Gourisankar Ghosh

List of Publications by Year
in descending order

122 papers	10,452 citations	28274 55 h-index	33894 99 g-index
156 all docs	156 docs citations	156 times ranked	11843 citing authors

#	Article	IF	Citations
1	Regulation of Protein Kinases. Molecular Cell, 2004, 15, 661-675.	9.7	972
2	The Crystal Structure of the IÎºBÎ±/NF-ÎºB Complex Reveals Mechanisms of NF-ÎºB Inactivation. Cell, 1998, 95, 759-770.	28.9	592
3	Structure of NF-ÎºB p50 homodimer bound to a ÎºB site. Nature, 1995, 373, 303-310.	27.8	571
4	Crystal structure of p50/p65 heterodimer of transcription factor NF-ÎºB bound to DNA. Nature, 1998, 391, 410-413.	27.8	514
5	A Fourth IÎºB Protein within the NF-ÎºB Signaling Module. Cell, 2007, 128, 369-381.	28.9	359
6	Activation of IKKÎ± target genes depends on recognition of specific ÎºB binding sites by RelB:p52 dimers. EMBO Journal, 2004, 23, 4202-4210.	7.8	299
7	Regulation of DNA binding by Rel/NF-ÎºB transcription factors: structural views. Oncogene, 1999, 18, 6845-6852.	5.9	283
8	A novel DNA recognition mode by the NF-ÎºB p65 homodimer. Nature Structural Biology, 1998, 5, 67-73.	9.7	218
9	PRMT5 dimethylates R30 of the p65 subunit to activate NF-ÎºB. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13516-13521.	7.1	205
10	Interaction between the RNA binding domains of Ser-Arg splicing factor 1 and U1-70K snRNP protein determines early spliceosome assembly. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8233-8238.	7.1	180
11	Interplay between SRPK and Clk/Sty Kinases in Phosphorylation of the Splicing Factor ASF/SF2 Is Regulated by a Docking Motif in ASF/SF2. Molecular Cell, 2005, 20, 77-89.	9.7	179
12	NF-ÎºB dictates the degradation pathway of IÎºBÎ±. EMBO Journal, 2008, 27, 1357-1367.	7.8	171
13	Crystal structure of NF-ÂB (p50)2 complexed to a high-affinity RNA aptamer. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9268-9273.	7.1	161
14	Regulation of SR protein phosphorylation and alternative splicing by modulating kinetic interactions of SRPK1 with molecular chaperones. Genes and Development, 2009, 23, 482-495.	5.9	160
15	Phosphorylation mechanism and structure of serine-arginine protein kinases. FEBS Journal, 2011, 278, 587-597.	4.7	159
16	IÎºBÎ², but Not IÎºBÎ±, Functions as a Classical Cytoplasmic Inhibitor of NF-ÎºB Dimers by Masking Both NF-ÎºB Nuclear Localization Sequences in Resting Cells. Journal of Biological Chemistry, 2001, 276, 45225-45235.	3.4	152
17	NFâ€ÎºB regulation: lessons from structures. Immunological Reviews, 2012, 246, 36-58.	6.0	149
18	IÎºBÎ± Functions through Direct Contacts with the Nuclear Localization Signals and the DNA Binding Sequences of NF-ÎºB. Journal of Biological Chemistry, 1998, 273, 25427-25435.	3.4	148

#	Article	IF	Citations
19	NF-Î°B, IÎ°B, and IKK: Integral Components of Immune System Signaling. Advances in Experimental Medicine and Biology, 2019, 1172, 207-226.	1.6	145
20	Structure of the Oligomerization andL-Arginine Binding Domain of the Arginine Repressor ofEscherichia coli. Journal of Molecular Biology, 1996, 256, 377-391.	4.2	144
21	Mechanism of Î°B DNA binding by Rel/NF-Î°B dimers. Journal of Biological Chemistry, 2000, 275, 24392-24399.	3.4	120
22	The Nfkb1 and Nfkb2 Proteins p105 and p100 Function as the Core of High-Molecular-Weight Heterogeneous Complexes. Molecular Cell, 2009, 34, 591-602.	9.7	120
23	The 20S proteasome processes NF-Î°B1 p105 into p50 in a translation-independent manner. EMBO Journal, 2006, 25, 1945-1956.	7.8	118
24	Analysis of the RelA:CBP/p300 Interaction Reveals Its Involvement in NF-Î°B-Driven Transcription. PLoS Biology, 2013, 11, e1001647.	5.6	118
25	PKR and eIF2Î±: Integration of Kinase Dimerization, Activation, and Substrate Docking. Cell, 2005, 122, 823-825.	28.9	112
26	A c-Rel subdomain responsible for enhanced DNA-binding affinity and selective gene activation. Genes and Development, 2005, 19, 2138-2151.	5.9	111
27	Enhanced Intracellular Mobility and Nuclear Accumulation of DNA Plasmids Associated with a Karyophilic Protein. Human Gene Therapy, 2005, 16, 200-208.	2.7	109
28	X-ray Crystal Structure of an IÎ°BÎ²Â·NF-Î°B p65 Homodimer Complex. Journal of Biological Chemistry, 2003, 278, 23094-23100.	3.4	107
29	The X-ray Crystal Structure of the NF-Î°B p50Â·p65 Heterodimer Bound to the Interferon Î²-Î°B Site. Journal of Biological Chemistry, 2002, 277, 24694-24700.	3.4	106
30	Kinase Domain Insertions Define Distinct Roles of CLK Kinases in SR Protein Phosphorylation. Structure, 2009, 17, 352-362.	3.3	106
31	A Structural Guide to Proteins of the NF-ÂB Signaling Module. Cold Spring Harbor Perspectives in Biology, 2009, 1, a000075-a000075.	5.5	102
32	Biophysical characterization of the free IÎ°BÎ± ankyrin repeat domain in solution. Protein Science, 2004, 13, 1767-1777.	7.6	101
33	A Sliding Docking Interaction Is Essential for Sequential and Processive Phosphorylation of an SR Protein by SRPK1. Molecular Cell, 2008, 29, 563-576.	9.7	98
34	Processive phosphorylation of alternative splicing factor/splicing factor 2. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 12601-12606.	7.1	97
35	Mechanism of IÎ°BÎ± Binding to NF-Î°B Dimers. Journal of Biological Chemistry, 2000, 275, 29840-29846.	3.4	95
36	Kinetic control of negative feedback regulators of NF-Î°B/RelA determines their pathogen- and cytokine-receptor signaling specificity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9619-9624.	7.1	94

#	Article	IF	Citations
37	A Structural Basis for IÎºB Kinase 2 Activation Via Oligomerization-Dependent Trans Auto-Phosphorylation. PLoS Biology, 2013, 11, e1001581.	5.6	93
38	Attenuation of yeast UPR is essential for survival and is mediated by <i>IRE1</i> kinase. Journal of Cell Biology, 2011, 193, 41-50.	5.2	92
39	X-Ray Crystal Structure of Proto-Oncogene Product c-Rel Bound to the CD28 Response Element of IL-2. Structure, 2001, 9, 669-678.	3.3	89
40	Kinetic enhancement of NF-ÎºBÂ·DNA dissociation by IÎºBÎ±. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19328-19333.	7.1	88
41	The Transcriptional Specificity of NF-ÎºB Dimers Is Coded within the ÎºB DNA Response Elements. Cell Reports, 2012, 2, 824-839.	6.4	86
42	NEMO Ensures Signaling Specificity of the Pleiotropic IKKÎ² by Directing Its Kinase Activity toward IÎºBÎ±. Molecular Cell, 2012, 47, 111-121.	9.7	85
43	Mass Spectrometric and Kinetic Analysis of ASF/SF2 Phosphorylation by SRPK1 and Clk/Sty. Journal of Biological Chemistry, 2005, 280, 41761-41768.	3.4	82
44	The ÎºB DNA Sequence from the HIV Long Terminal Repeat Functions as an Allosteric Regulator of HIV Transcription. Journal of Biological Chemistry, 2002, 277, 24701-24708.	3.4	81
45	Genome reading by the NF-ÎºB transcription factors. Nucleic Acids Research, 2019, 47, 9967-9989.	14.5	78
46	The role of DNA in the mechanism of NFÎºB dimer formation: crystal structures of the dimerization domains of the p50 and p65 subunits. Structure, 1997, 5, 1427-1436.	3.3	75
47	The Specificity of Innate Immune Responses Is Enforced by Repression of Interferon Response Elements by NF-ÎºB p50. Science Signaling, 2011, 4, ra11.	3.6	75
48	The structure of Sky1p reveals a novel mechanism for constitutive activity. Nature Structural Biology, 2001, 8, 176-183.	9.7	70
49	Thermodynamics Reveal that Helix Four in the NLS of NF-ÎºB p65 Anchors IÎºBÎ±, Forming a Very Stable Complex. Journal of Molecular Biology, 2006, 360, 421-434.	4.2	69
50	Characterization of the Dimer Interface of Transcription Factor NFÎºB p50 Homodimer. Journal of Molecular Biology, 1999, 289, 1029-1040.	4.2	67
51	NF-ÎºB p65 (RelA) homodimer uses distinct mechanisms to recognize DNA targets. Structure, 2000, 8, 419-428.	3.3	65
52	NFâ€ÎºB p52:RelB heterodimer recognizes two classes of ÎºB sites with two distinct modes. EMBO Reports, 2009, 10, 152-159.	4.5	65
53	Transcriptional Outcome of Wnt-Frizzled Signal Transduction in Inflammation: Evolving Concepts. Journal of Immunology, 2008, 181, 4441-4445.	0.8	64
54	Pre-folding IÎºBÎ± Alters Control of NF-ÎºB Signaling. Journal of Molecular Biology, 2008, 380, 67-82.	4.2	58

#	Article	IF	Citations
55	Stabilization of RelB Requires Multidomain Interactions with p100/p52. Journal of Biological Chemistry, 2008, 283, 12324-12332.	3.4	58
56	p100/IÎºBÎ´ sequesters and inhibits NF-Î°B through kappaBsome formation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15946-15951.	7.1	54
57	X-ray Structure of a NF-Î°B p50/RelB/DNA Complex Reveals Assembly of Multiple Dimers on Tandem Î°B Sites. Journal of Molecular Biology, 2007, 373, 723-734.	4.2	50
58	Crystal Structure of a Free Î°B DNA: Insights into DNA Recognition by Transcription Factor NF-Î°B. Journal of Molecular Biology, 2005, 346, 147-160.	4.2	49
59	Construction, expression, purification and functional analysis of recombinant NFÎ°B p50/p65 heterodimer. Protein Engineering, Design and Selection, 1999, 12, 423-428.	2.1	48
60	The IÎ°BÎ±/NFâ€Î°B complex has two hot spots, one at either end of the interface. Protein Science, 2008, 17, 2051-2058.	7.6	48
61	Structural Basis for the Activation of IKK1/Î±. Cell Reports, 2016, 17, 1907-1914.	6.4	47
62	Bcl3 Phosphorylation by Akt, Erk2, and IKK Is Required for Its Transcriptional Activity. Molecular Cell, 2017, 67, 484-497.e5.	9.7	47
63	Inhibition of NF-Î°B Activity by IÎ°BÎ² in Association with Î°B-Ras. Molecular and Cellular Biology, 2004, 24, 3048-3056.	2.3	46
64	Molecular mimicry of the NF-Î°B DNA target site by a selected RNA aptamer. Current Opinion in Structural Biology, 2004, 14, 21-27.	5.7	46
65	Ordered Multi-site Phosphorylation of the Splicing Factor ASF/SF2 By SRPK1. Journal of Molecular Biology, 2008, 376, 55-68.	4.2	46
66	NF-Î°B RelB Forms an Intertwined Homodimer. Structure, 2005, 13, 1365-1373.	3.3	45
67	Adaptable Molecular Interactions Guide Phosphorylation of the SR Protein ASF/SF2 by SRPK1. Journal of Molecular Biology, 2008, 382, 894-909.	4.2	44
68	Contribution of Non-catalytic Core Residues to Activity and Regulation in Protein Kinase A. Journal of Biological Chemistry, 2009, 284, 6241-6248.	3.4	44
69	Role of lysine methylation of NF-Î°B in differential gene regulation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13510-13515.	7.1	42
70	The SRSF1 linker induces semi-conservative ESE binding by cooperating with the RRMs. Nucleic Acids Research, 2011, 39, 9413-9421.	14.5	41
71	IÎ°BÎ² enhances the generation of the low-affinity NFÎ°B/RelA homodimer. Nature Communications, 2015, 6, 7068.	12.8	41
72	N-terminus of the protein kinase CLK1 induces SR protein hyperphosphorylation. Biochemical Journal, 2014, 462, 143-152.	3.7	35

#	Article	IF	Citations
73	Dissecting the Regulatory Strategies of NF-Î°B RelA Target Genes in the Inflammatory Response Reveals Differential Transactivation Logics. Cell Reports, 2020, 30, 2758-2775.e6.	6.4	35
74	Mechanism of Dephosphorylation of the SR Protein ASF/SF2 by Protein Phosphatase 1. Journal of Molecular Biology, 2010, 403, 386-404.	4.2	33
75	Î°B-Ras Binds to the Unique Insert within the Ankyrin Repeat Domain of IÎ°BÎ² and Regulates Cytoplasmic Retention of IÎ°BÎ²Â·NF-Î°B Complexes. Journal of Biological Chemistry, 2003, 278, 23101-23106.	3.4	32
76	SR Protein Kinase 1 Is Resilient to Inactivation. Structure, 2007, 15, 123-133.	3.3	32
77	Solvent Exposed Non-contacting Amino Acids Play a Critical Role in NF-Î°B/IÎ°BÎ± Complex Formation. Journal of Molecular Biology, 2002, 324, 587-597.	4.2	31
78	p105Â·IÎ°BÎ³ and Prototypical IÎ°Bs Use a Similar Mechanism to Bind but a Different Mechanism to Regulate the Subcellular Localization of NF-Î°B. Journal of Biological Chemistry, 2003, 278, 556-566.	3.4	31
79	Regiospecific Phosphorylation Control of the SR Protein ASF/SF2 by SRPK1. Journal of Molecular Biology, 2009, 390, 618-634.	4.2	31
80	An NFÎ°B Activity Calculator to Delineate Signaling Crosstalk: Type I and II Interferons Enhance NFÎ°B via Distinct Mechanisms. Frontiers in Immunology, 2019, 10, 1425.	4.8	31
81	Immunosuppression of Macrophages Underlies the Cardioprotective Effects of CST (Catestatin). Hypertension, 2021, 77, 1670-1682.	2.7	31
82	Deficiency in classical nonhomologous end-joiningâ€"mediated repair of transcribed genes is linked to SCA3 pathogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8154-8165.	7.1	28
83	Nucleotide-Induced Conformational Changes in theSaccharomyces cerevisiaeSR Protein Kinase, Sky1p, Revealed by X-ray Crystallographyâ€. Biochemistry, 2003, 42, 9575-9585.	2.5	26
84	Pho5p and Newly Identified Nucleotide Pyrophosphatases/ Phosphodiesterases Regulate Extracellular Nucleotide Phosphate Metabolism in Saccharomyces cerevisiae. Eukaryotic Cell, 2005, 4, 1892-1901.	3.4	26
85	Structural disruption of exonic stemâ€"loops immediately upstream of the intron regulates mammalian splicing. Nucleic Acids Research, 2020, 48, 6294-6309.	14.5	24
86	Deletion of the N-terminus of SF2/ASF Permits RS-Domain-Independent Pre-mRNA Splicing. PLoS ONE, 2007, 2, e854.	2.5	23
87	Inhibitor Î°B Kinase Î² Binding by Inhibitor Î°B Kinase Î³. Biochemistry, 2007, 46, 12482-12490.	2.5	22
88	DNA-binding affinity and transcriptional activity of the RelA homodimer of nuclear factor Î°B are not correlated. Journal of Biological Chemistry, 2017, 292, 18821-18830.	3.4	22
89	The RGG Domain of Npl3p Recruits Sky1p Through Docking Interactions. Journal of Molecular Biology, 2007, 367, 249-261.	4.2	21
90	Mechanistic Insights into Sky1p, a Yeast Homologue of the Mammalian SR Protein Kinasesâ€. Biochemistry, 2002, 41, 10002-10009.	2.5	19

#	Article	IF	Citations
91	Understanding the Logic of IÎºB:NF-ÎºB Regulation in Structural Terms. Current Topics in Microbiology and Immunology, 2010, 349, 1-24.	1.1	19
92	Flexible Regions within IÎºBÎ± Create the Ubiquitin-independent Degradation Signal. Journal of Biological Chemistry, 2010, 285, 32927-32936.	3.4	17
93	Preparation and Crystallization of Dynamic NF-ÎºBÂ·IÎºB Complexes. Journal of Biological Chemistry, 2000, 275, 32800-32806.	3.4	16
94	Structurally Unique Yeast and Mammalian Serine-Arginine Protein Kinases Catalyze Evolutionarily Conserved Phosphorylation Reactions. Journal of Biological Chemistry, 2007, 282, 23036-23043.	3.4	16
95	The NF-ÎºB subunit RelB controls p100 processing by competing with the kinases NIK and IKK1 for binding to p100. Science Signaling, 2016, 9, ra96.	3.6	16
96	Protein Cofactors Are Essential for High-Affinity DNA Binding by the Nuclear Factor ÎºB RelA Subunit. Biochemistry, 2018, 57, 2943-2957.	2.5	16
97	Identifying Critical Non-Catalytic Residues that Modulate Protein Kinase A Activity. PLoS ONE, 2009, 4, e4746.	2.5	15
98	Origin of the Functional Distinctiveness of NF-ÎºB/p52. Frontiers in Cell and Developmental Biology, 2021, 9, 764164.	3.7	15
99	Chemical Clamping Allows for Efficient Phosphorylation of the RNA Carrier Protein Npl3. Journal of Biological Chemistry, 2004, 279, 30182-30188.	3.4	14
100	NF-ÎºB Potentiates Caspase Independent Hydrogen Peroxide Induced Cell Death. PLoS ONE, 2011, 6, e16815.	2.5	14
101	A Structural Basis for Selective Dimerization by NF-ÎºB RelB. Journal of Molecular Biology, 2013, 425, 1934-1945.	4.2	14
102	Intrapulmonary administration of purified NEIL2 abrogates NF-ÎºBâ€“mediated inflammation. Journal of Biological Chemistry, 2021, 296, 100723.	3.4	14
103	Discreet mutations from c-Rel to v-Rel alter ÎºB DNA recognition, IÎºBÎ± binding, and dimerization: implications for v-Rel oncogenicity. Oncogene, 2004, 23, 1229-1238.	5.9	13
104	Regulatory subunit NEMO promotes polyubiquitin-dependent induction of NF-ÎºB through a targetable second interaction with upstream activator IKK2. Journal of Biological Chemistry, 2022, 298, 101864.	3.4	11
105	Inhibition of Transcription Factor NFâ€Î°B Activation by Î°Bâ€Ras. Methods in Enzymology, 2006, 407, 527-534.	1.0	8
106	Dynamic chromatin association of IÎºBÎ± is regulated by acetylation and cleavage of histone H4. EMBO Reports, 2021, 22, e52649.	4.5	8
107	Probing Kinase Activation and Substrate Specificity with an Engineered Monomeric IKK2. Biochemistry, 2014, 53, 2064-2073.	2.5	7
108	Discovery of a pre-mRNA structural scaffold as a contributor to the mammalian splicing code. Nucleic Acids Research, 2021, 49, 7103-7121.	14.5	7

#	Article	IF	Citations
109	Identification of Functionally Distinct Regions That Mediate Biological Activity of the Protein Kinase A Homolog Tpk2. Journal of Biological Chemistry, 2008, 283, 1084-1093.	3.4	5
110	Understanding NIK Regulation from Its Structure. Structure, 2012, 20, 1615-1617.	3.3	5
111	Structurally plastic NEMO and oligomerization prone IKK2 subunits define the behavior of human IKK2:NEMO complexes in solution. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2020, 1868, 140526.	2.3	5
112	PABP1 Drives the Selective Translation of Influenza A Virus mRNA. Journal of Molecular Biology, 2022, 434, 167460.	4.2	5
113	Pieces of the puzzle: assembling the preinitiation complex of Pol II. Structure, 1996, 4, 891-895.	3.3	4
114	A New DNA Methyltransferase-Histone Deacetylase-Kinase Axis in Innate Immunity. Molecular Cell, 2016, 63, 544-546.	9.7	1
115	To Swap or Not To Swap. Structure, 2016, 24, 1436-1438.	3.3	0
116	Construing the Dynamic Complexity at a Plausible IKK2-Nemo Interface. Biophysical Journal, 2017, 112, 352a.	0.5	0
117	A Guide to Production, Crystallization, and Structure Determination of Human IKK1/α. Journal of Visualized Experiments, 2018, , .	0.3	0
118	Structural Aspects of NF-_B and I_B Proteins. , 2006, , 9-24.		0
119	Recognition of Nucleic Acids by Transcription Factor NF-ÎºB. Biological and Medical Physics Series, 2010, , 85-106.	0.4	0
120	Challenges and Insights in Regulation of p53 and NFâ€kappaB Transcription Factors: Making the Case for Cancer Prevention from the Environmentalâ€Physiological Paradigm. FASEB Journal, 2018, 32, 648.22.	0.5	0
121	A mechanism for signalâ€dependent IKKÎ² activation driven by molecular interactions with polyâ€ubiquitinâ€bound NEMO. FASEB Journal, 2018, 32, 662.10.	0.5	0
122	Structural Analysis of NF-ÎºB and IÎºB Proteins. , 2006, , 1-11.		0