *Biochemical and Biophysical Research Communications*, **2010**, 403, 457-61	3.4	4
46	1H, 13C, and 15N NMR assignments of the Pyrococcus abyssi DNA polymerase II intein. *Biomolecular NMR Assignments*, **2011**, 5, 233-5	0.7	3
45	Data Pooling in a Chemical Kinetics Experiment: The Aquation of a Series of Cobalt(III) Complexes: A Discovery Chemistry Experiment. *Journal of Chemical Education*, **2008**, 85, 1120	2.4	2
44	Protein Splicing Activity of the PolB-c Intein Is Sensitive to Homing Endonuclease Domain Mutations. *Biochemistry*, **2020**, 59, 3359-3367	3.2	2
43	Allosteric Influence of Extremophile Hairpin Motif Mutations on the Protein Splicing Activity of a Hyperthermophilic Intein. *Biochemistry*, **2020**, 59, 2459-2467	3.2	1
42	Biochemistry in an undergraduate writing-intensive first-year program: Seminar courses in drugs and bioethics. *Biochemistry and Molecular Biology Education*, **2015**, 43, 263-72	1.3	1
41	Catalysis of individual steps of protein splicing of the Pyrococcus abyssi PolII intein. *FASEB Journal*, **2006**, 20, A40	0.9	1
40	Coordination of the third step of protein splicing in two cyanobacterial inteins. *FEBS Letters*, **2017**, 591, 2147-2154	3.8	0
39	Intein Inhibitors as Novel Antimicrobials: Protein Splicing in Human Pathogens, Screening Methods, and Off-Target Considerations. *Frontiers in Molecular Biosciences*, **2021**, 8, 752824	5.6	0
38	Self-Splicing Proteins **2013**, 315-321		
37	Protein splicing of a non-canonical Clostridium thermocellum intein with N-terminal Gln. *FASEB Journal*, **2006**, 20, A964	0.9	
36	The dependence of three P. abyssi inteins on extein sequence for efficient protein splicing. *FASEB Journal*, **2008**, 22, 611.3	0.9	
35	Homing Endonuclease and Protein Splicing Activity of Inteins from Extreme Thermophiles. *FASEB Journal*, **2018**, 32, 655.7	0.9	
34	The Variable Salt Dependence of Mini-Inteins from Haloquadratum walsbyi. *FASEB Journal*, **2018**, 32, 655.22	0.9	
33	The relationship of structural stability to temperature-dependent activity in a family of thermophilic inteins *FASEB Journal*, **2018**, 32, 655.15	0.9	
32	Conditional Protein Splicing of Inteins from Extremophiles. *FASEB Journal*, **2019**, 33, 633.20	0.9	
31	Fitness Cost of Two Inteins in Halobacterium salinarum *FASEB Journal*, **2019**, 33, 633.9	0.9	

30	Falling Apart: the Self-Catalyzed Process of Protein Splicing. *FASEB Journal*, **2019**, 33, 633.4	0.9
29	Methods to Study the Structure and Catalytic Activity of cis-Splicing Inteins. *Methods in Molecular Biology*, **2020**, 2133, 55-73	1.4
28	Structure and Activity of Inteins from Pyrococcus abyssi and Pyrococcus horikoshii. *FASEB Journal*, **2015**, 29, 722.4	0.9
27	Relating Intein Flexibility to the Temperature Dependence of Activity. *FASEB Journal*, **2015**, 29, 722.3	0.9
26	Integrating Biochemistry into a First-year Undergraduate Rhetoric-intensive Seminar Program. *FASEB Journal*, **2015**, 29, 559.1	0.9
25	The influence of extein residues on the protein splicing of three Pyrococcus abyssi inteins. *FASEB Journal*, **2009**, 23, 502.3	0.9
24	Alternate protein splicing mechanisms: A directed evolution approach. *FASEB Journal*, **2009**, 23, 502.4	0.9
23	Protein splicing of the Pyrococcus abyssi lon protease intein. *FASEB Journal*, **2009**, 23, 502.2	0.9
22	Manipulation of protein splicing side-reactions to facilitate protein purification and expressed protein ligation. *FASEB Journal*, **2010**, 24, 463.13	0.9
21	A kinetic analysis of each step of protein splicing of the Pyrococcus abyssi PolII intein. *FASEB Journal*, **2010**, 24, 463.5	0.9
20	Estimating the activation barrier to each step of protein splicing for the non-canonical P. abyssi PolII intein. *FASEB Journal*, **2010**, 24, 463.18	0.9
19	Non-canonical inteins: Alternate mechanisms for protein splicing. *FASEB Journal*, **2010**, 24, 463.12	0.9
18	Post-translational autoprocessing of a Pyrococcus abyssi intein and a Cryptosporidium hedgehog-like domain. *FASEB Journal*, **2011**, 25, 754.10	0.9
17	Determining the activation barrier and pH-dependence of each step of protein splicing. *FASEB Journal*, **2011**, 25, 520.6	0.9
16	The influence of conserved catalytic residues on the mechanism of protein splicing of the Pyrococcus abyssi PolII intein. *FASEB Journal*, **2011**, 25, 520.10	0.9
15	Post-translational autoprocessing by an Oryza sativa hedgehog-like domain. *FASEB Journal*, **2011**, 25, 754.16	0.9
14	Protein splicing facilitated by highly similar inteins from two extreme thermophiles. *FASEB Journal*, **2012**, 26, 756.4	0.9
13	Intein-mediated peptide bond cleavage adjacent to aspargine or glutamine. *FASEB Journal*, **2012**, 26, 963.6	0.9

12	Protein splicing of a temperature-dependent intein from an extreme thermophile. *FASEB Journal*, **2012**, 26, 756.3	0.9
11	Protein Splicing of inteins from Synechococcus sp. PCC 7002 and Pyrococcus abyssi. *FASEB Journal*, **2012**, 26, 756.5	0.9
10	Conditional protein splicing of inteins with a non-canonical C-terminal glutamine. *FASEB Journal*, **2012**, 26, 959.1	0.9
9	Expression and auto-processing of hedgehog-like proteins from Brugia malayi and Cryptosporidium. *FASEB Journal*, **2013**, 27, 789.4	0.9
8	Conditional protein splicing via disulfide bond formation. *FASEB Journal*, **2013**, 27, 789.3	0.9
7	Protein splicing of inteins from Synechococcus sp. PCC 7002 and Trichodesmium erythraeum. *FASEB Journal*, **2013**, 27, 789.7	0.9
6	Peptide bond cleavage adjacent to aspargine or glutamine. *FASEB Journal*, **2013**, 27, 789.6	0.9
5	The role of an extended beta-sheet in stabilizing the structure of a thermophilic intein. *FASEB Journal*, **2013**, 27, 1005.2	0.9
4	Structural analysis of an intein from an extreme thermophile. *FASEB Journal*, **2013**, 27, 1005.1	0.9
3	The structure, regulation and activity of non-canonical inteins. *FASEB Journal*, **2013**, 27, 998.2	0.9
2	Splicing of a non-canonical class three intein from Clostridium thermocellum. *FASEB Journal*, **2013**, 27, 789.5	0.9
1	An alternative domain-swapped structure of the Pyrococcus horikoshii PolII mini-intein. *Scientific Reports*, **2021**, 11, 11680	4.9