Peter ten Dijke

List of Publications by Citations

Source: https://exaly.com/author-pdf/5857775/peter-ten-dijke-publications-by-citations.pdf

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

51,894 118 218 451 h-index g-index citations papers 56,956 8.1 7.75 499 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
451	TGF-beta signalling from cell membrane to nucleus through SMAD proteins. <i>Nature</i> , 1997 , 390, 465-71	50.4	3206
450	Induction of apoptosis by ASK1, a mammalian MAPKKK that activates SAPK/JNK and p38 signaling pathways. <i>Science</i> , 1997 , 275, 90-4	33.3	2026
449	Identification of Smad7, a TGFbeta-inducible antagonist of TGF-beta signalling. <i>Nature</i> , 1997 , 389, 631-	550.4	1555
448	Direct binding of Smad3 and Smad4 to critical TGF beta-inducible elements in the promoter of human plasminogen activator inhibitor-type 1 gene. <i>EMBO Journal</i> , 1998 , 17, 3091-100	13	1468
447	New insights into TGF-beta-Smad signalling. <i>Trends in Biochemical Sciences</i> , 2004 , 29, 265-73	10.3	1009
446	Balancing the activation state of the endothelium via two distinct TGF-beta type I receptors. <i>EMBO Journal</i> , 2002 , 21, 1743-53	13	847
445	TGF-beta receptor-mediated signalling through Smad2, Smad3 and Smad4. <i>EMBO Journal</i> , 1997 , 16, 53	53-562	816
444	Activin receptor-like kinase 1 modulates transforming growth factor-beta 1 signaling in the regulation of angiogenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 2626-31	11.5	712
443	Cloning of a TGF beta type I receptor that forms a heteromeric complex with the TGF beta type II receptor. <i>Cell</i> , 1993 , 75, 681-92	56.2	709
442	Sclerostin is an osteocyte-expressed negative regulator of bone formation, but not a classical BMP antagonist. <i>Journal of Experimental Medicine</i> , 2004 , 199, 805-14	16.6	691
441	Specificity, diversity, and regulation in TGF-Buperfamily signaling. <i>FASEB Journal</i> , 1999 , 13, 2105-2124	0.9	685
440	Identification and functional characterization of distinct critically important bone morphogenetic protein-specific response elements in the Id1 promoter. <i>Journal of Biological Chemistry</i> , 2002 , 277, 4883	3- 5 94	684
439	Extracellular control of TGFbeta signalling in vascular development and disease. <i>Nature Reviews Molecular Cell Biology</i> , 2007 , 8, 857-69	48.7	597
438	Activin receptor-like kinase (ALK)1 is an antagonistic mediator of lateral TGFbeta/ALK5 signaling. <i>Molecular Cell</i> , 2003 , 12, 817-28	17.6	561
437	Transforming growth factor-beta1 to the bone. <i>Endocrine Reviews</i> , 2005 , 26, 743-74	27.2	541
436	Endoglin promotes endothelial cell proliferation and TGF-beta/ALK1 signal transduction. <i>EMBO Journal</i> , 2004 , 23, 4018-28	13	525
435	Characterization of type I receptors for transforming growth factor-beta and activin. <i>Science</i> , 1994 , 264, 101-4	33.3	497

434	Identification and functional characterization of a Smad binding element (SBE) in the JunB promoter that acts as a transforming growth factor-beta, activin, and bone morphogenetic protein-inducible enhancer. <i>Journal of Biological Chemistry</i> , 1998 , 273, 21145-52	5.4	482	
433	Cloning and characterization of a human type II receptor for bone morphogenetic proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1995 , 92, 7632-6	11.5	475	
432	TGF-In progression of liver disease. <i>Cell and Tissue Research</i> , 2012 , 347, 245-56	4.2	472	
431	Targeting TGF-Lignaling in Cancer. <i>Trends in Cancer</i> , 2017 , 3, 56-71	12.5	444	
430	Osteogenic protein-1 binds to activin type II receptors and induces certain activin-like effects. Journal of Cell Biology, 1995 , 130, 217-26	7.3	437	
429	Apoptosis in podocytes induced by TGF-land Smad7. <i>Journal of Clinical Investigation</i> , 2001 , 108, 807-816	5 15.9	434	
428	Abnormal angiogenesis but intact hematopoietic potential in TGF-beta type I receptor-deficient mice. <i>EMBO Journal</i> , 2001 , 20, 1663-73	13	429	
427	BMP-9 signals via ALK1 and inhibits bFGF-induced endothelial cell proliferation and VEGF-stimulated angiogenesis. <i>Journal of Cell Science</i> , 2007 , 120, 964-72	5.3	412	
426	Signaling of transforming growth factor-beta family members through Smad proteins. <i>FEBS Journal</i> , 2000 , 267, 6954-67		398	
425	TGF-beta signaling by Smad proteins. <i>Advances in Immunology</i> , 2000 , 75, 115-57	5.6	380	
424	TGF-beta receptor function in the endothelium. Cardiovascular Research, 2005, 65, 599-608	9.9	378	
423	TGF-beta signaling in vascular biology and dysfunction. <i>Cell Research</i> , 2009 , 19, 116-27	24.7	369	
422	Regulation of cell proliferation by Smad proteins. <i>Journal of Cellular Physiology</i> , 2002 , 191, 1-16	7	368	
421	The L45 loop in type I receptors for TGF-beta family members is a critical determinant in specifying Smad isoform activation. <i>FEBS Letters</i> , 1998 , 434, 83-7	3.8	327	
420	TGF-EMediated Epithelial-Mesenchymal Transition and Cancer Metastasis. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	324	
419	Hedgehog creates a gradient of DPP activity in Drosophila wing imaginal discs. <i>Molecular Cell</i> , 2000 , 5, 59-71	17.6	324	
418	Signaling inputs converge on nuclear effectors in TGF-beta signaling. <i>Trends in Biochemical Sciences</i> , 2000 , 25, 64-70	10.3	322	
4 ¹ 7	Phosphorylation of Ser465 and Ser467 in the C terminus of Smad2 mediates interaction with Smad4 and is required for transforming growth factor-beta signaling. <i>Journal of Biological Chemistry</i> , 1997 , 272, 28107-15	5.4	314	

416	Negative regulation of TGF-beta receptor/Smad signal transduction. <i>Current Opinion in Cell Biology</i> , 2007 , 19, 176-84	9	314
415	The tumor suppressor Smad4 is required for transforming growth factor beta-induced epithelial to mesenchymal transition and bone metastasis of breast cancer cells. <i>Cancer Research</i> , 2006 , 66, 2202-9	10.1	314
414	Smad7 prevents activation of hepatic stellate cells and liver fibrosis in rats. <i>Gastroenterology</i> , 2003 , 125, 178-91	13.3	314
413	Role of Smad proteins and transcription factor Sp1 in p21(Waf1/Cip1) regulation by transforming growth factor-beta. <i>Journal of Biological Chemistry</i> , 2000 , 275, 29244-56	5.4	312
412	MED12 controls the response to multiple cancer drugs through regulation of TGF-Ireceptor signaling. <i>Cell</i> , 2012 , 151, 937-50	56.2	310
411	Induction of inhibitory Smad6 and Smad7 mRNA by TGF-beta family members. <i>Biochemical and Biophysical Research Communications</i> , 1998 , 249, 505-11	3.4	306
410	TGF-Bignalling and its role in cancer progression and metastasis. <i>Cancer and Metastasis Reviews</i> , 2012 , 31, 553-68	9.6	304
409	TGF-Bignalling and liver disease. FEBS Journal, 2016 , 283, 2219-32	5.7	297
408	Signaling by members of the TGF-beta family in vascular morphogenesis and disease. <i>Trends in Cell Biology</i> , 2010 , 20, 556-67	18.3	294
407	SOST/sclerostin, an osteocyte-derived negative regulator of bone formation. <i>Cytokine and Growth Factor Reviews</i> , 2005 , 16, 319-27	17.9	289
406	Induction of sonic hedgehog mediators by transforming growth factor-beta: Smad3-dependent activation of Gli2 and Gli1 expression in vitro and in vivo. <i>Cancer Research</i> , 2007 , 67, 6981-6	10.1	286
405	FK506 activates BMPR2, rescues endothelial dysfunction, and reverses pulmonary hypertension. <i>Journal of Clinical Investigation</i> , 2013 , 123, 3600-13	15.9	278
404	The dynamic roles of TGF-IIn cancer. <i>Journal of Pathology</i> , 2011 , 223, 205-18	9.4	277
403	Stimulation of Id1 expression by bone morphogenetic protein is sufficient and necessary for bone morphogenetic protein-induced activation of endothelial cells. <i>Circulation</i> , 2002 , 106, 2263-70	16.7	264
402	Identification of another member of the transforming growth factor type beta gene family. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1988 , 85, 4715-9	11.5	259
401	Endoglin in angiogenesis and vascular diseases. <i>Angiogenesis</i> , 2008 , 11, 79-89	10.6	250
400	Distinct and overlapping patterns of localization of bone morphogenetic protein (BMP) family members and a BMP type II receptor during fracture healing in rats. <i>Bone</i> , 1998 , 22, 605-12	4.7	248
399	Distinct transforming growth factor-beta (TGF-beta) receptor subsets as determinants of cellular responsiveness to three TGF-beta isoforms. <i>Journal of Biological Chemistry</i> , 1990 , 265, 20533-20538	5.4	239

398	Apoptosis in podocytes induced by TGF-beta and Smad7. <i>Journal of Clinical Investigation</i> , 2001 , 108, 807	7-115 9	233
397	Signaling via hetero-oligomeric complexes of type I and type II serine/threonine kinase receptors. <i>Current Opinion in Cell Biology</i> , 1996 , 8, 139-45	9	229
396	Regulation of endothelial cell plasticity by TGF-DCell and Tissue Research, 2012, 347, 177-86	4.2	228
395	USP4 is regulated by AKT phosphorylation and directly deubiquitylates TGF-Itype I receptor. <i>Nature Cell Biology</i> , 2012 , 14, 717-26	23.4	220
394	Generation, expansion and functional analysis of endothelial cells and pericytes derived from human pluripotent stem cells. <i>Nature Protocols</i> , 2014 , 9, 1514-31	18.8	213
393	Deficient Smad7 expression: a putative molecular defect in scleroderma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 3908-13	11.5	211
392	Synergy and antagonism between Notch and BMP receptor signaling pathways in endothelial cells. <i>EMBO Journal</i> , 2004 , 23, 541-51	13	208
391	Immunoregulation by members of the TGFB uperfamily. <i>Nature Reviews Immunology</i> , 2016 , 16, 723-740	36.5	204
390	Wnt but not BMP signaling is involved in the inhibitory action of sclerostin on BMP-stimulated bone formation. <i>Journal of Bone and Mineral Research</i> , 2007 , 22, 19-28	6.3	202
389	BMP signaling in vascular diseases. <i>FEBS Letters</i> , 2012 , 586, 1993-2002	3.8	201
388	Transforming growth factor-beta signal transduction in angiogenesis and vascular disorders. <i>Chest</i> , 2005 , 128, 585S-590S	5.3	201
387	Transforming growth factor beta1 induces nuclear export of inhibitory Smad7. <i>Journal of Biological Chemistry</i> , 1998 , 273, 29195-201	5.4	198
386	Matrix metalloproteinase-14 (MT1-MMP)-mediated endoglin shedding inhibits tumor angiogenesis. <i>Cancer Research</i> , 2010 , 70, 4141-50	10.1	196
385	Transforming growth factor-beta1 (TGF-beta)-induced apoptosis of prostate cancer cells involves Smad7-dependent activation of p38 by TGF-beta-activated kinase 1 and mitogen-activated protein kinase kinase 3. <i>Molecular Biology of the Cell</i> , 2003 , 14, 529-44	3.5	193
384	Bone morphogenetic protein receptors. <i>Bone</i> , 1996 , 19, 569-74	4.7	191
383	Differential inhibition of Smad6 and Smad7 on bone morphogenetic protein- and activin-mediated growth arrest and apoptosis in B cells. <i>Journal of Biological Chemistry</i> , 1999 , 274, 13637-42	5.4	186
382	Elucidation of Smad requirement in transforming growth factor-beta type I receptor-induced responses. <i>Journal of Biological Chemistry</i> , 2003 , 278, 3751-61	5.4	171
381	Bone morphogenetic protein 7 in the development and treatment of bone metastases from breast cancer. <i>Cancer Research</i> , 2007 , 67, 8742-51	10.1	169

380	Controlling cell fate by bone morphogenetic protein receptors. <i>Molecular and Cellular Endocrinology</i> , 2003 , 211, 105-13	4.4	165
379	Follistatins neutralize activin bioactivity by inhibition of activin binding to its type II receptors. <i>Molecular and Cellular Endocrinology</i> , 1996 , 116, 105-14	4.4	165
378	Interaction with colon cancer cells hyperactivates TGF-Bignaling in cancer-associated fibroblasts. <i>Oncogene</i> , 2014 , 33, 97-107	9.2	162
377	TGF-Induced Endothelial-Mesenchymal Transition in Fibrotic Diseases. <i>International Journal of Molecular Sciences</i> , 2017 , 18,	6.3	161
376	BMP7, a putative regulator of epithelial homeostasis in the human prostate, is a potent inhibitor of prostate cancer bone metastasis in vivo. <i>American Journal of Pathology</i> , 2007 , 171, 1047-57	5.8	161
375	Transforming growth factor beta signal transduction. <i>Journal of Leukocyte Biology</i> , 2002 , 71, 731-40	6.5	160
374	Regulation of Smad signaling by protein kinase C. FASEB Journal, 2001, 15, 553-5	0.9	159
373	Signaling interplay between transforming growth factor-Ireceptor and PI3K/AKT pathways in cancer. <i>Trends in Biochemical Sciences</i> , 2013 , 38, 612-20	10.3	158
372	Transforming growth factor-beta receptor type I-dependent fibrogenic gene program is mediated via activation of Smad1 and ERK1/2 pathways. <i>Journal of Biological Chemistry</i> , 2007 , 282, 10405-13	5.4	158
371	The TGF-ISmad pathway induces breast cancer cell invasion through the up-regulation of matrix metalloproteinase 2 and 9 in a spheroid invasion model system. <i>Breast Cancer Research and Treatment</i> , 2011 , 128, 657-66	4.4	157
370	Osteocyte-derived sclerostin inhibits bone formation: its role in bone morphogenetic protein and Wnt signaling. <i>Journal of Bone and Joint Surgery - Series A</i> , 2008 , 90 Suppl 1, 31-5	5.6	157
369	Oral administration of GW788388, an inhibitor of TGF-beta type I and II receptor kinases, decreases renal fibrosis. <i>Kidney International</i> , 2008 , 73, 705-15	9.9	153
368	TRAF4 promotes TGF-lireceptor signaling and drives breast cancer metastasis. <i>Molecular Cell</i> , 2013 , 51, 559-72	17.6	151
367	Annexin A1 regulates TGF-beta signaling and promotes metastasis formation of basal-like breast cancer cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 6340-5	11.5	151
366	Transforming growth factor beta signal transduction in hepatic stellate cells via Smad2/3 phosphorylation, a pathway that is abrogated during in vitro progression to myofibroblasts. TGFbeta signal transduction during transdifferentiation of hepatic stellate cells. FEBS Letters, 2001,	3.8	149
365	Functionality of endothelial cells and pericytes from human pluripotent stem cells demonstrated in cultured vascular plexus and zebrafish xenografts. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2014 , 34, 177-86	9.4	147
364	Lack of primary cilia primes shear-induced endothelial-to-mesenchymal transition. <i>Circulation Research</i> , 2011 , 108, 1093-101	15.7	147
363	The deubiquitinating enzyme UCH37 interacts with Smads and regulates TGF-beta signalling. Oncogene, 2005, 24, 8080-4	9.2	146

(2018-2010)

362	Genetic and pharmacological targeting of activin receptor-like kinase 1 impairs tumor growth and angiogenesis. <i>Journal of Experimental Medicine</i> , 2010 , 207, 85-100	16.6	145
361	Action range of BMP is defined by its N-terminal basic amino acid core. <i>Current Biology</i> , 2002 , 12, 205-9	6.3	145
360	Smad7 mediates apoptosis induced by transforming growth factor beta in prostatic carcinoma cells. <i>Current Biology</i> , 2000 , 10, 535-8	6.3	141
359	Controlling mesenchymal stem cell differentiation by TGFBeta family members. <i>Journal of Orthopaedic Science</i> , 2003 , 8, 740-8	1.6	139
358	Animal models of chronic liver diseases. <i>American Journal of Physiology - Renal Physiology</i> , 2013 , 304, G449-68	5.1	137
357	Transforming growth factor-[TGF-]-mediated connective tissue growth factor (CTGF) expression in hepatic stellate cells requires Stat3 signaling activation. <i>Journal of Biological Chemistry</i> , 2013 , 288, 30708-30719	5.4	137
356	Promoting bone morphogenetic protein signaling through negative regulation of inhibitory Smads. <i>EMBO Journal</i> , 2001 , 20, 4132-42	13	136
355	Identification of Smad2, a human Mad-related protein in the transforming growth factor beta signaling pathway. <i>Journal of Biological Chemistry</i> , 1997 , 272, 2896-900	5.4	135
354	The bone morphogenetic protein pathway is inactivated in the majority of sporadic colorectal cancers. <i>Gastroenterology</i> , 2008 , 134, 1332-41	13.3	135
353	Enhanced expression of type I receptors for bone morphogenetic proteins during bone formation. Journal of Bone and Mineral Research, 1995 , 10, 1651-9	6.3	134
352	Bone morphogenetic protein signaling in bone homeostasis. <i>Bone</i> , 2015 , 80, 43-59	4.7	133
351	Smad2 and Smad3 have opposing roles in breast cancer bone metastasis by differentially affecting tumor angiogenesis. <i>Oncogene</i> , 2010 , 29, 1351-61	9.2	133
350	Targeting BMP signalling in cardiovascular disease and anaemia. <i>Nature Reviews Cardiology</i> , 2016 , 13, 106-20	14.8	131
349	Smad7-induced beta-catenin degradation alters epidermal appendage development. Developmental Cell, 2006, 11, 301-12	10.2	131
348	Efficient TGF-beta induction of the Smad7 gene requires cooperation between AP-1, Sp1, and Smad proteins on the mouse Smad7 promoter. <i>Journal of Biological Chemistry</i> , 2000 , 275, 29023-30	5.4	131
347	Physical and functional interaction of murine and Xenopus Smad7 with bone morphogenetic protein receptors and transforming growth factor-beta receptors. <i>Journal of Biological Chemistry</i> , 1998 , 273, 25364-70	5.4	131
346	Nuclear factor YY1 inhibits transforming growth factor beta- and bone morphogenetic protein-induced cell differentiation. <i>Molecular and Cellular Biology</i> , 2003 , 23, 4494-510	4.8	130
345	TGF-ဩignaling in Control of Cardiovascular Function. <i>Cold Spring Harbor Perspectives in Biology</i> , 2018 , 10,	10.2	129

344	Distinct modes of inhibition by sclerostin on bone morphogenetic protein and Wnt signaling pathways. <i>Journal of Biological Chemistry</i> , 2010 , 285, 41614-26	5.4	127
343	Cartilage-derived morphogenetic proteins and osteogenic protein-1 differentially regulate osteogenesis. <i>Journal of Bone and Mineral Research</i> , 1998 , 13, 383-92	6.3	127
342	DPC4 (SMAD4) mediates transforming growth factor-beta1 (TGF-beta1) induced growth inhibition and transcriptional response in breast tumour cells. <i>Oncogene</i> , 1997 , 14, 1891-9	9.2	126
341	VE-cadherin is a critical endothelial regulator of TGF-beta signalling. <i>EMBO Journal</i> , 2008 , 27, 993-1004	13	126
340	The FYVE domain in Smad anchor for receptor activation (SARA) is sufficient for localization of SARA in early endosomes and regulates TGF-beta/Smad signalling. <i>Genes To Cells</i> , 2002 , 7, 321-31	2.3	126
339	Smad and AML proteins synergistically confer transforming growth factor beta1 responsiveness to human germ-line IgA genes. <i>Journal of Biological Chemistry</i> , 2000 , 275, 3552-60	5.4	125
338	Localization of Smads, the TGF-beta family intracellular signaling components during endochondral ossification. <i>Journal of Bone and Mineral Research</i> , 1999 , 14, 1145-52	6.3	125
337	Nuclear receptor NR4A1 promotes breast cancer invasion and metastasis by activating TGF-I signalling. <i>Nature Communications</i> , 2014 , 5, 3388	17.4	124
336	TGF ignaling and Cardiovascular Diseases. International Journal of Biological Sciences, 2012, 8, 195-213	11.2	124
335	Exploring anti-TGF-Itherapies in cancer and fibrosis. <i>Growth Factors</i> , 2011 , 29, 140-52	1.6	122
334	ALK2 R206H mutation linked to fibrodysplasia ossificans progressiva confers constitutive activity to the BMP type I receptor and sensitizes mesenchymal cells to BMP-induced osteoblast differentiation and bone formation. <i>Journal of Bone and Mineral Research</i> , 2010 , 25, 1208-15	6.3	119
333	Loss of SMAD4 alters BMP signaling to promote colorectal cancer cell metastasis via activation of Rho and ROCK. <i>Gastroenterology</i> , 2014 , 147, 196-208.e13	13.3	117
332	Three-dimensional co-cultures of human endothelial cells and embryonic stem cell-derived pericytes inside a microfluidic device. <i>Lab on A Chip</i> , 2013 , 13, 3562-8	7.2	117
331	Transforming growth factor beta-induced endothelial-to-mesenchymal transition: a switch to cardiac fibrosis?. <i>Trends in Cardiovascular Medicine</i> , 2008 , 18, 293-8	6.9	117
330	Id1 is a critical mediator in TGF-beta-induced transdifferentiation of rat hepatic stellate cells. Hepatology, 2006 , 43, 1032-41	11.2	117
329	Defective paracrine signalling by TGFbeta in yolk sac vasculature of endoglin mutant mice: a paradigm for hereditary haemorrhagic telangiectasia. <i>Development (Cambridge)</i> , 2004 , 131, 6237-47	6.6	115
328	Endoglin has a crucial role in blood cell-mediated vascular repair. Circulation, 2006, 114, 2288-97	16.7	114
327	Activation of the TGF-beta/activin-Smad2 pathway during allergic airway inflammation. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2001 , 25, 60-8	5.7	114

(1990-2008)

326	ALK1 opposes ALK5/Smad3 signaling and expression of extracellular matrix components in human chondrocytes. <i>Journal of Bone and Mineral Research</i> , 2008 , 23, 896-906	6.3	113
325	TMEPAI, a transmembrane TGF-beta-inducible protein, sequesters Smad proteins from active participation in TGF-beta signaling. <i>Molecular Cell</i> , 2010 , 37, 123-34	17.6	111
324	Smad7 is an activin-inducible inhibitor of activin-induced growth arrest and apoptosis in mouse B cells. <i>Journal of Biological Chemistry</i> , 1998 , 273, 24293-6	5.4	111
323	Diffusion of nodal signaling activity in the absence of the feedback inhibitor Lefty2. <i>Developmental Cell</i> , 2001 , 1, 127-38	10.2	109
322	Activation of bone morphogenetic protein/Smad signaling in bronchial epithelial cells during airway inflammation. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2002 , 27, 160-9	5.7	108
321	TGF-Bignaling in breast cancer cell invasion and bone metastasis. <i>Journal of Mammary Gland Biology and Neoplasia</i> , 2011 , 16, 97-108	2.4	104
320	Constitutive phosphorylation and nuclear localization of Smad3 are correlated with increased collagen gene transcription in activated hepatic stellate cells. <i>Journal of Cellular Physiology</i> , 2001 , 187, 117-23	7	104
319	Growth differentiation factor-9 induces Smad2 activation and inhibin B production in cultured human granulosa-luteal cells. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2003 , 88, 755-62	5.6	103
318	Expression of type I and type IB receptors for activin in midgestation mouse embryos suggests distinct functions in organogenesis. <i>Mechanisms of Development</i> , 1995 , 52, 109-23	1.7	102
317	Age-dependent alteration of TGF-Bignalling in osteoarthritis. <i>Cell and Tissue Research</i> , 2012 , 347, 257-6	54.2	101
316	Phosphorylation of Ser165 in TGF-beta type I receptor modulates TGF-beta1-induced cellular responses <i>EMBO Journal</i> , 1996 , 15, 6231-6240	13	100
315	TGF-beta and BMP7 interactions in tumour progression and bone metastasis. <i>Clinical and Experimental Metastasis</i> , 2007 , 24, 609-17	4.7	99
314	Autocrine bone morphogenetic protein-9 signals through activin receptor-like kinase-2/Smad1/Smad4 to promote ovarian cancer cell proliferation. <i>Cancer Research</i> , 2009 , 69, 9254-65	2 ^{10.1}	97
313	Snail and Slug, key regulators of TGF-Induced EMT, are sufficient for the induction of single-cell invasion. <i>Biochemical and Biophysical Research Communications</i> , 2013 , 435, 58-63	3.4	96
312	Deficiency for endoglin in tumor vasculature weakens the endothelial barrier to metastatic dissemination. <i>Journal of Experimental Medicine</i> , 2013 , 210, 563-79	16.6	96
311	Human mast cell migration in response to members of the transforming growth factor-beta family. <i>Journal of Leukocyte Biology</i> , 2000 , 67, 350-6	6.5	95
310	Compensatory signalling induced in the yolk sac vasculature by deletion of TGFbeta receptors in mice. <i>Journal of Cell Science</i> , 2007 , 120, 4269-77	5.3	94
309	Recombinant transforming growth factor type beta 3: biological activities and receptor-binding properties in isolated bone cells. <i>Molecular and Cellular Biology</i> , 1990 , 10, 4473-9	4.8	94

308	TGF-Ifamily co-receptor function and signaling. Acta Biochimica Et Biophysica Sinica, 2018, 50, 12-36	2.8	93
307	Transforming growth factor-beta signaling and tumor angiogenesis. <i>Frontiers in Bioscience - Landmark</i> , 2009 , 14, 4848-61	2.8	93
306	Overexpression of Smad7 results in severe pathological alterations in multiple epithelial tissues. <i>EMBO Journal</i> , 2002 , 21, 2580-90	13	91
305	Global analysis of Smad2/3-dependent TGF-beta signaling in living mice reveals prominent tissue-specific responses to injury. <i>Journal of Immunology</i> , 2005 , 175, 547-54	5.3	91
304	Nonsynonymous variants in the SMAD6 gene predispose to congenital cardiovascular malformation. <i>Human Mutation</i> , 2012 , 33, 720-7	4.7	90
303	The transcriptional co-activator P/CAF potentiates TGF-beta/Smad signaling. <i>Nucleic Acids Research</i> , 2000 , 28, 4291-8	20.1	90
302	Transforming growth factor-Bignalling controls human breast cancer metastasis in a zebrafish xenograft model. <i>Breast Cancer Research</i> , 2013 , 15, R106	8.3	89
301	Expression and localization of bone morphogenetic proteins (BMPs) and BMP receptors in ossification of the ligamentum flavum. <i>Bone</i> , 1997 , 21, 23-30	4.7	89
300	Nodal signaling uses activin and transforming growth factor-beta receptor-regulated Smads. Journal of Biological Chemistry, 2001 , 276, 656-61	5.4	87
299	Epithelial-mesenchymal-transition-inducing transcription factors: new targets for tackling chemoresistance in cancer?. <i>Oncogene</i> , 2018 , 37, 6195-6211	9.2	86
298	Identification of a key residue mediating bone morphogenetic protein (BMP)-6 resistance to noggin inhibition allows for engineered BMPs with superior agonist activity. <i>Journal of Biological Chemistry</i> , 2010 , 285, 12169-80	5.4	86
297	L- and S-endoglin differentially modulate TGFbeta1 signaling mediated by ALK1 and ALK5 in L6E9 myoblasts. <i>Journal of Cell Science</i> , 2008 , 121, 913-9	5.3	86
296	Xenopus Smad4beta is the co-Smad component of developmentally regulated transcription factor complexes responsible for induction of early mesodermal genes. <i>Developmental Biology</i> , 1999 , 214, 354	l- ह ेर्न	85
295	Bone morphogenetic protein receptor signal transduction in human disease. <i>Journal of Pathology</i> , 2019 , 247, 9-20	9.4	85
294	VEGF and inhibitors of TGFbeta type-I receptor kinase synergistically promote blood-vessel formation by inducing alpha5-integrin expression. <i>Journal of Cell Science</i> , 2009 , 122, 3294-302	5.3	84
293	Transforming growth factor-beta 1 mutations in Camurati-Engelmann disease lead to increased signaling by altering either activation or secretion of the mutant protein. <i>Journal of Biological Chemistry</i> , 2003 , 278, 7718-24	5.4	83
292	Dominant-negative ALK2 allele associates with congenital heart defects. <i>Circulation</i> , 2009 , 119, 3062-9	16.7	81
291	Functional consequences of tumorigenic missense mutations in the amino-terminal domain of Smad4. <i>Oncogene</i> , 2000 , 19, 4396-404	9.2	81

290	Expression of Smad proteins in human colorectal cancer. <i>International Journal of Cancer</i> , 1999 , 82, 197-	·2 9 25	81
289	Connective tissue growth factor expression and Smad signaling during mouse heart development and myocardial infarction. <i>Developmental Dynamics</i> , 2004 , 231, 542-50	2.9	80
288	Physical and functional interaction between GATA-3 and Smad3 allows TGF-beta regulation of GATA target genes. <i>Current Biology</i> , 2002 , 12, 35-45	6.3	80
287	Endothelial-to-mesenchymal transition in cardiovascular diseases: Developmental signaling pathways gone awry. <i>Developmental Dynamics</i> , 2018 , 247, 492-508	2.9	79
286	Signaling by ALK5 mediates TGF-beta-induced ET-1 expression in endothelial cells: a role for migration and proliferation. <i>Journal of Cell Science</i> , 2007 , 120, 1256-66	5.3	79
285	DIPG-13. A NOVEL MOUSE MODEL REVEALS UNEXPECTED MECHANISMS OF ACTION OF ACVR1 MUTATIONS IN DIFFUSE INTRINSIC PONTINE GLIOMA. <i>Neuro-Oncology</i> , 2019 , 21, ii71-ii71	1	78
284	Anti-human activin receptor-like kinase 1 (ALK1) antibody attenuates bone morphogenetic protein 9 (BMP9)-induced ALK1 signaling and interferes with endothelial cell sprouting. <i>Journal of Biological Chemistry</i> , 2012 , 287, 18551-61	5.4	78
283	Signal transduction of bone morphogenetic proteins in osteoblast differentiation. <i>Journal of Bone and Joint Surgery - Series A</i> , 2003 , 85-A Suppl 3, 34-8	5.6	78
282	Bone Morphogenetic Proteins in Vascular Homeostasis and Disease. <i>Cold Spring Harbor Perspectives in Biology</i> , 2018 , 10,	10.2	77
281	KLF2 suppresses TGF-beta signaling in endothelium through induction of Smad7 and inhibition of AP-1. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2007 , 27, 532-9	9.4	77
280	Spatio-temporal activation of Smad1 and Smad5 in vivo: monitoring transcriptional activity of Smad proteins. <i>Journal of Cell Science</i> , 2004 , 117, 4653-63	5.3	77
279	BMP pathways are involved in otic capsule formation and epithelial-mesenchymal signaling in the developing chicken inner ear. <i>Developmental Biology</i> , 2002 , 251, 380-94	3.1	74
278	Elevated TGFbeta-Smad signalling in experimental Pkd1 models and human patients with polycystic kidney disease. <i>Journal of Pathology</i> , 2010 , 222, 21-31	9.4	73
277	A Perspective on the Development of TGF-Inhibitors for Cancer Treatment. <i>Biomolecules</i> , 2019 , 9,	5.9	73
276	Specific interactions between Smad proteins and AP-1 components determine TGFIInduced breast cancer cell invasion. <i>Oncogene</i> , 2013 , 32, 3606-15	9.2	72
275	Genomic characterization of the human DNA excision repair gene ERCC-1. <i>Nucleic Acids Research</i> , 1987 , 15, 9195-213	20.1	72
274	c-Myb Enhances Breast Cancer Invasion and Metastasis through the Wnt/ECatenin/Axin2 Pathway. <i>Cancer Research</i> , 2016 , 76, 3364-75	10.1	72
273	Biphasic effects of transforming growth factor Ibn bone morphogenetic protein-induced osteoblast differentiation. <i>Journal of Bone and Mineral Research</i> , 2011 , 26, 1178-87	6.3	71

272	Efficient association of an amino-terminally extended form of human latent transforming growth factor-beta binding protein with the extracellular matrix. <i>Journal of Biological Chemistry</i> , 1995 , 270, 312	294 ⁴ 7	71
271	Endoglin Expression on Cancer-Associated Fibroblasts Regulates Invasion and Stimulates Colorectal Cancer Metastasis. <i>Clinical Cancer Research</i> , 2018 , 24, 6331-6344	12.9	71
270	TGFIsignaling and cardiovascular diseases. International Journal of Biological Sciences, 2012, 8, 195-213	11.2	70
269	Smad1 pathway is activated in systemic sclerosis fibroblasts and is targeted by imatinib mesylate. <i>Arthritis and Rheumatism</i> , 2008 , 58, 2528-37		70
268	BMP-9 interferes with liver regeneration and promotes liver fibrosis. <i>Gut</i> , 2017 , 66, 939-954	19.2	69
267	Intracellular signaling of osteogenic protein-1 through Smad5 activation. <i>Journal of Cellular Physiology</i> , 1998 , 177, 355-63	7	67
266	RNF12 controls embryonic stem cell fate and morphogenesis in zebrafish embryos by targeting Smad7 for degradation. <i>Molecular Cell</i> , 2012 , 46, 650-61	17.6	66
265	Interaction between GC box binding factors and Smad proteins modulates cell lineage-specific alpha 2(I) collagen gene transcription. <i>Journal of Biological Chemistry</i> , 2001 , 276, 16573-9	5.4	66
264	Ionizing radiation shifts the PAI-1/ID-1 balance and activates notch signaling in endothelial cells. <i>International Journal of Radiation Oncology Biology Physics</i> , 2009 , 73, 506-13	4	65
263	A rapid and sensitive bioassay to measure bone morphogenetic protein activity. <i>BMC Cell Biology</i> , 2007 , 8, 41		64
263 262			64
	2007 , 8, 41	5.4	
262	2007, 8, 41 Serine/threonine kinase receptors. <i>Progress in Growth Factor Research</i> , 1994, 5, 55-72 Ubiquitin-specific protease 4 mitigates Toll-like/interleukin-1 receptor signaling and regulates	5.4	64
262 261	2007, 8, 41 Serine/threonine kinase receptors. <i>Progress in Growth Factor Research</i> , 1994, 5, 55-72 Ubiquitin-specific protease 4 mitigates Toll-like/interleukin-1 receptor signaling and regulates innate immune activation. <i>Journal of Biological Chemistry</i> , 2012, 287, 11002-10 Identification of receptors and Smad proteins involved in activin signalling in a human epidermal		64
262 261 260	Serine/threonine kinase receptors. <i>Progress in Growth Factor Research</i> , 1994 , 5, 55-72 Ubiquitin-specific protease 4 mitigates Toll-like/interleukin-1 receptor signaling and regulates innate immune activation. <i>Journal of Biological Chemistry</i> , 2012 , 287, 11002-10 Identification of receptors and Smad proteins involved in activin signalling in a human epidermal keratinocyte cell line. <i>Genes To Cells</i> , 1998 , 3, 125-34 Expression of transforming-growth-factor (TGF)-beta receptors and Smad proteins in glioblastoma	2.3	646363
262 261 260 259	Serine/threonine kinase receptors. <i>Progress in Growth Factor Research</i> , 1994 , 5, 55-72 Ubiquitin-specific protease 4 mitigates Toll-like/interleukin-1 receptor signaling and regulates innate immune activation. <i>Journal of Biological Chemistry</i> , 2012 , 287, 11002-10 Identification of receptors and Smad proteins involved in activin signalling in a human epidermal keratinocyte cell line. <i>Genes To Cells</i> , 1998 , 3, 125-34 Expression of transforming-growth-factor (TGF)-beta receptors and Smad proteins in glioblastoma cell lines with distinct responses to TGF-beta1. <i>International Journal of Cancer</i> , 1999 , 80, 756-63 Targeting TGFIsignal transduction for cancer therapy. <i>Signal Transduction and Targeted Therapy</i> ,	2.3 7.5	64636363
262 261 260 259 258	Serine/threonine kinase receptors. <i>Progress in Growth Factor Research</i> , 1994 , 5, 55-72 Ubiquitin-specific protease 4 mitigates Toll-like/interleukin-1 receptor signaling and regulates innate immune activation. <i>Journal of Biological Chemistry</i> , 2012 , 287, 11002-10 Identification of receptors and Smad proteins involved in activin signalling in a human epidermal keratinocyte cell line. <i>Genes To Cells</i> , 1998 , 3, 125-34 Expression of transforming-growth-factor (TGF)-beta receptors and Smad proteins in glioblastoma cell lines with distinct responses to TGF-beta1. <i>International Journal of Cancer</i> , 1999 , 80, 756-63 Targeting TGFIsignal transduction for cancer therapy. <i>Signal Transduction and Targeted Therapy</i> , 2021 , 6, 8 Controlling angiogenesis by two unique TGF-Itype I receptor signaling pathways. <i>Histology and</i>	2.3 7.5 21	6463636362

(2020-2006)

254	Bone morphogenetic protein signal transduction in bone. <i>Current Medical Research and Opinion</i> , 2006 , 22 Suppl 1, S7-11	2.5	59
253	New mechanisms of skin innate immunity: ASK1-mediated keratinocyte differentiation regulates the expression of beta-defensins, LL37, and TLR2. <i>European Journal of Immunology</i> , 2005 , 35, 1886-95	6.1	59
252	A novel type I receptor serine-threonine kinase predominantly expressed in the adult central nervous system. <i>Journal of Biological Chemistry</i> , 1996 , 271, 30603-9	5.4	59
251	TGFEInduced metabolic reprogramming during epithelial-to-mesenchymal transition in cancer. <i>Cellular and Molecular Life Sciences</i> , 2020 , 77, 2103-2123	10.3	59
250	Aberrant Bmp signaling and notochord delamination in the pathogenesis of esophageal atresia. <i>Developmental Dynamics</i> , 2007 , 236, 746-54	2.9	57
249	Critical role of endoglin in tumor cell plasticity of Ewing sarcoma and melanoma. <i>Oncogene</i> , 2011 , 30, 334-45	9.2	55
248	Endoglin promotes TGF-//Smad1 signaling in scleroderma fibroblasts. <i>Journal of Cellular Physiology</i> , 2011 , 226, 3340-8	7	55
247	BMP type II receptor as a therapeutic target in pulmonary arterial hypertension. <i>Cellular and Molecular Life Sciences</i> , 2017 , 74, 2979-2995	10.3	54
246	Preventive and therapeutic effects of Smad7 on radiation-induced oral mucositis. <i>Nature Medicine</i> , 2013 , 19, 421-8	50.5	54
245	Fine-tuning BMP7 signalling in adipogenesis by UBE2O/E2-230K-mediated monoubiquitination of SMAD6. <i>EMBO Journal</i> , 2013 , 32, 996-1007	13	54
244	Reversible ubiquitination regulates the Smad/TGF-beta signalling pathway. <i>Biochemical Society Transactions</i> , 2006 , 34, 761-3	5.1	54
243	TGF-Ireceptor signaling pathways in angiogenesis; emerging targets for anti-angiogenesis therapy. <i>Current Pharmaceutical Biotechnology</i> , 2011 , 12, 2108-20	2.6	53
242	UBE2O negatively regulates TRAF6-mediated NF- B activation by inhibiting TRAF6 polyubiquitination. <i>Cell Research</i> , 2013 , 23, 366-77	24.7	52
241	Combined Inhibition of TGF-Lignaling and the PD-L1 Immune Checkpoint Is Differentially Effective in Tumor Models. <i>Cells</i> , 2019 , 8,	7.9	51
240	Bone morphogenetic protein 6 and oxidized low-density lipoprotein synergistically recruit osteogenic differentiation in endothelial cells. <i>Cardiovascular Research</i> , 2015 , 108, 278-87	9.9	51
239	A Kinome-Wide Small Interfering RNA Screen Identifies Proviral and Antiviral Host Factors in Severe Acute Respiratory Syndrome Coronavirus Replication, Including Double-Stranded RNA-Activated Protein Kinase and Early Secretory Pathway Proteins. <i>Journal of Virology</i> , 2015 , 89, 8318-33	6.6	51
238	TGF-Induced Endothelial to Mesenchymal Transition in Disease and Tissue Engineering. <i>Frontiers in Cell and Developmental Biology</i> , 2020 , 8, 260	5.7	50
237	On-Target Anti-TGF-ITherapies Are Not Succeeding in Clinical Cancer Treatments: What Are Remaining Challenges?. <i>Frontiers in Cell and Developmental Biology</i> , 2020 , 8, 605	5.7	49

236	Breast cancer metastasis suppressor OTUD1 deubiquitinates SMAD7. <i>Nature Communications</i> , 2017 , 8, 2116	17.4	49
235	Induced Pluripotent Stem Cells to Model Human Fibrodysplasia Ossificans Progressiva. <i>Stem Cell Reports</i> , 2015 , 5, 963-970	8	49
234	The prognostic role of TGF-Isignaling pathway in breast cancer patients. <i>Annals of Oncology</i> , 2013 , 24, 384-390	10.3	48
233	Tgf¶Alk5 signaling is required for shear stress induced klf2 expression in embryonic endothelial cells. <i>Developmental Dynamics</i> , 2011 , 240, 1670-80	2.9	48
232	Gene array analysis of bone morphogenetic protein type I receptor-induced osteoblast differentiation. <i>Journal of Bone and Mineral Research</i> , 2003 , 18, 1177-85	6.3	48
231	JUNB governs a feed-forward network of TGFB ignaling that aggravates breast cancer invasion. <i>Nucleic Acids Research</i> , 2018 , 46, 1180-1195	20.1	47
230	Ski co-repressor complexes maintain the basal repressed state of the TGF-beta target gene, SMAD7, via HDAC3 and PRMT5. <i>Genes To Cells</i> , 2009 , 14, 17-28	2.3	47
229	Two novel type II receptors mediate BMP signalling and are required to establish left-right asymmetry in zebrafish. <i>Developmental Biology</i> , 2008 , 315, 55-71	3.1	47
228	An assay for the determination of biologically active bone morphogenetic proteins using cells transfected with an inhibitor of differentiation promoter-luciferase construct. <i>Analytical Biochemistry</i> , 2006 , 349, 78-86	3.1	47
227	ENDOGLIN is dispensable for vasculogenesis, but required for vascular endothelial growth factor-induced angiogenesis. <i>PLoS ONE</i> , 2014 , 9, e86273	3.7	47
226	The rationale for targeting TGF-IIn chronic liver diseases. <i>European Journal of Clinical Investigation</i> , 2016 , 46, 349-61	4.6	46
225	Transforming growth factor-beta-mediated mast cell migration depends on mitogen-activated protein kinase activity. <i>Cellular Signalling</i> , 2001 , 13, 483-90	4.9	46
224	Expression of transforming growth factor-beta1, activin A, and their receptors in thyroid follicle cells: negative regulation of thyrocyte growth and function. <i>Endocrinology</i> , 1999 , 140, 4300-10	4.8	45
223	Molecular analyses of the 15q and 18q SMAD genes in pancreatic cancer. <i>Genes Chromosomes and Cancer</i> , 1999 , 24, 62-71	5	45
222	Regulation of the levels of three transforming growth factor beta mRNAs by estrogen and their effects on the proliferation of human breast cancer cells. <i>Molecular and Cellular Endocrinology</i> , 1993 , 97, 115-23	4.4	45
221	Growth Factors For Wound Healing. <i>Nature Biotechnology</i> , 1989 , 7, 793-798	44.5	45
220	Deubiquitinase Activity Profiling Identifies UCHL1 as a Candidate Oncoprotein That Promotes TGFIInduced Breast Cancer Metastasis. <i>Clinical Cancer Research</i> , 2020 , 26, 1460-1473	12.9	45
219	Transforming Growth Factor Bignaling in Colorectal Cancer Cells With Microsatellite Instability Despite Biallelic Mutations in TGFBR2. <i>Gastroenterology</i> , 2015 , 148, 1427-37.e8	13.3	44

(2003-2015)

The BMP pathway either enhances or inhibits the Wnt pathway depending on the SMAD4 and p53 status in CRC. <i>British Journal of Cancer</i> , 2015 , 112, 122-30	8.7	44	
Cell-type specific regulation of myostatin signaling. <i>FASEB Journal</i> , 2012 , 26, 1462-72	0.9	44	
Elevated transforming growth factor Land mitogen-activated protein kinase pathways mediate fibrotic traits of Dupuytrenß disease fibroblasts. <i>Fibrogenesis and Tissue Repair</i> , 2011 , 4, 14		44	
Transient disruption of autocrine TGF-beta signaling leads to enhanced survival and proliferation potential in single primitive human hemopoietic progenitor cells. <i>Journal of Immunology</i> , 2002 , 168, 75	5-62	44	
A rate equation approach to elucidate the kinetics and robustness of the TGF-beta pathway. <i>Biophysical Journal</i> , 2006 , 91, 4368-80	2.9	43	•
Smad7 and protein phosphatase 1alpha are critical determinants in the duration of TGF-beta/ALK1 signaling in endothelial cells. <i>BMC Cell Biology</i> , 2006 , 7, 16		43	
The orphan receptor serine/threonine kinase ALK7 signals arrest of proliferation and morphological differentiation in a neuronal cell line. <i>Journal of Biological Chemistry</i> , 2001 , 276, 5140-6	5.4	43	
Cancer-associated fibroblast-derived Gremlin 1 promotes breast cancer progression. <i>Breast Cancer Research</i> , 2019 , 21, 109	8.3	42	
GSK3Inactivation induces apoptosis of leukemia cells by repressing the function of c-Myb. <i>Molecular Biology of the Cell</i> , 2011 , 22, 3533-40	3.5	42	
Cloning and characterization of p70(S6K beta) defines a novel family of p70 S6 kinases. <i>Biochemical and Biophysical Research Communications</i> , 1998 , 253, 470-6	3.4	42	
BMP-7 inhibits TGF-Induced invasion of breast cancer cells through inhibition of integrin (B) expression. <i>Cellular Oncology (Dordrecht)</i> , 2012 , 35, 19-28	7.2	41	
ELAC2, a putative prostate cancer susceptibility gene product, potentiates TGF-beta/Smad-induced growth arrest of prostate cells. <i>Oncogene</i> , 2006 , 25, 5591-600	9.2	40	
Anti-Sclerostin antibody inhibits internalization of Sclerostin and Sclerostin-mediated antagonism of Wnt/LRP6 signaling. <i>PLoS ONE</i> , 2013 , 8, e62295	3.7	40	
Activin Receptor-like Kinase 1 Ligand Trap Reduces Microvascular Density and Improves Chemotherapy Efficiency to Various Solid Tumors. <i>Clinical Cancer Research</i> , 2016 , 22, 96-106	12.9	39	
The therapeutic potential of targeting the endothelial-to-mesenchymal transition. <i>Angiogenesis</i> , 2019 , 22, 3-13	10.6	39	
LRP8 mediates Wnt/Eatenin signaling and controls osteoblast differentiation. <i>Journal of Bone and Mineral Research</i> , 2012 , 27, 2065-74	6.3	39	
Vanilloid receptor-1 regulates neurogenic inflammation in colon and protects mice from colon cancer. <i>Cancer Research</i> , 2012 , 72, 1705-16	10.1	39	
dSmurf selectively degrades decapentaplegic-activated MAD, and its overexpression disrupts imaginal disc development. <i>Journal of Biological Chemistry</i> , 2003 , 278, 26307-10	5.4	39	
	Cell-type specific regulation of myostatin signaling. <i>FASEB Journal</i> , 2012 , 26, 1462-72 Elevated transforming growth factor land mitogen-activated protein kinase pathways mediate fibrotic traits of DupuytrenB disease fibroblasts. <i>Fibrogenesis and Tissue Repair</i> , 2011 , 4, 14 Transient disruption of autocrine TGF-beta signaling leads to enhanced survival and proliferation potential in single primitive human hemopoietic progenitor cells. <i>Journal of Immunology</i> , 2002 , 168, 75 A rate equation approach to elucidate the kinetics and robustness of the TGF-beta pathway. <i>Biophysical Journal</i> , 2006 , 91, 4368-80 Smad7 and protein phosphatase 1alpha are critical determinants in the duration of TGF-beta/ALK1 signaling in endothelial cells. <i>BMC Cell Biology</i> , 2006 , 7, 16 The orphan receptor serine/threonine kinase ALK7 signals arrest of proliferation and morphological differentiation in a neuronal cell line. <i>Journal of Biological Chemistry</i> , 2001 , 276, 5140-6 Cancer-associated fibroblast-derived Gremlin 1 promotes breast cancer progression. <i>Breast Cancer Research</i> , 2019 , 21, 109 GSK3linactivation induces apoptosis of leukemia cells by repressing the function of c-Myb. <i>Molecular Biology of the Cell</i> , 2011 , 22, 3533-40 Cloning and characterization of p70(S6K beta) defines a novel family of p70 56 kinases. <i>Biochemical and Biophysical Research Communications</i> , 1998 , 253, 470-6 BMP-7 inhibits TGF-Binduced invasion of breast cancer cells through inhibition of integrin (B) expression. <i>Cellular Oncology (Dordrecht)</i> , 2012 , 35, 19-28 ELAC2, a putative prostate cancer susceptibility gene product, potentiates TGF-beta/Smad-induced growth arrest of prostate cells. <i>Oncogene</i> , 2006 , 25, 5591-600 Anti-Sclerostin antibody inhibits internalization of Sclerostin and Sclerostin-mediated antagonism of Wnt/LRP6 signaling. <i>PLoS ONE</i> , 2013 , 8, e62295 Activin Receptor-like Kinase 1 Ligand Trap Reduces Microvascular Density and Improves Chemotherapy Efficiency to Various Solid Tumors. <i>Clinical Cancer R</i>	Cell-type specific regulation of myostatin signaling. FASEB Jaurnal, 2012, 26, 1462-72 Cell-type specific regulation of myostatin signaling. FASEB Jaurnal, 2012, 26, 1462-72 Cell-type specific regulation of myostatin signaling. FASEB Jaurnal, 2012, 26, 1462-72 Department of Dupuytren B disease fibroblasts. Fibrogenesis and Tissue Repair, 2011, 4, 14 Transient disruption of autocrine TGF-beta signaling leads to enhanced survival and proliferation potential in single primitive human hemopoietic progenitor cells. Jaurnal of Immunology, 2002, 168, 755-52 A rate equation approach to elucidate the kinetics and robustness of the TGF-beta pathway. Biophysical Journal, 2006, 91, 4368-80 Smad7 and protein phosphatase 1alpha are critical determinants in the duration of TGF-beta/ALK1 signaling in endothelial cells. BMC Cell Biology, 2006, 7, 16 The orphan receptor serine/threonine kinase ALK7 signals arrest of proliferation and morphological differentiation in a neuronal cell line. Journal of Biological Chemistry, 2001, 276, 5140-6 Cancer-associated fibroblast-derived Gremlin 1 promotes breast cancer progression. Breast Cancer Research, 2019, 21, 109 SK3Ilnactivation induces apoptosis of leukemia cells by repressing the function of c-Myb. Molecular Biology of the Cell, 2011, 22, 3533-40 Cloning and characterization of p70(56K beta) defines a novel family of p70 56 kinases. Biochemical and Biophysical Research Communications, 1998, 253, 470-6 BMP-7 inhibits TGF-Induced invasion of breast cancer cells through inhibition of integrin (3) expression. Cellular Oncology (Dordrecht), 2012, 35, 19-28 ELAC2, a putative prostate cancer susceptibility gene product, potentiates TGF-beta/Smad-induced growth arrest of prostate cells. Oncogene, 2006, 25, 5591-600 Anti-Sclerostin antibody inhibits internalization of Sclerostin and Sclerostin-mediated antagonism of Wnt/LRP6 signaling. PLoS ONE, 2013, 8, e62295 Activin Receptor-like Kinase 1 Ligand Trap Reduces Microvascular Density and Improves Chemotherapy Efficiency to Vario	Cell-type specific regulation of myostatin signaling. FASEB Journal, 2012, 26, 1462-72 Cell-type specific regulation of myostatin signaling. FASEB Journal, 2012, 26, 1462-72 Cell-type specific regulation of myostatin signaling. FASEB Journal, 2012, 26, 1462-72 O9 44 Elevated transforming growth factor fand mitogen-activated protein kinase pathways mediate fibrotic traits of Dupuytren8 disease fibroblasts. Fibrogenesis and Tissue Repair, 2011, 4, 14 44 Transient disruption of autocrine TGF-beta signaling leads to enhanced survival and proliferation potential in single primitive human hemopoletic progenitor cells. Journal of Immunology, 2002, 168, 755-82 44 A rate equation approach to elucidate the kinetics and robustness of the TGF-beta pathway. Biophysical Journal, 2006, 91, 4368-80 Smad7 and protein phosphatase Talpha are critical determinants in the duration of TGF-beta/ALK1 signaling in endothelial cells. BMC Cell Biology, 2006, 7, 16 The orphan receptor serine/threonine kinase ALK7 signals arrest of proliferation and morphological differentiation in a neuronal cell line. Journal of Biological Chemistry, 2001, 276, 5140-6 54 43 Cancer-associated fibroblast-derived Gremllin 1 promotes breast cancer progression. Breast Cancer Research, 2019, 21, 109 GSK3llnactivation induces apoptosis of leukemia cells by repressing the function of c-Myb. Molecular Biology of the Cell, 2011, 22, 3533-40 Cloning and characterization of p70(S6K beta) defines a novel family of p70 S6 kinases. Biochemical and Biophysical Research Communications, 1998, 253, 470-6 BMP-7 inhibits TGF-linduced invasion of breast cancer cells through inhibition of integrin (3) expression. Cellular Oncology (Dordrecht), 2012, 35, 19-28 ELAC2, a putative prostate cancer susceptibility gene product, potentiates TGF-beta/Smad-induced proventiates of prostate cells. Oncogene, 2006, 25, 5591-600 Anti-Sclerostin antibody inhibits internalization of Sclerostin and Sclerostin-mediated antagonism of Wnt/LRP6 signaling. PLoS ONE, 2013, 8, e622

200	In Brief: Endothelial-to-mesenchymal transition. <i>Journal of Pathology</i> , 2016 , 238, 378-80	9.4	39
199	SLUG is expressed in endothelial cells lacking primary cilia to promote cellular calcification. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2015 , 35, 616-27	9.4	38
198	Key role for ubiquitin protein modification in TGFIsignal transduction. <i>Upsala Journal of Medical Sciences</i> , 2012 , 117, 153-65	2.8	38
197	The activities of Smad and Gli mediated signalling pathways in high-grade conventional osteosarcoma. European Journal of Cancer, 2012, 48, 3429-38	7.5	38
196	MicroRNA-155 functions as a negative regulator of RhoA signaling in TGF-Induced endothelial to mesenchymal transition. <i>MicroRNA (Shariqah, United Arab Emirates)</i> , 2012 , 1, 2-10	2.9	37
195	Fas-associated factor 1 antagonizes Wnt signaling by promoting Etatenin degradation. <i>Molecular Biology of the Cell</i> , 2011 , 22, 1617-24	3.5	37
194	A covalently dimerized recombinant human bone morphogenetic protein-15 variant identifies bone morphogenetic protein receptor type 1B as a key cell surface receptor on ovarian granulosa cells. <i>Endocrinology</i> , 2012 , 153, 1509-18	4.8	36
193	SOST expression is restricted to the great arteries during embryonic and neonatal cardiovascular development. <i>Developmental Dynamics</i> , 2007 , 236, 606-12	2.9	36
192	Functional antagonism between activin and osteogenic protein-1 in human embryonal carcinoma cells. <i>Journal of Cellular Physiology</i> , 1999 , 180, 141-9	7	36
191	Role of soluble endoglin in BMP9 signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 17800-17808	11.5	35
190	Epigenetic Reprogramming of TGF-15 ignaling in Breast Cancer. Cancers, 2019, 11,	6.6	35
189	Inhibition of Activin Signaling Slows Progression of Polycystic Kidney Disease. <i>Journal of the American Society of Nephrology: JASN</i> , 2016 , 27, 3589-3599	12.7	35
188	USP4 inhibits SMAD4 monoubiquitination and promotes activin and BMP signaling. <i>EMBO Journal</i> , 2017 , 36, 1623-1639	13	34
187	Immunotherapeutic Potential of TGF-Inhibition and Oncolytic Viruses. <i>Trends in Immunology</i> , 2020 , 41, 406-420	14.4	34
186	Endoglin for tumor imaging and targeted cancer therapy. <i>Expert Opinion on Therapeutic Targets</i> , 2013 , 17, 421-35	6.4	34
185	Molecular characterization of transforming growth factor type beta 3. <i>Annals of the New York Academy of Sciences</i> , 1990 , 593, 26-42	6.5	34
184	Smad6 determines BMP-regulated invasive behaviour of breast cancer cells in a zebrafish xenograft model. <i>Scientific Reports</i> , 2016 , 6, 24968	4.9	34
183	Distribution of phosphorylated Smad2 identifies target tissues of TGF beta ligands in mouse development. <i>Gene Expression Patterns</i> , 2003 , 3, 355-60	1.5	33

(2013-2001)

182	cDNA cloning, expression studies and chromosome mapping of human type I serine/threonine kinase receptor ALK7 (ACVR1C). <i>Cytogenetic and Genome Research</i> , 2001 , 95, 157-62	1.9	33	
181	FAF1 phosphorylation by AKT accumulates TGF-Itype II receptor and drives breast cancer metastasis. <i>Nature Communications</i> , 2017 , 8, 15021	17.4	32	
180	Time-resolved dissection of early phosphoproteome and ensuing proteome changes in response to TGF-[]Science Signaling, 2014 , 7, rs5	8.8	32	
179	Shear induced collateral artery growth modulated by endoglin but not by ALK1. <i>Journal of Cellular and Molecular Medicine</i> , 2012 , 16, 2440-50	5.6	32	
178	TGF-II/ALK5-induced monocyte migration involves PI3K and p38 pathways and is not negatively affected by diabetes mellitus. <i>Cardiovascular Research</i> , 2011 , 91, 510-8	9.9	32	
177	Genetic depletion and pharmacological targeting of \square integrin in breast cancer cells impairs metastasis in zebrafish and mouse xenograft models. <i>Breast Cancer Research</i> , 2015 , 17, 28	8.3	31	
176	Temporal smad7 transgene induction in mouse epidermis accelerates skin wound healing. <i>American Journal of Pathology</i> , 2011 , 179, 1768-79	5.8	31	
175	TGFIsignaling in liver regeneration. Current Pharmaceutical Design, 2012, 18, 4103-13	3.3	31	
174	Nerve growth factor mediates activation of the Smad pathway in PC12 cells. <i>FEBS Journal</i> , 2004 , 271, 920-31		31	
173	TGFII-induced SMAD2/3 and SMAD1/5 phosphorylation are both ALK5-kinase-dependent in primary chondrocytes and mediated by TAK1 kinase activity. <i>Arthritis Research and Therapy</i> , 2017 , 19, 112	5.7	30	
172	Dual exon skipping in myostatin and dystrophin for Duchenne muscular dystrophy. <i>BMC Medical Genomics</i> , 2011 , 4, 36	3.7	30	
171	Endoglin haploinsufficiency reduces radiation-induced fibrosis and telangiectasia formation in mouse kidneys. <i>Radiotherapy and Oncology</i> , 2009 , 92, 484-91	5.3	30	
170	Bone morphogenetic protein type IB receptor is progressively expressed in malignant glioma tumours. <i>British Journal of Cancer</i> , 1996 , 73, 624-9	8.7	30	
169	TGF-Family Signaling Pathways in Cellular Dormancy. <i>Trends in Cancer</i> , 2019 , 5, 66-78	12.5	29	
168	Targeting tumour vasculature by inhibiting activin receptor-like kinase (ALK)1 function. <i>Biochemical Society Transactions</i> , 2016 , 44, 1142-9	5.1	28	
167	Inhibition of TGFItype I receptor activity facilitates liver regeneration upon acute CCl4 intoxication in mice. <i>Archives of Toxicology</i> , 2016 , 90, 347-57	5.8	28	
166	Expression of TGFFamily signalling components in ageing cartilage: age-related loss of TGFI and BMP receptors. <i>Osteoarthritis and Cartilage</i> , 2016 , 24, 1235-45	6.2	28	
165	Activin receptor-like kinase 1 as a target for anti-angiogenesis therapy. <i>Expert Opinion on Investigational Drugs</i> , 2013 , 22, 1371-83	5.9	28	

164	ALK2 mutation in a patient with Downß syndrome and a congenital heart defect. <i>European Journal of Human Genetics</i> , 2011 , 19, 389-93	5.3	28
163	BMP antagonists enhance myogenic differentiation and ameliorate the dystrophic phenotype in a DMD mouse model. <i>Neurobiology of Disease</i> , 2011 , 41, 353-60	7.5	28
162	Immunohistochemical detection of activin A, follistatin, and activin receptors during fracture healing in the rat. <i>Journal of Orthopaedic Research</i> , 1998 , 16, 314-21	3.8	28
161	Latent transforming growth factor-beta complex in Chinese hamster ovary cells contains the multifunctional cysteine-rich fibroblast growth factor receptor, also termed E-selectin-ligand or MG-160. <i>Biochemical Journal</i> , 1997 , 324 (Pt 2), 427-34	3.8	27
160	Key signaling nodes in mammary gland development and cancer: Smad signal integration in epithelial cell plasticity. <i>Breast Cancer Research</i> , 2012 , 14, 204	8.3	26
159	Methylation of Smad6 by protein arginine N-methyltransferase 1. FEBS Letters, 2006, 580, 6603-11	3.8	26
158	c-Met activation leads to the establishment of a TGFE eceptor regulatory network in bladder cancer progression. <i>Nature Communications</i> , 2019 , 10, 4349	17.4	25
157	Overactive bone morphogenetic protein signaling in heterotopic ossification and Duchenne muscular dystrophy. <i>Cellular and Molecular Life Sciences</i> , 2013 , 70, 407-23	10.3	25
156	Antisense-oligonucleotide mediated exon skipping in activin-receptor-like kinase 2: inhibiting the receptor that is overactive in fibrodysplasia ossificans progressiva. <i>PLoS ONE</i> , 2013 , 8, e69096	3.7	25
155	Smad3 is a key nonredundant mediator of transforming growth factor beta signaling in Nme mouse mammary epithelial cells. <i>Molecular Cancer Research</i> , 2009 , 7, 1342-53	6.6	24
154	Transforming growth factor (TGF-beta)-specific signaling by chimeric TGF-beta type II receptor with intracellular domain of activin type IIB receptor. <i>Journal of Biological Chemistry</i> , 1997 , 272, 21187-94	5.4	24
153	Targeting TGF-Bignaling by Antisense Oligonucleotide-mediated Knockdown of TGF-Type I Receptor. <i>Molecular Therapy - Nucleic Acids</i> , 2014 , 3, e156	10.7	23
152	Role of endoglin in fibrosis and scleroderma. <i>International Review of Cell and Molecular Biology</i> , 2012 , 297, 295-308	6	23
151	Fas-associated factor 1 is a scaffold protein that promotes Eransducin repeat-containing protein (ETrCP)-mediated Etatenin ubiquitination and degradation. <i>Journal of Biological Chemistry</i> , 2012 , 287, 30701-10	5.4	23
150	Characterization of a 60-kDa cell surface-associated transforming growth factor-beta binding protein that can interfere with transforming growth factor-beta receptor binding. <i>Journal of Cellular Physiology</i> , 1997 , 173, 447-59	7	23
149	Lack of responsiveness to TGF-beta1 in a thyroid carcinoma cell line with functional type I and type II TGF-beta receptors and Smad proteins, suggests a novel mechanism for TGF-beta insensitivity in carcinoma cells. <i>Molecular and Cellular Endocrinology</i> , 1999 , 153, 79-90	4.4	23
148	Phosphorylation of Smad signaling proteins by receptor serine/threonine kinases. <i>Methods in Molecular Biology</i> , 2001 , 124, 107-20	1.4	23
147	Regulation of the TGF-[pathway by deubiquitinases in cancer. <i>International Journal of Biochemistry and Cell Biology</i> , 2016 , 76, 135-45	5.6	23

(2010-2016)

146	Delta-Like Ligand 4 Modulates Liver Damage by Down-Regulating Chemokine Expression. <i>American Journal of Pathology</i> , 2016 , 186, 1874-1889	5.8	23
145	Bone Morphogenetic Protein 9 Protects against Neonatal Hyperoxia-Induced Impairment of Alveolarization and Pulmonary Inflammation. <i>Frontiers in Physiology</i> , 2017 , 8, 486	4.6	22
144	Disorganised stroma determined on pre-treatment breast cancer biopsies is associated with poor response to neoadjuvant chemotherapy: Results from the NEOZOTAC trial. <i>Molecular Oncology</i> , 2015 , 9, 1120-8	7.9	22
143	TGFbeta activates mitogen- and stress-activated protein kinase-1 (MSK1) to attenuate cell death. <i>Journal of Biological Chemistry</i> , 2011 , 286, 5003-11	5.4	22
142	Characterization of the binding of transforming growth factor-beta 1, - beta 2, and -beta 3 to recombinant beta 1-latency-associated peptide. <i>Molecular Endocrinology</i> , 1992 , 6, 694-702		22
141	Development of a 96-well plate sample preparation method for integrated N- and O-glycomics using porous graphitized carbon liquid chromatography-mass spectrometry. <i>Molecular Omics</i> , 2020 , 16, 355-363	4.4	22
140	Mutant ACVR1 Arrests Glial Cell Differentiation to Drive Tumorigenesis in Pediatric Gliomas. <i>Cancer Cell</i> , 2020 , 37, 308-323.e12	24.3	21
139	Fluid shear stress-induced TGF-IALK5 signaling in renal epithelial cells is modulated by MEK1/2. <i>Cellular and Molecular Life Sciences</i> , 2017 , 74, 2283-2298	10.3	20
138	Prevention of progression of pulmonary hypertension by the Nur77 agonist 6-mercaptopurine: role of BMP signalling. <i>European Respiratory Journal</i> , 2019 , 54,	13.6	20
137	Engagement of activin and bone morphogenetic protein signaling pathway Smad proteins in the induction of inhibin B production in ovarian granulosa cells. <i>Molecular and Cellular Endocrinology</i> , 2002 , 195, 79-88	4.4	20
136	Expression of the inhibitory Smad7 in early mouse development and upregulation during embryonic vasculogenesis. <i>Developmental Dynamics</i> , 2000 , 218, 663-70	2.9	20
135	Spatial proteogenomics reveals distinct and evolutionarily conserved hepatic macrophage niches <i>Cell</i> , 2022 , 185, 379-396.e38	56.2	20
134	SUMO-triggered ubiquitination of NR4A1 controls macrophage cell death. <i>Cell Death and Differentiation</i> , 2017 , 24, 1530-1539	12.7	19
133	Bone morphogenetic protein receptors: Structure, function and targeting by selective small molecule kinase inhibitors. <i>Bone</i> , 2020 , 138, 115472	4.7	19
132	Invasive Behavior of Human Breast Cancer Cells in Embryonic Zebrafish. <i>Journal of Visualized Experiments</i> , 2017 ,	1.6	19
131	Novel Ex Vivo Culture Method for the Study of Dupuytren® Disease: Effects of TGF© ype 1 Receptor Modulation by Antisense Oligonucleotides. <i>Molecular Therapy - Nucleic Acids</i> , 2014 , 3, e142	10.7	19
130	Soluble fms-like tyrosine kinase 1 and soluble endoglin are elevated circulating anti-angiogenic factors in pre-eclampsia. <i>Pregnancy Hypertension</i> , 2012 , 2, 358-67	2.6	19
129	In situ proximity ligation detection of c-Jun/AP-1 dimers reveals increased levels of c-Jun/Fra1 complexes in aggressive breast cancer cell lines in vitro and in vivo. <i>Molecular and Cellular Proteomics</i> , 2010 , 9, 1982-90	7.6	19

128	Immunohistochemical localization of osteogenetic protein (OP-1) and its receptors in rabbit articular cartilage. <i>Journal of Histochemistry and Cytochemistry</i> , 2002 , 50, 1341-50	3.4	19
127	Characterization of in vivo phosphorylation of activin type II receptor. <i>Biochemical and Biophysical Research Communications</i> , 1993 , 194, 1508-14	3.4	19
126	Role of glycosylation in TGF-laignaling and epithelial-to-mesenchymal transition in cancer. <i>Protein and Cell</i> , 2021 , 12, 89-106	7.2	19
125	TGFIand EGF signaling orchestrates the AP-1- and p63 transcriptional regulation of breast cancer invasiveness. <i>Oncogene</i> , 2020 , 39, 4436-4449	9.2	18
124	A current perspective on applications of macrocyclic-peptide-based high-affinity ligands. <i>Biopolymers</i> , 2016 , 106, 889-900	2.2	18
123	Wild-type p53 inhibits pro-invasive properties of TGF-B in breast cancer, in part through regulation of EPHB2, a new TGF-Itarget gene. <i>Breast Cancer Research and Treatment</i> , 2014 , 148, 7-18	4.4	18
122	5-Aminosalicylic acid inhibits TGF-beta1 signalling in colorectal cancer cells. <i>Cancer Letters</i> , 2010 , 287, 82-90	9.9	18
121	Orthotopic ossification of the spinal ligaments of Zucker fatty rats: a possible animal model for ossification of the human posterior longitudinal ligament. <i>Journal of Orthopaedic Research</i> , 1997 , 15, 820-9	3.8	18
120	Role of TGF-beta in the tumor stroma. Current Cancer Drug Targets, 2008, 8, 466-72	2.8	18
119	Correlation between ALK-6 (BMPR-IB) distribution and responsiveness to osteogenic protein-1 (BMP-7) in embryonic mouse bone rudiments. <i>Growth Factors</i> , 2000 , 17, 177-92	1.6	18
118	A rat pituitary tumor cell line (GH3) expresses type I and type II receptors and other cell surface binding protein(s) for transforming growth factor-beta. <i>Journal of Biological Chemistry</i> , 1995 , 270, 770-4	₁ 5·4	18
117	Fish tales: The use of zebrafish xenograft human cancer cell models. <i>Histology and Histopathology</i> , 2017 , 32, 673-686	1.4	18
116	Small-Molecule Activity-Based Probe for Monitoring Ubiquitin C-Terminal Hydrolase L1 (UCHL1) Activity in Live Cells and Zebrafish Embryos. <i>Journal of the American Chemical Society</i> , 2020 , 142, 16825-	16841	18
115	Bone morphogenetic protein 9 as a key regulator of liver progenitor cells in DDC-induced cholestatic liver injury. <i>Liver International</i> , 2018 , 38, 1664-1675	7.9	17
114	Autophagy contributes to BMP type 2 receptor degradation and development of pulmonary arterial hypertension. <i>Journal of Pathology</i> , 2019 , 249, 356-367	9.4	17
113	Fibulin-4 deficiency increases TGF-Isignalling in aortic smooth muscle cells due to elevated TGF-Izelevels. <i>Scientific Reports</i> , 2015 , 5, 16872	4.9	17
112	Poor vessel formation in embryos from knock-in mice expressing ALK5 with L45 loop mutation defective in Smad activation. <i>Laboratory Investigation</i> , 2009 , 89, 800-10	5.9	17
111	Mutational analysis of sclerostin shows importance of the flexible loop and the cystine-knot for Wnt-signaling inhibition. <i>PLoS ONE</i> , 2013 , 8, e81710	3.7	17

110	Spheroid assay to measure TGF-Enduced invasion. Journal of Visualized Experiments, 2011,	1.6	16
109	Transforming growth factor beta and wound healing in human cholesteatoma. <i>Laryngoscope</i> , 2008 , 118, 94-8	3.6	16
108	Assignment1 of the Smad7 gene (MADH7) to human chromosome 18q21.1 by fluorescence in situ hybridization. <i>Cytogenetic and Genome Research</i> , 1998 , 81, 189-90	1.9	16
107	Therapeutic targeting of TGF-IIn cancer: hacking a master switch of immune suppression. <i>Clinical Science</i> , 2021 , 135, 35-52	6.5	16
106	RLP, a novel Ras-like protein, is an immediate-early transforming growth factor-beta (TGF-beta) target gene that negatively regulates transcriptional activity induced by TGF-beta. <i>Biochemical Journal</i> , 2004 , 383, 187-99	3.8	15
105	The high affinity ALK1-ligand BMP9 induces a hypertrophy-like state in chondrocytes that is antagonized by TGF 1 . <i>Osteoarthritis and Cartilage</i> , 2015 , 23, 985-95	6.2	14
104	Wnt/Etatenin signaling changes C2C12 myoblast proliferation and differentiation by inducing Id3 expression. <i>Biochemical and Biophysical Research Communications</i> , 2012 , 419, 83-8	3.4	14
103	Smad2 Phosphorylation in Diabetic Kidney Tubule Epithelial Cells Is Associated with Modulation of Several Transforming Growth Factor-Family Members. <i>Nephron</i> , 2017 , 135, 291-306	3.3	13
102	GREM1 is associated with metastasis and predicts poor prognosis in ER-negative breast cancer patients. <i>Cell Communication and Signaling</i> , 2019 , 17, 140	7.5	13
101	Development of Macrocycle Kinase Inhibitors for ALK2 Using Fibrodysplasia Ossificans Progressiva-Derived Endothelial Cells. <i>JBMR Plus</i> , 2019 , 3, e10230	3.9	13
100	Regulation of endothelial barrier function by TGF-Itype I receptor ALK5: potential role of contractile mechanisms and heat shock protein 90. <i>Journal of Cellular Physiology</i> , 2012 , 227, 759-71	7	13
99	Current perspectives on inhibitory SMAD7 in health and disease. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , 2020 , 55, 691-715	8.7	13
98	Hepatocyte-specific Smad7 deletion accelerates DEN-induced HCC via activation of STAT3 signaling in mice. <i>Oncogenesis</i> , 2017 , 6, e294	6.6	12
97	Clinical Utility Gene Card for: Fibrodysplasia ossificans progressiva. <i>European Journal of Human Genetics</i> , 2015 , 23,	5.3	12
96	New function of the myostatin/activin type I receptor (ALK4) as a mediator of muscle atrophy and muscle regeneration. <i>FASEB Journal</i> , 2017 , 31, 238-255	0.9	12
95	TMED10 Protein Interferes with Transforming Growth Factor (TGF)-\(\text{Isignaling}\) by Disrupting TGF-\(\text{I}\) Receptor Complex Formation. <i>Journal of Biological Chemistry</i> , 2017 , 292, 4099-4112	5.4	11
94	Expression of TGF-beta related Smad proteins in human epithelial skin tumors. <i>International Journal of Oncology</i> , 1999 , 14, 1049-56	1	11
93	Tacrolimus-Induced BMP/SMAD Signaling Associates With Metabolic Stress-Activated FOXO1 to Trigger ECell Failure. <i>Diabetes</i> , 2020 , 69, 193-204	0.9	10

92	Interrogating TGF-Function and Regulation in Endothelial Cells. <i>Methods in Molecular Biology</i> , 2016 , 1344, 193-203	1.4	10
91	Bone morphogenetic protein signalling in NGF-stimulated PC12 cells. <i>Biochemical and Biophysical Research Communications</i> , 2003 , 307, 632-9	3.4	10
90	Chromosomal localization of three human genes encoding bone morphogenetic protein receptors. <i>Mammalian Genome</i> , 1999 , 10, 299-302	3.2	10
89	Mutational activation of BRAF confers sensitivity to transforming growth factor beta inhibitors in human cancer cells. <i>Oncotarget</i> , 2016 , 7, 81995-82012	3.3	10
88	Cancer associated-fibroblast-derived exosomes in cancer progression. <i>Molecular Cancer</i> , 2021 , 20, 154	42.1	10
87	Differential - and Glycosphingolipid Glycosylation in Human Pancreatic Adenocarcinoma Cells With Opposite Morphology and Metastatic Behavior. <i>Frontiers in Oncology</i> , 2020 , 10, 732	5.3	9
86	Signal Transduction Cascades Controlling Osteoblast Differentiation 2013 , 15-24		9
85	14-3-3lturns TGF-lto the dark side. <i>Cancer Cell</i> , 2015 , 27, 151-3	24.3	9
84	Chromosomal localization of three human genes encoding members of the TGF-beta superfamily of type I serine/threonine kinase receptors. <i>Mammalian Genome</i> , 1998 , 9, 266-8	3.2	9
83	Ectopic expression of Smad7 inhibits transforming growth factor-beta responses in vascular smooth muscle cells. <i>Life Sciences</i> , 2001 , 69, 2641-52	6.8	9
82	Reactivation of BMP signaling by suboptimal concentrations of MEK inhibitor and FK506 reduces organ-specific breast cancer metastasis. <i>Cancer Letters</i> , 2020 , 493, 41-54	9.9	9
81	Mechanotransduction is a context-dependent activator of TGF-Isignaling in mesenchymal stem cells. <i>Biomaterials</i> , 2020 , 259, 120331	15.6	8
80	Endothelium-derived stromal cells contribute to hematopoietic bone marrow niche formation. <i>Cell Stem Cell</i> , 2021 , 28, 653-670.e11	18	8
79	Activin A induces a non-fibrotic phenotype in smooth muscle cells in contrast to TGF-I Experimental Cell Research, 2011 , 317, 131-42	4.2	7
78	TGF-Bignaling in liver metastasis. Clinical and Translational Medicine, 2020, 10, e160	5.7	7
77	TGF-Induced Endothelial to Mesenchymal Transition Is Determined by a Balance Between SNAIL and ID Factors. <i>Frontiers in Cell and Developmental Biology</i> , 2021 , 9, 616610	5.7	7
76	Secreted BMP antagonists and their role in cancer and bone metastases. <i>Bone</i> , 2020 , 137, 115455	4.7	6
75	A Signaling Crosstalk between BMP9 and HGF/c-Met Regulates Mouse Adult Liver Progenitor Cell Survival. <i>Cells</i> , 2020 , 9,	7.9	6

(2019-2017)

74	Disparate phospho-Smad2 levels in advanced type 2 diabetes patients with diabetic nephropathy and early experimental db/db mouse model. <i>Renal Failure</i> , 2017 , 39, 629-642	2.9	6
73	Regulatory RNAs controlling vascular (dys)function by affecting TGF-Ifamily signalling. <i>EXCLI Journal</i> , 2015 , 14, 832-50	2.4	6
72	E3 Ubiquitin Ligases: Key Regulators of TGFISignaling in Cancer Progression. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	6
71	A comprehensive enhancer screen identifies TRAM2 as a key and novel mediator of YAP oncogenesis. <i>Genome Biology</i> , 2021 , 22, 54	18.3	6
70	Heterozygous disruption of activin receptor-like kinase 1 is associated with increased arterial pressure in mice. <i>DMM Disease Models and Mechanisms</i> , 2015 , 8, 1427-39	4.1	5
69	Generation of Fibrodysplasia ossificans progressiva and control integration free iPSC lines from periodontal ligament fibroblasts. <i>Stem Cell Research</i> , 2019 , 41, 101639	1.6	5
68	Ter94/VCP is a novel component involved in BMP signaling. <i>PLoS ONE</i> , 2014 , 9, e114475	3.7	5
67	Studying TGF-Bignaling and TGF-Induced Epithelial-to-mesenchymal Transition in Breast Cancer and Normal Cells. <i>Journal of Visualized Experiments</i> , 2020 ,	1.6	5
66	Determining TGF-IReceptor Levels in the Cell Membrane. <i>Methods in Molecular Biology</i> , 2016 , 1344, 35-47	1.4	5
65	VprBP mitigates TGF-land Activin signaling by promoting Smurf1-mediated type I receptor degradation. <i>Journal of Molecular Cell Biology</i> , 2020 , 12, 138-151	6.3	5
64	In vivo imaging of TGFIsignalling components using positron emission tomography. <i>Drug Discovery Today</i> , 2019 , 24, 2258-2272	8.8	4
63	TGF-Bignaling in Duchenne muscular dystrophy. <i>Future Neurology</i> , 2012 , 7, 209-224	1.5	4
62	Control of bone formation by osteocytes? lessons from the rare skeletal disorders sclerosteosis and van Buchem disease. <i>BoneKEy Osteovision</i> , 2005 , 2, 33-38		4
61	Bone morphogenetic protein receptors and their nuclear effectors in bone formation 2002 , 31-60		4
60	Designed nanomolar small-molecule inhibitors of Ena/VASP EVH1 interaction impair invasion and extravasation of breast cancer cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 29684-29690	11.5	4
59	JNK-Dependent cJun Phosphorylation Mitigates TGFE and EGF-Induced Pre-Malignant Breast Cancer Cell Invasion by Suppressing AP-1-Mediated Transcriptional Responses. <i>Cells</i> , 2019 , 8,	7.9	4
58	Bone Morphogenetic Proteins in the Initiation and Progression of Breast Cancer 2017 , 409-433		3
57	Generation of non-standard macrocyclic peptides specifically binding TSC-22 homologous gene-1. <i>Biochemical and Biophysical Research Communications</i> , 2019 , 516, 445-450	3.4	3

56	ALK1Fc Suppresses the Human Prostate Cancer Growth in and Preclinical Models. <i>Frontiers in Cell and Developmental Biology</i> , 2017 , 5, 104	5.7	3
55	Signal Transduction: Gain of Activin Turns Muscle into Bone. <i>Current Biology</i> , 2015 , 25, R1136-8	6.3	3
54	Eccrine sweat glands: expression of transforming growth factor-beta and bone morphogenetic protein type I receptors and their intracellular signalling Smad proteins. <i>Acta Dermato-Venereologica</i> , 1999 , 79, 183-6	2.2	3
53	CD161 expression and regulation defines rapidly responding effector CD4+ T cells associated with improved survival in HPV16-associated tumors. 2022 , 10,		3
52	Combinatorial Therapeutic Approaches with Nanomaterial-Based Photodynamic Cancer Therapy <i>Pharmaceutics</i> , 2022 , 14,	6.4	3
51	Breast cancer dormancy is associated with a 4NG1 state and not senescence. <i>Npj Breast Cancer</i> , 2021 , 7, 140	7.8	3
50	Signal transduction mechanisms for members of the TGF-Ifamily 2001, 11-40		3
49	Bone morphogenetic protein receptors and their nuclear effectors in bone formation 2004 , 9-44		3
48	A Small-Molecule Activity-Based Probe for Monitoring Ubiquitin C-terminal Hydrolase L1 (UCHL1) Activity in Live Cells and Zebrafish Embryos		3
47	Metabolic Reprogramming of Mammary Epithelial Cells during TGF-Einduced Epithelial-to-Mesenchymal Transition. <i>Metabolites</i> , 2021 , 11,	5.6	3
46	Measurement of constitutive activity of BMP type I receptors. <i>Methods in Enzymology</i> , 2010 , 484, 281-9	93 _{1.7}	2
45	Deregulated bone morphogenetic protein receptor signaling underlies fibrodysplasia ossificans progressiva. <i>Current Pharmaceutical Design</i> , 2012 , 18, 4087-92	3.3	2
44	Bone Morphogenetic Proteins and their Receptors 2006,		2
43	Smad protein and TGF-Bignaling in vascular smooth muscle cells. <i>International Journal of Molecular Medicine</i> , 2003 , 11, 645	4.4	2
42	TGF-Emediated Endothelial to Mesenchymal Transition (EndMT) and the Functional Assessment of EndMT Effectors using CRISPR/Cas9 Gene Editing. <i>Journal of Visualized Experiments</i> , 2021 ,	1.6	2
41	Photodynamic Therapy in Combination with the Hepatitis B Core Virus-like Particles (HBc VLPs) to Prime Anticancer Immunity for Colorectal Cancer Treatment. <i>Cancers</i> , 2022 , 14, 2724	6.6	2
40	Cercosporamide inhibits bone morphogenetic protein receptor type I kinase activity in zebrafish. <i>DMM Disease Models and Mechanisms</i> , 2020 , 13,	4.1	1
39	TGF-land Cardiovascular Disorders 2013 , 297-322		1

38	Bone Morphogenetic Proteins and Their Receptors 2009 ,		1
37	Transforming growth factor-Ethallenge alters the N-, O-, and glycosphingolipid glycomes in PaTu-S pancreatic adenocarcinoma cells <i>Journal of Biological Chemistry</i> , 2022 , 101717	5.4	1
36	Fibrodysplasia Ossificans Progressiva: What Have We Achieved and Where Are We Now? Follow-up to the 2015 Lorentz Workshop. <i>Frontiers in Endocrinology</i> , 2021 , 12, 732728	5.7	1
35	The polarity protein Par3 coordinates positively self-renewal and negatively invasiveness in glioblastoma. <i>Cell Death and Disease</i> , 2021 , 12, 932	9.8	1
34	Assessment of functional competence of endothelial cells from human pluripotent stem cells in zebrafish embryos. <i>Methods in Molecular Biology</i> , 2014 , 1213, 107-19	1.4	1
33	TRAF4 inhibits bladder cancer progression by promoting BMP/SMAD signalling pathway		1
32	An Experimental Liver Metastasis Mouse Model Suitable for Short and Long-Term Intravital Imaging. <i>Current Protocols</i> , 2021 , 1, e116		1
31	Inhibiting Endothelial Cell Function in Normal and Tumor Angiogenesis Using BMP Type I Receptor Macrocyclic Kinase Inhibitors. <i>Cancers</i> , 2021 , 13,	6.6	1
30	Emerging regulators of BMP bioavailability. <i>Bone</i> , 2016 , 93, 220-221	4.7	1
29	Challenges and Opportunities for Drug Repositioning in Fibrodysplasia Ossificans Progressiva. <i>Biomedicines</i> , 2021 , 9,	4.8	1
28	The protein kinase LKB1 promotes self-renewal and blocks invasiveness in glioblastoma. <i>Journal of Cellular Physiology</i> , 2021 ,	7	1
27	Fine-tuning ALK1 linear polyubiquitination to control angiogenesis. <i>Trends in Cell Biology</i> , 2021 , 31, 705	- 787 3	1
26	Cripto favors chondrocyte hypertrophy via TGF-ISMAD1/5 signaling during development of osteoarthritis. <i>Journal of Pathology</i> , 2021 , 255, 330-342	9.4	1
25	Transforming Growth Factor-IReceptors and Signal Transduction 1997, 277-284		1
24	Establishment of Embryonic Zebrafish Xenograft Assays to Investigate TGF-IFamily Signaling in Human Breast Cancer Progression <i>Methods in Molecular Biology</i> , 2022 , 2488, 67-80	1.4	1
23	Crystal structures of BMPRII extracellular domain in binary and ternary receptor complexes with BMP10 <i>Nature Communications</i> , 2022 , 13, 2395	17.4	1
22	Microfluidics meets 3D cancer cell migration Trends in Cancer, 2022,	12.5	1
21	RNF12 is regulated by AKT phosphorylation and promotes TGF-Idriven breast cancer metastasis <i>Cell Death and Disease</i> , 2022 , 13, 44	9.8	O

20	THG-1 suppresses SALL4 degradation to induce stemness genes and tumorsphere formation through antagonizing NRBP1 in squamous cell carcinoma cells. <i>Biochemical and Biophysical Research Communications</i> , 2020 , 523, 307-314	3.4	О
19	Inhibition of the prolyl isomerase Pin1 improves endothelial function and attenuates vascular remodelling in pulmonary hypertension by inhibiting TGF-Isignalling. <i>Angiogenesis</i> , 2021 , 1	10.6	O
18	Visualizing Dynamic Changes During TGF-Induced Epithelial to Mesenchymal Transition <i>Methods in Molecular Biology</i> , 2022 , 2488, 47-65	1.4	О
17	A Programmable Multifunctional 3D Cancer Cell Invasion Micro Platform Small, 2022, e2107757	11	О
16	OVOL1 inhibits breast cancer cell invasion by enhancing the degradation of TGF-Itype I receptor <i>Signal Transduction and Targeted Therapy</i> , 2022 , 7, 126	21	О
15	Dynamic Visualization of TGF-/ISMAD3 Transcriptional Responses in Single Living Cells. <i>Cancers</i> , 2022 , 14, 2508	6.6	O
14	Synthesis and preclinical evaluation of [11C]LR111 and [18F]EW-7197 as PET tracers of the activin-receptor like kinase-5. <i>Nuclear Medicine and Biology</i> , 2022 , 112-113, 9-19	2.1	О
13	P348Impaired macrophage polarization in endoglin haplo-insufficiency leading to defective tissue repair is recovered by counter balance the TGFbeta pathway. <i>Cardiovascular Research</i> , 2014 , 103, S63.4-	-\$63	
12	132 Non-synonymous SMAD6 mutations impaired inhibition of bmp signalling in patients with congenital cardiovascular malformation. <i>Heart</i> , 2011 , 97, A75-A75	5.1	
11	Receptor Serine/Threonine Kinases 2004 , 174-180		
11	Receptor Serine, Fine Chine Kindses 2004, 174-100		
10	Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87	0.8	
		o.8 o.8	
10	Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87		
10	Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87 Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87		
10 9 8	Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87 Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87 TGF-Liginaling and Vascular Morphogenesis 2008 , 507-521 Effects of ALK1Fc treatment on prostate cancer cells interacting with bone and bone cells in bone	0.8	
10 9 8	Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87 Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87 TGF-Bignaling and Vascular Morphogenesis 2008 , 507-521 Effects of ALK1Fc treatment on prostate cancer cells interacting with bone and bone cells in bone metastasis models <i>Journal of Clinical Oncology</i> , 2017 , 35, e16576-e16576	0.8	
10 9 8 7 6	Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87 Uncovering the deubiquitinase activity landscape of breast cancer. <i>Oncoscience</i> , 2020 , 7, 85-87 TGF-ISignaling and Vascular Morphogenesis 2008 , 507-521 Effects of ALK1Fc treatment on prostate cancer cells interacting with bone and bone cells in bone metastasis models <i>Journal of Clinical Oncology</i> , 2017 , 35, e16576-e16576 Shear stress modulates TGF-beta signaling and EMT in endothelial cells. <i>FASEB Journal</i> , 2009 , 23, 830.8 Genetic and pharmacological targeting of activin receptor-like kinase 1 impairs tumor growth and	o.8 2.2 0.9	

- 2 Signal Transduction Cascades Controlling Osteoblast Differentiation **2018**, 54-59
- A Programmable Multifunctional 3D Cancer Cell Invasion Micro Platform (Small 20/2022). *Small*, **2022**, 18, 2270103

11