

# Joan Massagu Sol

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2071747/joan-massague-sole-publications-by-citations.pdf>  
**Version:** 2024-04-10

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.

249 papers	103,197 citations	141 h-index	269 g-index
269 ext. papers	112,376 ext. citations	25 avg, IF	8.79 L-index

#	Paper	IF	Citations
249	Mechanisms of TGF-beta signaling from cell membrane to the nucleus. <i>Cell</i> , <b>2003</b> , 113, 685-700	56.2	4695
248	TGF-beta signal transduction. <i>Annual Review of Biochemistry</i> , <b>1998</b> , 67, 753-91	29.1	3919
247	Cancer metastasis: building a framework. <i>Cell</i> , <b>2006</b> , 127, 679-95	56.2	3126
246	The transforming growth factor-beta family. <i>Annual Review of Cell Biology</i> , <b>1990</b> , 6, 597-641		2825
245	TGFbeta in Cancer. <i>Cell</i> , <b>2008</b> , 134, 215-30	56.2	2821
244	Genes that mediate breast cancer metastasis to lung. <i>Nature</i> , <b>2005</b> , 436, 518-24	50.4	2242
243	A multigenic program mediating breast cancer metastasis to bone. <i>Cancer Cell</i> , <b>2003</b> , 3, 537-49	24.3	2050
242	Mechanism of activation of the TGF-beta receptor. <i>Nature</i> , <b>1994</b> , 370, 341-7	50.4	2048
241	TGFbeta signaling in growth control, cancer, and heritable disorders. <i>Cell</i> , <b>2000</b> , 103, 295-309	56.2	2036
240	TGFβ signalling in context. <i>Nature Reviews Molecular Cell Biology</i> , <b>2012</b> , 13, 616-30	48.7	2035
239	Metastasis: from dissemination to organ-specific colonization. <i>Nature Reviews Cancer</i> , <b>2009</b> , 9, 274-84	31.3	1934
238	Cloning of p27Kip1, a cyclin-dependent kinase inhibitor and a potential mediator of extracellular antimitogenic signals. <i>Cell</i> , <b>1994</b> , 78, 59-66	56.2	1928
237	Smad transcription factors. <i>Genes and Development</i> , <b>2005</b> , 19, 2783-810	12.6	1789
236	How cells read TGF-beta signals. <i>Nature Reviews Molecular Cell Biology</i> , <b>2000</b> , 1, 169-78	48.7	1589
235	Transcriptional control by the TGF-beta/Smad signaling system. <i>EMBO Journal</i> , <b>2000</b> , 19, 1745-54	13	1589
234	Endogenous human microRNAs that suppress breast cancer metastasis. <i>Nature</i> , <b>2008</b> , 451, 147-52	50.4	1571
233	TGF beta signals through a heteromeric protein kinase receptor complex. <i>Cell</i> , <b>1992</b> , 71, 1003-14	56.2	1368

232	Cytostatic and apoptotic actions of TGF-beta in homeostasis and cancer. <i>Nature Reviews Cancer</i> , <b>2003</b> , 3, 807-21	31.3	1333
231	Genes that mediate breast cancer metastasis to the brain. <i>Nature</i> , <b>2009</b> , 459, 1005-9	50.4	1288
230	Controlling TGF-beta signaling. <i>Genes and Development</i> , <b>2000</b> , 14, 627-44	12.6	1231
229	Mechanism of CDK activation revealed by the structure of a cyclinA-CDK2 complex. <i>Nature</i> , <b>1995</b> , 376, 313-20	50.4	1227
228	Epithelial-mesenchymal transitions: twist in development and metastasis. <i>Cell</i> , <b>2004</b> , 118, 277-9	56.2	1198
227	Metastatic colonization by circulating tumour cells. <i>Nature</i> , <b>2016</b> , 529, 298-306	50.4	1004
226	Tumor self-seeding by circulating cancer cells. <i>Cell</i> , <b>2009</b> , 139, 1315-26	56.2	972
225	G1 cell-cycle control and cancer. <i>Nature</i> , <b>2004</b> , 432, 298-306	50.4	929
224	Controlling TGF-beta signaling. <i>Genes and Development</i> , <b>2000</b> , 14, 627-644	12.6	879
223	Interleukin-2-mediated elimination of the p27Kip1 cyclin-dependent kinase inhibitor prevented by rapamycin. <i>Nature</i> , <b>1994</b> , 372, 570-3	50.4	857
222	Crystal structure of a Smad MH1 domain bound to DNA: insights on DNA binding in TGF-beta signaling. <i>Cell</i> , <b>1998</b> , 94, 585-94	56.2	830
221	Partnership between DPC4 and SMAD proteins in TGF-beta signalling pathways. <i>Nature</i> , <b>1996</b> , 383, 832-5	50.4	818
220	TGF-beta directly targets cytotoxic T cell functions during tumor evasion of immune surveillance. <i>Cancer Cell</i> , <b>2005</b> , 8, 369-80	24.3	815
219	TGFbeta signaling: receptors, transducers, and Mad proteins. <i>Cell</i> , <b>1996</b> , 85, 947-50	56.2	814
218	Crystal structure of the p27Kip1 cyclin-dependent-kinase inhibitor bound to the cyclin A-Cdk2 complex. <i>Nature</i> , <b>1996</b> , 382, 325-31	50.4	804
217	Integration of Smad and forkhead pathways in the control of neuroepithelial and glioblastoma cell proliferation. <i>Cell</i> , <b>2004</b> , 117, 211-23	56.2	796
216	Molecular basis of metastasis. <i>New England Journal of Medicine</i> , <b>2008</b> , 359, 2814-23	59.2	791
215	Betaglycan presents ligand to the TGF beta signaling receptor. <i>Cell</i> , <b>1993</b> , 73, 1435-44	56.2	787

214	TGF-beta signaling blockade inhibits PTHrP secretion by breast cancer cells and bone metastases development. <i>Journal of Clinical Investigation</i> , <b>1999</b> , 103, 197-206	15.9	774
213	Growth inhibition by TGF-beta linked to suppression of retinoblastoma protein phosphorylation. <i>Cell</i> , <b>1990</b> , 62, 175-85	56.2	731
212	TGFbeta primes breast tumors for lung metastasis seeding through angiopoietin-like 4. <i>Cell</i> , <b>2008</b> , 133, 66-77	56.2	728
211	A CXCL1 paracrine network links cancer chemoresistance and metastasis. <i>Cell</i> , <b>2012</b> , 150, 165-78	56.2	720
210	Cyclic AMP-induced G1 phase arrest mediated by an inhibitor (p27Kip1) of cyclin-dependent kinase 4 activation. <i>Cell</i> , <b>1994</b> , 79, 487-96	56.2	712
209	Inhibition of transforming growth factor-beta/SMAD signalling by the interferon-gamma/STAT pathway. <i>Nature</i> , <b>1999</b> , 397, 710-3	50.4	704
208	The TGF-beta family of growth and differentiation factors. <i>Cell</i> , <b>1987</b> , 49, 437-8	56.2	697
207	Dependency of colorectal cancer on a TGF-beta driven program in stromal cells for metastasis initiation. <i>Cancer Cell</i> , <b>2012</b> , 22, 571-84	24.3	690
206	The transforming growth factor-beta system, a complex pattern of cross-reactive ligands and receptors. <i>Cell</i> , <b>1987</b> , 48, 409-15	56.2	668
205	Transforming Growth Factor-beta Signaling in Immunity and Cancer. <i>Immunity</i> , <b>2019</b> , 50, 924-940	32.3	666
204	Receptors for the TGF-beta family. <i>Cell</i> , <b>1992</b> , 69, 1067-70	56.2	664
203	Breast cancer cells produce tenascin C as a metastatic niche component to colonize the lungs. <i>Nature Medicine</i> , <b>2011</b> , 17, 867-74	50.5	636
202	Roles of TGFbeta in metastasis. <i>Cell Research</i> , <b>2009</b> , 19, 89-102	24.7	633
201	Genetic determinants of cancer metastasis. <i>Nature Reviews Genetics</i> , <b>2007</b> , 8, 341-52	30.1	624
200	Structure and expression of the membrane proteoglycan betaglycan, a component of the TGF-beta receptor system. <i>Cell</i> , <b>1991</b> , 67, 785-95	56.2	601
199	The logic of TGFbeta signaling. <i>FEBS Letters</i> , <b>2006</b> , 580, 2811-20	3.8	598
198	A human Mad protein acting as a BMP-regulated transcriptional activator. <i>Nature</i> , <b>1996</b> , 381, 620-3	50.4	594
197	Membrane-anchored growth factors. <i>Annual Review of Biochemistry</i> , <b>1993</b> , 62, 515-41	29.1	593

196	Mediators of vascular remodelling co-opted for sequential steps in lung metastasis. <i>Nature</i> , <b>2007</b> , 446, 765-70	50.4	560
195	Myc suppression of the p21(Cip1) Cdk inhibitor influences the outcome of the p53 response to DNA damage. <i>Nature</i> , <b>2002</b> , 419, 729-34	50.4	560
194	Nuclear CDKs drive Smad transcriptional activation and turnover in BMP and TGF-beta pathways. <i>Cell</i> , <b>2009</b> , 139, 757-69	56.2	550
193	Latent bone metastasis in breast cancer tied to Src-dependent survival signals. <i>Cancer Cell</i> , <b>2009</b> , 16, 67-78	24.3	534
192	The TGF-beta family and its composite receptors. <i>Trends in Cell Biology</i> , <b>1994</b> , 4, 172-8	18.3	500
191	Distinct organ-specific metastatic potential of individual breast cancer cells and primary tumors. <i>Journal of Clinical Investigation</i> , <b>2005</b> , 115, 44-55	15.9	499
190	Cell-cycle inhibition by independent CDK and PCNA binding domains in p21Cip1. <i>Nature</i> , <b>1995</b> , 375, 159-61	50.4	498
189	Serpins promote cancer cell survival and vascular co-option in brain metastasis. <i>Cell</i> , <b>2014</b> , 156, 1002-16	56.2	491
188	Beyond tumorigenesis: cancer stem cells in metastasis. <i>Cell Research</i> , <b>2007</b> , 17, 3-14	24.7	478
187	A Smad transcriptional corepressor. <i>Cell</i> , <b>1999</b> , 97, 29-39	56.2	473
186	Metastatic stem cells: sources, niches, and vital pathways. <i>Cell Stem Cell</i> , <b>2014</b> , 14, 306-21	18	472
185	Guidelines and definitions for research on epithelial-mesenchymal transition. <i>Nature Reviews Molecular Cell Biology</i> , <b>2020</b> , 21, 341-352	48.7	469
184	Repression of p15INK4b expression by Myc through association with Miz-1. <i>Nature Cell Biology</i> , <b>2001</b> , 3, 392-9	23.4	461
183	Novel activin receptors: distinct genes and alternative mRNA splicing generate a repertoire of serine/threonine kinase receptors. <i>Cell</i> , <b>1992</b> , 68, 97-108	56.2	455
182	Breast cancer bone metastasis mediated by the Smad tumor suppressor pathway. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 13909-14	11.5	452
181	WNT/TCF signaling through LEF1 and HOXB9 mediates lung adenocarcinoma metastasis. <i>Cell</i> , <b>2009</b> , 138, 51-62	56.2	443
180	A self-enabling TGFbeta response coupled to stress signaling: Smad engages stress response factor ATF3 for Id1 repression in epithelial cells. <i>Molecular Cell</i> , <b>2003</b> , 11, 915-26	17.6	441
179	The TGF-alpha precursor expressed on the cell surface binds to the EGF receptor on adjacent cells, leading to signal transduction. <i>Cell</i> , <b>1989</b> , 56, 495-506	56.2	438

178	Carcinoma-astrocyte gap junctions promote brain metastasis by cGAMP transfer. <i>Nature</i> , <b>2016</b> , 533, 493-498	42.6	426
177	SMADs: mediators and regulators of TGF-beta signaling. <i>Current Opinion in Genetics and Development</i> , <b>1998</b> , 8, 103-11	4.9	423
176	TGFbeta influences Myc, Miz-1 and Smad to control the CDK inhibitor p15INK4b. <i>Nature Cell Biology</i> , <b>2001</b> , 3, 400-8	23.4	404
175	E2F4/5 and p107 as Smad cofactors linking the TGFbeta receptor to c-myc repression. <i>Cell</i> , <b>2002</b> , 110, 19-32	56.2	401
174	Metastatic Latency and Immune Evasion through Autocrine Inhibition of WNT. <i>Cell</i> , <b>2016</b> , 165, 45-60	56.2	399
173	Macrophage binding to receptor VCAM-1 transmits survival signals in breast cancer cells that invade the lungs. <i>Cancer Cell</i> , <b>2011</b> , 20, 538-49	24.3	399
172	A structural basis for mutational inactivation of the tumour suppressor Smad4. <i>Nature</i> , <b>1997</b> , 388, 87-93	50.4	382
171	OAZ uses distinct DNA- and protein-binding zinc fingers in separate BMP-Smad and Olf signaling pathways. <i>Cell</i> , <b>2000</b> , 100, 229-40	56.2	378
170	Transforming growth factor beta signaling impairs Neu-induced mammary tumorigenesis while promoting pulmonary metastasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 8430-5	11.5	375
169	Crystal structure of the cytoplasmic domain of the type I TGF beta receptor in complex with FKBP12. <i>Cell</i> , <b>1999</b> , 96, 425-36	56.2	375
168	Origins of metastatic traits. <i>Cancer Cell</i> , <b>2013</b> , 24, 410-21	24.3	367
167	VCAM-1 promotes osteolytic expansion of indolent bone micrometastasis of breast cancer by engaging $\alpha\text{V}\beta\text{3}$ -positive osteoclast progenitors. <i>Cancer Cell</i> , <b>2011</b> , 20, 701-14	24.3	363
166	TGF- $\beta$ Tumor Suppression through a Lethal EMT. <i>Cell</i> , <b>2016</b> , 164, 1015-30	56.2	363
165	Two forms of transforming growth factor-beta distinguished by multipotential haematopoietic progenitor cells. <i>Nature</i> , <b>1987</b> , 329, 539-41	50.4	358
164	Diverse cell surface protein ectodomains are shed by a system sensitive to metalloprotease inhibitors. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 11376-82	5.4	340
163	Mutations in TGIF cause holoprosencephaly and link NODAL signalling to human neural axis determination. <i>Nature Genetics</i> , <b>2000</b> , 25, 205-8	36.3	337
162	Contextual determinants of TGF $\beta$ action in development, immunity and cancer. <i>Nature Reviews Molecular Cell Biology</i> , <b>2018</b> , 19, 419-435	48.7	335
161	Balancing BMP signaling through integrated inputs into the Smad1 linker. <i>Molecular Cell</i> , <b>2007</b> , 25, 441-54	57.6	333

160	Repression of the CDK activator Cdc25A and cell-cycle arrest by cytokine TGF-beta in cells lacking the CDK inhibitor p15. <i>Nature</i> , <b>1997</b> , 387, 417-22	50.4	328
159	The daf-4 gene encodes a bone morphogenetic protein receptor controlling <i>C. elegans</i> dauer larva development. <i>Nature</i> , <b>1993</b> , 365, 644-9	50.4	327
158	Therapy-induced tumour secretomes promote resistance and tumour progression. <i>Nature</i> , <b>2015</b> , 520, 368-72	50.4	317
157	Mutations increasing autoinhibition inactivate tumour suppressors Smad2 and Smad4. <i>Nature</i> , <b>1997</b> , 388, 82-7	50.4	310
156	The TGF beta receptor activation process: an inhibitor- to substrate-binding switch. <i>Molecular Cell</i> , <b>2001</b> , 8, 671-82	17.6	310
155	Characterization and cloning of a receptor for BMP-2 and BMP-4 from NIH 3T3 cells. <i>Molecular and Cellular Biology</i> , <b>1994</b> , 14, 5961-74	4.8	310
154	Lung metastasis genes couple breast tumor size and metastatic spread. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 6740-5	11.5	305
153	Hematopoiesis controlled by distinct TIF1gamma and Smad4 branches of the TGFbeta pathway. <i>Cell</i> , <b>2006</b> , 125, 929-41	56.2	299
152	Ubiquitin-dependent degradation of TGF-beta-activated smad2. <i>Nature Cell Biology</i> , <b>1999</b> , 1, 472-8	23.4	299
151	Selection of bone metastasis seeds by mesenchymal signals in the primary tumor stroma. <i>Cell</i> , <b>2013</b> , 154, 1060-1073	56.2	296
150	Mechanism of TGFbeta receptor inhibition by FKBP12. <i>EMBO Journal</i> , <b>1997</b> , 16, 3866-76	13	285
149	Surviving at a Distance: Organ-Specific Metastasis. <i>Trends in Cancer</i> , <b>2015</b> , 1, 76-91	12.5	282
148	Characterization and relationship of Dpp receptors encoded by the saxophone and thick veins genes in <i>Drosophila</i> . <i>Cell</i> , <b>1994</b> , 78, 251-61	56.2	278
147	Is cancer a disease of self-seeding?. <i>Nature Medicine</i> , <b>2006</b> , 12, 875-8	50.5	276
146	Defective repression of c-myc in breast cancer cells: A loss at the core of the transforming growth factor beta growth arrest program. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 992-9	11.5	276
145	Physical and functional interaction of SMADs and p300/CBP. <i>Journal of Biological Chemistry</i> , <b>1998</b> , 273, 22865-8	5.4	275
144	Adapting a transforming growth factor beta-related tumor protection strategy to enhance antitumor immunity. <i>Blood</i> , <b>2002</b> , 99, 3179-87	2.2	267
143	Direct signaling by the BMP type II receptor via the cytoskeletal regulator LIMK1. <i>Journal of Cell Biology</i> , <b>2003</b> , 162, 1089-98	7.3	265

142	Ubiquitin ligase Nedd4L targets activated Smad2/3 to limit TGF-beta signaling. <i>Molecular Cell</i> , <b>2009</b> , 36, 457-68	17.6	264
141	Structural basis of Smad2 recognition by the Smad anchor for receptor activation. <i>Science</i> , <b>2000</b> , 287, 92-7	33.3	251
140	TGF-beta receptors and actions. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , <b>1994</b> , 1222, 71-80.	14.9	245
139	Crystal structure of a phosphorylated Smad2. Recognition of phosphoserine by the MH2 domain and insights on Smad function in TGF-beta signaling. <i>Molecular Cell</i> , <b>2001</b> , 8, 1277-89	17.6	244
138	Distinct altered patterns of p27KIP1 gene expression in benign prostatic hyperplasia and prostatic carcinoma. <i>Journal of the National Cancer Institute</i> , <b>1998</b> , 90, 1284-91	9.7	243
137	Drosophila Dpp signaling is mediated by the punt gene product: a dual ligand-binding type II receptor of the TGF beta receptor family. <i>Cell</i> , <b>1995</b> , 80, 899-908	56.2	242
136	Direct binding of Smad1 and Smad4 to two distinct motifs mediates bone morphogenetic protein-specific transcriptional activation of Id1 gene. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 3176-85	5.4	239
135	Identification of two bone morphogenetic protein type I receptors in Drosophila and evidence that Brk25D is a decapentaplegic receptor. <i>Cell</i> , <b>1994</b> , 78, 239-50	56.2	237
134	ADAMTS1 and MMP1 proteolytically engage EGF-like ligands in an osteolytic signaling cascade for bone metastasis. <i>Genes and Development</i> , <b>2009</b> , 23, 1882-94	12.6	235
133	Analysis of tumour- and stroma-supplied proteolytic networks reveals a brain-metastasis-promoting role for cathepsin S. <i>Nature Cell Biology</i> , <b>2014</b> , 16, 876-88	23.4	227
132	C/EBPbeta at the core of the TGFbeta cytostatic response and its evasion in metastatic breast cancer cells. <i>Cancer Cell</i> , <b>2006</b> , 10, 203-14	24.3	220
131	Structural determinants of Smad function in TGF-beta signaling. <i>Trends in Biochemical Sciences</i> , <b>2015</b> , 40, 296-308	10.3	219
130	Nucleocytoplasmic shuttling of signal transducers. <i>Nature Reviews Molecular Cell Biology</i> , <b>2004</b> , 5, 209-19	18.7	217
129	Breast cancer methylomes establish an epigenomic foundation for metastasis. <i>Science Translational Medicine</i> , <b>2011</b> , 3, 75ra25	17.5	215
128	Differential interaction of the cyclin-dependent kinase (Cdk) inhibitor p27Kip1 with cyclin A-Cdk2 and cyclin D2-Cdk4. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 25863-72	5.4	214
127	Clinical implications of cancer self-seeding. <i>Nature Reviews Clinical Oncology</i> , <b>2011</b> , 8, 369-77	19.4	213
126	Smad2 nucleocytoplasmic shuttling by nucleoporins CAN/Nup214 and Nup153 feeds TGFbeta signaling complexes in the cytoplasm and nucleus. <i>Molecular Cell</i> , <b>2002</b> , 10, 271-82	17.6	211
125	ID genes mediate tumor reinitiation during breast cancer lung metastasis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 19506-11	11.5	210



124	A poised chromatin platform for TGF- $\beta$ access to master regulators. <i>Cell</i> , <b>2011</b> , 147, 1511-24	56.2	209
123	Role of transforming growth factor-beta in chondrogenic pattern formation in the embryonic limb: stimulation of mesenchymal condensation and fibronectin gene expression by exogenous TGF-beta and evidence for endogenous TGF-beta-like activity. <i>Developmental Biology</i> , <b>1991</b> , 145, 99-109	3.1	208
122	TGF-beta receptors and TGF-beta binding proteoglycans: recent progress in identifying their functional properties. <i>Annals of the New York Academy of Sciences</i> , <b>1990</b> , 593, 59-72	6.5	207
121	Transforming growth factor beta-induced cell cycle arrest of human hematopoietic cells requires p57KIP2 up-regulation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 15231-6	11.5	196
120	A FoxO-Smad synexpression group in human keratinocytes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 12747-52	11.5	188
119	A Smad action turnover switch operated by WW domain readers of a phosphoserine code. <i>Genes and Development</i> , <b>2011</b> , 25, 1275-88	12.6	187
118	Identification and expression of two forms of the human transforming growth factor-beta-binding protein endoglin with distinct cytoplasmic regions. <i>European Journal of Immunology</i> , <b>1993</b> , 23, 2340-5	6.1	180
117	Integration of Smad and MAPK pathways: a link and a linker revisited. <i>Genes and Development</i> , <b>2003</b> , 17, 2993-7	12.6	176
116	TGF- $\beta$ 1 signaling opposes Twist1 and promotes metastatic colonization via a mesenchymal-to-epithelial transition. <i>Cell Reports</i> , <b>2013</b> , 5, 1228-42	10.6	175
115	Smad1 recognition and activation by the ALK1 group of transforming growth factor-beta family receptors. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 3672-7	5.4	172
114	MicroRNA-335 inhibits tumor reinitiation and is silenced through genetic and epigenetic mechanisms in human breast cancer. <i>Genes and Development</i> , <b>2011</b> , 25, 226-31	12.6	170
113	Human platelet-derived transforming growth factor-beta stimulates parameters of bone growth in fetal rat calvariae. <i>Endocrinology</i> , <b>1986</b> , 119, 2306-12	4.8	162
112	Glycogen synthase: a new activity ratio assay expressing a high sensitivity to the phosphorylation state. <i>FEBS Letters</i> , <b>1979</b> , 106, 284-8	3.8	157
111	Nomenclature: vertebrate mediators of TGFbeta family signals. <i>Cell</i> , <b>1996</b> , 87, 173	56.2	150
110	A rectal cancer organoid platform to study individual responses to chemoradiation. <i>Nature Medicine</i> , <b>2019</b> , 25, 1607-1614	50.5	149
109	Epigenetic expansion of VHL-HIF signal output drives multiorgan metastasis in renal cancer. <i>Nature Medicine</i> , <b>2013</b> , 19, 50-6	50.5	148
108	The Human Tumor Atlas Network: Charting Tumor Transitions across Space and Time at Single-Cell Resolution. <i>Cell</i> , <b>2020</b> , 181, 236-249	56.2	140
107	Selective compounds define Hsp90 as a major inhibitor of apoptosis in small-cell lung cancer. <i>Nature Chemical Biology</i> , <b>2007</b> , 3, 498-507	11.7	140

106	Multiple modes of repression by the Smad transcriptional corepressor TGIF. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 37105-10	5.4	140
105	Complement Component 3 Adapts the Cerebrospinal Fluid for Leptomeningeal Metastasis. <i>Cell</i> , <b>2017</b> , 168, 1101-1113.e13	56.2	139
104	TGF-beta signaling and cancer: structural and functional consequences of mutations in Smads. <i>Trends in Molecular Medicine</i> , <b>1998</b> , 4, 257-62		135
103	Dephosphorylation of the linker regions of Smad1 and Smad2/3 by small C-terminal domain phosphatases has distinct outcomes for bone morphogenetic protein and transforming growth factor-beta pathways. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 40412-9	5.4	133
102	The cytoplasmic carboxy-terminal amino acid specifies cleavage of membrane TGF alpha into soluble growth factor. <i>Cell</i> , <b>1992</b> , 71, 1157-65	56.2	131
101	Epidermal growth factor signaling via Ras controls the Smad transcriptional co-repressor TGIF. <i>EMBO Journal</i> , <b>2001</b> , 20, 128-36	13	128
100	The nuclear import function of Smad2 is masked by SARA and unmasked by TGFbeta-dependent phosphorylation. <i>Nature Cell Biology</i> , <b>2000</b> , 2, 559-62	23.4	128
99	Regenerative lineages and immune-mediated pruning in lung cancer metastasis. <i>Nature Medicine</i> , <b>2020</b> , 26, 259-269	50.5	127
98	Engagement of bone morphogenetic protein type IB receptor and Smad1 signaling by anti-Müllerian hormone and its type II receptor. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 27973-8	5.4	123
97	Smad4/DPC4 silencing and hyperactive Ras jointly disrupt transforming growth factor-beta antiproliferative responses in colon cancer cells. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 33637-43	5.4	121
96	Identification of receptors for type-beta transforming growth factor. <i>Methods in Enzymology</i> , <b>1987</b> , 146, 174-95	1.7	120
95	Mammalian antiproliferative signals and their targets. <i>Current Opinion in Genetics and Development</i> , <b>1995</b> , 5, 91-6	4.9	113
94	TGF-β control of stem cell differentiation genes. <i>FEBS Letters</i> , <b>2012</b> , 586, 1953-8	3.8	112
93	Sorting out breast-cancer gene signatures. <i>New England Journal of Medicine</i> , <b>2007</b> , 356, 294-7	59.2	111
92	TGF-β orchestrates fibrogenic and developmental EMTs via the RAS effector RREB1. <i>Nature</i> , <b>2020</b> , 577, 566-571	50.4	109
91	Unique players in the BMP pathway: small C-terminal domain phosphatases dephosphorylate Smad1 to attenuate BMP signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 11940-5	11.5	108
90	Phase II trial of saracatinib (AZD0530), an oral SRC-inhibitor for the treatment of patients with hormone receptor-negative metastatic breast cancer. <i>Clinical Breast Cancer</i> , <b>2011</b> , 11, 306-11	3	102
89	Targeting metastatic cancer. <i>Nature Medicine</i> , <b>2021</b> , 27, 34-44	50.5	102

88	Pericyte-like spreading by disseminated cancer cells activates YAP and MRTF for metastatic colonization. <i>Nature Cell Biology</i> , <b>2018</b> , 20, 966-978	23.4	98
87	Characterization of high molecular weight transforming growth factor alpha produced by rat hepatocellular carcinoma cells. <i>Biochemistry</i> , <b>1988</b> , 27, 6487-94	3.2	98
86	Carboxy-terminally truncated Gli3 proteins associate with Smads. <i>Nature Genetics</i> , <b>1998</b> , 20, 325-6	36.3	96
85	Modeling metastasis in the mouse. <i>Current Opinion in Pharmacology</i> , <b>2010</b> , 10, 571-7	5.1	95
84	Integral membrane glycoprotein properties of the prohormone pro-transforming growth factor-alpha. <i>Nature</i> , <b>1987</b> , 326, 883-5	50.4	95
83	Molecular pathways: VCAM-1 as a potential therapeutic target in metastasis. <i>Clinical Cancer Research</i> , <b>2012</b> , 18, 5520-5	12.9	94
82	Distinct domain utilization by Smad3 and Smad4 for nucleoporin interaction and nuclear import. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 42569-77	5.4	94
81	Distinct oligomeric states of SMAD proteins in the transforming growth factor-beta pathway. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 40710-7	5.4	93
80	Role of the juxtamembrane domains of the transforming growth factor-alpha precursor and the beta-amyloid precursor protein in regulated ectodomain shedding. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 17160-5	5.4	92
79	TGF-beta receptors. <i>Molecular Reproduction and Development</i> , <b>1992</b> , 32, 99-104	2.6	92
78	BF-1 interferes with transforming growth factor beta signaling by associating with Smad partners. <i>Molecular and Cellular Biology</i> , <b>2000</b> , 20, 6201-11	4.8	86
77	Structural basis for the versatile interactions of Smad7 with regulator WW domains in TGF- $\beta$ Pathways. <i>Structure</i> , <b>2012</b> , 20, 1726-36	5.2	82
76	Genome-wide impact of the BRG1 SWI/SNF chromatin remodeler on the transforming growth factor beta transcriptional program. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 1146-55	5.4	82
75	Loss of the multifunctional RNA-binding protein RBM47 as a source of selectable metastatic traits in breast cancer. <i>ELife</i> , <b>2014</b> , 3,	8.9	79
74	Identifying site-specific metastasis genes and functions. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , <b>2005</b> , 70, 149-58	3.9	79
73	Platelets and metastasis revisited: a novel fatty link. <i>Journal of Clinical Investigation</i> , <b>2004</b> , 114, 1691-1693	13.9	79
72	The p53 Family Coordinates Wnt and Nodal Inputs in Mesendodermal Differentiation of Embryonic Stem Cells. <i>Cell Stem Cell</i> , <b>2017</b> , 20, 70-86	18	78
71	52. BrMPANEL: A PUBLIC RESOURCE OF ORGANOTROPIC CELL LINES. <i>Neuro-Oncology Advances</i> , <b>2020</b> , 2, ii10-ii11	0.9	78

70	TGF- $\beta$ inhibition and immunotherapy: Checkmate. <i>Immunity</i> , <b>2018</b> , 48, 626-628	32.3	77
69	Inhibition of the transforming growth factor beta 1 signaling pathway by the AML1/ETO leukemia-associated fusion protein. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 40282-7	5.4	77
68	Extracellular matrix players in metastatic niches. <i>EMBO Journal</i> , <b>2012</b> , 31, 254-6	13	74
67	Mad upregulation and Id2 repression accompany transforming growth factor (TGF)-beta-mediated epithelial cell growth suppression. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 35444-50	5.4	74
66	TGF- $\beta$ signaling in development and disease. <i>FEBS Letters</i> , <b>2012</b> , 586, 1833	3.8	73
65	Internalization of transforming growth factor-beta and its receptor in BALB/c 3T3 fibroblasts. <i>Journal of Cellular Physiology</i> , <b>1986</b> , 128, 216-22	7	73
64	Off-target effects dominate a large-scale RNAi screen for modulators of the TGF- $\beta$ pathway and reveal microRNA regulation of TGFBR2. <i>Silence: A Journal of RNA Regulation</i> , <b>2011</b> , 2, 3		67
63	The insulin receptor: structural features. <i>Trends in Biochemical Sciences</i> , <b>1981</b> , 6, 222-225	10.3	67
62	Signaling activity of homologous and heterologous transforming growth factor-beta receptor kinase complexes. <i>Journal of Biological Chemistry</i> , <b>1995</b> , 270, 7134-41	5.4	66
61	Diverted total synthesis leads to the generation of promising cell-migration inhibitors for treatment of tumor metastasis: in vivo and mechanistic studies on the migrastatin core ether analog. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 3224-8	16.4	61
60	A very private TGF-beta receptor embrace. <i>Molecular Cell</i> , <b>2008</b> , 29, 149-50	17.6	61
59	L1CAM defines the regenerative origin of metastasis-initiating cells in colorectal cancer. <i>Nature Cancer</i> , <b>2020</b> , 1, 28-45	15.4	59
58	Features of a Smad3 MH1-DNA complex. Roles of water and zinc in DNA binding. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 20327-31	5.4	58
57	Insulin control of rat hepatocyte glycogen synthase and phosphorylase in the absence of glucose. <i>FEBS Letters</i> , <b>1977</b> , 82, 317-20	3.8	57
56	The transforming growth factors. <i>Trends in Biochemical Sciences</i> , <b>1985</b> , 10, 237-240	10.3	55
55	RARRES3 suppresses breast cancer lung metastasis by regulating adhesion and differentiation. <i>EMBO Molecular Medicine</i> , <b>2014</b> , 6, 865-81	12	51
54	Multiple type-beta transforming growth factors and their receptors. <i>Journal of Cellular Physiology</i> , <b>1987</b> , Suppl 5, 43-7	7	51
53	Structural basis for genome wide recognition of 5-bp GC motifs by SMAD transcription factors. <i>Nature Communications</i> , <b>2017</b> , 8, 2070	17.4	46

52	Genome-scale screens identify JNK-JUN signaling as a barrier for pluripotency exit and endoderm differentiation. <i>Nature Genetics</i> , <b>2019</b> , 51, 999-1010	36.3	44
51	Transforming growth factor receptor gene TGFBR2 maps to human chromosome band 3p22. <i>Genomics</i> , <b>1994</b> , 20, 114-5	4.3	44
50	Signalling change: signal transduction through the decades. <i>Nature Reviews Molecular Cell Biology</i> , <b>2013</b> , 14, 393-8	48.7	43
49	Multimodality imaging of TGFbeta signaling in breast cancer metastases. <i>FASEB Journal</i> , <b>2009</b> , 23, 2662-72	7.9	43
48	Platelets and metastasis revisited: a novel fatty link. <i>Journal of Clinical Investigation</i> , <b>2004</b> , 114, 1691-3	15.9	42
47	Interaction of transforming growth factor-beta receptor I with farnesyl-protein transferase-alpha in yeast and mammalian cells. <i>Journal of Biological Chemistry</i> , <b>1996</b> , 271, 13931-4	5.4	41
46	Metastatic Competence Can Emerge with Selection of Preexisting Oncogenic Alleles without a Need of New Mutations. <i>Cancer Research</i> , <b>2015</b> , 75, 3713-9	10.1	38
45	HER2 silences tumor suppression in breast cancer cells by switching expression of C/EBPβ isoforms. <i>Cancer Research</i> , <b>2010</b> , 70, 9927-36	10.1	38
44	Dynamic Incorporation of Histone H3 Variants into Chromatin Is Essential for Acquisition of Aggressive Traits and Metastatic Colonization. <i>Cancer Cell</i> , <b>2019</b> , 36, 402-417.e13	24.3	37
43	Tissue factor-specific ultra-bright SERRS nanostars for Raman detection of pulmonary micrometastases. <i>Nanoscale</i> , <b>2017</b> , 9, 1110-1119	7.7	34
42	The inactivation of glycogen phosphorylase is not a prerequisite for the activation of liver glycogen synthase. <i>FEBS Letters</i> , <b>1979</b> , 99, 321-4	3.8	34
41	Field cancerization: something new under the sun. <i>Cell</i> , <b>2012</b> , 149, 1179-81	56.2	33
40	Ubiquitin removal in the TGF-β pathway. <i>Nature Cell Biology</i> , <b>2012</b> , 14, 656-7	23.4	33
39	Breast cancer tumor size, nodal status, and prognosis: biology trumps anatomy. <i>Journal of Clinical Oncology</i> , <b>2011</b> , 29, 2610-2	2.2	30
38	Dexamethasone enhancement of betaglycan (TGF-beta type III receptor) gene expression in osteoblast-like cells. <i>Experimental Cell Research</i> , <b>1994</b> , 211, 301-6	4.2	30
37	Structural basis for distinct roles of SMAD2 and SMAD3 in FOXH1 pioneer-directed TGF-β signaling. <i>Genes and Development</i> , <b>2019</b> , 33, 1506-1524	12.6	28
36	Metabolic Profiling Reveals a Dependency of Human Metastatic Breast Cancer on Mitochondrial Serine and One-Carbon Unit Metabolism. <i>Molecular Cancer Research</i> , <b>2020</b> , 18, 599-611	6.6	27
35	Cyclin-dependent kinase inhibitors uncouple cell cycle progression from mitochondrial apoptotic functions in DNA-damaged cancer cells. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 32018-25	5.4	26

34	Flura-seq identifies organ-specific metabolic adaptations during early metastatic colonization. <i>ELife</i> , <b>2019</b> , 8,	8.9	26
33	ID1 Mediates Escape from TGF $\beta$ Tumor Suppression in Pancreatic Cancer. <i>Cancer Discovery</i> , <b>2020</b> , 10, 142-157	24.4	26
32	Brain Metastasis Cell Lines Panel: A Public Resource of Organotropic Cell Lines. <i>Cancer Research</i> , <b>2020</b> , 80, 4314-4323	10.1	25
31	Metastasis-Initiating Cells and Ecosystems. <i>Cancer Discovery</i> , <b>2021</b> , 11, 971-994	24.4	22
30	A helping hand from proteoglycans. <i>Current Biology</i> , <b>1991</b> , 1, 117-9	6.3	19
29	Negative regulators of growth. <i>Current Opinion in Genetics and Development</i> , <b>1992</b> , 2, 28-32	4.9	17
28	Opposite Smad and chicken ovalbumin upstream promoter transcription factor inputs in the regulation of the collagen VII gene promoter by transforming growth factor-beta. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 23759-65	5.4	16
27	Different sensitivity of the transforming growth factor-beta cell cycle arrest pathway to c-Myc and MDM-2. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 32066-70	5.4	15
26	Cytotoxic lymphocytes target characteristic biophysical vulnerabilities in cancer. <i>Immunity</i> , <b>2021</b> , 54, 1037-1054.e7	32.3	15
25	Intracerebral infusion of the bispecific targeted toxin DTATEGF in a mouse xenograft model of a human metastatic non-small cell lung cancer. <i>Journal of Neuro-Oncology</i> , <b>2012</b> , 109, 229-38	4.8	14
24	Arresting supporters: targeting neutrophils in metastasis. <i>Cell Research</i> , <b>2016</b> , 26, 273-4	24.7	13
23	Cell cycle 1995: constructing cell physiology with molecular building blocks. <i>Current Opinion in Cell Biology</i> , <b>1995</b> , 7, 769-72	9	11
22	Transforming growth factor-alpha. <i>Biochemical Society Transactions</i> , <b>1991</b> , 19, 259-62	5.1	11
21	Multiple phosphorylation of rabbit muscle glycogen synthase by glycogen synthase kinase-1. Relationship between phosphorylation state and kinetic properties. <i>FEBS Letters</i> , <b>1979</b> , 106, 279-83	3.8	11
20	Genomic characterization of metastatic patterns from prospective clinical sequencing of 25,000 patients.. <i>Cell</i> , <b>2022</b> , 185, 563-575.e11	56.2	11
19	[14] Affinity cross-linking of receptors for insulin and the insulin-like growth factors I and II. <i>Methods in Enzymology</i> , <b>1985</b> , 109, 179-187	1.7	10
18	Mechanisms in TGF-beta action. <i>Novartis Foundation Symposium</i> , <b>1991</b> , 157, 51-9; discussion 59-65		10
17	Modulation of type alpha transforming growth factor receptors by a phorbol ester tumor promoter. <i>Journal of Cellular Biochemistry</i> , <b>1985</b> , 27, 23-30	4.7	8

16	Hypoxia signaling--license to metastasize. <i>Cancer Discovery</i> , <b>2013</b> , 3, 1103-4	24.4	6
15	Identification of receptor proteins for type-alpha transforming growth factor. <i>Methods in Enzymology</i> , <b>1987</b> , 146, 143-53	1.7	6
14	H3K18ac Primes Mesendodermal Differentiation upon Nodal Signaling. <i>Stem Cell Reports</i> , <b>2019</b> , 13, 642-656	8.5	4
13	Invasion and Metastasis <b>2015</b> , 269-284.e2		4
12	Networks of tumor suppressors. Workshop: tumor suppressor networks. <i>EMBO Reports</i> , <b>2000</b> , 1, 115-9	6.5	4
11	Purification of type-alpha transforming growth factor from transformed cells. <i>Methods in Enzymology</i> , <b>1987</b> , 146, 103-12	1.7	3
10	Structural features of the insulin effector system: relation to hexose transport activation. <i>Annals of the New York Academy of Sciences</i> , <b>1980</b> , 358, 282-91	6.5	3
9	Anti-tumor effects of an Id antagonist with no acquired resistance		3
8	BF-1 Interferes with Transforming Growth Factor $\beta$ Signaling by Associating with Smad Partners. <i>Molecular and Cellular Biology</i> , <b>2000</b> , 20, 6201-6211	4.8	2
7	Author response: Loss of the multifunctional RNA-binding protein RBM47 as a source of selectable metastatic traits in breast cancer <b>2014</b> ,		2
6	Author response: Flura-seq identifies organ-specific metabolic adaptations during early metastatic colonization <b>2019</b> ,		2
5	Cytotoxic lymphocytes use mechanosurveillance to target biophysical vulnerabilities in cancer		2
4	The transcription factor Rreb1 regulates epithelial architecture, invasiveness, and vasculogenesis in early mouse embryos. <i>ELife</i> , <b>2021</b> , 10,	8.9	1
3	Labeling and Isolation of Fluorouracil Tagged RNA by Cytosine Deaminase Expression. <i>Bio-protocol</i> , <b>2019</b> , 9, e3433	0.9	0
2	Anti-tumor effects of an ID antagonist with no observed acquired resistance. <i>Npj Breast Cancer</i> , <b>2021</b> , 7, 58	7.8	0
1	TIF1 $\beta$ Knockdown Enhances Hematopoietic Stem Cell Self Renewal with Preferential Myeloid Differentiation and Delayed Erythropoiesis. <i>Blood</i> , <b>2011</b> , 118, 4829-4829	2.2	