Pierre A Coulombe

List of Publications by Year
in descending order

116 papers	11,116 citations	28274 55 h-index	30087 103 g-index
125 all docs	125 docs citations	125 times ranked	9560 citing authors

#	Article	IF	Citations
1	Point mutations in human keratin 14 genes of epidermolysis bullosa simplex patients: Genetic and functional analyses. Cell, 1991, 66, 1301-1311.	28.9	657
2	New consensus nomenclature for mammalian keratins. Journal of Cell Biology, 2006, 174, 169-174.	5.2	630
3	â€˜Hardâ€™ and â€˜softâ€™ principles defining the structure, function and regulation of keratin intermediate filaments. Current Opinion in Cell Biology, 2002, 14, 110-122.	5.4	614
4	Intermediate Filament Proteins and Their Associated Diseases. New England Journal of Medicine, 2004, 351, 2087-2100.	27.0	434
5	A keratin cytoskeletal protein regulates protein synthesis and epithelial cell growth. Nature, 2006, 441, 362-365.	27.8	430
6	Mutant keratin expression in transgenic mice causes marked abnormalities resembling a human genetic skin disease. Cell, 1991, 64, 365-380.	28.9	425
7	Contribution of olfactory neural stem cells to tissue maintenance and regeneration. Nature Neuroscience, 2007, 10, 720-726.	14.8	385
8	Cytoplasmic intermediate filaments revealed as dynamic and multipurpose scaffolds. Nature Cell Biology, 2004, 6, 699-706.	10.3	320
9	Onset of Keratin 17 Expression Coincides with the Definition of Major Epithelial Lineages during Skin Development. Journal of Cell Biology, 1998, 143, 469-486.	5.2	286
10	Intermediate filament scaffolds fulfill mechanical, organizational, and signaling functions in the cytoplasm. Genes and Development, 2007, 21, 1581-1597.	5.9	268
11	Keratin 17 promotes epithelial proliferation and tumor growth by polarizing the immune response in skin. Nature Genetics, 2010, 42, 910-914.	21.4	197
12	Overexpressed Transient Receptor Potential Vanilloid 3 Ion Channels in Skin Keratinocytes Modulate Pain Sensitivity via Prostaglandin E₂. Journal of Neuroscience, 2008, 28, 13727-13737.	3.6	191
13	The expanding significance of keratin intermediate filaments in normal and diseased epithelia. Current Opinion in Cell Biology, 2013, 25, 47-56.	5.4	187
14	Loss of keratin 6 (K6) proteins reveals a function for intermediate filaments during wound repair. Journal of Cell Biology, 2003, 163, 327-337.	5.2	185
15	Epidermolysis bullosa simplex: a paradigm for disorders of tissue fragility. Journal of Clinical Investigation, 2009, 119, 1784-1793.	8.2	174
16	Emerging role for the cytoskeleton as an organizer and regulator of translation. Nature Reviews Molecular Cell Biology, 2010, 11, 75-81.	37.0	174
17	Types I and II Keratin Intermediate Filaments. Cold Spring Harbor Perspectives in Biology, 2018, 10, a018275.	5.5	171
18	Keratin function in skin epithelia: a broadening palette with surprising shades. Current Opinion in Cell Biology, 2007, 19, 13-23.	5.4	167

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19	Keratin 17 modulates hair follicle cycling in a TNFÂ-dependent fashion. Genes and Development, 2006, 20, 1353-1364.	5.9	163
20	Networking galore: intermediate filaments and cell migration. Current Opinion in Cell Biology, 2013, 25, 600-612.	5.4	162
21	The â€˜insâ€™ and â€˜outsâ€™ of intermediate filament organization. Trends in Cell Biology, 2000, 10, 420-428.	7.9	160
22	Structural basis for heteromeric assembly and perinuclear organization of keratin filaments. Nature Structural and Molecular Biology, 2012, 19, 707-715.	8.2	158
23	Keratin 16 regulates innate immunity in response to epidermal barrier breach. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19537-19542.	7.1	149
24	Of mice and men: Genetic skin diseases of keratin. Cell, 1992, 69, 899-902.	28.9	138
25	Wound Epithelialization: Accelerationg the Pace of Discovery. Journal of Investigative Dermatology, 2003, 121, 219-230.	0.7	138
26	A 'hot-spot' mutation alters the mechanical properties of keratin filament networks. Nature Cell Biology, 2001, 3, 503-506.	10.3	137
27	MIM/BEG4, a Sonic hedgehog-responsive gene that potentiates Gli-dependent transcription. Genes and Development, 2004, 18, 2724-2729.	5.9	135
28	Hairless triggers reactivation of hair growth by promoting Wnt signaling. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14653-14658.	7.1	133
29	Towards a Molecular Definition of Keratinocyte Activation after Acute Injury to Stratified Epithelia. Biochemical and Biophysical Research Communications, 1997, 236, 231-238.	2.1	128
30	Keratin Filament Suspensions Show Unique Micromechanical Properties. Journal of Biological Chemistry, 1999, 274, 19145-19151.	3.4	123
31	Keratin 17 null mice exhibit age- and strain-dependent alopecia. Genes and Development, 2002, 16, 1412-1422.	5.9	115
32	Keratin-dependent regulation of Aire and gene expression in skin tumor keratinocytes. Nature Genetics, 2015, 47, 933-938.	21.4	111
33	The cellular and molecular biology of keratins: beginning a new era. Current Opinion in Cell Biology, 1993, 5, 17-29.	5.4	107
34	Periderm prevents pathological epithelial adhesions during embryogenesis. Journal of Clinical Investigation, 2014, 124, 3891-3900.	8.2	105
35	Cloning and Characterization of Multiple Human Genes and cDNAs Encoding Highly Related Type II Keratin 6 Isoforms. Journal of Biological Chemistry, 1995, 270, 18581-18592.	3.4	104
36	Defining Keratin Protein Function in Skin Epithelia: Epidermolysis Bullosa Simplex and Its Aftermath. Journal of Investigative Dermatology, 2012, 132, 763-775.	0.7	102

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37	Introducing a Null Mutation in the Mouse K6Î± and K6Î² Genes Reveals Their Essential Structural Role in the Oral Mucosa. Journal of Cell Biology, 2000, 150, 921-928.	5.2	98
38	A wound-induced keratin inhibits Src activity during keratinocyte migration and tissue repair. Journal of Cell Biology, 2012, 197, 381-389.	5.2	98
39	Functional Differences between Keratins of Stratified and Simple Epithelia. Journal of Cell Biology, 1998, 143, 487-499.	5.2	91
40	Reprogramming of keratin biosynthesis by sulforaphane restores skin integrity in epidermolysis bullosa simplex. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14460-14465.	7.1	86
41	Re-epithelialization of Porcine Skin By The Sweat Apparatus. Journal of Investigative Dermatology, 1998, 110, 13-19.	0.7	80
42	The Two Functional Keratin 6 Genes of Mouse Are Differentially Regulated and Evolved Independently from Their Human Orthologs. Genomics, 1998, 53, 170-183.	2.9	80
43	Keratin 17 Expression in the Hard Epithelial Context of the Hair and Nail, and its Relevance for the Pachyonychia Congenita Phenotype. Journal of Investigative Dermatology, 2000, 114, 1101-1107.	0.7	80
44	Intermediate filaments and tissue repair. Experimental Cell Research, 2004, 301, 68-76.	2.6	78
45	Directed Expression of Keratin 16 to the Progenitor Basal Cells of Transgenic Mouse Skin Delays Skin Maturation. Journal of Cell Biology, 1998, 142, 1035-1051.	5.2	77
46	Keratin 16 Expression Defines a Subset of Epithelial Cells During Skin Morphogenesis and the Hair Cycle. Journal of Investigative Dermatology, 2002, 119, 1137-1149.	0.7	77
47	Regulation of C-X-C chemokine gene expression by keratin 17 and hnRNP K in skin tumor keratinocytes. Journal of Cell Biology, 2015, 208, 613-627.	5.2	71
48	Keratin 6 regulates collective keratinocyte migration by altering cellâ€“cell and cellâ€“matrix adhesion. Journal of Cell Biology, 2018, 217, 4314-4330.	5.2	70
49	Intermediate filaments at a glance. Journal of Cell Science, 2001, 114, 4345-4347.	2.0	68
50	The nonhelical tail domain of keratin 14 promotes filament bundling and enhances the mechanical properties of keratin intermediate filaments in vitro. Journal of Cell Biology, 2001, 155, 747-754.	5.2	66
51	Self-organization of keratin intermediate filaments into cross-linked networks. Journal of Cell Biology, 2009, 186, 409-421.	5.2	66
52	Increased Levels of Keratin 16 Alter Epithelialization Potential of Mouse Skin Keratinocytes In Vivo and Ex Vivo. Molecular Biology of the Cell, 2001, 12, 3439-3450.	2.1	64
53	An Ex Vivo Assay to Assess the Potential of Skin Keratinocytes for Wound Epithelialization. Journal of Investigative Dermatology, 2002, 118, 866-870.	0.7	64
54	Keratin 16â€“Null Mice Develop Palmoplantar Keratoderma, a Hallmark Feature of Pachyonychia Congenita and Related Disorders. Journal of Investigative Dermatology, 2012, 132, 1384-1391.	0.7	62

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55	Great promises yet to be fulfilled: Defining keratin intermediate filament function in vivo. European Journal of Cell Biology, 2004, 83, 735-746.	3.6	60
56	Type II Epithelial Keratin 6hf (K6hf) Is Expressed in the Companion Layer, Matrix, and Medulla in Anagen-Stage Hair Follicles. Journal of Investigative Dermatology, 2003, 121, 1276-1282.	0.7	57
57	Exploiting the Keratin 17 Gene Promoter To Visualize Live Cells in Epithelial Appendages of Mice. Molecular and Cellular Biology, 2005, 25, 7249-7259.	2.3	55
58	Skin Keratins. Methods in Enzymology, 2016, 568, 303-350.	1.0	54
59	The Functional Diversity of Epidermal Keratins Revealed by the Partial Rescue of the Keratin 14 Null Phenotype by Keratin 16. Journal of Cell Biology, 1999, 146, 1185-1201.	5.2	52
60	Keratins Are Going Nuclear. Developmental Cell, 2016, 38, 227-233.	7.0	52
61	Interaction between the keratin cytoskeleton and eEF1BÎ³ affects protein synthesis in epithelial cells. Nature Structural and Molecular Biology, 2007, 14, 982-983.	8.2	49
62	Oxidative stress and dysfunctional NRF2 underlie pachyonychia congenita phenotypes. Journal of Clinical Investigation, 2016, 126, 2356-2366.	8.2	48
63	Vibrissa hair bulge houses two populations of skin epithelial stem cells distinct by their keratin profile. FASEB Journal, 2008, 22, 1404-1415.	0.5	47
64	A role for disulfide bonding in keratin intermediate filament organization and dynamics in skin keratinocytes. Journal of Cell Biology, 2015, 209, 59-72.	5.2	47
65	A Proline Residue in the Î±-Helical Rod Domain of Type I Keratin 16 Destabilizes Keratin Heterotetramers. Journal of Biological Chemistry, 1997, 272, 32557-32565.	3.4	43
66	Defining a Region of the Human Keratin 6a Gene That Confers Inducible Expression in Stratified Epithelia of Transgenic Mice. Journal of Biological Chemistry, 1997, 272, 11979-11985.	3.4	41
67	Keratin 14-dependent disulfides regulate epidermal homeostasis and barrier function via 14-3-3Ïƒ and YAP1. ELife, 2020, 9, .	6.0	41
68	The Type I Keratin 19 Possesses Distinct and Context-dependent Assembly Properties. Journal of Biological Chemistry, 1998, 273, 35176-35184.	3.4	40
69	Keratin Expression Provides Novel Insight into the Morphogenesis and Function of the Companion Layer in Hair Follicles. Journal of Investigative Dermatology, 2007, 127, 1061-1073.	0.7	37
70	Keratin intermediate filament proteins â€" novel regulators of inflammation and immunity in skin. Journal of Cell Science, 2012, 125, 5257-5258.	2.0	36
71	Oxidative stress management in the hair follicle: Could targeting NRF2 counter ageâ€related hair disorders and beyond?. BioEssays, 2017, 39, 1700029.	2.5	33
72	Intermediate filaments as effectors of differentiation. Current Opinion in Cell Biology, 2021, 68, 155-162.	5.4	33

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73	Barrier Function in Transgenic Mice Overexpressing K16, Involucrin, and Filaggrin in the Suprabasal Epidermis. Journal of Investigative Dermatology, 2004, 123, 603-606.	0.7	32
74	A reporter transgene based on a human keratin 6 gene promoter is specifically expressed in the periderm of mouse embryos. Mechanisms of Development, 2001, 100, 65-69.	1.7	31
75	A small surface hydrophobic stripe in the coiled-coil domain of type I keratins mediates tetramer stability. Journal of Cell Biology, 2005, 168, 965-974.	5.2	31
76	Identification of Novel Interaction between Annexin A2 and Keratin 17. Journal of Biological Chemistry, 2012, 287, 7573-7581.	3.4	31
77	A Novel Mouse Type I Intermediate Filament Gene, Keratin 17n (K17n), Exhibits Preferred Expression in Nail Tissue. Journal of Investigative Dermatology, 2004, 122, 965-970.	0.7	30
78	Type I Keratin 17 Protein Is Phosphorylated on Serine 44 by p90 Ribosomal Protein S6 Kinase 1 (RSK1) in a Growth- and Stress-dependent Fashion. Journal of Biological Chemistry, 2011, 286, 42403-42413.	3.4	28
79	Hedgehog Signaling, Keratin 6 Induction, and Sebaceous Gland Morphogenesis. American Journal of Pathology, 2008, 173, 752-761.	3.8	27
80	Overcoming Functional Redundancy To Elicit Pachyonychia Congenita-Like Nail Lesions in Transgenic Mice. Molecular and Cellular Biology, 2005, 25, 197-205.	2.3	25
81	The Molecular Revolution in Cutaneous Biology: Keratin Genes and their Associated Disease: Diversity, Opportunities, and Challenges. Journal of Investigative Dermatology, 2017, 137, e67-e71.	0.7	25
82	Altered keratinocyte differentiation is an early driver of keratin mutation-based palmoplantar keratoderma. Human Molecular Genetics, 2019, 28, 2255-2270.	2.9	25
83	A role for keratin 17 during DNA damage response and tumor initiation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	25
84	Keratin Intracellular Concentration Revisited: Implications for Keratin Function in Surface Epithelia. Journal of Investigative Dermatology, 2013, 133, 850-853.	0.7	23
85	Defining the Properties of the Nonhelical Tail Domain in Type II Keratin 5: Insight from a Bullous Disease-causing Mutation. Molecular Biology of the Cell, 2005, 16, 1427-1438.	2.1	22
86	A role for keratins in supporting mitochondrial organization and function in skin keratinocytes. Molecular Biology of the Cell, 2020, 31, 1103-1111.	2.1	22
87	Overexpression of human keratin 16 produces a distinct skin phenotype in transgenic mouse skin. Biochemistry and Cell Biology, 1995, 73, 611-618.	2.0	21
88	Stressing the role of O-GlcNAc: linking cell survival to keratin modification. Nature Cell Biology, 2010, 12, 847-849.	10.3	21
89	Structure-Function Analyses of a Keratin Heterotypic Complex Identify Specific Keratin Regions Involved in Intermediate Filament Assembly. Structure, 2020, 28, 355-362.e4.	3.3	19
90	Randomized, split-body, single-blinded clinical trial of topical broccoli sprout extract: Assessing the feasibility of its use in keratin-based disorders. Journal of the American Academy of Dermatology, 2017, 76, 449-453.e1.	1.2	18

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91	Keratins and protein synthesis: the plot thickens. Journal of Cell Biology, 2009, 187, 157-159.	5.2	16
92	Complementary Roles of Specific Cysteines in Keratin 14 toward the Assembly, Organization, and Dynamics of Intermediate Filaments in Skin Keratinocytes. Journal of Biological Chemistry, 2015, 290, 22507-22519.	3.4	15
93	Keratin 17 regulates nuclear morphology and chromatin organization. Journal of Cell Science, 2020, 133, .	2.0	14
94	Sexual Dimorphism in Response toÂanÂNRF2ÂInducer in a Model for PachyonychiaÂCongenita. Journal of Investigative Dermatology, 2018, 138, 1094-1100.	0.7	13
95	Sam68 is required for the growth and survival of nonmelanoma skin cancer. Cancer Medicine, 2019, 8, 6106-6113.	2.8	13
96	Non-canonical processes that shape the cell migration landscape. Current Opinion in Cell Biology, 2019, 57, 123-134.	5.4	12
97	Cytoskeleton: Missing links found?. Current Biology, 1996, 6, 1563-1566.	3.9	11
98	Modeling the Self-Organization Property of Keratin Intermediate Filaments. Biophysical Journal, 2010, 99, 2748-2756.	0.5	11
99	Skin: An Ideal Model System to Study Keratin Genes and Proteins. Methods in Cell Biology, 2004, 78, 453-487.	1.1	10
100	SKPing a Hurdle: Sox2 and Adult Dermal Stem Cells. Cell Stem Cell, 2009, 5, 569-570.	11.1	10
101	Directed Expression of a Chimeric Type II Keratin Partially Rescues Keratin 5-null Mice. Journal of Biological Chemistry, 2014, 289, 19435-19447.	3.4	10
102	Hepatic handling of vitamin D3 in micronodular cirrhosis: A structureâ€"function study in the rat. Journal of Bone and Mineral Research, 1988, 3, 461-472.	2.8	9
103	Mathematical Modeling of the Impact of Actin and Keratin Filaments onÂKeratinocyte Cell Spreading. Biophysical Journal, 2012, 103, 1828-1838.	0.5	9
104	A new fold on an old story: attachment of intermediate filaments to desmosomes. , 2002, 9, 560-562.		8
105	Lung Surfactant-associated Proteins and Type IV Collagen Share Common Epitopes: An Immunocytochemical Demonstration. The American Review of Respiratory Disease, 1989, 140, 1040-1044.	2.9	7
106	Les kÃ©ratines : un autre regard sur la biologie de la peau. Medecine/Sciences, 2002, 18, 45-54.	0.2	5
107	Ready evaluation of lung alveolar toxic damage with histological sections morphometry. Toxicology Letters, 1984, 20, 263-269.	0.8	4
108	Acute sensitivity of BHT-induced alveolar toxicity to a diquat challenge in murine lungs. Experimental and Molecular Pathology, 1987, 47, 241-261.	2.1	4

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109	Discovery of keratin function and role in genetic diseases: the year that 1991 was. Molecular Biology of the Cell, 2016, 27, 2807-2810.	2.1	4
110	The incidental pore: Ca_V1.2 and stem cell activation in quiescent hair follicles. Genes and Development, 2013, 27, 1315-1317.	5.9	3
111	The keratin 16 null phenotype is modestly impacted by genetic strain background in mice. Experimental Dermatology, 2018, 27, 672-674.	2.9	2
112	Application of linear intergration in the morphometric study of mild and severe pulmonary aveolar injury. Experimental and Molecular Pathology, 1988, 48, 77-96.	2.1	1
113	An <i>MBoC</i> Favorite: Identification of novel principles of keratin filament turnover in living cells. Molecular Biology of the Cell, 2012, 23, 3926-3926.	2.1	0
114	Editorial: Architectural cell elements as multimodal sensors, transducers, and actuators. Current Opinion in Cell Biology, 2021, 68, iii-v.	5.4	0
115	A Niche Above: A Novel Modality of Stem Cell Regulation in Mammalian Skin Epidermis. Cell Stem Cell, 2021, 28, 365-366.	11.1	0
116	Capturing intermediate filament networks. ELife, 2022, 11, .	6.0	0