

Surendranath P Suman

List of Publications by Year in descending order

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100
papers

3,815
citations

172207

29
h-index

133063

59
g-index

100
all docs

100
docs citations

100
times ranked

2559
citing authors

#	ARTICLE	IF	CITATIONS
1	Myoglobin and lipid oxidation interactions: Mechanistic bases and control. <i>Meat Science</i> , 2010, 86, 86-94.	2.7	730
2	Myoglobin Chemistry and Meat Color. <i>Annual Review of Food Science and Technology</i> , 2013, 4, 79-99.	5.1	445
3	Proteomics of Muscle-Specific Beef Color Stability. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 3196-3203.	2.4	208
4	Improving beef color stability: Practical strategies and underlying mechanisms. <i>Meat Science</i> , 2014, 98, 490-504.	2.7	143
5	Proteomics of lipid oxidation-induced oxidation of porcine and bovine oxymyoglobins. <i>Proteomics</i> , 2007, 7, 628-640.	1.3	109
6	Meat quality traits and proteome profile of woody broiler breast (pectoralis major) meat. <i>Poultry Science</i> , 2018, 97, 337-346.	1.5	101
7	Differential abundance of sarcoplasmic proteome explains animal effect on beef Longissimus lumborum color stability. <i>Meat Science</i> , 2015, 102, 90-98.	2.7	97
8	Biomolecular Interactions Governing Fresh Meat Color in Post-mortem Skeletal Muscle: A Review. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 12779-12787.	2.4	85
9	Redox Instability Induced by 4-Hydroxy-2-nonenal in Porcine and Bovine Myoglobins at pH 5.6 and 4 °C. <i>Journal of Agricultural and Food Chemistry</i> , 2006, 54, 3402-3408.	2.4	73
10	Exogenous and Endogenous Factors Influencing Color of Fresh Meat from Ungulates. <i>Meat and Muscle Biology</i> , 2017, 1, .	0.7	65
11	Factors influencing internal color of cooked meats. <i>Meat Science</i> , 2016, 120, 133-144.	2.7	62
12	Effect of carbon monoxide packaging and lactate enhancement on the color stability of beef steaks stored at 1°C for 9 days. <i>Meat Science</i> , 2009, 81, 71-76.	2.7	61
13	Packaging-specific influence of chitosan on color stability and lipid oxidation in refrigerated ground beef. <i>Meat Science</i> , 2010, 86, 994-998.	2.7	59
14	Immunocastration improves carcass traits and beef color attributes in Nellore and Nellore×Aberdeen Angus crossbred animals finished in feedlot. <i>Meat Science</i> , 2014, 96, 884-891.	2.7	59
15	Color attributes and oxidative stability of longissimus lumborum and psoas major muscles from Nellore bulls. <i>Meat Science</i> , 2016, 121, 19-26.	2.7	59
16	Physico-chemical and sensory attributes of low-sodium restructured caiman steaks containing microbial transglutaminase and salt replacers. <i>Meat Science</i> , 2014, 96, 623-632.	2.7	53
17	Proteome basis for intramuscular variation in color stability of beef semimembranosus. <i>Meat Science</i> , 2016, 113, 9-16.	2.7	50
18	Recent Updates in Meat Color Research: Integrating Traditional and High-Throughput Approaches. <i>Meat and Muscle Biology</i> , 2020, 4, .	0.7	49

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19	Proteomic approach to characterize biochemistry of meat quality defects. <i>Meat Science</i> , 2017, 132, 131-138.	2.7	46
20	Muscle-specific effect of aging on beef tenderness. <i>LWT - Food Science and Technology</i> , 2019, 100, 250-252.	2.5	46
21	Species-Specific Myoglobin Oxidation. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 12198-12203.	2.4	43
22	Covalent Binding of 4-Hydroxy-2-nonenal to Lactate Dehydrogenase Decreases NADH Formation and Metmyoglobin Reducing Activity. <i>Journal of Agricultural and Food Chemistry</i> , 2014, 62, 2112-2117.	2.4	43
23	American Meat Science Association Guidelines for Meat Color Measurement. <i>Meat and Muscle Biology</i> , 2022, 6, .	0.7	42
24	Effect of grind size and fat levels on the physico-chemical and sensory characteristics of low-fat ground buffalo meat patties. <i>Meat Science</i> , 2003, 65, 973-976.	2.7	41
25	Characterization of bison (<i>Bison bison</i>) myoglobin. <i>Meat Science</i> , 2010, 84, 71-78.	2.7	40
26	Bovine mitochondrial oxygen consumption effects on oxymyoglobin in the presence of lactate as a substrate for respiration. <i>Meat Science</i> , 2013, 93, 893-897.	2.7	38
27	Application of proteomics to characterize and improve color and oxidative stability of muscle foods. <i>Food Research International</i> , 2015, 76, 938-945.	2.9	38
28	Proteome basis of pale, soft, and exudative-like (PSE-like) broiler breast (<i>Pectoralis major</i>) meat. <i>Poultry Science</i> , 2016, 95, 2696-2706.	1.5	37
29	Effects of reducing agents on premature browning in ground beef. <i>Food Chemistry</i> , 2005, 93, 571-576.	4.2	33
30	Changes in the Sarcoplasmic Proteome of Beef Muscles with Differential Color Stability during Postmortem Aging. <i>Meat and Muscle Biology</i> , 2018, 2, .	0.7	32
31	Effects of lactate and modified atmospheric packaging on premature browning in cooked ground beef patties. <i>Meat Science</i> , 2010, 85, 339-346.	2.7	31
32	Effect of erythorbate, storage and high-oxygen packaging on premature browning in ground beef. <i>Meat Science</i> , 2005, 69, 363-369.	2.7	29
33	Effect of lactate-enhancement, modified atmosphere packaging, and muscle source on the internal cooked colour of beef steaks. <i>Meat Science</i> , 2009, 81, 664-670.	2.7	29
34	Effects of 4-hydroxy-2-nonenal on beef heart mitochondrial ultrastructure, oxygen consumption, and metmyoglobin reduction. <i>Meat Science</i> , 2012, 90, 564-571.	2.7	29
35	Muscle-specific Mitochondrial Functionality and Its Influence on Fresh Beef Color Stability. <i>Journal of Food Science</i> , 2018, 83, 2077-2082.	1.5	27
36	Proteome basis of red color defect in channel catfish (<i>Ictalurus punctatus</i>) fillets. <i>LWT - Food Science and Technology</i> , 2014, 57, 141-148.	2.5	26

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37	Post-mortem oxidative stability of three yak (<i>Bos grunniens</i>) muscles as influenced by animal age. <i>Meat Science</i> , 2015, 105, 121-125.	2.7	26
38	Color-stabilizing effect of lactate on ground beef is packaging-dependent. <i>Meat Science</i> , 2010, 84, 329-333.	2.7	25
39	Effects of succinate on ground beef color and premature browning. <i>Meat Science</i> , 2011, 89, 189-194.	2.7	25
40	Lipid oxidation-induced oxidation in emu and ostrich myoglobins. <i>Meat Science</i> , 2014, 96, 984-993.	2.7	25
41	Lipid-Oxidation-Induced Carboxymyoglobin Oxidation. <i>Journal of Agricultural and Food Chemistry</i> , 2006, 54, 9248-9253.	2.4	24
42	Chitosan inhibits premature browning in ground beef. <i>Meat Science</i> , 2011, 88, 512-516.	2.7	24
43	Fatty acid profile and bacteriological quality of caiman meat subjected to high hydrostatic pressure. <i>LWT - Food Science and Technology</i> , 2015, 63, 872-877.	2.5	24
44	Primary structure of goat myoglobin. <i>Meat Science</i> , 2009, 82, 456-460.	2.7	23
45	2013 EARLY CAREER ACHIEVEMENT AWARD Proteomics of muscle- and species-specificity in meat color stability. <i>Journal of Animal Science</i> , 2014, 92, 875-882.	0.2	22
46	Effect of muscle source on premature browning in ground beef. <i>Meat Science</i> , 2004, 68, 457-461.	2.7	21
47	Amino acid sequence of myoglobin from emu (<i>Dromaius novaehollandiae</i>) skeletal muscle. <i>Meat Science</i> , 2010, 86, 623-628.	2.7	19
48	The Eating Quality of Meat. , 2017, , 329-356.		19
49	Quality Assessment of Filtered Smoked Yellowfin Tuna (<i>Thunnus albacares</i>) Steaks. <i>Journal of Food Science</i> , 2011, 76, S369-79.	1.5	18
50	Metabolites and Metabolic Pathways Correlated With Beef Tenderness. <i>Meat and Muscle Biology</i> , 2020, 4, .	0.7	17
51	Primary structure of turkey myoglobin. <i>Food Chemistry</i> , 2011, 129, 175-178.	4.2	16
52	Redox Instability and Hemin Loss of Mutant Sperm Whale Myoglobins Induced by 4-Hydroxynonenal in Vitro. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 8473-8483.	2.4	16
53	Muscle-specific colour stability of blesbok (<i>Damaliscus pygargus phillipsi</i>) meat. <i>Meat Science</i> , 2016, 119, 69-79.	2.7	16
54	Frozen storage stability of antioxidant-treated raw restructured beef steaks made from mature cows. <i>Meat Science</i> , 2007, 77, 562-569.	2.7	15

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55	Dietary ractopamine influences sarcoplasmic proteome profile of pork Longissimus thoracis. Meat Science, 2015, 103, 7-12.	2.7	15
56	Principal component analysis of lipid and protein oxidation products and their impact on color stability in bison longissimus lumborum and psoas major muscles. Meat Science, 2021, 178, 108523.	2.7	15
57	Temperature- and pH-dependent effect of lactate on in vitro redox stability of red meat myoglobins. Meat Science, 2014, 96, 408-412.	2.7	14
58	Proteomic Characterization of Normal and Woody Breast Meat from Broilers of Five Genetic Strains. Meat and Muscle Biology, 2020, 4, .	0.7	14
59	Mass spectrometric evidence for aldehyde adduction in carboxymyoglobin. Meat Science, 2009, 83, 339-344.	2.7	13
60	Mass spectrometric investigations on lactate adduction to equine myoglobin. Meat Science, 2010, 85, 363-367.	2.7	13
61	Effects of Pyruvate on Lipid Oxidation and Ground Beef Color. Journal of Food Science, 2012, 77, C886-92.	1.5	13
62	Sex-specific effect of ractopamine on quality attributes of pork frankfurters. Meat Science, 2014, 96, 799-805.	2.7	13
63	Impact of Light Source on Color and Lipid Oxidative Stabilities from a Moderately Color-Stable Beef Muscle during Retail Display. Meat and Muscle Biology, 2018, 2, .	0.7	13
64	Myoglobin Post-Translational Modifications Influence Color Stability of Beef Longissimus Lumborum. Meat and Muscle Biology, 2021, 5, .	0.7	12
65	Bison muscle discrimination and color stability prediction using near-infrared hyperspectral imaging. Biosystems Engineering, 2021, 209, 1-13.	1.9	12
66	Proteome basis for the biological variations in color and tenderness of longissimus thoracis muscle from beef cattle differing in growth rate and feeding regime. Food Research International, 2022, 153, 110947.	2.9	12
67	Early Postmortem Proteome Changes in Normal and Woody Broiler Breast Muscles. Journal of Agricultural and Food Chemistry, 2020, 68, 11000-11010.	2.4	11
68	Broiler genetics influences proteome profiles of normal and woody breast muscle. Poultry Science, 2021, 100, 100994.	1.5	10
69	Quality Assessment of Commercially Processed Carbon Monoxide-Treated Tilapia Fillets. Journal of Food Science, 2013, 78, S902-10.	1.5	9
70	Differential abundance of muscle proteome in cultured channel catfish (Ictalurus punctatus) subjected to ante-mortem stressors and its impact on fillet quality. Comparative Biochemistry and Physiology Part D: Genomics and Proteomics, 2016, 20, 10-18.	0.4	9
71	Exploring innovative possibilities of recovering the value of dark-cutting beef in the Canadian grading system. Meat Science, 2018, 137, 77-84.	2.7	8
72	Skeletal muscle proteome analysis provides insights on high altitude adaptation of yaks. Molecular Biology Reports, 2019, 46, 2857-2866.	1.0	8

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73	Differential Abundance of Mitochondrial Proteome Influences the Color Stability of Beef <i>Longissimus Lumborum</i> and <i>Psoas Major</i> Muscles. <i>Meat and Muscle Biology</i> , 2021, 5, .	0.7	8
74	Amino acid sequence of myoglobin from white-tailed deer (<i>Odocoileus virginianus</i>). <i>Meat Science</i> , 2012, 92, 160-163.	2.7	7
75	Muscle-specific color stability in fresh beef from grain-finished <i>Bos indicus</i> cattle. <i>Asian-Australasian Journal of Animal Sciences</i> , 2019, 32, 1036-1043.	2.4	7
76	Intramuscular Variations in Color and Sarcoplasmic Proteome of Beef during Postmortem Aging. <i>Meat and Muscle Biology</i> , 2018, 2, 92.	0.7	6
77	Thermal Instability Induced by 4-Hydroxy-2-Nonenal in Beef Myoglobin. <i>Meat and Muscle Biology</i> , 2020, 4, .	0.7	6
78	Light Source Influences Color Stability and Lipid Oxidation in Steaks from Low Color Stability Beef Muscle. <i>Meat and Muscle Biology</i> , 2017, 1, 149.	0.7	5
79	Application of Vis-NIR and SWIR spectroscopy for the segregation of bison muscles based on their color stability. <i>Meat Science</i> , 2022, 188, 108774.	2.7	5
80	Sarcoplasmic Proteome Profile and Internal Color of Beef <i>Longissimus Lumborum</i> Steaks Cooked to Different Endpoint Temperatures. <i>Meat and Muscle Biology</i> , 2020, 4, .	0.7	4
81	Proteomics of Color in Fresh Muscle Foods. , 2017, , 163-175.		3
82	Harvest Method Influences Color Stability of <i>Longissimus Lumborum</i> Steaks from Cattle. <i>Meat and Muscle Biology</i> , 2019, 3, 33.	0.7	3
83	Muscle-Specific Color Stability of Fresh Meat from Springbok (). <i>Meat and Muscle Biology</i> , 2019, 3, 1.	0.7	3
84	Ractopamine-induced remodeling in the mitochondrial proteome of postmortem <i>longissimus lumborum</i> muscle from feedlot steers. <i>Livestock Science</i> , 2022, 260, 104923.	0.6	3
85	Color Stability of Fallow Deer () , , and Muscles During Refrigerated Storage. <i>Meat and Muscle Biology</i> , 2018, 2, 147.	0.7	2
86	Tandem Mass Tag Labeling-Based Analysis to Characterize Muscle-Specific Proteome Changes During Postmortem Aging of Bison <i>Longissimus Lumborum</i> and <i>Psoas Major</i> Muscles. <i>Meat and Muscle Biology</i> , 2022, 6, .	0.7	2
87	Color attributes and myoglobin chemistry exhibit relationships with tenderness and calpain-1 abundance in postmortem <i>Longissimus lumborum</i> muscles from Holstein heifers. <i>Meat Science</i> , 2022, 189, 108824.	2.7	2
88	Myoglobin Modeling to Study Species-Specific Differences in the Distance Between Heme Iron and Proximal and Distal Histidines. <i>Meat and Muscle Biology</i> , 2020, 3, .	0.7	1
89	Variations in intramuscular fat content and profile in Angus x Nellore steers under different feeding strategies contribute to color and tenderness development in <i>longissimus thoracis</i> . <i>Meat and Muscle Biology</i> , 0, , .	0.7	1
90	Endpoint Temperature Influences Sarcoplasmic Proteome Profile of Cooked Beef <i>Longissimus Lumborum</i> . <i>Meat and Muscle Biology</i> , 2020, 3, .	0.7	0

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91	Thermal Stability of Beef Myoglobin is Compromised by Reactive Lipid Oxidation Products. Meat and Muscle Biology, 2020, 3, .	0.7	0
92	Possible Role of Myoglobin in Regulating Calpain-1 Activity in Postmortem Beef Muscle. Meat and Muscle Biology, 2020, 3, .	0.7	0
93	Ractopamine-Induced Changes in the Mitochondrial Proteome of Postmortem Beef Longissimus Lumborum. Meat and Muscle Biology, 2020, 3, .	0.7	0
94	Aging Influences Shear Force of Beef in a Muscle-Specific Manner. Meat and Muscle Biology, 2020, 3, .	0.7	0
95	Comparison of Lipid and Protein Oxidation Products and their Impact on Colour Stability in Bison Longissimus Lumborum and Psoas Major Muscles. Meat and Muscle Biology, 2020, 3, .	0.7	0
96	Quantitative Proteomic Characterization Associated with Woody Breast Meat from Broilers Fed a Standard or an Amino Acid-Reduced Diet. Meat and Muscle Biology, 2020, 3, .	0.7	0
97	Supranutritional Supplementation of Vitamin E Influences the Abundance of Antioxidant Proteins in Postmortem Longissimus Lumborum from Heifers. Meat and Muscle Biology, 2020, 3, .	0.7	0
98	Chemical and physical characteristics of meat color and pigment. , 2022, , .		0
99	Myoglobin and hemoglobin: discoloration, lipid oxidation and solvent access to the heme pocket. Meat and Muscle Biology, 0, , .	0.7	0
100	Proteomic advances in poultry science. , 2022, , 183-200.		0