David Komander

List of Publications by Year
in descending order

110 papers	23,441 citations	15504 65 h-index	24982 109 g-index
122 all docs	122 docs citations	122 times ranked	21466 citing authors

#	Article	IF	Citations
1	The Ubiquitin Code. Annual Review of Biochemistry, 2012, 81, 203-229.	11.1	2,844
2	Breaking the chains: structure and function of the deubiquitinases. Nature Reviews Molecular Cell Biology, 2009, 10, 550-563.	37.0	1,722
3	Ubiquitin modifications. Cell Research, 2016, 26, 399-422.	12.0	1,357
4	The nuts and bolts of AGC protein kinases. Nature Reviews Molecular Cell Biology, 2010, 11, 9-22.	37.0	1,137
5	PDK1, the master regulator of AGC kinase signal transduction. Seminars in Cell and Developmental Biology, 2004, 15, 161-170.	5.0	715
6	Mechanisms of Deubiquitinase Specificity and Regulation. Annual Review of Biochemistry, 2017, 86, 159-192.	11.1	698
7	The emerging complexity of protein ubiquitination. Biochemical Society Transactions, 2009, 37, 937-953.	3.4	684
8	Recruitment of the Linear Ubiquitin Chain Assembly Complex Stabilizes the TNF-R1 Signaling Complex andÂIs Required for TNF-Mediated Gene Induction. Molecular Cell, 2009, 36, 831-844.	9.7	674
9	Specific Recognition of Linear Ubiquitin Chains by NEMO Is Important for NF-ÎºB Activation. Cell, 2009, 136, 1098-1109.	28.9	667
10	Atypical ubiquitylation â€" the unexplored world of polyubiquitin beyond Lys48 and Lys63 linkages. Nature Reviews Molecular Cell Biology, 2012, 13, 508-523.	37.0	558
11	Molecular discrimination of structurally equivalent Lys 63â€linked and linear polyubiquitin chains. EMBO Reports, 2009, 10, 466-473.	4.5	513
12	Breaking the chains: deubiquitylating enzyme specificity begets function. Nature Reviews Molecular Cell Biology, 2019, 20, 338-352.	37.0	512
13	OTU Deubiquitinases Reveal Mechanisms of Linkage Specificity and Enable Ubiquitin Chain Restriction Analysis. Cell, 2013, 154, 169-184.	28.9	470
14	OTULIN Antagonizes LUBAC Signaling by Specifically Hydrolyzing Met1-Linked Polyubiquitin. Cell, 2013, 153, 1312-1326.	28.9	395
15	Activation of the canonical IKK complex by K63/M1-linked hybrid ubiquitin chains. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15247-15252.	7.1	373
16	Mechanism of phospho-ubiquitin-induced PARKIN activation. Nature, 2015, 524, 370-374.	27.8	356
17	Molecular basis of USP7 inhibition by selective small-molecule inhibitors. Nature, 2017, 550, 481-486.	27.8	332
18	Mechanism and inhibition of the papainâ€like protease, PLpro, of SARSâ€CoVâ€2. EMBO Journal, 2020, 39, e106275.	7.8	330

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19	Lys11-linked ubiquitin chains adopt compact conformations and are preferentially hydrolyzed by the deubiquitinase Cezanne. Nature Structural and Molecular Biology, 2010, 17, 939-947.	8.2	294
20	On Terminal Alkynes That Can React with Active-Site Cysteine Nucleophiles in Proteases. Journal of the American Chemical Society, 2013, 135, 2867-2870.	13.7	290
21	LC3C, Bound Selectively by a Noncanonical LIR Motif in NDP52, Is Required for Antibacterial Autophagy. Molecular Cell, 2012, 48, 329-342.	9.7	285
22	Structure of the human Parkin ligase domain in an autoinhibited state. EMBO Journal, 2013, 32, 2099-2112.	7.8	271
23	Mechanism of parkin activation by PINK1. Nature, 2018, 559, 410-414.	27.8	271
24	Engineered diubiquitin synthesis reveals Lys29-isopeptide specificity of an OTU deubiquitinase. Nature Chemical Biology, 2010, 6, 750-757.	8.0	269
25	The Deubiquitinase OTULIN Is an Essential Negative Regulator of Inflammation and Autoimmunity. Cell, 2016, 166, 1215-1230.e20.	28.9	259
26	Ubiquitin Ser65 phosphorylation affects ubiquitin structure, chain assembly and hydrolysis. EMBO Journal, 2015, 34, 307-325.	7.8	258
27	The Structure of the CYLD USP Domain Explains Its Specificity for Lys63-Linked Polyubiquitin and Reveals a B Box Module. Molecular Cell, 2008, 29, 451-464.	9.7	251
28	OTULIN Restricts Met1-Linked Ubiquitination to Control Innate Immune Signaling. Molecular Cell, 2013, 50, 818-830.	9.7	209
29	Ubiquitin signalling in neurodegeneration: mechanisms and therapeutic opportunities. Cell Death and Differentiation, 2021, 28, 570-590.	11.2	197
30	LUBAC-synthesized linear ubiquitin chains restrict cytosol-invading bacteria by activating autophagy and NF-Î°B. Nature Microbiology, 2017, 2, 17063.	13.3	182
31	Deubiquitinase-based analysis of ubiquitin chain architecture using Ubiquitin Chain Restriction (UbiCRest). Nature Protocols, 2015, 10, 349-361.	12.0	178
32	Two-sided ubiquitin binding explains specificity of the TAB2 NZF domain. Nature Structural and Molecular Biology, 2009, 16, 1328-1330.	8.2	177
33	High resolution crystal structure of the human PDK1 catalytic domain defines the regulatory phosphopeptide docking site. EMBO Journal, 2002, 21, 4219-4228.	7.8	176
34	Mechanism and regulation of the Lys6-selective deubiquitinase USP30. Nature Structural and Molecular Biology, 2017, 24, 920-930.	8.2	173
35	Structural insights into the regulation of PDK1 by phosphoinositides and inositol phosphates. EMBO Journal, 2004, 23, 3918-3928.	7.8	167
36	Ubiquitin chain conformation regulates recognition and activity of interacting proteins. Nature, 2012, 492, 266-270.	27.8	166

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37	Structure of the A20 OTU domain and mechanistic insights into deubiquitination. Biochemical Journal, 2008, 409, 77-85.	3.7	165
38	Assembly and Specific Recognition of K29- and K33-Linked Polyubiquitin. Molecular Cell, 2015, 58, 95-109.	9.7	162
39	Molecular Basis and Regulation of OTULIN-LUBAC Interaction. Molecular Cell, 2014, 54, 335-348.	9.7	158
40	Insights into ubiquitin chain architecture using Ub-clipping. Nature, 2019, 572, 533-537.	27.8	155
41	Ubiquitin Linkage-Specific Affimers Reveal Insights into K6-Linked Ubiquitin Signaling. Molecular Cell, 2017, 68, 233-246.e5.	9.7	153
42	Lysine 27 Ubiquitination of the Mitochondrial Transport Protein Miro Is Dependent on Serine 65 of the Parkin Ubiquitin Ligase. Journal of Biological Chemistry, 2014, 289, 14569-14582.	3.4	152
43	Polyubiquitin binding and crossâ€reactivity in the USP domain deubiquitinase USP21. EMBO Reports, 2011, 12, 350-357.	4.5	147
44	Global Landscape and Dynamics of Parkin and USP30-Dependent Ubiquitylomes in iNeurons during Mitophagic Signaling. Molecular Cell, 2020, 77, 1124-1142.e10.	9.7	143
45	Dissection of USP catalytic domains reveals five common insertion points. Molecular BioSystems, 2009, 5, 1797.	2.9	135
46	Analysis of the human E2 ubiquitin conjugating enzyme protein interaction network. Genome Research, 2009, 19, 1905-1911.	5.5	134
47	Assembly, analysis and architecture of atypical ubiquitin chains. Nature Structural and Molecular Biology, 2013, 20, 555-565.	8.2	131
48	Analysis of the LKB1-STRAD-MO25 complex. Journal of Cell Science, 2004, 117, 6365-6375.	2.0	130
49	SPATA2 Links CYLD to LUBAC, Activates CYLD, and Controls LUBAC Signaling. Molecular Cell, 2016, 63, 990-1005.	9.7	130
50	Molecular basis of Lys11-polyubiquitin specificity in the deubiquitinase Cezanne. Nature, 2016, 538, 402-405.	27.8	129
51	CYLD Limits Lys63- and Met1-Linked Ubiquitin at Receptor Complexes to Regulate Innate Immune Signaling. Cell Reports, 2016, 14, 2846-2858.	6.4	128
52	Molecular basis for ubiquitin and ISG15 cross-reactivity in viral ovarian tumor domains. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2228-2233.	7.1	124
53	An ankyrin-repeat ubiquitin-binding domain determines TRABID's specificity for atypical ubiquitin chains. Nature Structural and Molecular Biology, 2012, 19, 62-71.	8.2	122
54	A cascading activity-based probe sequentially targets E1â€"E2â€"E3 ubiquitin enzymes. Nature Chemical Biology, 2016, 12, 523-530.	8.0	122

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55	The Molecular Basis for Ubiquitin and Ubiquitin-like Specificities in Bacterial Effector Proteases. Molecular Cell, 2016, 63, 261-276.	9.7	119
56	Recognition of Polyubiquitin Isoforms by the Multiple Ubiquitin Binding Modules of Isopeptidase T. Journal of Biological Chemistry, 2008, 283, 19581-19592.	3.4	116
57	Mutation of the PDK1 PH Domain Inhibits Protein Kinase B/Akt, Leading to Small Size and Insulin Resistance. Molecular and Cellular Biology, 2008, 28, 3258-3272.	2.3	115
58	Structure of PINK1 in complex with its substrate ubiquitin. Nature, 2017, 552, 51-56.	27.8	114
59	Recruitment of <scp>TBK</scp> 1 to cytosolâ€invading <i>Salmonella</i> induces <scp>WIPI</scp> 2â€dependent antibacterial autophagy. EMBO Journal, 2016, 35, 1779-1792.	7.8	107
60	Ubiquitin-Mediated Regulation of RIPK1 Kinase Activity Independent of IKK and MK2. Molecular Cell, 2018, 69, 566-580.e5.	9.7	102
61	Non-hydrolyzable Diubiquitin Probes Reveal Linkage-Specific Reactivity of Deubiquitylating Enzymes Mediated by S2 Pockets. Cell Chemical Biology, 2016, 23, 472-482.	5.2	90
62	An Î±-Helical Extension of the ELMO1 Pleckstrin Homology Domain Mediates Direct Interaction to DOCK180 and Is Critical in Rac Signaling. Molecular Biology of the Cell, 2008, 19, 4837-4851.	2.1	85
63	OTULIN deficiency in ORAS causes cell typeâ€specific LUBAC degradation, dysregulated TNF signalling and cell death. EMBO Molecular Medicine, 2019, 11, .	6.9	80
64	Interactions of LY333531 and Other Bisindolyl Maleimide Inhibitors with PDK1. Structure, 2004, 12, 215-226.	3.3	79
65	Cezanne (<scp>OTUD</scp>7B) regulates <scp>HIF</scp>â€1Î± homeostasis in a proteasomeâ€independent manner. EMBO Reports, 2014, 15, 1268-1277.	4.5	78
66	USP30 sets a trigger threshold for PINK1â€"PARKIN amplification of mitochondrial ubiquitylation. Life Science Alliance, 2020, 3, e202000768.	2.8	72
67	Irreversible inactivation of ISG15 by a viral leader protease enables alternative infection detection strategies. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2371-2376.	7.1	68
68	BIMEL, an intrinsically disordered protein, is degraded by 20S proteasomes in the absence of poly-ubiquitylation. Journal of Cell Science, 2011, 124, 969-977.	2.0	65
69	Emerging roles for Lys11-linked polyubiquitin in cellular regulation. Trends in Biochemical Sciences, 2011, 36, 355-63.	7.5	64
70	Activation mechanism of PINK1. Nature, 2022, 602, 328-335.	27.8	59
71	Mechanism of multi-site phosphorylation from a ROCK-I:RhoE complex structure. EMBO Journal, 2008, 27, 3175-3185.	7.8	57
72	A Chlamydia effector combining deubiquitination and acetylation activities induces Golgi fragmentation. Nature Microbiology, 2018, 3, 1377-1384.	13.3	55

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73	Cezanne regulates E2F1-dependent HIF2Î± expression. Journal of Cell Science, 2015, 128, 3082-93.	2.0	54
74	An invisible ubiquitin conformation is required for efficient phosphorylation by <scp>PINK</scp> 1. EMBO Journal, 2017, 36, 3555-3572.	7.8	50
75	Distinct USP25 and USP28 Oligomerization States Regulate Deubiquitinating Activity. Molecular Cell, 2019, 74, 436-451.e7.	9.7	48
76	Development of Diubiquitinâ€Based FRET Probes To Quantify Ubiquitin Linkage Specificity of Deubiquitinating Enzymes. ChemBioChem, 2016, 17, 816-820.	2.6	46
77	Identification and characterization of diverse OTU deubiquitinases in bacteria. EMBO Journal, 2020, 39, e105127.	7.8	46
78	Gsk3Î² and Tomm20 are substrates of the SCFFbxo7/PARK15 ubiquitin ligase associated with Parkinson's disease. Biochemical Journal, 2016, 473, 3563-3580.	3.7	45
79	OTULIN protects the liver against cell death, inflammation, fibrosis, and cancer. Cell Death and Differentiation, 2020, 27, 1457-1474.	11.2	45
80	Active site alanine mutations convert deubiquitinases into highâ€affinity ubiquitinâ€binding proteins. EMBO Reports, 2018, 19, .	4.5	43
81	Mind Bomb Regulates Cell Death during TNF Signaling by Suppressing RIPK1â€™s Cytotoxic Potential. Cell Reports, 2018, 23, 470-484.	6.4	42
82	A Linear Diubiquitin-Based Probe for Efficient and Selective Detection of the Deubiquitinating Enzyme OTULIN. Cell Chemical Biology, 2017, 24, 1299-1313.e7.	5.2	41
83	Oligomerizationâ€driven MLKL ubiquitylation antagonizes necroptosis. EMBO Journal, 2021, 40, e103718.	7.8	39
84	Inhibitors of SARS-CoV-2 PLpro. Frontiers in Chemistry, 2022, 10, 876212.	3.6	38
85	Role of T-loop Phosphorylation in PDK1 Activation, Stability, and Substrate Binding. Journal of Biological Chemistry, 2005, 280, 18797-18802.	3.4	36
86	The Salmonella Effector SpvD Is a Cysteine Hydrolase with a Serovar-specific Polymorphism Influencing Catalytic Activity, Suppression of Immune Responses, and Bacterial Virulence. Journal of Biological Chemistry, 2016, 291, 25853-25863.	3.4	35
87	Regulation of the endosomal SNX27-retromer by OTULIN. Nature Communications, 2019, 10, 4320.	12.8	34
88	Enzymatic Assembly of Ubiquitin Chains. Methods in Molecular Biology, 2018, 1844, 73-84.	0.9	29
89	Regulation of Met1â€linked polyubiquitin signalling by the deubiquitinase <scp>OTULIN</scp>. FEBS Journal, 2016, 283, 39-53.	4.7	27
90	Dissecting distinct proteolytic activities of FMDV Lpro implicates cleavage and degradation of RLR signaling proteins, not its deISGylase/DUB activity, in type I interferon suppression. PLoS Pathogens, 2020, 16, e1008702.	4.7	26

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91	An essential role for the ATG8 ortholog LC3C in antibacterial autophagy. Autophagy, 2013, 9, 784-786.	9.1	25
92	USP28 deletion and small-molecule inhibition destabilizes c-MYC and elicits regression of squamous cell lung carcinoma. ELife, 2021, 10, .	6.0	25
93	Synthesis of Poly-Ubiquitin Chains Using a Bifunctional Ubiquitin Monomer. Organic Letters, 2017, 19, 6490-6493.	4.6	21
94	Novel Inositol Phospholipid Headgroup Surrogate Crystallized in the Pleckstrin Homology Domain of Protein Kinase BÎ±. ACS Chemical Biology, 2007, 2, 242-246.	3.4	20
95	The deubiquitylase USP9X controls ribosomal stalling. Journal of Cell Biology, 2021, 220, .	5.2	20
96	Regulation of CYLD activity and specificity by phosphorylation and ubiquitin-binding CAP-Gly domains. Cell Reports, 2021, 37, 109777.	6.4	20
97	Evaluating enzyme activities and structures of DUBs. Methods in Enzymology, 2019, 618, 321-341.	1.0	19
98	The E3 ubiquitin ligase SCF(Fbxo7) mediates proteasomal degradation of UXT isoform 2 (UXT-V2) to inhibit the NF-ÎºB signaling pathway. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129754.	2.4	11
99	Insights Into Drug Repurposing, as Well as Specificity and Compound Properties of Piperidine-Based SARS-CoV-2 PLpro Inhibitors. Frontiers in Chemistry, 2022, 10, 861209.	3.6	11
100	Dual role of a GTPase conformational switch for membrane fusion by mitofusin ubiquitylation. Life Science Alliance, 2020, 3, e201900476.	2.8	10
101	The JAMM in the proteasome. Nature Structural and Molecular Biology, 2014, 21, 346-348.	8.2	9
102	CYLD Tidies Up Dishevelled Signaling. Molecular Cell, 2010, 37, 589-590.	9.7	8
103	LUBAC. Current Biology, 2022, 32, R506-R508.	3.9	7
104	Strange New World: Bacteria Catalyze Ubiquitylation via ADP Ribosylation. Cell Host and Microbe, 2017, 21, 127-129.	11.0	6
105	Details of destruction, one molecule at a time. Science, 2015, 348, 183-184.	12.6	5
106	Purification, crystallization and preliminary X-ray diffraction of a proteolytic fragment of PDK1 containing the pleckstrin homology domain. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 314-316.	2.5	4
107	A further case of Dopâ€ing in bacterial pupylation. EMBO Reports, 2010, 11, 722-723.	4.5	3
108	New Tools for Ubiquitin Signaling. Journal of Molecular Biology, 2012, 418, 129-130.	4.2	0

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109	Linear ubiquitin chains break blood vessel branches. Cell Research, 2021, 31, 1045-1046.	12.0	0
110	Unravelling the specificity in the ubiquitin system. FASEB Journal, 2013, 27, 553.26.	0.5	0