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Genome-scale CRISPR-Cas9 knockout screening in human cells

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2286	shRNA-seq data analysis with edgeR. 2014 , 3, 95		58
2285	Novel methods and approaches to acute lymphoblastic leukemia drug discovery. 2014 , 9, 1435-46		7
2284	Approaches for establishing the function of regulatory genetic variants involved in disease. 2014 , 6, 92		31
2283	MAGeCK enables robust identification of essential genes from genome-scale CRISPR/Cas9 knockout screens. 2014 , 15, 554		821
2282	From Human Pluripotent Stem Cells to Neurons: Promises and Pitfalls. 2014 ,		
2281	Screening CRISPLY in human cells. 2014 , 11, 125		2
2280	Computational and experimental approaches to reveal the effects of single nucleotide polymorphisms with respect to disease diagnostics. 2014 , 15, 9670-717		26

2279	Amphipathic Helices in apolipoproteins are crucial to the formation of infectious hepatitis C virus particles. 2014 , 10, e1004534	64
2278	Revealing molecular mechanisms by integrating high-dimensional functional screens with protein interaction data. 2014 , 10, e1003801	2
2277	Functional toxicology: tools to advance the future of toxicity testing. 2014 , 5, 110	30
2276	The I-TevI nuclease and linker domains contribute to the specificity of monomeric TALENs. 2014 , 4, 1155-65	17
2275	A distal locus element mediates IFN- γ priming of lipopolysaccharide-stimulated TNF gene expression. 2014 , 9, 1718-1728	17
2274	Reducing Drug Attrition. 2014 ,	2
2273	Next-generation models of human cardiogenesis via genome editing. 2014 , 4, a013920	3
2272	Efficient gene disruption in diverse strains of <i>Toxoplasma gondii</i> using CRISPR/CAS9. 2014 , 5, e01114-14	283
2271	Understanding functional miRNA-target interactions in vivo by site-specific genome engineering. 2014 , 5, 4640	63
2270	Measuring error rates in genomic perturbation screens: gold standards for human functional genomics. 2014 , 10, 733	203
2269	Comparison of TALE designer transcription factors and the CRISPR/dCas9 in regulation of gene expression by targeting enhancers. 2014 , 42, e155	135
2268	TALEN and CRISPR/Cas9-mediated genome editing in the early-branching metazoan <i>Nematostella vectensis</i> . 2014 , 5, 5486	88
2267	Genome editing. The new frontier of genome engineering with CRISPR-Cas9. <i>Science</i> , 2014 , 346, 12580963,3	3479
2266	Genome engineering in human cells. 2014 , 546, 93-118	10
2265	Determining the specificities of TALENs, Cas9, and other genome-editing enzymes. 2014 , 546, 47-78	54
2264	Targeted genome editing in human cells using CRISPR/Cas nucleases and truncated guide RNAs. 2014 , 546, 21-45	33
2263	In vivo shRNA screens in solid tumors. 2014 , 9, 2880-902	31
2262	Adapting CRISPR/Cas9 for functional genomics screens. 2014 , 546, 193-213	16

2261	Research Highlights. 2014 , 32, 138-138	2
2260	Multi-input CRISPR/Cas genetic circuits that interface host regulatory networks. 2014 , 10, 763	166
2259	RNA interference screening to detect targetable molecules in hematopoietic stem cells. 2014 , 21, 283-8	3
2258	Cordon Bleu serves as a platform at the basal region of microvilli, where it regulates microvillar length through its WH2 domains. 2014 , 25, 2817-27	25
2257	Generation of genomic deletions in mammalian cell lines via CRISPR/Cas9. 2015 , e52118	75
2256	Advances in genome editing technology and its promising application in evolutionary and ecological studies. 2014 , 3, 24	32
2255	Plant genome engineering in full bloom. 2014 , 19, 284-7	71
2254	Molecular insights into NF2/Merlin tumor suppressor function. 2014 , 588, 2743-52	103
2253	Crystal structure of Cas9 in complex with guide RNA and target DNA. 2014 , 156, 935-49	1131
2252	Genome engineering with targetable nucleases. 2014 , 83, 409-39	392
2251	Gene editing at CRISPR speed. 2014 , 32, 309-12	29
2250	High-throughput screening of a CRISPR/Cas9 library for functional genomics in human cells. 2014 , 509, 487-91	512
2249	Engineering the Caenorhabditis elegans genome with CRISPR/Cas9. 2014 , 68, 381-8	38
2248	CRISPR-based technologies: prokaryotic defense weapons repurposed. 2014 , 30, 111-8	79
2247	CRISPR-Cas systems for editing, regulating and targeting genomes. 2014 , 32, 347-55	2182
2246	A guide to genome engineering with programmable nucleases. 2014 , 15, 321-34	853
2245	Reduced NF1 expression confers resistance to EGFR inhibition in lung cancer. 2014 , 4, 606-19	135
2244	CRISPR-Cas system: a powerful tool for genome engineering. 2014 , 85, 209-18	38

2243	Genome-wide binding of the CRISPR endonuclease Cas9 in mammalian cells. 2014 , 32, 670-6	666
2242	Fusion of catalytically inactive Cas9 to FokI nuclease improves the specificity of genome modification. 2014 , 32, 577-582	624
2241	CRISPR-Cas systems: Prokaryotes upgrade to adaptive immunity. 2014 , 54, 234-44	470
2240	Natural selection and infectious disease in human populations. 2014 , 15, 379-93	255
2239	Genome-wide analysis reveals characteristics of off-target sites bound by the Cas9 endonuclease. 2014 , 32, 677-83	553
2238	Large-scale de novo DNA synthesis: technologies and applications. 2014 , 11, 499-507	457
2237	A CRISPR method for genome-wide screening. 2014 , 46, 99-99	1
2236	Unlocking the treasure trove: from genes to schizophrenia biology. 2014 , 40, 492-6	13
2235	Improving CRISPR-Cas nuclease specificity using truncated guide RNAs. 2014 , 32, 279-284	1371
2234	Cas9-based tools for targeted genome editing and transcriptional control. 2014 , 80, 1544-52	50
2233	Genetic and genomic tools for the marine annelid <i>Platynereis dumerilii</i> . 2014 , 197, 19-31	48
2232	Genome editing in human stem cells. 2014 , 546, 119-38	70
2231	Guide RNA functional modules direct Cas9 activity and orthogonality. 2014 , 56, 333-339	174
2230	Rapid modelling of cooperating genetic events in cancer through somatic genome editing. 2014 , 516, 428-31	278
2229	Building high-resolution synthetic lethal networks: a 'Google map' of the cancer cell. 2014 , 20, 704-15	24
2228	Multiplex CRISPR/Cas9-based genome engineering from a single lentiviral vector. 2014 , 42, e147	232
2227	Selection of chromosomal DNA libraries using a multiplex CRISPR system in <i>Saccharomyces cerevisiae</i> . 2014 ,	1
2226	Protein engineering of Cas9 for enhanced function. 2014 , 546, 491-511	17

2225	Characterization of genomic deletion efficiency mediated by clustered regularly interspaced short palindromic repeats (CRISPR)/Cas9 nuclease system in mammalian cells. 2014 , 289, 21312-24	236
2224	Genome engineering: the next genomic revolution. 2014 , 11, 1009-11	22
2223	Editing and investigating genomes with TALE and CRISPR/Cas systems: applications of artificial TALE and CRISPR-Cas systems. 2014 , 69, 119-20	1
2222	RNA-guided endonuclease provides a therapeutic strategy to cure latent herpesviridae infection. 2014 , 111, 13157-62	156
2221	Cellular reprogramming by transcription factor engineering. 2014 , 28, 1-9	6
2220	Genome-Scale CRISPR-Mediated Control of Gene Repression and Activation. 2014 , 159, 647-61	1556
2219	Drugging the undruggable RAS: Mission possible?. 2014 , 13, 828-51	1081
2218	A double-edged sword: R loops as threats to genome integrity and powerful regulators of gene expression. 2014 , 28, 1384-96	329
2217	Synthetic biology and therapeutic strategies for the degenerating brain: Synthetic biology approaches can transform classical cell and gene therapies, to provide new cures for neurodegenerative diseases. 2014 , 36, 979-90	16
2216	Systematically labeling developmental stage-specific genes for the study of pancreatic β cell differentiation from human embryonic stem cells. 2014 , 24, 1181-200	27
2215	The genome editing toolbox: a spectrum of approaches for targeted modification. 2014 , 30, 87-94	28
2214	Dissecting mammalian immunity through mutation. 2014 , 92, 392-9	8
2213	Improved vectors and genome-wide libraries for CRISPR screening. 2014 , 11, 783-784	2552
2212	iPipet: sample handling using a tablet. 2014 , 11, 784-5	11
2211	Conditional knockouts generated by engineered CRISPR-Cas9 endonuclease reveal the roles of coronin in <i>C. elegans</i> neural development. 2014 , 30, 625-36	116
2210	Inactivation of the human papillomavirus E6 or E7 gene in cervical carcinoma cells by using a bacterial CRISPR/Cas RNA-guided endonuclease. 2014 , 88, 11965-72	193
2209	Small RNAs: a new paradigm in plant-microbe interactions. 2014 , 52, 495-516	133
2208	Target Selection and Validation in Drug Discovery. 2014 , 1-72	

2207	Construction of a quadruple auxotrophic mutant of an industrial polyploid saccharomyces cerevisiae strain by using RNA-guided Cas9 nuclease. 2014 , 80, 7694-701	90
2206	RNAi screening comes of age: improved techniques and complementary approaches. 2014 , 15, 591-600	241
2205	Genome modification by CRISPR/Cas9. 2014 , 281, 5186-93	86
2204	Rational design of highly active sgRNAs for CRISPR-Cas9-mediated gene inactivation. 2014 , 32, 1262-7	1000
2203	Impact of RNA-guided technologies for target identification and deconvolution. 2014 , 19, 1327-37	18
2202	Genomic editing tools to model human diseases with isogenic pluripotent stem cells. 2014 , 23, 2673-86	42
2201	CRISPR-Cas9 knockin mice for genome editing and cancer modeling. 2014 , 159, 440-55	1089
2200	Polymerase Chain Reaction (PCR): Specialised Applications. 2014 ,	
2199	Phenotypic directed antibody selection. 2014 , 21, 170-1	3
2198	Functional genomics platform for pooled screening and generation of mammalian genetic interaction maps. 2014 , 9, 1825-47	58
2197	Genome wide functional genetics in haploid cells. 2014 , 588, 2415-21	16
2196	Engineering synthetic TALE and CRISPR/Cas9 transcription factors for regulating gene expression. 2014 , 69, 188-97	27
2195	CRISPR-Cas9 knockout screening for functional genomics. 2014 , 57, 733-4	3
2194	The future of drug discovery: enabling technologies for enhancing lead characterization and profiling therapeutic potential. 2014 , 9, 847-58	9
2193	A CRISPR view of development. 2014 , 28, 1859-72	174
2192	The SKIV2L RNA exosome limits activation of the RIG-I-like receptors. 2014 , 15, 839-45	131
2191	CRISPR/Cas9-mediated genome engineering: an adeno-associated viral (AAV) vector toolbox. 2014 , 9, 1402-12	186
2190	Cancer mouse models: past, present and future. 2014 , 27, 54-60	37

2189	Applications of TALENs and CRISPR/Cas9 in human cells and their potentials for gene therapy. 2014 , 56, 681-8	33
2188	Disrupting the male germ line to find infertility and contraception targets. 2014 , 75, 101-8	11
2187	CRISPR/Cas9 and genome editing in Drosophila. 2014 , 41, 7-19	144
2186	When half is better than the whole: advances in haploid embryonic stem cell technology. 2014 , 14, 265-7	10
2185	A hierarchical map of regulatory genetic interactions in membrane trafficking. 2014 , 157, 1473-1487	70
2184	Development and applications of CRISPR-Cas9 for genome engineering. 2014 , 157, 1262-1278	3595
2183	DrugTargetSeqR: a genomics- and CRISPR-Cas9-based method to analyze drug targets. 2014 , 10, 626-8	84
2182	Generation of mouse models of myeloid malignancy with combinatorial genetic lesions using CRISPR-Cas9 genome editing. 2014 , 32, 941-6	342
2181	Reading between the lines; understanding drug response in the post genomic era. 2014 , 8, 1112-9	10
2180	Genome-wide analyses of proliferation-important genes of Iridovirus-tiger frog virus by RNAi. 2014 , 189, 214-25	5
2179	Gene Inactivation Strategies: An Update. 2014 ,	
2178	Expanding the genetic editing tool kit: ZFNs, TALENs, and CRISPR-Cas9. 2014 , 124, 4154-61	252
2177	Cytokine therapy reverses NK cell anergy in MHC-deficient tumors. 2014 , 124, 4781-94	120
2176	Selection of chromosomal DNA libraries using a multiplex CRISPR system. 2014 , 3,	224
2175	[Connecting isolated congenital asplenia to the ribosome]. 2014 , 208, 289-98	
2174	Genetic rearrangements of variable di-residue (RVD)-containing repeat arrays in a baculoviral TALEN system. 2014 , 1, 14050	13
2173	Interview with Bryan R Cullen. 2014 , 9, 345-350	
2172	CRISPR/Cas9-mediated genome engineering of CHO cell factories: Application and perspectives. 2015 , 10, 979-94	82

2171	Genome editing of CXCR4 by CRISPR/cas9 confers cells resistant to HIV-1 infection. 2015 , 5, 15577	139
2170	A minimally invasive, lentiviral based method for the rapid and sustained genetic manipulation of renal tubules. 2015 , 5, 11061	11
2169	MED12 methylation by CARM1 sensitizes human breast cancer cells to chemotherapy drugs. 2015 , 1, e1500463	45
2168	Synthesis of an arrayed sgRNA library targeting the human genome. 2015 , 5, 14987	34
2167	High-throughput genotyping of CRISPR/Cas9-mediated mutants using fluorescent PCR-capillary gel electrophoresis. 2015 , 5, 15587	58
2166	Assembly and validation of versatile transcription activator-like effector libraries. 2014 , 4, 4857	7
2165	Extensive mapping of an innate immune network with CRISPR. 2015 , 11, 821	1
2164	Modeling Kidney Disease with iPS Cells. 2015 , 10, 153-69	30
2163	Transient Low-Temperature Effects on Propidium Iodide Uptake in Lance Array Nano-injected HeLa Cells. 2015 , 6,	
2162	Differential Stoichiometry among Core Ribosomal Proteins. 2015 , 13, 865-73	127
2161	Establishment of leukemia inhibitory factor (LIF)-independent iPS cells with potentiated Oct4. 2015 , 15, 469-480	4
2160	DECKO: Single-oligo, dual-CRISPR deletion of genomic elements including long non-coding RNAs. 2015 , 16, 846	63
2159	Single amino acid substitution (G42E) in the receptor binding domain of mouse mammary tumour virus envelope protein facilitates infection of non-murine cells in a transferrin receptor 1-independent manner. 2015 , 12, 43	14
2158	The utility of transposon mutagenesis for cancer studies in the era of genome editing. 2015 , 16, 229	20
2157	Identification of an antiviral host transmembrane protein MARCH8. 2015 , 65, 173-178	1
2156	What Does Genetics Tell Us About Age-Related Macular Degeneration?. 2015 , 1, 73-96	18
2155	CRISPR screen: a high-throughput approach for cancer genetic research. 2015 , 88, 32-3	1
2154	Pathophysiological Functions of Rnd3/RhoE. 2015 , 6, 169-86	31

2153	Screening for melanoma resistance genes in vivo. 2015 , 28, 375-6	
2152	Multiplexed CRISPR/Cas9 genome editing increases the efficacy of homologous-dependent repair of donor sequences in mammalian cells. 2015 , 111,	
2151	Cancer Cell Line Panels Empower Genomics-Based Discovery of Precision Cancer Medicine. 2015 , 56, 1186-98	10
2150	Genome Editing Using Mammalian Haploid Cells. 2015 , 16, 23604-14	11
2149	A new age in functional genomics using CRISPR/Cas9 in arrayed library screening. 2015 , 6, 300	69
2148	Novel Genome-Editing Tools to Model and Correct Primary Immunodeficiencies. 2015 , 6, 250	27
2147	Neuroprotective therapies in glaucoma: II. Genetic nanotechnology tools. 2015 , 9, 355	10
2146	[High content screening in chemical biology: overview and main challenges]. 2015 , 31, 187-96	3
2145	[The CRISPR system can correct or modify the expression of genes responsible for hereditary diseases]. 2015 , 31, 1014-22	3
2144	CRISPR-Cas9: A Revolutionary Tool for Cancer Modelling. 2015 , 16, 22151-68	17
2143	Genetics and Epigenetics of Eating Disorders. 2015 , 5, 131-150	107
2142	The Characteristics of Heterozygous Protein Truncating Variants in the Human Genome. 2015 , 11, e1004647	23
2141	Genome-Wide Screening of Genes Required for Glycosylphosphatidylinositol Biosynthesis. 2015 , 10, e0138553	17
2140	Activation of Type I and III Interferon Response by Mitochondrial and Peroxisomal MAVS and Inhibition by Hepatitis C Virus. 2015 , 11, e1005264	91
2139	Phosphoproteomic Analysis of KSHV-Infected Cells Reveals Roles of ORF45-Activated RSK during Lytic Replication. 2015 , 11, e1004993	32
2138	Function genomics of abiotic stress tolerance in plants: a CRISPR approach. 2015 , 6, 375	66
2137	The CRISPR revolution and its impact on cancer research. 2015 , 145, w14230	10
2136	Applications of the CRISPR-Cas9 system in cancer biology. 2015 , 15, 387-95	260

2135	Expanding the Biologist's Toolkit with CRISPR-Cas9. 2015 , 58, 568-74	311
2134	Toward Whole-Transcriptome Editing with CRISPR-Cas9. 2015 , 58, 560-2	10
2133	DcpS is a transcript-specific modulator of RNA in mammalian cells. 2015 , 21, 1306-12	16
2132	CRISPR/Cas9 cleavage of viral DNA efficiently suppresses hepatitis B virus. 2015 , 5, 10833	205
2131	Techniques Analyzing Chromatin Modifications at Specific Single Loci. 2015 , 79-100	
2130	RNAi-mediated downregulation of CDKL1 inhibits growth and colony-formation ability, promotes apoptosis of human melanoma cells. 2015 , 79, 57-63	14
2129	Lung Stem Cells in the Epithelium and Vasculature. 2015 ,	
2128	3-Anhydro-6-hydroxy-ophiobolin A, a fungal sesterterpene from <i>Bipolaris oryzae</i> induced autophagy and promoted the degradation of β -synuclein in PC12 cells. 2015 , 25, 1464-70	14
2127	A Toolkit of CRISPR-Based Genome Editing Systems in <i>Drosophila</i> . 2015 , 42, 141-9	32
2126	CRISPR-Cas9-mediated gene knockout in primary human airway epithelial cells reveals a proinflammatory role for MUC18. 2015 , 22, 822-9	70
2125	High-Throughput Silencing Using the CRISPR-Cas9 System: A Review of the Benefits and Challenges. 2015 , 20, 1027-39	26
2124	CRISPR-Cas9-mediated genome editing and guide RNA design. 2015 , 26, 501-10	41
2123	Fluorescent protein biosensors applied to microphysiological systems. 2015 , 240, 795-808	26
2122	Sequence determinants of improved CRISPR sgRNA design. 2015 , 25, 1147-57	335
2121	Engineering Sequence-Specific DNA Binding Proteins for Antiviral Gene Editing. 2015 , 63-94	4
2120	A Perspective on the Future of High-Throughput RNAi Screening: Will CRISPR Cut Out the Competition or Can RNAi Help Guide the Way?. 2015 , 20, 1040-51	27
2119	Collateral Lethality: A new therapeutic strategy in oncology. 2015 , 1, 161-173	68
2118	Specific induction of endogenous viral restriction factors using CRISPR/Cas-derived transcriptional activators. 2015 , 112, E7249-56	33

2117	Endosomal sorting of Notch receptors through COMMD9-dependent pathways modulates Notch signaling. 2015 , 211, 605-17	34
2116	Mutations in DCPS and EDC3 in autosomal recessive intellectual disability indicate a crucial role for mRNA decapping in neurodevelopment. 2015 , 24, 3172-80	27
2115	Integrin β Suppresses the Phosphorylation of Epidermal Growth Factor Receptor and Its Cellular Signaling of Cell Proliferation via N-Glycosylation. 2015 , 290, 29345-60	24
2114	PAM multiplicity marks genomic target sites as inhibitory to CRISPR-Cas9 editing. 2015 , 6, 10124	37
2113	A platform for reverse genetics in endothelial cells. 2015 , 117, 107-8	2
2112	CRISPR/Cas9 system as an innovative genetic engineering tool: Enhancements in sequence specificity and delivery methods. 2015 , 1856, 234-43	15
2111	Nodes-and-connections RNAi knockdown screening: identification of a signaling molecule network involved in fulvestrant action and breast cancer prognosis. 2015 , 4, e172	
2110	WU-CRISPR: characteristics of functional guide RNAs for the CRISPR/Cas9 system. 2015 , 16, 218	182
2109	Quality control, modeling, and visualization of CRISPR screens with MAGeCK-VISPR. 2015 , 16, 281	171
2108	Resources for the design of CRISPR gene editing experiments. 2015 , 16, 260	78
2107	Optimizing sgRNA structure to improve CRISPR-Cas9 knockout efficiency. 2015 , 16, 280	202
2106	Modeling Normal and Disordered Human Hematopoiesis. 2015 , 1, 199-210	8
2105	The CENP-L-N Complex Forms a Critical Node in an Integrated Meshwork of Interactions at the Centromere-Kinetochore Interface. 2015 , 60, 886-98	108
2104	Genome-wide CRISPR-Cas9 Screens Reveal Loss of Redundancy between PKMYT1 and WEE1 in Glioblastoma Stem-like Cells. 2015 , 13, 2425-2439	97
2103	Downregulation of the Ubiquitin Ligase RNF125 Underlies Resistance of Melanoma Cells to BRAF Inhibitors via JAK1 Dereglulation. 2015 , 11, 1458-73	37
2102	Current and future delivery systems for engineered nucleases: ZFN, TALEN and RGEN. 2015 , 205, 120-7	76
2101	Massively parallel single-amino-acid mutagenesis. 2015 , 12, 203-6, 4 p following 206	101
2100	What are super-enhancers?. 2015 , 47, 8-12	398

2099	Suppression of hepatitis B virus DNA accumulation in chronically infected cells using a bacterial CRISPR/Cas RNA-guided DNA endonuclease. 2015 , 476, 196-205	168
2098	New insight into cancer aneuploidy in zebrafish. 2015 , 314, 149-70	2
2097	Cooperation between Noncanonical Ras Network Mutations. 2015 , 10, 307-316	19
2096	CRISPR genome engineering and viral gene delivery: a case of mutual attraction. 2015 , 10, 258-72	61
2095	Functional genomic screening approaches in mechanistic toxicology and potential future applications of CRISPR-Cas9. 2015 , 764, 31-42	14
2094	Pluripotent stem cell derived cardiovascular progenitors--a developmental perspective. 2015 , 400, 169-79	36
2093	Gene targeting and editing in crop plants: a new era of precision opportunities. 2015 , 35, 1	47
2092	A practical guide to induced pluripotent stem cell research using patient samples. 2015 , 95, 4-13	45
2091	Phosphorylation of innate immune adaptor proteins MAVS, STING, and TRIF induces IRF3 activation. <i>Science</i> , 2015 , 347, aaa2630	33-3 805
2090	Path from schizophrenia genomics to biology: gene regulation and perturbation in neurons derived from induced pluripotent stem cells and genome editing. 2015 , 31, 113-27	7
2089	CRISPR/Cas9: The Leading Edge of Genome Editing Technology. 2015 , 25-41	6
2088	The impact of CRISPR-Cas9 on target identification and validation. 2015 , 20, 450-7	49
2087	CRISPR: a new method for genetic engineering - a prokaryotic immune component may potentially open a new era of gene silencing. 2015 , 22, 3-5	4
2086	Targeted Genome Editing Using Site-Specific Nucleases. 2015 ,	6
2085	Unbiased detection of off-target cleavage by CRISPR-Cas9 and TALENs using integrase-defective lentiviral vectors. 2015 , 33, 175-8	321
2084	High-throughput screens in mammalian cells using the CRISPR-Cas9 system. 2015 , 282, 2089-96	42
2083	Molecular techniques to interrogate and edit the <i>Chlamydomonas</i> nuclear genome. 2015 , 82, 393-412	108
2082	Use of the CRISPR/Cas9 system as an intracellular defense against HIV-1 infection in human cells. 2015 , 6, 6413	234

2081	Bacterial CRISPR/Cas DNA endonucleases: A revolutionary technology that could dramatically impact viral research and treatment. 2015 , 479-480, 213-20	44
2080	Genetic screens and functional genomics using CRISPR/Cas9 technology. 2015 , 282, 1383-93	56
2079	Genome-wide CRISPR screen in a mouse model of tumor growth and metastasis. 2015 , 160, 1246-60	544
2078	Dual sgRNA-directed gene knockout using CRISPR/Cas9 technology in <i>Caenorhabditis elegans</i> . 2014 , 4, 7581	80
2077	The Mediator complex of <i>Caenorhabditis elegans</i> : insights into the developmental and physiological roles of a conserved transcriptional coregulator. 2015 , 43, 2442-53	24
2076	Fast and sensitive detection of indels induced by precise gene targeting. 2015 , 43, e59	115
2075	Genome Engineering for Therapeutic Applications. 2015 , 27-43	2
2074	In Vivo RNAi Screening Identifies MDA5 as a Significant Contributor to the Cellular Defense against Influenza A Virus. 2015 , 11, 1714-26	55
2073	Next-generation libraries for robust RNA interference-based genome-wide screens. 2015 , 112, E3384-91	64
2072	CRISPR-ERA: a comprehensive design tool for CRISPR-mediated gene editing, repression and activation. 2015 , 31, 3676-8	124
2071	Highly Efficient Genome Editing via CRISPR/Cas9 to Create Clock Gene Knockout Cells. 2015 , 30, 389-95	12
2070	Recent strategies and progress in identifying host factors involved in virus replication. 2015 , 26, 79-88	20
2069	CRISPR-Cas9-Mediated Genome Editing in <i>Leishmania donovani</i> . 2015 , 6, e00861	113
2068	Characterization of genome-wide ordered sequence-tagged <i>Mycobacterium</i> mutant libraries by Cartesian Pooling-Coordinate Sequencing. 2015 , 6, 7106	24
2067	The renaissance of developmental biology. 2015 , 13, e1002149	20
2066	Enriching CRISPR-Cas9 targeted cells by co-targeting the HPRT gene. 2015 , 43, e134	28
2065	Application of CRISPR/Cas9 for biomedical discoveries. 2015 , 5, 33	41
2064	CRISPR-Cas9-Mediated Genetic Screening in Mice with Haploid Embryonic Stem Cells Carrying a Guide RNA Library. 2015 , 17, 221-32	70

2063	Cell death during crisis is mediated by mitotic telomere deprotection. 2015 , 522, 492-6	80
2062	Precision cancer mouse models through genome editing with CRISPR-Cas9. 2015 , 7, 53	61
2061	An intramolecular bond at cluster of differentiation 81 ectodomain is important for hepatitis C virus entry. 2015 , 29, 4214-26	5
2060	The Hope for iPSC in Lung Stem Cell Therapy and Disease Modeling. 2015 , 113-143	0
2059	A CRISPR-Based Screen Identifies Genes Essential for West-Nile-Virus-Induced Cell Death. 2015 , 12, 673-83	150
2058	Systematic analysis of CRISPR-Cas9 mismatch tolerance reveals low levels of off-target activity. 2015 , 211, 56-65	99
2057	Development of retroviral vectors for insertional mutagenesis in medaka haploid cells. 2015 , 573, 296-302	3
2056	Enzymatically Generated CRISPR Libraries for Genome Labeling and Screening. 2015 , 34, 373-8	24
2055	CRISPR-Cas: New Tools for Genetic Manipulations from Bacterial Immunity Systems. 2015 , 69, 209-28	125
2054	A Genome-wide CRISPR Screen in Primary Immune Cells to Dissect Regulatory Networks. 2015 , 162, 675-86	288
2053	Durable pluripotency and haploidy in epiblast stem cells derived from haploid embryonic stem cells in vitro. 2015 , 7, 326-37	16
2052	Delivery and Specificity of CRISPR-Cas9 Genome Editing Technologies for Human Gene Therapy. 2015 , 26, 443-51	130
2051	Delivering the Goods for Genome Engineering and Editing. 2015 , 26, 486-97	12
2050	Cas9-chromatin binding information enables more accurate CRISPR off-target prediction. 2015 , 43, e118	141
2049	Trans-spliced Cas9 allows cleavage of HBB and CCR5 genes in human cells using compact expression cassettes. 2015 , 5, 10777	28
2048	Identification of Cholesterol 25-Hydroxylase as a Novel Host Restriction Factor and a Part of the Primary Innate Immune Responses against Hepatitis C Virus Infection. 2015 , 89, 6805-16	61
2047	Cell-based screening: extracting meaning from complex data. 2015 , 86, 160-74	33
2046	Modularization of genetic elements promotes synthetic metabolic engineering. 2015 , 33, 1412-9	11

2045	TP53 loss creates therapeutic vulnerability in colorectal cancer. 2015 , 520, 697-701	154
2044	The CRISPR/Cas9 system inactivates latent HIV-1 proviral DNA. 2015 , 12, 22	156
2043	The production of viral vectors designed to express large and difficult to express transgenes within neurons. 2015 , 8, 12	17
2042	RNA-guided CRISPR-Cas technologies for genome-scale investigation of disease processes. 2015 , 8, 31	7
2041	Synthetic epigenetics-towards intelligent control of epigenetic states and cell identity. 2015 , 7, 18	47
2040	Application guide for omics approaches to cell signaling. 2015 , 11, 387-97	52
2039	Toward stem cell-based phenotypic screens for neurodegenerative diseases. 2015 , 11, 339-50	55
2038	Applications of CRISPR-Cas9 mediated genome engineering. 2015 , 2, 11	24
2037	HiTSelect: a comprehensive tool for high-complexity-pooled screen analysis. 2015 , 43, e16	45
2036	p53-dependent non-coding RNA networks in chronic lymphocytic leukemia. 2015 , 29, 2015-23	117
2035	Quantifying the impact of transporters on cellular drug permeability. 2015 , 36, 255-62	28
2034	Increasing the efficiency of homology-directed repair for CRISPR-Cas9-induced precise gene editing in mammalian cells. 2015 , 33, 543-8	77 ¹
2033	Systems biology of the secretory pathway: what have we learned so far?. 2015 , 107, 205-17	10
2032	A lncRNA-MAF:MAFB transcription factor network regulates epidermal differentiation. 2015 , 32, 693-706	123
2031	Discovery of cancer drug targets by CRISPR-Cas9 screening of protein domains. 2015 , 33, 661-7	464
2030	CRISPR-Cas targeted plasmid integration into mammalian cells via non-homologous end joining. 2015 , 112, 2154-62	39
2029	The history and market impact of CRISPR RNA-guided nucleases. 2015 , 12, 85-90	26
2028	Efficient gene disruption in cultured primary human endothelial cells by CRISPR/Cas9. 2015 , 117, 121-8	47

2027	Decoding the complex genetic causes of heart diseases using systems biology. 2015 , 7, 141-159	
2026	RAS Synthetic Lethal Screens Revisited: Still Seeking the Elusive Prize?. 2015 , 21, 1802-9	118
2025	Autophagy and checkpoints for intracellular pathogen defense. 2015 , 31, 14-23	30
2024	Advances in CRISPR-Cas9 genome engineering: lessons learned from RNA interference. 2015 , 43, 3407-19	104
2023	Application of CRISPR/Cas9 genome editing to the study and treatment of disease. 2015 , 89, 1023-34	38
2022	Inhibition of HIV-1 infection of primary CD4+ T-cells by gene editing of CCR5 using adenovirus-delivered CRISPR/Cas9. 2015 , 96, 2381-2393	133
2021	SHMT2 drives glioma cell survival in ischaemia but imposes a dependence on glycine clearance. 2015 , 520, 363-7	216
2020	Efficient inversions and duplications of mammalian regulatory DNA elements and gene clusters by CRISPR/Cas9. 2015 , 7, 284-98	89
2019	High-throughput functional genomics using CRISPR-Cas9. 2015 , 16, 299-311	748
2018	Rapid reverse genetic screening using CRISPR in zebrafish. 2015 , 12, 535-40	221
2017	Enabling functional genomics with genome engineering. 2015 , 25, 1442-55	67
2016	Functional genomics bridges the gap between quantitative genetics and molecular biology. 2015 , 25, 1427-31	41
2015	Preclinical mouse cancer models: a maze of opportunities and challenges. 2015 , 163, 39-53	363
2014	DNA tumor virus oncogenes antagonize the cGAS-STING DNA-sensing pathway. <i>Science</i> , 2015 , 350, 568-71	247
2013	Modeling Disease In Vivo With CRISPR/Cas9. 2015 , 21, 609-621	77
2012	Orthogonal gene knockout and activation with a catalytically active Cas9 nuclease. 2015 , 33, 1159-61	176
2011	Mapping the Pathways of Resistance to Targeted Therapies. 2015 , 75, 4247-51	22
2010	Application of human haploid cell genetic screening model in identifying the genes required for resistance to environmental toxicants: Chlorpyrifos as a case study. 2015 , 76, 76-82	8

2009	Genetic Dissection of the Host Tropism of Human-Tropic Pathogens. 2015 , 49, 21-45	26
2008	Tracking and transforming neocortical progenitors by CRISPR/Cas9 gene targeting and piggyBac transposase lineage labeling. 2015 , 142, 3601-11	40
2007	CRISPR/Cas9-based tools for targeted genome editing and replication control of HBV. 2015 , 30, 317-25	15
2006	MARCH8 inhibits HIV-1 infection by reducing virion incorporation of envelope glycoproteins. 2015 , 21, 1502-7	73
2005	Functional Genomics in Pharmaceutical Drug Discovery. 2016 , 232, 25-41	4
2004	CRISPR/Cas9 somatic multiplex-mutagenesis for high-throughput functional cancer genomics in mice. 2015 , 112, 13982-7	135
2003	Combining CRISPR/Cas9 and rAAV Templates for Efficient Gene Editing. 2015 , 25, 287-96	19
2002	CRISPR-Cas9 delivery to hard-to-transfect cells via membrane deformation. 2015 , 1, e1500454	154
2001	Efficient delivery of nuclease proteins for genome editing in human stem cells and primary cells. 2015 , 10, 1842-59	88
2000	Targeted Chromosomal Translocations and Essential Gene Knockout Using CRISPR/Cas9 Technology in <i>Caenorhabditis elegans</i> . 2015 , 201, 1295-306	24
1999	CRISPR/Cas9: molecular tool for gene therapy to target genome and epigenome in the treatment of lung cancer. 2015 , 22, 509-17	33
1998	GRHL2 coordinates regeneration of a polarized mucociliary epithelium from basal stem cells. 2015 , 211, 669-82	68
1997	Network analysis of gene essentiality in functional genomics experiments. 2015 , 16, 239	41
1996	Hitting the Target in BRAF-Mutant Colorectal Cancer. 2015 , 33, 3990-2	11
1995	Targeting Transcription Factors in Cancer. 2015 , 1, 53-65	149
1994	Tuberous Sclerosis Complex Protein 2-Independent Activation of mTORC1 by Human Cytomegalovirus pUL38. 2015 , 89, 7625-35	10
1993	Autophagy protects intestinal epithelial cells against deoxynivalenol toxicity by alleviating oxidative stress via IKK signaling pathway. 2015 , 89, 944-51	68
1992	ScreenBEAM: a novel meta-analysis algorithm for functional genomics screens via Bayesian hierarchical modeling. 2016 , 32, 260-7	23

1991	Identification and characterization of essential genes in the human genome. <i>Science</i> , 2015 , 350, 1096-1033	977
1990	Epigenetic Control of Smooth Muscle Cell Identity and Lineage Memory. 2015 , 35, 2508-16	65
1989	A double-edged sword: CRISPR-Cas9 is emerging as a revolutionary technique for genome editing. 2015 , 2, 25	4
1988	Identification of potential drug targets for tuberous sclerosis complex by synthetic screens combining CRISPR-based knockouts with RNAi. 2015 , 8, rs9	86
1987	A Scalable Genome-Editing-Based Approach for Mapping Multiprotein Complexes in Human Cells. 2015 , 13, 621-633	58
1986	Combined CSL and p53 downregulation promotes cancer-associated fibroblast activation. 2015 , 17, 1193-204	131
1985	Massively parallel high-order combinatorial genetics in human cells. 2015 , 33, 952-61	36
1984	Overview of guide RNA design tools for CRISPR-Cas9 genome editing technology. 2015 , 10, 289-296	20
1983	Identification of P450 Oxidoreductase as a Major Determinant of Sensitivity to Hypoxia-Activated Prodrugs. 2015 , 75, 4211-23	56
1982	Rapid and efficient one-step generation of paired gRNA CRISPR-Cas9 libraries. 2015 , 6, 8083	79
1981	Streamlined Genome Engineering with a Self-Excising Drug Selection Cassette. 2015 , 200, 1035-49	307
1980	Natural Killer cell control of mutant melanoma during targeted therapy. 2015 , 4, e998119	5
1979	Virus-Host Interactions: From Unbiased Genetic Screens to Function. 2015 , 2, 497-524	25
1978	Applications of comparative evolution to human disease genetics. 2015 , 35, 16-24	6
1977	Conditionally Stabilized dCas9 Activator for Controlling Gene Expression in Human Cell Reprogramming and Differentiation. 2015 , 5, 448-59	119
1976	A modular open platform for systematic functional studies under physiological conditions. 2015 , 43, e112	30
1975	Metabolic reprogramming and dysregulated metabolism: cause, consequence and/or enabler of environmental carcinogenesis?. 2015 , 36 Suppl 1, S203-31	61
1974	BCL11A enhancer dissection by Cas9-mediated in situ saturating mutagenesis. 2015 , 527, 192-7	528

1973	The New State of the Art: Cas9 for Gene Activation and Repression. 2015 , 35, 3800-9	150
1972	Electroporation Knows No Boundaries: The Use of Electrostimulation for siRNA Delivery in Cells and Tissues. 2015 , 20, 932-42	30
1971	Efficient CRISPR/Cas9-mediated multiplex genome editing in CHO cells via high-level sgRNA-Cas9 complex. 2015 , 20, 825-833	12
1970	Production of functional small interfering RNAs by an amino-terminal deletion mutant of human Dicer. 2015 , 112, E6945-54	55
1969	The Power Decoder Simulator for the Evaluation of Pooled shRNA Screen Performance. 2015 , 20, 965-75	2
1968	A genome-wide CRISPR library for high-throughput genetic screening in Drosophila cells. 2015 , 42, 301-9	47
1967	High-Resolution CRISPR Screens Reveal Fitness Genes and Genotype-Specific Cancer Liabilities. 2015 , 163, 1515-26	863
1966	Functional genomics to uncover drug mechanism of action. 2015 , 11, 942-8	58
1965	From hacking the human genome to editing organs. 2015 , 11, 173-82	2
1964	New genes drive the evolution of gene interaction networks in the human and mouse genomes. 2015 , 16, 202	56
1963	Biological Networks Governing the Acquisition, Maintenance, and Dissolution of Pluripotency: Insights from Functional Genomics Approaches. 2015 , 80, 189-98	2
1962	The oncogenic roles of DICER1 RNase IIIb domain mutations in ovarian Sertoli-Leydig cell tumors. 2015 , 17, 650-60	43
1961	The CRISPR/Cas9 system for plant genome editing and beyond. 2015 , 33, 41-52	772
1960	Single-cell and multivariate approaches in genetic perturbation screens. 2015 , 16, 18-32	65
1959	MDA5 plays a critical role in interferon response during hepatitis C virus infection. 2015 , 62, 771-8	70
1958	Genome-scale transcriptional activation by an engineered CRISPR-Cas9 complex. 2015 , 517, 583-8	1628
1957	DNA methylation and its implications and accessibility for neuropsychiatric therapeutics. 2015 , 55, 591-611	57
1956	Targeting CDK11 in osteosarcoma cells using the CRISPR-Cas9 system. 2015 , 33, 199-207	50

1955	An efficient genotyping method for genome-modified animals and human cells generated with CRISPR/Cas9 system. 2014 , 4, 6420	175
1954	Genome editing by targeted chromosomal mutagenesis. 2015 , 1239, 1-13	7
1953	Comparison of non-canonical PAMs for CRISPR/Cas9-mediated DNA cleavage in human cells. 2014 , 4, 5405	143
1952	Synthetic lethal vulnerabilities of cancer. 2015 , 55, 513-31	31
1951	Mitochondrial targets for pharmacological intervention in human disease. 2015 , 14, 5-21	35
1950	Off-target assessment of CRISPR-Cas9 guiding RNAs in human iPS and mouse ES cells. 2015 , 53, 225-36	45
1949	Knockout of leucine aminopeptidase in <i>Toxoplasma gondii</i> using CRISPR/Cas9. 2015 , 45, 141-8	37
1948	Schizophrenia genetics: building the foundations of the future. 2015 , 41, 15-9	5
1947	Functional characterization of CYP2D6 enhancer polymorphisms. 2015 , 24, 1556-62	44
1946	Prostate cancer risk locus at 8q24 as a regulatory hub by physical interactions with multiple genomic loci across the genome. 2015 , 24, 154-66	48
1945	Synthetic biology for therapeutic applications. 2015 , 12, 322-31	18
1944	Gene Correction Technology and Its Impact on Viral Research and Therapy. 2016 ,	
1943	Complex Genetic Control of Autoimmune Disease. 2016 , 133-141	
1942	Cell-Based Assay Design for High-Content Screening of Drug Candidates. 2016 , 26, 213-25	52
1941	Selectable one-step PCR-mediated integration of a degron for rapid depletion of endogenous human proteins. 2016 , 60, 69-74	12
1940	CRISPR-Cas9: from Genome Editing to Cancer Research. 2016 , 12, 1427-1436	24
1939	References. 2016 , 373-395	
1938	A CRISPR-Based Toolbox for Studying T Cell Signal Transduction. 2016 , 2016, 5052369	18

1937	The Rise of CRISPR/Cas for Genome Editing in Stem Cells. 2016 , 2016, 8140168	18
1936	Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes Afford New Opportunities in Inherited Cardiovascular Disease Modeling. 2016 , 2016, 3582380	8
1935	Advanced In vivo Use of CRISPR/Cas9 and Anti-sense DNA Inhibition for Gene Manipulation in the Brain. 2015 , 6, 362	23
1934	Genome Engineering with TALE and CRISPR Systems in Neuroscience. 2016 , 7, 47	21
1933	CRISPR/Cas9: Implications for Modeling and Therapy of Neurodegenerative Diseases. 2016 , 9, 30	34
1932	Targeting Stromal-Cancer Cell Crosstalk Networks in Ovarian Cancer Treatment. 2016 , 6, 3	35
1931	In Vivo Delivery Systems for Therapeutic Genome Editing. 2016 , 17,	54
1930	Germline Gene Editing in Chickens by Efficient CRISPR-Mediated Homologous Recombination in Primordial Germ Cells. 2016 , 11, e0154303	73
1929	Reversible Cysteine Acylation Regulates the Activity of Human Palmitoyl-Protein Thioesterase 1 (PPT1). 2016 , 11, e0146466	18
1928	HIV-1 Integrates Widely throughout the Genome of the Human Blood Fluke <i>Schistosoma mansoni</i> . 2016 , 12, e1005931	14
1927	Genomic Disruption of VEGF-A Expression in Human Retinal Pigment Epithelial Cells Using CRISPR-Cas9 Endonuclease. 2016 , 57, 5490-5497	26
1926	Design, execution, and analysis of pooled in vitro CRISPR/Cas9 screens. 2016 , 283, 3170-80	49
1925	CRISPR guide RNA design for research applications. 2016 , 283, 3232-8	56
1924	On the Origin of CRISPR-Cas Technology: From Prokaryotes to Mammals. 2016 , 24, 811-820	92
1923	Chemistry-Driven Target Identification. 2016 , 63-92	
1922	Microfluidic Cell Deformability Assay for Rapid and Efficient Kinase Screening with the CRISPR-Cas9 System. 2016 , 128, 8703-8707	5
1921	Microfluidic Cell Deformability Assay for Rapid and Efficient Kinase Screening with the CRISPR-Cas9 System. 2016 , 55, 8561-5	21
1920	Every transcription factor deserves its map: Scaling up epitope tagging of proteins to bypass antibody problems. 2016 , 38, 801-11	11

1919	Current and future prospects for CRISPR-based tools in bacteria. 2016 , 113, 930-43	79
1918	Ring Index: A new strategy to evaluate the integrity of TEX86 paleothermometry. 2016 , 31, 220-232	87
1917	CRISPR-Cas9 systems: versatile cancer modelling platforms and promising therapeutic strategies. 2016 , 138, 1328-36	20
1916	Stacking up CRISPR against RNAi for therapeutic gene inhibition. 2016 , 283, 3249-60	10
1915	Active Caspase-1 Induces Plasma Membrane Pores That Precede Pyroptotic Lysis and Are Blocked by Lanthanides. 2016 , 197, 1353-67	106
1914	CRISPR: a versatile tool for both forward and reverse genetics research. 2016 , 135, 971-6	27
1913	Human Inducible Pluripotent Stem Cells and Autism Spectrum Disorder: Emerging Technologies. 2016 , 9, 513-35	25
1912	Primary ovarian insufficiency associated with autosomal abnormalities: from chromosome to genome-wide and beyond. 2016 , 23, 806-15	4
1911	Anti-HIV-1 potency of the CRISPR/Cas9 system insufficient to fully inhibit viral replication. 2016 , 60, 483-96	46
1910	Versatility of chemically synthesized guide RNAs for CRISPR-Cas9 genome editing. 2016 , 233, 74-83	52
1909	Somatic mutations in disorders with disrupted brain connectivity. 2016 , 48, e239	19
1908	Multiple mechanisms disrupt the let-7 microRNA family in neuroblastoma. 2016 , 535, 246-51	125
1907	Applying CRISPR-Cas9 tools to identify and characterize transcriptional enhancers. 2016 , 17, 597-604	42
1906	The effect of lance geometry and carbon coating of silicon lances on propidium iodide uptake in lance array nanoinjection of HeLa 229 cells. 2016 , 26, 045002	
1905	Defining an olfactory receptor function in airway smooth muscle cells. 2016 , 6, 38231	60
1904	Protein stability regulators screening assay (Pro-SRSA): protein degradation meets the CRISPR-Cas9 library. 2016 , 35, 60	1
1903	How Cancer Genomics Drives Cancer Biology: Does Synthetic Lethality Explain Mutually Exclusive Oncogenic Mutations?. 2016 , 81, 247-255	13
1902	Efficient CRISPR-Mediated Post-Transcriptional Gene Silencing in a Hyperthermophilic Archaeon Using Multiplexed crRNA Expression. 2016 , 6, 3161-3168	18

1901	Antiviral Innate Immune Response Interferes with the Formation of Replication-Associated Membrane Structures Induced by a Positive-Strand RNA Virus. 2016 , 7,	20
1900	Overview of CRISPR-Cas9 Biology. 2016 , 2016,	10
1899	A Retroviral CRISPR-Cas9 System for Cellular Autism-Associated Phenotype Discovery in Developing Neurons. 2016 , 6, 25611	28
1898	RBFOX1 and RBFOX2 are dispensable in iPSCs and iPSC-derived neurons and do not contribute to neural-specific paternal UBE3A silencing. 2016 , 6, 25368	14
1897	Smad2 and Smad3 have differential sensitivity in relaying TGF β signaling and inversely regulate early lineage specification. 2016 , 6, 21602	56
1896	Monotonic decrease of the zonal SST gradient of the equatorial Pacific as a function of CO ₂ concentration in CCSM3 and CCSM4. 2016 , 121, 10,637-10,653	7
1895	CRISPR-Mediated VHL Knockout Generates an Improved Model for Metastatic Renal Cell Carcinoma. 2016 , 6, 29032	32
1894	PIK3CA mutations enable targeting of a breast tumor dependency through mTOR-mediated MCL-1 translation. 2016 , 8, 369ra175	35
1893	A method to convert mRNA into a gRNA library for CRISPR/Cas9 editing of any organism. 2016 , 2, e1600699	12
1892	TRIP6 antagonizes the recruitment of A20 and CYLD to TRAF6 to promote the LPA2 receptor-mediated TRAF6 activation. 2016 , 2,	14
1891	SIRT7-dependent deacetylation of the U3-55k protein controls pre-rRNA processing. 2016 , 7, 10734	68
1890	Genome editing for targeted improvement of plants. 2016 , 10, 327-343	23
1889	Development of a fast and easy method for Escherichia coli genome editing with CRISPR/Cas9. 2016 , 15, 205	67
1888	CRISPR/Cas9-induced disruption of gene expression in mouse embryonic brain and single neural stem cells in vivo. 2016 , 17, 338-48	53
1887	Establishment of MAGEC2-knockout cells and functional investigation of MAGEC2 in tumor cells. 2016 , 107, 1888-1897	11
1886	Targeting DNA repair, DNA metabolism and replication stress as anti-cancer strategies. 2016 , 283, 232-45	84
1885	Designed nucleases for targeted genome editing. 2016 , 14, 448-62	39
1884	On-demand continuous-flow production of pharmaceuticals in a compact, reconfigurable system. <i>Science</i> , 2016 , 352, 61-7	33-3 578

1883	Directed evolution and synthetic biology applications to microbial systems. 2016 , 39, 126-133	45
1882	CRISPy-web: An online resource to design sgRNAs for CRISPR applications. 2016 , 1, 118-121	80
1881	Tankyrase Inhibitor Sensitizes Lung Cancer Cells to Endothelial Growth Factor Receptor (EGFR) Inhibition via Stabilizing Angiomotins and Inhibiting YAP Signaling. 2016 , 291, 15256-66	50
1880	Decoding transcriptional enhancers: Evolving from annotation to functional interpretation. 2016 , 57, 40-50	10
1879	Gene editing and its application for hematological diseases. 2016 , 104, 18-28	19
1878	CRISPR/Cas9 for Human Genome Engineering and Disease Research. 2016 , 17, 131-54	65
1877	SAMHD1 controls cell cycle status, apoptosis and HIV-1 infection in monocytic THP-1 cells. 2016 , 495, 92-100	56
1876	Genome engineering in ophthalmology: Application of CRISPR/Cas to the treatment of eye disease. 2016 , 53, 1-20	36
1875	Focused screening of mitochondrial metabolism reveals a crucial role for a tumor suppressor Hbp1 in ovarian reserve. 2016 , 23, 1602-14	19
1874	EVI1 Interferes with Myeloid Maturation via Transcriptional Repression of Cebpa, via Binding to Two Far Downstream Regulatory Elements. 2016 , 291, 13591-607	8
1873	Regulation of DNA double-strand break repair by ubiquitin and ubiquitin-like modifiers. 2016 , 17, 379-94	207
1872	Genome editing in pluripotent stem cells: research and therapeutic applications. 2016 , 473, 665-74	15
1871	Oxygen-dependent Regulation of Erythropoietin Receptor Turnover and Signaling. 2016 , 291, 7357-72	24
1870	Strengths and Limitations of Model Systems for the Study of Urinary Tract Infections and Related Pathologies. 2016 , 80, 351-67	24
1869	The Application of CRISPR/Cas9 Technologies and Therapies in Stem Cells. 2016 , 2, 95-103	2
1868	Hypoxia-activated prodrugs: paths forward in the era of personalised medicine. 2016 , 114, 1071-7	119
1867	Primary Human Hepatocytes Repopulate Livers of Mice After In Vitro Culturing and Lentiviral-Mediated Gene Transfer. 2016 , 22, 742-53	7
1866	Roles of Capsid-Interacting Host Factors in Multimodal Inhibition of HIV-1 by PF74. 2016 , 90, 5808-5823	58

1865	FOXA1 defines cancer cell specificity. 2016 , 2, e1501473	31
1864	Cigarette Smoke Induces Human Airway Epithelial Senescence via Growth Differentiation Factor 15 Production. 2016 , 55, 429-38	24
1863	Synthetic biology platform technologies for antimicrobial applications. 2016 , 105, 35-43	35
1862	Targeting Non-proteolytic Protein Ubiquitination for the Treatment of Diffuse Large B Cell Lymphoma. 2016 , 29, 494-507	72
1861	Consequences of Cas9 cleavage in the chromosome of Escherichia coli. 2016 , 44, 4243-51	156
1860	Imaging Specific Genomic DNA in Living Cells. 2016 , 45, 1-23	52
1859	Engineering Delivery Vehicles for Genome Editing. 2016 , 7, 637-62	75
1858	Systematic comparison of CRISPR/Cas9 and RNAi screens for essential genes. 2016 , 34, 634-6	230
1857	Posttranscriptional m(6)A Editing of HIV-1 mRNAs Enhances Viral Gene Expression. 2016 , 19, 675-85	198
1856	The expanding footprint of CRISPR/Cas9 in the plant sciences. 2016 , 35, 1451-68	25
1855	LncRNA GClnc1 Promotes Gastric Carcinogenesis and May Act as a Modular Scaffold of WDR5 and KAT2A Complexes to Specify the Histone Modification Pattern. 2016 , 6, 784-801	245
1854	Induced Pluripotent Stem Cells Meet Genome Editing. 2016 , 18, 573-86	304
1853	Leukemia cell infiltration causes defective erythropoiesis partially through MIP-1 α /CCL3. 2016 , 30, 1897-908	22
1852	CRISPR knockout screening outperforms shRNA and CRISPRi in identifying essential genes. 2016 , 34, 631-3	230
1851	Discovery of a Coregulatory Interaction between Kaposi's Sarcoma-Associated Herpesvirus ORF45 and the Viral Protein Kinase ORF36. 2016 , 90, 5953-5964	16
1850	CRISPR/Cas9 in Genome Editing and Beyond. 2016 , 85, 227-64	644
1849	TFEB and TFE3 cooperate in the regulation of the innate immune response in activated macrophages. 2016 , 12, 1240-58	150
1848	A genome editing primer for the hematologist. 2016 , 127, 2525-35	21

1847	Screening out irrelevant cell-based models of disease. 2016 , 15, 751-769	297
1846	The epigenome: the next substrate for engineering. 2016 , 17, 183	37
1845	Application of the CRISPR/Cas9 gene editing technique to research on functional genomes of parasites. 2016 , 65, 641-644	11
1844	A Genome-wide CRISPR Screen in Toxoplasma Identifies Essential Apicomplexan Genes. 2016 , 166, 1423-1435.e188	188
1843	Efficient CRISPR/Cas9-Mediated Versatile, Predictable, and Donor-Free Gene Knockout in Human Pluripotent Stem Cells. 2016 , 7, 496-507	32
1842	Applications of CRISPR Genome Engineering in Cell Biology. 2016 , 26, 875-888	58
1841	A Distinct Gene Module for Dysfunction Uncoupled from Activation in Tumor-Infiltrating T Cells. 2016 , 166, 1500-1511.e9	209
1840	Deimmunization for gene therapy: host matching of synthetic zinc finger constructs enables long-term mutant Huntingtin repression in mice. 2016 , 11, 64	29
1839	TGF- β -Induced stromal CYR61 promotes resistance to gemcitabine in pancreatic ductal adenocarcinoma through downregulation of the nucleoside transporters hENT1 and hCNT3. 2016 , 37, 1041-1051	48
1838	Patterns of CRISPR/Cas9 activity in plants, animals and microbes. 2016 , 14, 2203-2216	85
1837	Guide RNA engineering for versatile Cas9 functionality. 2016 , 44, 9555-9564	44
1836	Genetic and Proteomic Interrogation of Lower Confidence Candidate Genes Reveals Signaling Networks in β -Catenin-Active Cancers. 2016 , 3, 302-316.e4	36
1835	Cpf1 nucleases demonstrate robust activity to induce DNA modification by exploiting homology directed repair pathways in mammalian cells. 2016 , 11, 46	43
1834	CRISPR-Cas: biology, mechanisms and relevance. 2016 , 371,	168
1833	An essential role for Grk2 in Hedgehog signalling downstream of Smoothed. 2016 , 17, 739-52	31
1832	Frizzled proteins are colonic epithelial receptors for C. difficile toxin B. 2016 , 538, 350-355	146
1831	High-resolution interrogation of functional elements in the noncoding genome. <i>Science</i> , 2016 , 353, 1545-1549	197
1830	Systematic mapping of functional enhancer-promoter connections with CRISPR interference. <i>Science</i> , 2016 , 354, 769-773	333 314

1829	Regulation of Linear Ubiquitin Chain Assembly Complex by Caspase-Mediated Cleavage of RNF31. 2016 , 36, 3010-3018	13
1828	Identification of oncogenic driver mutations by genome-wide CRISPR-Cas9 dropout screening. 2016 , 17, 723	25
1827	Challenges of CRISPR/Cas9 applications for long non-coding RNA genes. 2017 , 45, e12	101
1826	Deep sequencing of 10,000 human genomes. 2016 , 113, 11901-11906	222
1825	Efficient CRISPR-mediated mutagenesis in primary immune cells using CrispRGold and a C57BL/6 Cas9 transgenic mouse line. 2016 , 113, 12514-12519	65
1824	Discovery of a Small-Molecule BMP Sensitizer for Human Embryonic Stem Cell Differentiation. 2016 , 15, 2063-75	12
1823	Class I Histone Deacetylase HDAC1 and WRN RECQ Helicase Contribute Additively to Protect Replication Forks upon Hydroxyurea-induced Arrest. 2016 , 291, 24487-24503	14
1822	Aldehyde dehydrogenase activity plays a Key role in the aggressive phenotype of neuroblastoma. 2016 , 16, 781	32
1821	Genome-Editing Technologies: Principles and Applications. 2016 , 8,	120
1820	Minimal genome: Worthwhile or worthless efforts toward being smaller?. 2016 , 11, 199-211	29
1819	Human iPSC-Derived Neuronal Model of Tau-A152T Frontotemporal Dementia Reveals Tau-Mediated Mechanisms of Neuronal Vulnerability. 2016 , 7, 325-340	68
1818	CRISPR-Cas9 gene editing: Delivery aspects and therapeutic potential. 2016 , 244, 139-148	37
1817	Methods for Optimizing CRISPR-Cas9 Genome Editing Specificity. 2016 , 63, 355-70	190
1816	Diverse evolutionary roots and mechanistic variations of the CRISPR-Cas systems. <i>Science</i> , 2016 , 353, aad5147	33.3 378
1815	Inhibition of histone deacetylase reduces transcription of NADPH oxidases and ROS production and ameliorates pulmonary arterial hypertension. 2016 , 99, 167-178	64
1814	Functional Toxicogenomic Assessment of Triclosan in Human HepG2 Cells Using Genome-Wide CRISPR-Cas9 Screening. 2016 , 50, 10682-10692	35
1813	CRISPR/Cas9 genome editing in human pluripotent stem cells: Harnessing human genetics in a dish. 2016 , 245, 788-806	14
1812	High-throughput Phenotyping of Lung Cancer Somatic Mutations. 2016 , 30, 214-228	119

1811	Generation and application of mammalian haploid embryonic stem cells. 2016 , 280, 236-45	18
1810	Application of CRISPR-Cas system in gene therapy: Pre-clinical progress in animal model. 2016 , 46, 1-8	6
1809	A Sorghum Mutant Resource as an Efficient Platform for Gene Discovery in Grasses. 2016 , 28, 1551-62	68
1808	Genetic Engineering in Stem Cell Biomanufacturing. 2016 , 1-25	
1807	Valosin-containing protein (VCP)-Adaptor Interactions are Exceptionally Dynamic and Subject to Differential Modulation by a VCP Inhibitor. 2016 , 15, 2970-86	26
1806	Generation of porcine fetal fibroblasts expressing the tetracycline-inducible Cas9 gene by somatic cell nuclear transfer. 2016 , 14, 2527-33	4
1805	CRISPR-Cas9 mediated genetic engineering for the purification of the endogenous integrator complex from mammalian cells. 2016 , 128, 101-8	9
1804	Development of the Theta Comparative Cell Scoring Method to Quantify Diverse Phenotypic Responses Between Distinct Cell Types. 2016 , 14, 395-406	14
1803	An Ebola Virus-Like Particle-Based Reporter System Enables Evaluation of Antiviral Drugs In Vivo under Non-Biosafety Level 4 Conditions. 2016 , 90, 8720-8	13
1802	Genome Editing with Targetable Nucleases. 2016 , 1-29	
1801	MAPK kinase signalling dynamics regulate cell fate decisions and drug resistance. 2016 , 41, 151-158	56
1800	Comprehensive Protocols for CRISPR/Cas9-based Gene Editing in Human Pluripotent Stem Cells. 2016 , 38, 5B.6.1-5B.6.60	23
1799	Research Techniques Made Simple: The Application of CRISPR-Cas9 and Genome Editing in Investigative Dermatology. 2016 , 136, e87-e93	9
1798	Back to the Future: Mutant Hunts Are Still the Way To Go. 2016 , 203, 1007-10	5
1797	Patterns of ribosomal protein expression specify normal and malignant human cells. 2016 , 17, 236	97
1796	CRISPR/cas9, a novel genomic tool to knock down microRNA in vitro and in vivo. 2016 , 6, 22312	127
1795	Genetic dissection of mammalian ERAD through comparative haploid and CRISPR forward genetic screens. 2016 , 7, 11786	48
1794	TFEB and TFE3 are novel components of the integrated stress response. 2016 , 35, 479-95	151

1793	Using genome-wide CRISPR library screening with library resistant DCK to find new sources of Ara-C drug resistance in AML. 2016 , 6, 36199	31
1792	CRISPR-Cas9 technology and its application in haematological disorders. 2016 , 175, 208-225	15
1791	Suppressed translation and ULK1 degradation as potential mechanisms of autophagy limitation under prolonged starvation. 2016 , 12, 2085-2097	19
1790	Determining antigen specificity of a monoclonal antibody using genome-scale CRISPR-Cas9 knockout library. 2016 , 439, 8-14	7
1789	CRISPR-Cas9 therapeutics in cancer: promising strategies and present challenges. 2016 , 1866, 197-207	36
1788	Characterization of vitamin K-dependent carboxylase mutations that cause bleeding and nonbleeding disorders. 2016 , 127, 1847-55	34
1787	Methods of Genome Engineering: a New Era of Molecular Biology. 2016 , 81, 662-77	5
1786	Practical Considerations for Using Pooled Lentiviral CRISPR Libraries. 2016 , 115, 31.5.1-31.5.13	11
1785	E3 ubiquitin ligase Cbl-b negatively regulates C-type lectin receptor-mediated antifungal innate immunity. 2016 , 213, 1555-70	32
1784	CRISPR/Cas9 Screens Reveal Requirements for Host Cell Sulfation and Fucosylation in Bacterial Type III Secretion System-Mediated Cytotoxicity. 2016 , 20, 226-37	45
1783	A USP28-53BP1-p53-p21 signaling axis arrests growth after centrosome loss or prolonged mitosis. 2016 , 214, 143-53	112
1782	The present and future of genome editing in cancer research. 2016 , 135, 1083-92	9
1781	Signaling in dopamine D2 receptor-oxytocin receptor heterocomplexes and its relevance for the anxiolytic effects of dopamine and oxytocin interactions in the amygdala of the rat. 2016 , 1862, 2075-2085	30
1780	CRISPR/Cas9 in locusts: Successful establishment of an olfactory deficiency line by targeting the mutagenesis of an odorant receptor co-receptor (Orco). 2016 , 79, 27-35	77
1779	CRISPR-Cas9 System as a Versatile Tool for Genome Engineering in Human Cells. 2016 , 5, e388	20
1778	Inhibition of JCPyV infection mediated by targeted viral genome editing using CRISPR/Cas9. 2016 , 6, 36921	19
1777	A Modular Assembly Platform for Rapid Generation of DNA Constructs. 2016 , 6, 16836	34
1776	Increasing the performance of pooled CRISPR-Cas9 drop-out screening. 2016 , 6, 31782	21

1775	Delivery methods for site-specific nucleases: Achieving the full potential of therapeutic gene editing. 2016 , 244, 83-97		16
1774	Rapid and efficient CRISPR/Cas9 gene inactivation in human neurons during human pluripotent stem cell differentiation and direct reprogramming. 2016 , 6, 37540		29
1773	The Molecular Genetics of Autosomal Recessive Nonsyndromic Intellectual Disability: a Mutational Continuum and Future Recommendations. 2016 , 80, 342-368		13
1772	An interactive web-based application for Comprehensive Analysis of RNAi-screen Data. 2016 , 7, 10578		10
1771	Making the cut in the dark genome. <i>Science</i> , 2016 , 354, 705-706	33.3	2
1770	Functional Genomic Characterization of Cancer Genomes. 2016 , 81, 237-246		11
1769	A Molecular Chipper technology for CRISPR sgRNA library generation and functional mapping of noncoding regions. 2016 , 7, 11178		12
1768	Activation of concurrent apoptosis and necroptosis by SMAC mimetics for the treatment of refractory and relapsed ALL. 2016 , 8, 339ra70		72
1767	SIRT7 is a histone desuccinylase that functionally links to chromatin compaction and genome stability. 2016 , 7, 12235		179
1766	The epigenetic landscape of T cell exhaustion. <i>Science</i> , 2016 , 354, 1165-1169	33.3	485
1765	Endonuclease mediated genome editing in drug discovery and development: promises and challenges. 2016 , 21-22, 17-25		1
1764	Zebrafish Genome Engineering Using the CRISPR-Cas9 System. 2016 , 32, 815-827		93
1763	A CRISPR Dropout Screen Identifies Genetic Vulnerabilities and Therapeutic Targets in Acute Myeloid Leukemia. 2016 , 17, 1193-1205		331
1762	A genome-scale CRISPR-Cas9 screening method for protein stability reveals novel regulators of Cdc25A. 2016 , 2, 16014		21
1761	CRISPR/Cas in genome defense and gene editing. 2016 , 9, 68-74		
1760	CNS disease models with human pluripotent stem cells in the CRISPR age. 2016 , 43, 96-103		17
1759	Shigella flexneri suppresses NF- κ B activation by inhibiting linear ubiquitin chain ligation. 2016 , 1, 16084		58
1758	Different Effects of sgRNA Length on CRISPR-mediated Gene Knockout Efficiency. 2016 , 6, 28566		51

1757	Genome-wide CRISPR screen reveals novel host factors required for Staphylococcus aureus Hemolysin-mediated toxicity. 2016 , 6, 24242	50
1756	Genome-scale deletion screening of human long non-coding RNAs using a paired-guide RNA CRISPR-Cas9 library. 2016 , 34, 1279-1286	269
1755	Distinct effects of α integrin on cell proliferation and cellular signaling in MDA-MB-231 breast cancer cells. 2016 , 6, 18430	41
1754	Advances in peripheral nerve regeneration as it relates to VCA. 2016 , 3, 75-88	2
1753	High-throughput CRISPR Vector Construction and Characterization of DNA Modifications by Generation of Tomato Hairy Roots. 2016 ,	17
1752	Death receptor-based enrichment of Cas9-expressing cells. 2016 , 16, 17	9
1751	The minimal genome comes of age. 2016 , 34, 623-4	11
1750	Comparing CRISPR and RNAi-based screening technologies. 2016 , 34, 621-3	24
1749	Versatile in vivo regulation of tumor phenotypes by dCas9-mediated transcriptional perturbation. 2016 , 113, E3892-900	76
1748	A CRISPR screen defines a signal peptide processing pathway required by flaviviruses. 2016 , 535, 164-8	249
1747	Genetic dissection of Flaviviridae host factors through genome-scale CRISPR screens. 2016 , 535, 159-63	265
1746	Insert, remove or replace: A highly advanced genome editing system using CRISPR/Cas9. 2016 , 1863, 2333-44	66
1745	Design and Implementation of High-Throughput Screening Assays. 2016 , 1439, 1-32	10
1744	cGAS-STING Signaling Regulates Initial Innate Control of Cytomegalovirus Infection. 2016 , 90, 7789-97	81
1743	Site-Directed Genome Knockout in Chicken Cell Line and Embryos Can Use CRISPR/Cas Gene Editing Technology. 2016 , 6, 1787-92	20
1742	Spermatogonial stem cell autotransplantation and germline genomic editing: a future cure for spermatogenic failure and prevention of transmission of genomic diseases. 2016 , 22, 561-73	44
1741	Global Analysis of Cellular Protein Flux Quantifies the Selectivity of Basal Autophagy. 2016 , 14, 2426-39	44
1740	Novel Immunotherapeutic Approaches to the Treatment of Cancer. 2016 ,	1

1739	CRISPR/Cas9: From Genome Engineering to Cancer Drug Discovery. 2016 , 2, 313-324	32
1738	Genomic Copy Number Dictates a Gene-Independent Cell Response to CRISPR/Cas9 Targeting. 2016 , 6, 914-29	343
1737	Requirements for comprehensive pharmacogenetic genotyping platforms. 2016 , 17, 917-24	30
1736	BAGEL: a computational framework for identifying essential genes from pooled library screens. 2016 , 17, 164	124
1735	CD44-mediated monocyte transmigration across <i>Cryptococcus neoformans</i> -infected brain microvascular endothelial cells is enhanced by HIV-1 gp41-I90 ectodomain. 2016 , 23, 28	16
1734	Express photolithographic DNA microarray synthesis with optimized chemistry and high-efficiency photolabile groups. 2016 , 14, 14	28
1733	Cancer Drug Development Using <i>Drosophila</i> as an in vivo Tool: From Bedside to Bench and Back. 2016 , 37, 789-806	46
1732	The CENP-T/-W complex is a binding partner of the histone chaperone FACT. 2016 , 30, 1313-26	34
1731	Spatiotemporal variation of nitrate uptake kinetics within the maize (<i>Zea mays</i> L.) root system is associated with greater nitrate uptake and interactions with architectural phenes. 2016 , 67, 3763-75	35
1730	Emerging Mitochondrial Therapeutic Targets in Optic Neuropathies. 2016 , 165, 132-52	46
1729	The Biology Complicated by Genetic Analysis. 2016 , 33, 2177-81	3
1728	Genetic screens to study the immune system in cancer. 2016 , 41, 55-61	13
1727	Heat shock proteins in hepatocellular carcinoma: Molecular mechanism and therapeutic potential. 2016 , 138, 1824-34	64
1726	Identification of Zika Virus and Dengue Virus Dependency Factors using Functional Genomics. 2016 , 16, 232-246	252
1725	Targeting the serrated pathway of colorectal cancer with mutation in BRAF. 2016 , 1866, 51-63	6
1724	Complex Interplay between HIV-1 Capsid and MX2-Independent Alpha Interferon-Induced Antiviral Factors. 2016 , 90, 7469-7480	23
1723	Expanding CRISPR/Cas9 Genome Editing Capacity in Zebrafish Using SaCas9. 2016 , 6, 2517-21	11
1722	Cellular Therapies: Gene Editing and Next-Gen CAR T Cells. 2016 , 203-247	1


1721	Off-target effects of engineered nucleases. 2016 , 283, 3239-48	51
1720	High-throughput mapping of regulatory DNA. 2016 , 34, 167-74	165
1719	Expression of N-Acetylglucosaminyltransferase III Suppresses α 3-Sialylation, and Its Distinctive Functions in Cell Migration Are Attributed to α 6-Sialylation Levels. 2016 , 291, 5708-5720	34
1718	Development and potential applications of CRISPR-Cas9 genome editing technology in sarcoma. 2016 , 373, 109-118	24
1717	A new class of temporarily phenotypic enhancers identified by CRISPR/Cas9-mediated genetic screening. 2016 , 26, 397-405	86
1716	Acute myeloid leukemia requires Hhex to enable PRC2-mediated epigenetic repression of Cdkn2a. 2016 , 30, 78-91	20
1715	High-Content Analysis of CRISPR-Cas9 Gene-Edited Human Embryonic Stem Cells. 2016 , 6, 109-20	19
1714	CRISPR-Based Typing and Next-Generation Tracking Technologies. 2016 , 7, 395-411	47
1713	Optimized sgRNA design to maximize activity and minimize off-target effects of CRISPR-Cas9. 2016 , 34, 184-191	1790
1712	Beyond editing: repurposing CRISPR-Cas9 for precision genome regulation and interrogation. 2016 , 17, 5-15	538
1711	CRISPR-Cas9 for medical genetic screens: applications and future perspectives. 2016 , 53, 91-7	30
1710	Towards a compendium of essential genes - From model organisms to synthetic lethality in cancer cells. 2016 , 51, 74-85	30
1709	Modeling Alzheimer's disease with human induced pluripotent stem (iPS) cells. 2016 , 73, 13-31	67
1708	Cytokines in cancer drug resistance: Cues to new therapeutic strategies. 2016 , 1865, 255-65	91
1707	Establishment of a highly efficient virus-inducible CRISPR/Cas9 system in insect cells. 2016 , 130, 50-7	36
1706	Cellular Engineering and Disease Modeling with Gene-Editing Nucleases. 2016 , 223-258	1
1705	Integrative clustering methods of multi-omics data for molecule-based cancer classifications. 2016 , 4, 58-67	37
1704	Smoothed determines β arrestin-mediated removal of the G protein-coupled receptor Gpr161 from the primary cilium. 2016 , 212, 861-75	82

1703	CRISPR library designer (CLD): software for multispecies design of single guide RNA libraries. 2016 , 17, 55	47
1702	NCG 5.0: updates of a manually curated repository of cancer genes and associated properties from cancer mutational screenings. 2016 , 44, D992-9	77
1701	Parallel shRNA and CRISPR-Cas9 screens enable antiviral drug target identification. 2016 , 12, 361-6	123
1700	A novel sgRNA selection system for CRISPR-Cas9 in mammalian cells. 2016 , 471, 528-32	7
1699	Understanding Spatial Genome Organization: Methods and Insights. 2016 , 14, 7-20	34
1698	Cell membranes: A subjective perspective. 2016 , 1858, 2569-2572	30
1697	Multiplexed barcoded CRISPR-Cas9 screening enabled by CombiGEM. 2016 , 113, 2544-9	149
1696	Activation of RNase L is dependent on OAS3 expression during infection with diverse human viruses. 2016 , 113, 2241-6	141
1695	The ERK cascade inhibitors: Towards overcoming resistance. 2016 , 25, 1-12	48
1694	Efficient Genome Editing in Chicken DF-1 Cells Using the CRISPR/Cas9 System. 2016 , 6, 917-23	19
1693	Post-translational Regulation of Cas9 during G1 Enhances Homology-Directed Repair. 2016 , 14, 1555-1566	175
1692	Mapping regulatory elements. 2016 , 34, 151-2	2
1691	Identification and Characterization of a Novel Broad-Spectrum Virus Entry Inhibitor. 2016 , 90, 4494-4510	21
1690	Hypoxia as a therapy for mitochondrial disease. <i>Science</i> , 2016 , 352, 54-61	33.3 251
1689	Organoids as Models for Neoplastic Transformation. 2016 , 11, 199-220	50
1688	Cas-Database: web-based genome-wide guide RNA library design for gene knockout screens using CRISPR-Cas9. 2016 , 32, 2017-23	28
1687	TRIM9 short isoform preferentially promotes DNA and RNA virus-induced production of type I interferon by recruiting GSK3 β to TBK1. 2016 , 26, 613-28	48
1686	Genome Editing. 2016 ,	

1685	Functional Genomic Strategies for Elucidating Human-Virus Interactions: Will CRISPR Knockout RNAi and Haploid Cells?. 2016 , 94, 1-51	22
1684	Chemical Biology Approaches to Genome Editing: Understanding, Controlling, and Delivering Programmable Nucleases. 2016 , 23, 57-73	35
1683	Large-Scale Single Guide RNA Library Construction and Use for CRISPR-Cas9-Based Genetic Screens. 2016 , 2016, pdb.top086892	10
1682	Targeted candidate gene screens using CRISPR/Cas9 technology. 2016 , 135, 89-106	15
1681	The Mediator Kinase Module Restrains Epidermal Growth Factor Receptor Signaling and Represses Vulval Cell Fate Specification in <i>Caenorhabditis elegans</i> . 2016 , 202, 583-99	10
1680	CRISPR Interference Efficiently Induces Specific and Reversible Gene Silencing in Human iPSCs. 2016 , 18, 541-53	271
1679	Thrombin-Mediated Direct Activation of Proteinase-Activated Receptor-2: Another Target for Thrombin Signaling. 2016 , 89, 606-14	53
1678	Quantitative CRISPR interference screens in yeast identify chemical-genetic interactions and new rules for guide RNA design. 2016 , 17, 45	110
1677	Advances in identification and validation of protein targets of natural products without chemical modification. 2016 , 33, 719-30	64
1676	Emerging roles for lipids in non-apoptotic cell death. 2016 , 23, 1099-109	120
1675	The Development and Use of Zinc-Finger Nucleases. 2016 , 15-28	2
1674	In vivo gene editing in dystrophic mouse muscle and muscle stem cells. <i>Science</i> , 2016 , 351, 407-411	333 711
1673	Essential role of protein kinase R antagonism by TRS1 in human cytomegalovirus replication. 2016 , 489, 75-85	17
1672	Genetic Transformation for Quality Improvement in Ornamental Climbers. 2016 , 351-365	0
1671	Contribution of Biotechnological Tools in the Enhancement of Secondary Metabolites in Selected Medicinal Climbers. 2016 , 465-486	2
1670	Genome Editing in Human Pluripotent Stem Cells: Approaches, Pitfalls, and Solutions. 2016 , 18, 53-65	81
1669	Functional genetic screens for enhancer elements in the human genome using CRISPR-Cas9. 2016 , 34, 192-8	264
1668	CRISPR Technology for Genome Activation and Repression in Mammalian Cells. 2016 , 2016, pdb.prot090175	16

1667	Deregulated KLF4 Expression in Myeloid Leukemias Alters Cell Proliferation and Differentiation through MicroRNA and Gene Targets. 2016 , 36, 559-73	25
1666	Multi-gene engineering in plants with RNA-guided Cas9 nuclease. 2016 , 37, 69-75	24
1665	CRISPR/Cas9 DNA cleavage at SNP-derived PAM enables both in vitro and in vivo KRT12 mutation-specific targeting. 2016 , 23, 108-12	82
1664	Creating and evaluating accurate CRISPR-Cas9 scalpels for genomic surgery. 2016 , 13, 41-50	84
1663	Biotechnological strategies for the conservation of medicinal and ornamental climbers. 2016 ,	9
1662	DCAF1 controls T-cell function via p53-dependent and -independent mechanisms. 2016 , 7, 10307	15
1661	The resurgence of phenotypic screening in drug discovery and development. 2016 , 11, 121-5	32
1660	Enhanced Store-Operated Calcium Entry Leads to Striatal Synaptic Loss in a Huntington's Disease Mouse Model. 2016 , 36, 125-41	91
1659	CRISPR-Cas9-based target validation for p53-reactivating model compounds. 2016 , 12, 22-8	54
1658	A Genome-wide CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) Screen Identifies NEK7 as an Essential Component of NLRP3 Inflammasome Activation. 2016 , 291, 103-9	262
1657	Definitive localization of intracellular proteins: Novel approach using CRISPR-Cas9 genome editing, with glucose 6-phosphate dehydrogenase as a model. 2016 , 494, 55-67	4
1656	Identification of an "Exceptional Responder" Cell Line to MEK1 Inhibition: Clinical Implications for MEK-Targeted Therapy. 2016 , 14, 207-15	16
1655	Interferon but not MxB inhibits foamy retroviruses. 2016 , 488, 51-60	19
1654	LMO2 Oncoprotein Stability in T-Cell Leukemia Requires Direct LDB1 Binding. 2016 , 36, 488-506	4
1653	Nanomedicine-mediated cancer stem cell therapy. 2016 , 74, 1-18	100
1652	caRools: an R package for exploratory data analysis and documentation of pooled CRISPR/Cas9 screens. 2016 , 32, 632-4	46
1651	Modulation of Mitochondrial Antiviral Signaling by Human Herpesvirus 8 Interferon Regulatory Factor 1. 2016 , 90, 506-20	20
1650	iPSC-based drug screening for Huntington's disease. 2016 , 1638, 42-56	23

1649	Genetic screening reveals a link between Wnt signaling and antitubulin drugs. 2016 , 16, 164-72	6
1648	Role of Merlin/NF2 inactivation in tumor biology. 2016 , 35, 537-48	171
1647	Application of CRISPR-mediated genome engineering in cancer research. 2017 , 387, 10-17	11
1646	Plant-pathogen interactions: toward development of next-generation disease-resistant plants. 2017 , 37, 229-237	45
1645	FGFR3-TACC3 fusion proteins act as naturally occurring drivers of tumor resistance by functionally substituting for EGFR/ERK signaling. 2017 , 36, 471-481	33
1644	The applications of CRISPR screen in functional genomics. 2017 , 16, 34-37	4
1643	Applications of the CRISPR/Cas9 system in murine cancer modeling. 2017 , 16, 25-33	11
1642	Emerging roles for long noncoding RNAs in skeletal biology and disease. 2017 , 58, 116-141	67
1641	Genome-scale CRISPR pooled screens. 2017 , 532, 95-99	35
1640	Studying human disease using human neurons. 2017 , 1656, 40-48	8
1639	Sam68 is a regulator of Toll-like receptor signaling. 2017 , 14, 107-117	9
1638	Pooled CRISPR screening with single-cell transcriptome readout. 2017 , 14, 297-301	435
1637	The commercialization of genome-editing technologies. 2017 , 37, 924-932	52
1636	High Rab11-FIP4 expression predicts poor prognosis and exhibits tumor promotion in pancreatic cancer. 2017 , 50, 396-404	10
1635	Genome engineering of stem cell organoids for disease modeling. 2017 , 8, 315-327	23
1634	Acetylation Enhances TET2 Function in Protecting against Abnormal DNA Methylation during Oxidative Stress. 2017 , 65, 323-335	86
1633	Fully Automated One-Step Synthesis of Single-Transcript TALEN Pairs Using a Biological Foundry. 2017 , 6, 678-685	27
1632	Synthetic lethality: emerging targets and opportunities in melanoma. 2017 , 30, 183-193	11

1631	CRISPR/Cas9-Mediated Deletion of C1EIS Inhibits Chicken Embryonic Stem Cell Differentiation Into Male Germ Cells (<i>Gallus gallus</i>). 2017 , 118, 2380-2386	5
1630	An Argonaute phosphorylation cycle promotes microRNA-mediated silencing. 2017 , 542, 197-202	140
1629	piggyBac mediates efficient in vivo CRISPR library screening for tumorigenesis in mice. 2017 , 114, 722-727	59
1628	PAF53 is essential in mammalian cells: CRISPR/Cas9 fails to eliminate PAF53 expression. 2017 , 612, 55-60	3
1627	Targeting SAMHD1 with the Vpx protein to improve cytarabine therapy for hematological malignancies. 2017 , 23, 256-263	69
1626	Development of a genome-editing CRISPR/Cas9 system in thermophilic fungal species and its application to hyper-cellulase production strain engineering. 2017 , 10, 1	305
1625	Modulated DISP3/PTCHD2 expression influences neural stem cell fate decisions. 2017 , 7, 41597	9
1624	Cas9, Cpf1 and C2c1/2/3-What's next?. 2017 , 8, 265-273	58
1623	PAX3-FOXO1 is essential for tumour initiation and maintenance but not recurrence in a human myoblast model of rhabdomyosarcoma. 2017 , 241, 626-637	32
1622	Gene Essentiality Profiling Reveals Gene Networks and Synthetic Lethal Interactions with Oncogenic Ras. 2017 , 168, 890-903.e15	359
1621	Laboratory of genetics and physiology 2 (LGP2) plays an essential role in hepatitis C virus infection-induced interferon responses. 2017 , 65, 1478-1491	21
1620	Application of the CRISPR gene-editing technique in insect functional genome studies  review. 2017 , 162, 124-132	15
1619	Decoding transcriptional states in cancer. 2017 , 43, 82-92	5
1618	Genome-Scale Networks Link Neurodegenerative Disease Genes to β Synuclein through Specific Molecular Pathways. 2017 , 4, 157-170.e14	76
1617	Strain Development by Whole-Cell Directed Evolution. 2017 , 173-200	2
1616	Genome Editing Reveals Glioblastoma Addiction to MicroRNA-10b. 2017 , 25, 368-378	50
1615	A stable but reversible integrated surrogate reporter for assaying CRISPR/Cas9-stimulated homology-directed repair. 2017 , 292, 6148-6162	9
1614	A Systematic Evaluation of Methods for Tailoring Genome-Scale Metabolic Models. 2017 , 4, 318-329.e6	107

1613	Method for Dual Viral Vector Mediated CRISPR-Cas9 Gene Disruption in Primary Human Endothelial Cells. 2017 , 7, 42127	19
1612	Large-Scale Analysis of CRISPR/Cas9 Cell-Cycle Knockouts Reveals the Diversity of p53-Dependent Responses to Cell-Cycle Defects. 2017 , 40, 405-420.e2	105
1611	Reprogramming cell fates by small molecules. 2017 , 8, 328-348	64
1610	Variant-aware saturating mutagenesis using multiple Cas9 nucleases identifies regulatory elements at trait-associated loci. 2017 , 49, 625-634	73
1609	High-throughput in situ cell electroporation microsystem for parallel delivery of single guide RNAs into mammalian cells. 2017 , 7, 42512	21
1608	Loss of Pin1 Suppresses Hedgehog-Driven Medulloblastoma Tumorigenesis. 2017 , 19, 216-225	7
1607	Modern Genome Editing Technologies in Huntington's Disease Research. 2017 , 6, 19-31	16
1606	Application of CRISPR/Cas9 to Autophagy Research. 2017 , 588, 79-108	20
1605	Linking Protein and RNA Function within the Same Gene. 2017 , 168, 753-755	2
1604	Transcription control by the ENL YEATS domain in acute leukaemia. 2017 , 543, 270-274	159
1603	MC1R signaling. Intracellular partners and pathophysiological implications. 2017 , 1863, 2448-2461	57
1602	Genome-wide barcoded transposon screen for cancer drug sensitivity in haploid mouse embryonic stem cells. 2017 , 4, 170020	11
1601	Identification of apilimod as a first-in-class PIKfyve kinase inhibitor for treatment of B-cell non-Hodgkin lymphoma. 2017 , 129, 1768-1778	91
1600	Erythroid specific activator GATA-1-dependent interactions between CTCF sites around the Eglobin locus. 2017 , 1860, 416-426	12
1599	ACSS2-mediated acetyl-CoA synthesis from acetate is necessary for human cytomegalovirus infection. 2017 , 114, E1528-E1535	32
1598	Activation of c-Abl Kinase Potentiates the Anti-myeloma Drug Lenalidomide by Promoting DDA1 Protein Recruitment to the CRL4 Ubiquitin Ligase. 2017 , 292, 3683-3691	6
1597	A genetic interaction analysis identifies cancer drivers that modify EGFR dependency. 2017 , 31, 184-196	42
1596	The mitogen-activated protein kinase pathway in melanoma part I - Activation and primary resistance mechanisms to BRAF inhibition. 2017 , 73, 85-92	67

1595	What rheumatologists need to know about CRISPR/Cas9. 2017 , 13, 205-216	14
1594	ATXN1L, CIC, and ETS Transcription Factors Modulate Sensitivity to MAPK Pathway Inhibition. 2017 , 18, 1543-1557	60
1593	Hetero-oligomerization between the TNF receptor superfamily members CD40, Fas and TRAILR2 modulate CD40 signalling. 2017 , 8, e2601	19
1592	Gene Editing With CRISPR/Cas9 RNA-Directed Nuclease. 2017 , 120, 876-894	49
1591	GuideScan software for improved single and paired CRISPR guide RNA design. 2017 , 35, 347-349	119
1590	Seasonal distribution of archaeal lipids in surface water and its constraint on their sources and the TEX86 temperature proxy in sediments of the South China Sea. 2017 , 122, 592-606	19
1589	Clustered, Regularly Interspaced Short Palindromic Repeats (CRISPR)/Cas9-coupled Affinity Purification/Mass Spectrometry Analysis Revealed a Novel Role of Neurofibromin in mTOR Signaling. 2017 , 16, 594-607	6
1588	PNPLA5-knockout rats induced by CRISPR/Cas9 exhibit abnormal bleeding and lipid level. 2017 , 16, 169-180	4
1587	A New Mode of Mitotic Surveillance. 2017 , 27, 314-321	38
1586	Therapeutic genome engineering via CRISPR-Cas systems. 2017 , 9, e1380	17
1585	Muscle-specific CRISPR/Cas9 dystrophin gene editing ameliorates pathophysiology in a mouse model for Duchenne muscular dystrophy. 2017 , 8, 14454	225
1584	Molecular Biology, Genomics, Proteomics, and Mouse Models of Human Cancer. 2017 , 1-31	
1583	Responsive Nanocarriers as an Emerging Platform for Cascaded Delivery of Nucleic Acids to Cancer. 2017 , 115, 98-114	76
1582	Single-minded CRISPR screening. 2017 , 35, 339-340	4
1581	A functional screening of the kinome identifies the Polo-like kinase 4 as a potential therapeutic target for malignant rhabdoid tumors, and possibly, other embryonal tumors of the brain. 2017 , 64, e26551	21
1580	Genome editing: a robust technology for human stem cells. 2017 , 74, 3335-3346	9
1579	CRISPR/Cas9: Transcending the Reality of Genome Editing. 2017 , 7, 211-222	63
1578	An efficient method to enrich for knock-out and knock-in cellular clones using the CRISPR/Cas9 system. 2017 , 74, 3413-3423	7

1577	Maturation of secreted HCV particles by incorporation of secreted ApoE protects from antibodies by enhancing infectivity. 2017 , 67, 480-489	38
1576	Advancing chimeric antigen receptor T cell therapy with CRISPR/Cas9. 2017 , 8, 634-643	64
1575	Enhancing the throughput and multiplexing capabilities of next generation sequencing for efficient implementation of pooled shRNA and CRISPR screens. 2017 , 7, 1040	4
1574	PRDM16 represses the type I interferon response in adipocytes to promote mitochondrial and thermogenic programming. 2017 , 36, 1528-1542	35
1573	Down-regulation of miR-214 reverses erlotinib resistance in non-small-cell lung cancer through up-regulating LHX6 expression. 2017 , 7, 781	26
1572	Apigenin, a modulator of PPAR α attenuates HFD-induced NAFLD by regulating hepatocyte lipid metabolism and oxidative stress via Nrf2 activation. 2017 , 136, 136-149	102
1571	A CRISPR toolbox to study virus-host interactions. 2017 , 15, 351-364	99
1570	TIAM1 Antagonizes TAZ/YAP Both in the Destruction Complex in the Cytoplasm and in the Nucleus to Inhibit Invasion of Intestinal Epithelial Cells. 2017 , 31, 621-634.e6	51
1569	Advances in CRISPR-Cas based genome engineering. 2017 , 1, 78-86	4
1568	Integrase-Deficient Lentiviral Vector as an All-in-One Platform for Highly Efficient CRISPR/Cas9-Mediated Gene Editing. 2017 , 5, 153-164	66
1567	Single-cell CRISPR screening in drug resistance. 2017 , 33, 207-210	24
1566	A lentivirus-free inducible CRISPR-Cas9 system for efficient targeting of human genes. 2017 , 530, 40-49	4
1565	p53 Maintains Baseline Expression of Multiple Tumor Suppressor Genes. 2017 , 15, 1051-1062	39
1564	Use of CRISPR/Cas9 for Symbiotic Nitrogen Fixation Research in Legumes. 2017 , 149, 187-213	16
1563	Transplantation of engineered organoids enables rapid generation of metastatic mouse models of colorectal cancer. 2017 , 35, 577-582	137
1562	Elucidating drug targets and mechanisms of action by genetic screens in mammalian cells. 2017 , 53, 7162-7167.20	
1561	CRISPR Editing in Biological and Biomedical Investigation. 2017 , 118, 4152-4162	5
1560	Hybrid Cellular Metabolism Coordinated by Zic3 and Esrrb Synergistically Enhances Induction of Naive Pluripotency. 2017 , 25, 1103-1117.e6	51

1559	Automated multiplex genome-scale engineering in yeast. 2017 , 8, 15187	114
1558	Genome-scale measurement of off-target activity using Cas9 toxicity in high-throughput screens. 2017 , 8, 15178	148
1557	The CRISPR/Cas9 system: Their delivery, in vivo and ex vivo applications and clinical development by startups. 2017 , 33, 1035-1045	27
1556	CRISPR/Cas9-mediated gene knockout screens and target identification via whole-genome sequencing uncover host genes required for picornavirus infection. 2017 , 292, 10664-10671	27
1555	Developmental history and application of CRISPR in human disease. 2017 , 19, e2963	6
1554	CRISPR-STOP: gene silencing through base-editing-induced nonsense mutations. 2017 , 14, 710-712	202
1553	Integrated Microfluidic System for Gene Silencing and Cell Migration. 2017 , 1, 1700054	10
1552	Widespread Influence of 3'-End Structures on Mammalian mRNA Processing and Stability. 2017 , 169, 905-917.e11	69
1551	Exome Sequencing of African-American Prostate Cancer Reveals Loss-of-Function Mutations. 2017 , 7, 973-983	65
1550	Non-viral and viral delivery systems for CRISPR-Cas9 technology in the biomedical field. 2017 , 60, 458-467	33
1549	A platform for functional assessment of large variant libraries in mammalian cells. 2017 , 45, e102	46
1548	A Genome-Wide CRISPR Screen Identifies Genes Critical for Resistance to FLT3 Inhibitor AC220. 2017 , 77, 4402-4413	37
1547	Disruptive non-disruptive applications of CRISPR/Cas9. 2017 , 48, 203-209	6
1546	Phenotype databases for genetic screens in human cells. 2017 , 261, 63-69	9
1545	Genome-wide Targeted Mutagenesis in Rice Using the CRISPR/Cas9 System. 2017 , 10, 1242-1245	132
1544	Inhibition of androgen receptor promotes CXCR7-mediated prostate cancer cell survival. 2017 , 7, 3058	13
1543	Dynamic balance between master transcription factors determines the fates and functions of CD4 T cell and innate lymphoid cell subsets. 2017 , 214, 1861-1876	106
1542	CRISPRcloud: a secure cloud-based pipeline for CRISPR pooled screen deconvolution. 2017 , 33, 2963-2965	19

1541	CRISPR/Cas9-Based Genome Editing for Disease Modeling and Therapy: Challenges and Opportunities for Nonviral Delivery. 2017 , 117, 9874-9906	287
1540	Generation of a Collection of Mutant Tomato Lines Using Pooled CRISPR Libraries. 2017 , 174, 2023-2037	55
1539	Progress and Application of CRISPR/Cas Technology in Biological and Biomedical Investigation. 2017 , 118, 3061-3071	6
1538	An efficient method to generate conditional knockout cell lines for essential genes by combination of auxin-inducible degron tag and CRISPR/Cas9. 2017 , 25, 253-260	18
1537	Promise of adeno-associated virus as a gene therapy vector for cardiovascular diseases. 2017 , 22, 795-823	5
1536	Deletion of the Bombyx mori odorant receptor co-receptor (BmOrco) impairs olfactory sensitivity in silkworms. 2017 , 86, 58-67	50
1535	Engineering biological systems using automated biofoundries. 2017 , 42, 98-108	97
1534	Hyperactivation of HUSH complex function by Charcot-Marie-Tooth disease mutation in MORC2. 2017 , 49, 1035-1044	65
1533	Understanding neurodevelopmental disorders using human pluripotent stem cell-derived neurons. 2017 , 27, 508-517	6
1532	Challenges and progress in interpretation of non-coding genetic variants associated with human disease. 2017 , 242, 1325-1334	20
1531	Optimizing complex phenotypes through model-guided multiplex genome engineering. 2017 , 18, 100	18
1530	Therapeutic editing of hepatocyte genome in vivo. 2017 , 67, 818-828	16
1529	Hit and go CAS9 delivered through a lentiviral based self-limiting circuit. 2017 , 8, 15334	55
1528	Complementary information derived from CRISPR Cas9 mediated gene deletion and suppression. 2017 , 8, 15403	65
1527	cGAS is essential for cellular senescence. 2017 , 114, E4612-E4620	422
1526	CPS1 maintains pyrimidine pools and DNA synthesis in KRAS/LKB1-mutant lung cancer cells. 2017 , 546, 168-172	136
1525	UTX promotes hormonally responsive breast carcinogenesis through feed-forward transcription regulation with estrogen receptor. 2017 , 36, 5497-5511	23
1524	Treatable traits and therapeutic targets: Goals for systems biology in infectious disease. 2017 , 2, 140-146	23

1523	TRIM45 functions as a tumor suppressor in the brain via its E3 ligase activity by stabilizing p53 through K63-linked ubiquitination. 2017 , 8, e2831	24
1522	Enhancing the genome editing toolbox: genome wide CRISPR arrayed libraries. 2017 , 7, 2244	26
1521	De Novo Gene Expression Reconstruction in Space. 2017 , 23, 583-593	6
1520	Progress and perspective of biosynthetic platform for higher-order biofuels. 2017 , 80, 801-826	9
1519	Genome-wide CRISPR screen identifies HNRNPL as a prostate cancer dependency regulating RNA splicing. 2017 , 114, E5207-E5215	155
1518	System-level perturbations of cell metabolism using CRISPR/Cas9. 2017 , 46, 134-140	21
1517	CRISPR-Cas9 epigenome editing enables high-throughput screening for functional regulatory elements in the human genome. 2017 , 35, 561-568	241
1516	Mining the topography and dynamics of the 4D Nucleome to identify novel CNS drug pathways. 2017 , 123, 102-118	10
1515	Genome-scale CRISPR-Cas9 knockout and transcriptional activation screening. 2017 , 12, 828-863	459
1514	Identification of a Novel SYK/c-MYC/MALAT1 Signaling Pathway and Its Potential Therapeutic Value in Ewing Sarcoma. 2017 , 23, 4376-4387	34
1513	Evaluation and rational design of guide RNAs for efficient CRISPR/Cas9-mediated mutagenesis in Ciona. 2017 , 425, 8-20	38
1512	Functional variomics and network perturbation: connecting genotype to phenotype in cancer. 2017 , 18, 395-410	60
1511	Precision Genome Editing for Systems Biology I A Temporal Perspective. 2017 , 367-392	
1510	The AAV-mediated and RNA-guided CRISPR/Cas9 system for gene therapy of DMD and BMD. 2017 , 39, 547-556	23
1509	Applications of CRISPR genome editing technology in drug target identification and validation. 2017 , 12, 541-552	13
1508	A long history of equatorial deep-water upwelling in the Pacific Ocean. 2017 , 467, 1-9	20
1507	Genome Editing in Human Pluripotent Stem Cells. 2017 , 1590, 165-174	3
1506	Differential molecular regulation of processing and membrane expression of Type-I BMP receptors: implications for signaling. 2017 , 74, 2645-2662	6

1505	Explicit Modeling of siRNA-Dependent On- and Off-Target Repression Improves the Interpretation of Screening Results. 2017 , 4, 182-193.e4	16
1504	CRISPR/Cas9 editing of the genome for cancer modeling. 2017 , 121-122, 130-137	26
1503	Nrl knockdown by AAV-delivered CRISPR/Cas9 prevents retinal degeneration in mice. 2017 , 8, 14716	176
1502	PSMA redirects cell survival signaling from the MAPK to the PI3K-AKT pathways to promote the progression of prostate cancer. 2017 , 10,	33
1501	Progress towards precision functional genomics in cancer. 2017 , 2, 74-83	6
1500	Functional interrogation of non-coding DNA through CRISPR genome editing. 2017 , 121-122, 118-129	19
1499	Live cell imaging of low- and non-repetitive chromosome loci using CRISPR-Cas9. 2017 , 8, 14725	139
1498	Can gene editing and silencing technologies play a role in the treatment of head and neck cancer?. 2017 , 68, 9-19	6
1497	Selective Killing of SMARCA2- and SMARCA4-deficient Small Cell Carcinoma of the Ovary, Hypercalcemic Type Cells by Inhibition of EZH2: and Preclinical Models. 2017 , 16, 850-860	88
1496	Editing the genome of hiPSC with CRISPR/Cas9: disease models. 2017 , 28, 348-364	44
1495	Synergistic drug combinations for cancer identified in a CRISPR screen for pairwise genetic interactions. 2017 , 35, 463-474	275
1494	Potential of long non-coding RNAs in cancer patients: From biomarkers to therapeutic targets. 2017 , 140, 1955-1967	307
1493	Genetic modification of ER-Hoxb8 osteoclast precursors using CRISPR/Cas9 as a novel way to allow studies on osteoclast biology. 2017 , 101, 957-966	8
1492	Fluorescence Amplification Method for Forward Genetic Discovery of Factors in Human mRNA Degradation. 2017 , 65, 191-201	21
1491	Cornerstones of CRISPR-Cas in drug discovery and therapy. 2017 , 16, 89-100	274
1490	CRISPR/Cas9 system-mediated impairment of synaptobrevin/VAMP function in postmitotic hippocampal neurons. 2017 , 278, 57-64	2
1489	Rational Design of Selective Allosteric Inhibitors of PHGDH and Serine Synthesis with Anti-tumor Activity. 2017 , 24, 55-65	77
1488	Genome engineering in human pluripotent stem cells. 2017 , 15, 56-67	1

1487	Genome-Wide CRISPR Screen Identifies Regulators of Mitogen-Activated Protein Kinase as Suppressors of Liver Tumors in Mice. 2017 , 152, 1161-1173.e1		63
1486	Genome-wide mapping of mutations at single-nucleotide resolution for protein, metabolic and genome engineering. 2017 , 35, 48-55		217
1485	A genome-wide CRISPR screen identifies a restricted set of HIV host dependency factors. 2017 , 49, 193-203		197
1484	In vivo high-throughput profiling of CRISPR-Cpf1 activity. 2017 , 14, 153-159		199
1483	Quantitative approaches for investigating the spatial context of gene expression. 2017 , 9, e1369		27
1482	Affinity-Based Selectivity Profiling of an In-Class Selective Competitive Inhibitor of Acyl Protein Thioesterase 2. 2017 , 8, 215-220		7
1481	CRISPRi-based genome-scale identification of functional long noncoding RNA loci in human cells. <i>Science</i> , 2017 , 355,	33-3	404
1480	Targeted genome editing in a quail cell line using a customized CRISPR/Cas9 system. 2017 , 96, 1445-1450		13
1479	Decoding the role of regulatory element polymorphisms in complex disease. 2017 , 43, 38-45		21
1478	Induced pluripotent stem cell technology: a decade of progress. 2017 , 16, 115-130		701
1477	Rac3 regulates breast cancer invasion and metastasis by controlling adhesion and matrix degradation. 2017 , 216, 4331-4349		41
1476	Gene delivery ability of polyethylenimine and polyethylene glycol dual-functionalized nanographene oxide in 11 different cell lines. 2017 , 4, 170822		13
1475	An interferon-independent lncRNA promotes viral replication by modulating cellular metabolism. <i>Science</i> , 2017 , 358, 1051-1055	33-3	176
1474	Lipid nanoparticle-mediated efficient delivery of CRISPR/Cas9 for tumor therapy. 2017 , 9, e441-e441		83
1473	Key elements for designing and performing a CRISPR/Cas9-based genetic screen. 2017 , 44, 439-449		13
1472	Systematic analysis of human telomeric dysfunction using inducible telosome/shelterin CRISPR/Cas9 knockout cells. 2017 , 3, 17034		31
1471	Genome engineering: a new approach to gene therapy for neuromuscular disorders. 2017 , 13, 647-661		45
1470	CRISPR Genome-Wide Screening Identifies Dependence on the Proteasome Subunit PSMC6 for Bortezomib Sensitivity in Multiple Myeloma. 2017 , 16, 2862-2870		32

1469	Keap1 loss promotes Kras-driven lung cancer and results in dependence on glutaminolysis. 2017 , 23, 1362-1368	301
1468	Novel biomaterials to study neural stem cell mechanobiology and improve cell-replacement therapies. 2017 , 4, 13-20	11
1467	Tissue-specific genome editing of laminA/C in the posterior silk glands of <i>Bombyx mori</i> . 2017 , 44, 451-459	10
1466	Molecular tools for gene manipulation in filamentous fungi. 2017 , 101, 8063-8075	38
1465	Targeting of Photoreceptor Genes in via Zinc-Finger Nucleases and CRISPR/Cas9. 2017 , 29, 2498-2518	138
1464	Lactate Metabolism in Human Lung Tumors. 2017 , 171, 358-371.e9	568
1463	Genetic and Functional Drivers of Diffuse Large BCell Lymphoma. 2017 , 171, 481-494.e15	499
1462	High-Throughput Approaches to Pinpoint Function within the Noncoding Genome. 2017 , 68, 44-59	37
1461	Methods and Applications of CRISPR-Mediated Base Editing in Eukaryotic Genomes. 2017 , 68, 26-43	160
1460	CRISPR/Cas9-Based Engineering of the Epigenome. 2017 , 21, 431-447	147
1459	Cancer drug addiction is relayed by an ERK2-dependent phenotype switch. 2017 , 550, 270-274	86
1458	Caspase-1 cleaves PPAR β for potentiating the pro-tumor action of TAMs. 2017 , 8, 766	77
1457	pgRNAFinder: a web-based tool to design distance independent paired-gRNA. 2017 , 33, 3642-3644	5
1456	Phenotypic Screening. 2017 , 50, 263-299	4
1455	Identifying host regulators and inhibitors of liver stage malaria infection using kinase activity profiles. 2017 , 8, 1232	19
1454	Parallel genome-wide screens identify synthetic viable interactions between the BLM helicase complex and Fanconi anemia. 2017 , 8, 1238	16
1453	Modern methods for laboratory diversification of biomolecules. 2017 , 41, 50-60	13
1452	CRISPR/Cas9 Genome-Editing System in Human Stem Cells: Current Status and Future Prospects. 2017 , 9, 230-241	61

1451	Human Induced Pluripotent Stem Cell-Derived Macrophages for Unraveling Human Macrophage Biology. 2017 , 37, 2000-2006	18
1450	Randomized CRISPR-Cas Transcriptional Perturbation Screening Reveals Protective Genes against Alpha-Synuclein Toxicity. 2017 , 68, 247-257.e5	24
1449	Ectopic expression of RAD52 and dn53BP1 improves homology-directed repair during CRISPR-Cas9 genome editing. 2017 , 1, 878-888	48
1448	LAMTOR/Ragulator is a negative regulator of Arl8b- and BORC-dependent late endosomal positioning. 2017 , 216, 4199-4215	63
1447	CRISPR/Cas9 screening using unique molecular identifiers. 2017 , 13, 945	30
1446	Genome Editing in Neurosciences. 2017 ,	2
1445	Genome-Wide CRISPR Screen for Essential Cell Growth Mediators in Mutant KRAS Colorectal Cancers. 2017 , 77, 6330-6339	61
1444	Chemical Proteomics Identifies Druggable Vulnerabilities in a Genetically Defined Cancer. 2017 , 171, 696-709.e23	119
1443	Sparks of the CRISPR explosion: Applications in medicine and agriculture. 2017 , 44, 413-414	5
1442	CRISPR-UMI: single-cell lineage tracing of pooled CRISPR-Cas9 screens. 2017 , 14, 1191-1197	60
1441	CRISPR/Cas9 knockouts reveal genetic interaction between strain-transcendent erythrocyte determinants of invasion. 2017 , 114, E9356-E9365	28
1440	CRISPR/Cas9-mediated gene knockout is insensitive to target copy number but is dependent on guide RNA potency and Cas9/sgRNA threshold expression level. 2017 , 45, 12039-12053	41
1439	Therapeutic Strategies of Clustered Regularly Interspaced Palindromic Repeats-Cas Systems for Different Viral Infections. 2017 , 30, 552-559	1
1438	Course-based undergraduate research experiences in molecular biosciences-patterns, trends, and faculty support. 2017 , 364,	17
1437	HBL1 Is a Human Long Noncoding RNA that Modulates Cardiomyocyte Development from Pluripotent Stem Cells by Counteracting MIR1. 2017 , 42, 333-348.e5	34
1436	Implications of CRISPR-Based Germline Engineering for Cancer Survivors. 2017 , 51, 672-682	1
1435	LSD1-Mediated Epigenetic Reprogramming Drives CENPE Expression and Prostate Cancer Progression. 2017 , 77, 5479-5490	53
1434	Edited course of biomedical research: leaping forward with CRISPR. 2017 , 125, 258-265	5

1433	Variant Interpretation: Functional Assays to the Rescue. 2017 , 101, 315-325	171
1432	Genome Engineering for Personalized Arthritis Therapeutics. 2017 , 23, 917-931	40
1431	Genome and metabolic engineering in non-conventional yeasts: Current advances and applications. 2017 , 2, 198-207	79
1430	Delivery strategies of the CRISPR-Cas9 gene-editing system for therapeutic applications. 2017 , 266, 17-26	248
1429	A CRISPR screen identifies genes controlling Etv2 threshold expression in murine hemangiogenic fate commitment. 2017 , 8, 541	9
1428	RABIF/MSS4 is a Rab-stabilizing holdase chaperone required for GLUT4 exocytosis. 2017 , 114, E8224-E8233	32
1427	Crystal structure of the human lysosomal mTORC1 scaffold complex and its impact on signaling. <i>Science</i> , 2017 , 358, 377-381	33-3 62
1426	Using a Fluorescent PCR-capillary Gel Electrophoresis Technique to Genotype CRISPR/Cas9-mediated Knockout Mutants in a High-throughput Format. 2017 ,	1
1425	Systems-level interference strategies to decipher host factors involved in bacterial pathogen interaction: from RNAi to CRISPRi. 2017 , 39, 34-41	7
1424	CDYL suppresses epileptogenesis in mice through repression of axonal Nav1.6 sodium channel expression. 2017 , 8, 355	24
1423	CRISPR/Cas9 editing reveals novel mechanisms of clustered microRNA regulation and function. 2017 , 7, 8585	19
1422	Functional characterization of PBP1 gene in <i>Helicoverpa armigera</i> (Lepidoptera: Noctuidae) by using the CRISPR/Cas9 system. 2017 , 7, 8470	35
1421	Transposons As Tools for Functional Genomics in Vertebrate Models. 2017 , 33, 784-801	39
1420	High-Throughput Imaging for the Discovery of Cellular Mechanisms of Disease. 2017 , 33, 604-615	53
1419	In vivo CRISPR screening identifies Ptpn2 as a cancer immunotherapy target. 2017 , 547, 413-418	510
1418	The Pursuit of Therapeutic Biomarkers with High-Throughput Cancer Cell Drug Screens. 2017 , 24, 1066-1074	14
1417	A Landscape of Therapeutic Cooperativity in KRAS Mutant Cancers Reveals Principles for Controlling Tumor Evolution. 2017 , 20, 999-1015	45
1416	Synthetic essentiality: Targeting tumor suppressor deficiencies in cancer. 2017 , 39, 1700076	17

1415	CRISPR/Cas9-Mediated Scanning for Regulatory Elements Required for HPRT1 Expression via Thousands of Large, Programmed Genomic Deletions. 2017 , 101, 192-205	87
1414	Effects of Inner Nuclear Membrane Proteins SUN1/UNC-84A and SUN2/UNC-84B on the Early Steps of HIV-1 Infection. 2017 , 91,	14
1413	A CRISPR/Cas9 guidance RNA screen platform for HIV provirus disruption and HIV/AIDS gene therapy in astrocytes. 2017 , 7, 5955	17
1412	Prospect of divergent roles for the CUL3 system in vascular endothelial cell function and angiogenesis. 2017 , 162, 237-245	6
1411	Prioritising Causal Genes at Type 2 Diabetes Risk Loci. 2017 , 17, 76	21
1410	Blockage of Core Fucosylation Reduces Cell-Surface Expression of PD-1 and Promotes Anti-tumor Immune Responses of T Cells. 2017 , 20, 1017-1028	86
1409	Germline factor DDX4 functions in blood-derived cancer cell phenotypes. 2017 , 108, 1612-1619	14
1408	Technical considerations for the use of CRISPR/Cas9 in hematology research. 2017 , 54, 4-11	13
1407	Variations in glycoprotein B contribute to immunogenic difference between PRV variant JS-2012 and Bartha-K61. 2017 , 208, 97-105	19
1406	The retroviral vector family: something for everyone. 2017 , 53, 714-722	17
1405	Genome editing in crop improvement: Present scenario and future prospects. 2017 , 31, 453-559	42
1404	Identification of essential genes for cancer immunotherapy. 2017 , 548, 537-542	460
1403	Optimised metrics for CRISPR-KO screens with second-generation gRNA libraries. 2017 , 7, 7384	25
1402	In Vivo Genome Editing Restores Dystrophin Expression and Cardiac Function in Dystrophic Mice. 2017 , 121, 923-929	86
1401	Adenovirus Core Protein VII Downregulates the DNA Damage Response on the Host Genome. 2017 , 91,	20
1400	In vivo loss-of-function screens identify KPNB1 as a new druggable oncogene in epithelial ovarian cancer. 2017 , 114, E7301-E7310	53
1399	Genome-Wide CRISPR/Cas9 Screening for High-Throughput Functional Genomics in Human Cells. 2017 , 1656, 175-181	11
1398	A genome-wide CRISPR screen reconciles the role of N-linked glycosylation in galectin-3 transport to the cell surface. 2017 , 130, 3234-3247	28

1397	Genome-scale activation screen identifies a lncRNA locus regulating a gene neighbourhood. 2017 , 548, 343-346	243
1396	Genomic analysis of hairy cell leukemia identifies novel recurrent genetic alterations. 2017 , 130, 1644-1648	54
1395	Mapping a diversity of genetic interactions in yeast. 2017 , 6, 14-21	9
1394	AAV-mediated direct in vivo CRISPR screen identifies functional suppressors in glioblastoma. 2017 , 20, 1329-1341	119
1393	Characterization of noncoding regulatory DNA in the human genome. 2017 , 35, 732-746	50
1392	Dynamics of phosphoinositide conversion in clathrin-mediated endocytic traffic. 2017 , 552, 410-414	86
1391	Breast cancer metastasis suppressor OTUD1 deubiquitinates SMAD7. 2017 , 8, 2116	49
1390	Therapeutic relevance of the PP2A-B55 inhibitory kinase MASTL/Greatwall in breast cancer. 2018 , 25, 828-840	53
1389	A Protocol for the Production of Integrase-deficient Lentiviral Vectors for CRISPR/Cas9-mediated Gene Knockout in Dividing Cells. 2017 ,	9
1388	CRISPR/Cas9-assisted gRNA-free one-step genome editing with no sequence limitations and improved targeting efficiency. 2017 , 7, 16624	17
1387	PinAPL-Py: A comprehensive web-application for the analysis of CRISPR/Cas9 screens. 2017 , 7, 15854	38
1386	Techniques and strategies employing engineered transcription factors. 2017 , 4, 152-162	0
1385	SNX8 mediates IFN β -triggered noncanonical signaling pathway and host defense against. 2017 , 114, 13000-13005	16
1384	Genome Editing: The Recent History and Perspective in Cardiovascular Diseases. 2017 , 70, 2808-2821	14
1383	CRISPR/Cas9 for Drug Discovery in Oncology. 2017 , 61-85	1
1382	Chemical Similarity Enrichment Analysis (ChemRICH) as alternative to biochemical pathway mapping for metabolomic datasets. 2017 , 7, 14567	133
1381	3D collagen architecture induces a conserved migratory and transcriptional response linked to vasculogenic mimicry. 2017 , 8, 1651	76
1380	Precision Medicine, CRISPR, and Genome Engineering. 2017 ,	0

1379	From Reductionism to Holism: Toward a More Complete View of Development Through Genome Engineering. 2017 , 1016, 45-74	5
1378	Target Discovery for Precision Medicine Using High-Throughput Genome Engineering. 2017 , 1016, 123-145	5
1377	Disruption of diphthamide synthesis genes and resulting toxin resistance as a robust technology for quantifying and optimizing CRISPR/Cas9-mediated gene editing. 2017 , 7, 15480	6
1376	Epigenetic silencing of IRF1 dysregulates type III interferon responses to respiratory virus infection in epithelial to mesenchymal transition. 2017 , 2, 17086	32
1375	InVivo Knockout of the Vegfa Gene by Lentiviral Delivery of CRISPR/Cas9 in Mouse Retinal Pigment Epithelium Cells. 2017 , 9, 89-99	40
1374	NLRP11 disrupts MAVS signalosome to inhibit type I interferon signaling and virus-induced apoptosis. 2017 , 18, 2160-2171	15
1373	Host Factors in Coronavirus Replication. 2018 , 419, 1-42	267
1372	Role of Host Genes in Influenza Virus Replication. 2018 , 419, 151-189	13
1371	Label-Free Dynamic Mass Redistribution and Bio-Impedance Methods for Drug Discovery. 2017 , 77, 9.24.1-9.24.21	
1370	A CRISPR/Cas9 approach reveals that the polymerase activity of DNA polymerase β s dispensable for HIV-1 infection in dividing and nondividing cells. 2017 , 292, 14016-14025	8
1369	Gene editing tools: state-of-the-art and the road ahead for the model and non-model fishes. 2017 , 26, 577-589	17
1368	Identifying synthetic lethal targets using CRISPR/Cas9 system. 2017 , 131, 66-73	14
1367	TAK1 inhibition attenuates both inflammation and fibrosis in experimental pneumoconiosis. 2017 , 3, 17023	22
1366	Type II CRISPR/Cas9 approach in the oncological therapy. 2017 , 36, 80	11
1365	Host determinants of adeno-associated viral vector entry. 2017 , 24, 124-131	40
1364	Nuclear Acetyl-CoA Production by ACLY Promotes Homologous Recombination. 2017 , 67, 252-265.e6	110
1363	A convenient method to pre-screen candidate guide RNAs for CRISPR/Cas9 gene editing by NHEJ-mediated integration of a 'self-cleaving' GFP-expression plasmid. 2017 , 24, 609-621	15
1362	Next-generation mammalian genetics toward organism-level systems biology. 2017 , 3, 15	15

1361	CRISPR/Cas9 targeting of GPRC6A suppresses prostate cancer tumorigenesis in a human xenograft model. 2017 , 36, 90	33
1360	Forward RNAi Screens in Human Hematopoietic Stem Cells. 2017 , 1622, 29-50	3
1359	Challenges and emerging directions in single-cell analysis. 2017 , 18, 84	166
1358	Seed-effect modeling improves the consistency of genome-wide loss-of-function screens and identifies synthetic lethal vulnerabilities in cancer cells. 2017 , 9, 51	10
1357	Mutant p53 dictates the oncogenic activity of c-Abl in triple-negative breast cancers. 2017 , 8, e2899	8
1356	Inherited determinants of early recurrent somatic mutations in prostate cancer. 2017 , 8, 48	16
1355	Technology Turbocharges Functional Genomics. 2017 , 29, 1179-1180	3
1354	Gene Knockout Shows That PML (TRIM19) Does Not Restrict the Early Stages of HIV-1 Infection in Human Cell Lines. 2017 , 2,	3
1353	Evaluation and Design of Genome-Wide CRISPR/SpCas9 Knockout Screens. 2017 , 7, 2719-2727	211
1352	METTL21B Is a Novel Human Lysine Methyltransferase of Translation Elongation Factor 1A: Discovery by CRISPR/Cas9 Knockout. 2017 , 16, 2229-2242	26
1351	Non-viral delivery of genome-editing nucleases for gene therapy. 2017 , 24, 144-150	67
1350	Genome-wide genetic screening with chemically mutagenized haploid embryonic stem cells. 2017 , 13, 12-14	29
1349	Loss-of-function genetic tools for animal models: cross-species and cross-platform differences. 2017 , 18, 24-40	113
1348	PAX6 regulates human corneal epithelium cell identity. 2017 , 154, 30-38	33
1347	Accelerating glioblastoma drug discovery: Convergence of patient-derived models, genome editing and phenotypic screening. 2017 , 80, 198-207	15
1346	New strategies for targeting drug combinations to overcome mutation-driven drug resistance. 2017 , 42, 44-51	12
1345	CRISPR-Based Technologies for the Manipulation of Eukaryotic Genomes. 2017 , 168, 20-36	545
1344	CRISPR/Cas9-The ultimate weapon to battle infectious diseases?. 2017 , 19, e12693	33

1343	Challenges and Opportunities in Linking Long Noncoding RNAs to Cardiovascular, Lung, and Blood Diseases. 2017 , 37, 21-25	34
1342	Genetically Engineered Macrophages: A Potential Platform for Cancer Immunotherapy. 2017 , 28, 200-215	35
1341	The LIN28B/let-7 axis is a novel therapeutic pathway in multiple myeloma. 2017 , 31, 853-860	50
1340	A review of genetic engineering biotechnologies for enhanced chronic wound healing. 2017 , 26, 179-185	13
1339	CRISPR/Cas9-Mediated Mutagenesis of Human Pluripotent Stem Cells in Defined Xeno-Free E8 Medium. 2017 , 1498, 57-78	5
1338	Synthetic Lethality in Cancer Therapeutics. 2017 , 1, 141-161	23
1337	Developing a Novel Two-Dimensional Culture System to Enrich Human Prostate Luminal Progenitors that Can Function as a Cell of Origin for Prostate Cancer. 2017 , 6, 748-760	13
1336	Precision genome editing in the CRISPR era. 2017 , 95, 187-201	82
1335	A Potent Antitumor Efficacy of Novel Recombinant Type I Interferon. 2017 , 23, 2038-2049	11
1334	CRISPR/Cas9 Technique for Identification of Genes Regulating Oxaliplatin Resistance of Pancreatic Cancer Cell Line. 2017 , 7, 97-100	2
1333	What are the challenges in 2016 regarding resistance to tyrosine kinase inhibitors in chronic myeloid leukemia and cancer?. 2017 , 35, 420-423	1
1332	Large-scale image-based screening and profiling of cellular phenotypes. 2017 , 91, 115-125	37
1331	PARP Inhibitor Activity Correlates with SLFN11 Expression and Demonstrates Synergy with Temozolomide in Small Cell Lung Cancer. 2017 , 23, 523-535	162
1330	Genome-wide CRISPR screens reveal a Wnt-FZD5 signaling circuit as a druggable vulnerability of RNF43-mutant pancreatic tumors. 2017 , 23, 60-68	178
1329	Improved detection of synthetic lethal interactions in cells using variable dose analysis (VDA). 2017 , 114, E10755-E10762	7
1328	Establishment of a novel hepatic steatosis cell model by Cas9/sgRNA-mediated DGK α gene knockout. 2018 , 17, 2169-2176	4
1327	Systems analysis identifies melanoma-enriched pro-oncogenic networks controlled by the RNA binding protein CELF1. 2017 , 8, 2249	11
1326	Generation of an arrayed CRISPR-Cas9 library targeting epigenetic regulators: from high-content screens to in vivo assays. 2017 , 12, 1065-1075	21

1325	Oncogenic Human Papillomavirus: Application of CRISPR/Cas9 Therapeutic Strategies for Cervical Cancer. 2017 , 44, 2455-2466	21
1324	Dual direction CRISPR transcriptional regulation screening uncovers gene networks driving drug resistance. 2017 , 7, 17693	29
1323	A Universal Protocol for Large-scale gRNA Library Production from any DNA Source. 2017 ,	2
1322	Flexible CRISPR library construction using parallel oligonucleotide retrieval. 2017 , 45, e101	4
1321	CRISPR in Animals and Animal Models. 2017 , 152, 95-114	26
1320	COMBATING NRAS MUTANT MELANOMA: FROM BENCH TO BEDSIDE. 2017 , 4, 183-186	3
1319	Genome Engineering Using Haploid Embryonic Stem Cells. 2017 , 152, 83-94	
1318	Mitochondrial permeabilization engages NF- κ B-dependent anti-tumour activity under caspase \square deficiency. 2017 , 19, 1116-1129	119
1317	ENCoRE: an efficient software for CRISPR screens identifies new players in extrinsic apoptosis. 2017 , 18, 905	15
1316	Use of Natural Diversity and Biotechnology to Increase the Quality and Nutritional Content of Tomato and Grape. 2017 , 8, 652	32
1315	Human melanoma cells resistant to MAPK inhibitors can be effectively targeted by inhibition of the p90 ribosomal S6 kinase. 2017 , 8, 35761-35775	13
1314	Use of a MCL-1 inhibitor alone to de-bulk melanoma and in combination to kill melanoma initiating cells. 2017 , 8, 46801-46817	19
1313	Prominin-1 Is a Novel Regulator of Autophagy in the Human Retinal Pigment Epithelium. 2017 , 58, 2366-2387	27
1312	Elucidating the Role of Host Long Non-Coding RNA during Viral Infection: Challenges and Paths Forward. 2017 , 5,	8
1311	Cancer as a Paradigm for Translational and Clinical Biomedical Research. 2017 , 587-607	
1310	A permutation-based non-parametric analysis of CRISPR screen data. 2017 , 18, 545	18
1309	CRISPR/Cas9 mutagenesis invalidates a putative cancer dependency targeted in on-going clinical trials. 2017 , 6,	78
1308	FXR1 regulates transcription and is required for growth of human cancer cells with homozygous deletion. 2017 , 6,	18

1307	The Novel Toll-Like Receptor 2 Agonist SUP3 Enhances Antigen Presentation and T Cell Activation by Dendritic Cells. 2017 , 8, 158	18
1306	The Implications and Future Perspectives of Nanomedicine for Cancer Stem Cell Targeted Therapies. 2017 , 4, 52	15
1305	Nicotinic Acetylcholine Receptor Subtype Alpha-9 Mediates Triple-Negative Breast Cancers Based on a Spontaneous Pulmonary Metastasis Mouse Model. 2017 , 11, 336	14
1304	CRISPR Libraries and Screening. 2017 , 152, 69-82	7
1303	Simple Meets Single: The Application of CRISPR/Cas9 in Haploid Embryonic Stem Cells. 2017 , 2017, 2601746	3
1302	New Insights Into Cellular Stress Responses to Environmental Metal Toxicants. 2017 , 331, 55-82	4
1301	KEAP1 loss modulates sensitivity to kinase targeted therapy in lung cancer. 2017 , 6,	56
1300	Environmental cystine drives glutamine anaplerosis and sensitizes cancer cells to glutaminase inhibition. 2017 , 6,	159
1299	Modeling Cancer Using CRISPR-Cas9 Technology. 2017 , 905-924	
1298	Enhanced Rb/E2F and TSC/mTOR Pathways Induce Synergistic Inhibition in PDGF-Induced Proliferation in Vascular Smooth Muscle Cells. 2017 , 12, e0170036	3
1297	IQGAP1 is an oncogenic target in canine melanoma. 2017 , 12, e0176370	6
1296	Frameshift indels introduced by genome editing can lead to in-frame exon skipping. 2017 , 12, e0178700	53
1295	Baculoviral delivery of CRISPR/Cas9 facilitates efficient genome editing in human cells. 2017 , 12, e0179514	23
1294	CRISPR History: Discovery, Characterization, and Prosperity. 2017 , 152, 1-21	12
1293	Functional Study of the Vitamin K Cycle Enzymes in Live Cells. 2017 , 584, 349-394	15
1292	Scalable Design of Paired CRISPR Guide RNAs for Genomic Deletion. 2017 , 13, e1005341	44
1291	CRISPulator: a discrete simulation tool for pooled genetic screens. 2017 , 18, 347	11
1290	Efficient gene editing in <i>Corynebacterium glutamicum</i> using the CRISPR/Cas9 system. 2017 , 16, 201	47

1289	The lncRNA CASC15 regulates SOX4 expression in RUNX1-rearranged acute leukemia. 2017 , 16, 126	85
1288	A proteomic analysis of LRRK2 binding partners reveals interactions with multiple signaling components of the WNT/PCP pathway. 2017 , 12, 54	28
1287	Kinase profiling of liposarcomas using RNAi and drug screening assays identified druggable targets. 2017 , 10, 173	14
1286	Systematic identification of regulatory variants associated with cancer risk. 2017 , 18, 194	44
1285	CENP-B protects centromere chromatin integrity by facilitating histone deposition via the H3.3-specific chaperone Daxx. 2017 , 10, 63	13
1284	The lncRNA BORG Drives Breast Cancer Metastasis and Disease Recurrence. 2017 , 7, 12698	55
1283	CRISPR/Cas9 Technology: Applications and Human Disease Modeling. 2017 , 152, 23-48	10
1282	Origins and Applications of CRISPR-Mediated Genome Editing. 2016 , 31, 2-5	3
1281	Drug Discovery Technologies: Current and Future Trends. 2017 , 1-32	1
1280	From huntingtin gene to Huntington's disease-altering strategies. 2017 , 251-276	
1279	CRISPR-Cas9: a promising tool for gene editing on induced pluripotent stem cells. 2017 , 32, 42-61	35
1278	Centriole triplet microtubules are required for stable centriole formation and inheritance in human cells. 2017 , 6,	25
1277	Anthrax toxin receptor 1 is the cellular receptor for Seneca Valley virus. 2017 , 127, 2957-2967	31
1276	Haploid genetic screens identify key regulators of protein phenotypes and signaling transduction. 2017 , 2, 163-163	
1275	Genetic engineering of host organisms for pharmaceutical synthesis. 2018 , 53, 191-200	15
1274	DNA Nanotechnology-Enabled Drug Delivery Systems. 2019 , 119, 6459-6506	447
1273	Genome-wide CRISPR-Cas9 Screen Identifies Leukemia-Specific Dependence on a Pre-mRNA Metabolic Pathway Regulated by DCPS. 2018 , 33, 386-400.e5	57
1272	Natural Selection and Origin of a Melanistic Allele in North American Gray Wolves. 2018 , 35, 1190-1209	28

1271	Exploiting an Asp-Glu "switch" in glycogen synthase kinase 3 to design paralog-selective inhibitors for use in acute myeloid leukemia. 2018 , 10,	50
1270	LKB1, Salt-Inducible Kinases, and MEF2C Are Linked Dependencies in Acute Myeloid Leukemia. 2018 , 69, 1017-1027.e6	64
1269	Genome-wide CRISPR screen reveals SGOL1 as a druggable target of sorafenib-treated hepatocellular carcinoma. 2018 , 98, 734-744	23
1268	A translational silencing function of MCPIP1/Regnase-1 specified by the target site context. 2018 , 46, 4256-4270	16
1267	Combined cistrome and transcriptome analysis of SKI in AML cells identifies SKI as a co-repressor for RUNX1. 2018 , 46, 3412-3428	10
1266	Directed evolution of SIRT6 for improved deacylation and glucose homeostasis maintenance. 2018 , 8, 3538	5
1265	A Systems Biology Approach to Advancing Adverse Outcome Pathways for Risk Assessment. 2018 ,	3
1264	Omics Advances in Ecotoxicology. 2018 , 52, 3842-3851	71
1263	Genome Editing in Stem Cells for Disease Therapeutics. 2018 , 60, 329-338	8
1262	The oxidized phospholipid oxPAPC protects from septic shock by targeting the non-canonical inflammasome in macrophages. 2018 , 9, 996	85
1261	Mapping a functional cancer genome atlas of tumor suppressors in mouse liver using AAV-CRISPR-mediated direct in vivo screening. 2018 , 4, eao5508	37
1260	CRISPR-based methods for high-throughput annotation of regulatory DNA. 2018 , 52, 32-41	11
1259	New tools for old drugs: Functional genetic screens to optimize current chemotherapy. 2018 , 36, 30-46	27
1258	p204 Is Required for Canonical Lipopolysaccharide-induced TLR4 Signaling in Mice. 2018 , 29, 78-91	13
1257	A CRISPR screen identifies CDK7 as a therapeutic target in hepatocellular carcinoma. 2018 , 28, 690-692	28
1256	CRISPR-Cas9 screens in human cells and primary neurons identify modifiers of C9ORF72 dipeptide-repeat-protein toxicity. 2018 , 50, 603-612	110
1255	MPC1 is essential for PGC-1 β -induced mitochondrial respiration and biogenesis. 2018 , 475, 1687-1699	17
1254	The Role of Topology in Materials. 2018 ,	3

1253	Methylation-induced silencing of SPG20 facilitates gastric cancer cell proliferation by activating the EGFR/MAPK pathway. 2018 , 500, 411-417	13
1252	The potential of CRISPR/Cas9 genome editing for the study and treatment of intervertebral disc pathologies. 2018 , 1, e1003	16
1251	Recent advances in metabolic engineering of <i>Saccharomyces cerevisiae</i> : New tools and their applications. 2018 , 50, 85-108	147
1250	A loop region of BAFF controls B cell survival and regulates recognition by different inhibitors. 2018 , 9, 1199	18
1249	Impact of Genetic Variation on CRISPR-Cas Targeting. 2018 , 1, 159-170	16
1248	BAMBI is a novel HIF1-dependent modulator of TGF β -mediated disruption of cell polarity during hypoxia. 2018 , 131,	8
1247	PHF5A Epigenetically Inhibits Apoptosis to Promote Breast Cancer Progression. 2018 , 78, 3190-3206	35
1246	Characterization of WDR20: A new regulator of the ERAD machinery. 2018 , 1865, 970-980	3
1245	Recent advances in cancer metabolism: a technological perspective. 2018 , 50, 1-16	34
1244	Defining essential genes for human pluripotent stem cells by CRISPR-Cas9 screening in haploid cells. 2018 , 20, 610-619	57
1243	Non-viral delivery systems for CRISPR/Cas9-based genome editing: Challenges and opportunities. 2018 , 171, 207-218	180
1242	CRISPR/Cas9 cleavage efficiency regression through boosting algorithms and Markov sequence profiling. 2018 , 34, 3069-3077	22
1241	RAF, MEK and ERK Inhibitors as Anti-Cancer Drugs: Intrinsic and Acquired Resistance as a Major Therapeutic Challenge. 2018 , 89-116	1
1240	Targeting Alzheimer's disease with gene and cell therapies. 2018 , 284, 2-36	23
1239	JMJD6 Licenses ER β -Dependent Enhancer and Coding Gene Activation by Modulating the Recruitment of the CARM1/MED12 Co-activator Complex. 2018 , 70, 340-357.e8	43
1238	Success and failure in replication of genotype-phenotype associations: How does replication help in understanding the genetic basis of phenotypic variation in outbred populations?. 2018 , 18, 739-754	14
1237	Innovations in CRISPR technology. 2018 , 52, 95-101	14
1236	In vivo CRISPR screening unveils histone demethylase UTX as an important epigenetic regulator in lung tumorigenesis. 2018 , 115, E3978-E3986	45

1235	Development of capability for genome-scale CRISPR-Cas9 knockout screens in New Zealand. 2018 , 48, 245-261	1
1234	High-throughput genetic screens using CRISPR-Cas9 system. 2018 , 41, 875-884	15
1233	Genome-wide CRISPR/Cas9 Screen Identifies Host Factors Essential for Influenza Virus Replication. 2018 , 23, 596-607	119
1232	Characterization of PIK3CA and PIK3R1 somatic mutations in Chinese breast cancer patients. 2018 , 9, 1357	63
1231	ANP32E induces tumorigenesis of triple-negative breast cancer cells by upregulating E2F1. 2018 , 12, 896-912	29
1230	Review of CRISPR/Cas9 sgRNA Design Tools. 2018 , 10, 455-465	113
1229	Integrated design, execution, and analysis of arrayed and pooled CRISPR genome-editing experiments. 2018 , 13, 946-986	42
1228	Fast and efficient genetic engineering of hematopoietic precursor cells for the study of dendritic cell migration. 2018 , 48, 1074-1077	15
1227	CARM1-expressing ovarian cancer depends on the histone methyltransferase EZH2 activity. 2018 , 9, 631	55
1226	Kinesin 1 regulates cilia length through an interaction with the Bardet-Biedl syndrome related protein CCDC28B. 2018 , 8, 3019	8
1225	Knockout of human muscle genes revealed by large scale whole-exome studies. 2018 , 123, 411-415	1
1224	A CRISPR-based screen for Hedgehog signaling provides insights into ciliary function and ciliopathies. 2018 , 50, 460-471	84
1223	Methods to validate Hsp90 inhibitor specificity, to identify off-target effects, and to rethink approaches for further clinical development. 2018 , 23, 467-482	58
1222	Multigene delivery in mammalian cells: Recent advances and applications. 2018 , 36, 871-879	5
1221	A Distinct Class of Genome Rearrangements Driven by Heterologous Recombination. 2018 , 69, 292-305.e6	23
1220	Target identification of small molecules using large-scale CRISPR-Cas mutagenesis scanning of essential genes. 2018 , 9, 502	59
1219	CRISPR interference-based specific and efficient gene inactivation in the brain. 2018 , 21, 447-454	95
1218	Allele-Specific Chromatin Recruitment and Therapeutic Vulnerabilities of ESR1 Activating Mutations. 2018 , 33, 173-186.e5	133

1217	Genome-Scale Signatures of Gene Interaction from Compound Screens Predict Clinical Efficacy of Targeted Cancer Therapies. 2018 , 6, 343-354.e5	23
1216	Broad-spectrum antiviral functions of duck interferon-induced protein with tetratricopeptide repeats (AvIFIT). 2018 , 84, 71-81	7
1215	Hallmarks of cancer: The CRISPR generation. 2018 , 93, 10-18	42
1214	Combinatorial CRISPR-Cas9 Metabolic Screens Reveal Critical Redox Control Points Dependent on the KEAP1-NRF2 Regulatory Axis. 2018 , 69, 699-708.e7	47
1213	Approaches to target tractability assessment - a practical perspective. 2018 , 9, 606-613	28
1212	Cell-specific responses to the cytokine TGF β are determined by variability in protein levels. 2018 , 14, e7733	35
1211	A highly specific SpCas9 variant is identified by in vivo screening in yeast. 2018 , 36, 265-271	240
1210	Enhancer invasion shapes MYCN-dependent transcriptional amplification in neuroblastoma. 2018 , 50, 515-523	100
1209	Molecular Life Sciences. 2018 , 1-1	
1208	A comparison of CRISPR/Cas9 and siRNA-mediated ALDH2 gene silencing in human cell lines. 2018 , 293, 769-783	11
1207	Construction of green fluorescence protein mutant to monitor STT3B-dependent N-glycosylation. 2018 , 285, 915-928	2
1206	The Genotype-Phenotype Relationships in the Light of Natural Selection. 2018 , 35, 525-542	9
1205	Experimental noise cutoff boosts inferability of transcriptional networks in large-scale gene-deletion studies. 2018 , 9, 133	2
1204	Modulating Gene Expression in Epstein-Barr Virus (EBV)-Positive B Cell Lines with CRISPRa and CRISPRi. 2018 , 121, 31.13.1-31.13.18	4
1203	The Hippo Pathway Component TAZ Promotes Immune Evasion in Human Cancer through PD-L1. 2018 , 78, 1457-1470	130
1202	The evolution of CRISPR/Cas9 and their cousins: hope or hype?. 2018 , 40, 465-477	15
1201	CRISPR/Cas9: A tool for immunological research. 2018 , 48, 576-583	12
1200	Primary Airway Epithelial Cell Gene Editing Using CRISPR-Cas9. 2018 , 1706, 267-292	6

1199	Platelets Enhance Multiple Myeloma Progression via IL-1 β Upregulation. 2018 , 24, 2430-2439	26
1198	CRISPR-Cas9: a promising genetic engineering approach in cancer research. 2018 , 10, 1758834018755089	23
1197	Monoclonal Cell Line Generation and CRISPR/Cas9 Manipulation via Single-Cell Electroporation. 2018 , 14, e1702495	24
1196	An intrinsic lipid-binding interface controls sphingosine kinase 1 function. 2018 , 59, 462-474	23
1195	DNA Nanostructure-Based Systems for Intelligent Delivery of Therapeutic Oligonucleotides. 2018 , 7, e1701153	35
1194	Large-scale image-based profiling of single-cell phenotypes in arrayed CRISPR-Cas9 gene perturbation screens. 2018 , 14, e8064	42
1193	Genome-wide CRISPR screen for PARKIN regulators reveals transcriptional repression as a determinant of mitophagy. 2018 , 115, E180-E189	50
1192	Thermo-triggered Release of CRISPR-Cas9 System by Lipid-Encapsulated Gold Nanoparticles for Tumor Therapy. 2018 , 57, 1491-1496	207
1191	ER Stress Signaling Promotes the Survival of Cancer "Persister Cells" Tolerant to EGFR Tyrosine Kinase Inhibitors. 2018 , 78, 1044-1057	55
1190	CRISPR Approaches to Small Molecule Target Identification. 2018 , 13, 366-375	41
1189	CRISPR-Cas9-based genome-wide screening of <i>Toxoplasma gondii</i> . 2018 , 13, 307-323	26
1188	An Rb family-independent E2F3 transcription factor variant impairs STAT5 signaling and mammary gland remodeling during pregnancy in mice. 2018 , 293, 3156-3167	5
1187	Lysophosphatidic acid regulates the motility of MCF10CA1a breast cancer cell sheets via two opposing signaling pathways. 2018 , 45, 1-11	10
1186	Dual gene activation and knockout screen reveals directional dependencies in genetic networks. 2018 , 36, 170-178	87
1185	Advances in Engineering the Fly Genome with the CRISPR-Cas System. 2018 , 208, 1-18	83
1184	Thermo-triggered Release of CRISPR-Cas9 System by Lipid-Encapsulated Gold Nanoparticles for Tumor Therapy. 2018 , 130, 1507-1512	16
1183	A validated gRNA library for CRISPR/Cas9 targeting of the human glycosyltransferase genome. 2018 , 28, 295-305	43
1182	Zinc finger protein 274 regulates imprinted expression of transcripts in Prader-Willi syndrome neurons. 2018 , 27, 505-515	22

1181	An actin cytoskeletal barrier inhibits lytic granule release from natural killer cells in patients with Chediak-Higashi syndrome. 2018 , 142, 914-927.e6	28
1180	Refined sgRNA efficacy prediction improves large- and small-scale CRISPR-Cas9 applications. 2018 , 46, 1375-1385	105
1179	Identifying Novel Enhancer Elements with CRISPR-Based Screens. 2018 , 13, 326-332	16
1178	MicroRNA-focused CRISPR-Cas9 library screen reveals fitness-associated miRNAs. 2018 , 24, 966-981	33
1177	Ligase IV inhibitor SCR7 enhances gene editing directed by CRISPR-Cas9 and ssODN in human cancer cells. 2018 , 8, 12	49
1176	Pulling the genome in opposite directions to dissect gene networks. 2018 , 19, 42	1
1175	A CRISPR knockout screen identifies SETDB1-target retroelement silencing factors in embryonic stem cells. 2018 , 28, 846-858	29
1174	Arrayed CRISPR screen with image-based assay reliably uncovers host genes required for coxsackievirus infection. 2018 , 28, 859-868	26
1173	CRISPR genetic screens to discover host-virus interactions. 2018 , 29, 87-100	12
1172	Topology of Minimal Surface Biophotonic Nanostructures in Arthropods. 2018 , 275-290	
1171	Dysregulation of mitochondrial dynamics proteins are a targetable feature of human tumors. 2018 , 9, 1677	62
1170	Dynamics of sister chromatid resolution during cell cycle progression. 2018 , 217, 1985-2004	23
1169	ES cell-derived presomitic mesoderm-like tissues for analysis of synchronized oscillations in the segmentation clock. 2018 , 145,	30
1168	Collection of homozygous mutant mouse embryonic stem cells arising from autodiploidization during haploid gene trap mutagenesis. 2018 , 46, e63	1
1167	Resistance to Anti-Cancer Therapeutics Targeting Receptor Tyrosine Kinases and Downstream Pathways. 2018 ,	1
1166	Cancer CRISPR Screens In Vivo. 2018 , 4, 349-358	38
1165	CRISPR Gene Editing in the Kidney. 2018 , 71, 874-883	24
1164	Colorectal Cancer. 2018 ,	

1163	Applications of Gene Editing Technologies to Cellular Therapies. 2018 , 24, 1537-1545	2
1162	Lessons on Synthetic Bioarchitectures. 2018 ,	1
1161	The Tools. 2018 , 41-56	
1160	Coordinated Activity of Y Family TLS Polymerases and EXO1 Protects Non-S Phase Cells from UV-Induced Cytotoxic Lesions. 2018 , 70, 34-47.e4	13
1159	Advances in functional genetic screening with transposons and CRISPR/Cas9 to illuminate cancer biology. 2018 , 49, 85-94	16
1158	Use of Organoids to Characterize Signaling Pathways in Cancer Initiation. 2018 , 1765, 315-331	1
1157	Long Terminal Repeat CRISPR-CAR-Coupled "Universal" T Cells Mediate Potent Anti-leukemic Effects. 2018 , 26, 1215-1227	68
1156	Role for Wnt Signaling in Retinal Neuropil Development: Analysis via RNA-Seq and InVivo Somatic CRISPR Mutagenesis. 2018 , 98, 109-126.e8	37
1155	Generation and Use of Merlin-Deficient Human Schwann Cells for a High-Throughput Chemical Genomics Screening Assay. 2018 , 1739, 161-173	2
1154	Screening Regulatory Element Function with CRISPR/Cas9-based Epigenome Editing. 2018 , 1767, 447-480	3
1153	Key to Delivery: The (Epi-)genome Editing Vector Toolbox. 2018 , 1767, 147-166	1
1152	High MLL2 expression predicts poor prognosis and promotes tumor progression by inducing EMT in esophageal squamous cell carcinoma. 2018 , 144, 1025-1035	25
1151	Suppression of Epstein-Barr virus DNA load in latently infected nasopharyngeal carcinoma cells by CRISPR/Cas9. 2018 , 244, 296-303	30
1150	Simultaneous Knockout of CXCR4 and CCR5 Genes in CD4+ T Cells via CRISPR/Cas9 Confers Resistance to Both X4- and R5-Tropic Human Immunodeficiency Virus Type 1 Infection. 2018 , 29, 51-67	53
1149	CRISPR-engineered genome editing for the next generation neurological disease modeling. 2018 , 81, 459-467	8
1148	Recent Advances in CRISPR-Cas9 Genome Editing Technology for Biological and Biomedical Investigations. 2018 , 119, 81-94	56
1147	Carfilzomib resistance due to ABCB1/MDR1 overexpression is overcome by nelfinavir and lopinavir in multiple myeloma. 2018 , 32, 391-401	63
1146	A High-Resolution Genome-Wide CRISPR/Cas9 Viability Screen Reveals Structural Features and Contextual Diversity of the Human Cell-Essential Proteome. 2018 , 38,	33

1145	Suppression of Adaptive Responses to Targeted Cancer Therapy by Transcriptional Repression. 2018 , 8, 59-73	67
1144	ABIN1 inhibits HDAC1 ubiquitination and protects it from both proteasome- and lysozyme-dependent degradation. 2018 , 119, 3030-3043	5
1143	CHO-Omics Review: The Impact of Current and Emerging Technologies on Chinese Hamster Ovary Based Bioproduction. 2018 , 13, e1700227	44
1142	PICKLES: the database of pooled in-vitro CRISPR knockout library essentiality screens. 2018 , 46, D776-D780	51
1141	Precision medicine – A promising, yet challenging road lies ahead. 2018 , 7, 1-7	8
1140	Emerging and evolving concepts in gene essentiality. 2018 , 19, 34-49	131
1139	CRISPRi and CRISPRa Screens in Mammalian Cells for Precision Biology and Medicine. 2018 , 13, 406-416	136
1138	CRISPR-Cas9 mediated gene knockout in human coronary artery endothelial cells reveals a pro-inflammatory role of TLR2. 2018 , 42, 187-193	8
1137	Introduction to Cancer Stem Cells: Past, Present, and Future. 2018 , 1692, 1-16	12
1136	Role of angiopoietin-like 3 (ANGPTL3) in regulating plasma level of low-density lipoprotein cholesterol. 2018 , 268, 196-206	52
1135	Synthetic Lethal Vulnerabilities in -Mutant Cancers. 2018 , 8,	41
1134	Suppressed translation as a mechanism of initiation of CASP8 (caspase 8)-dependent apoptosis in autophagy-deficient NSCLC cells under nutrient limitation. 2018 , 14, 252-268	13
1133	Sirt1 overexpression suppresses fluoride-induced p53 acetylation to alleviate fluoride toxicity in ameloblasts responsible for enamel formation. 2018 , 92, 1283-1293	19
1132	Predictive bioinformatics identifies novel regulators of proliferation in a cancer stem cell model. 2018 , 26, 1-7	7
1131	Induced mutation and epigenetics modification in plants for crop improvement by targeting CRISPR/Cas9 technology. 2018 , 233, 4578-4594	14
1130	Next-Generation Sequencing of Genome-Wide CRISPR Screens. 2018 , 1712, 203-216	19
1129	An ALOX12-12-HETE-GPR31 signaling axis is a key mediator of hepatic ischemia-reperfusion injury. 2018 , 24, 73-83	106
1128	The Future of Multiplexed Eukaryotic Genome Engineering. 2018 , 13, 313-325	27

1127	An easy-to-use FRET protein substrate to detect calpain cleavage in vitro and in vivo. 2018 , 1865, 221-230	5
1126	Direct and indirect approaches to identify drug modes of action. 2018 , 70, 9-22	19
1125	Aberrant GATA2 epigenetic dysregulation induces a GATA2/GATA6 switch in human gastric cancer. 2018 , 37, 993-1004	15
1124	Serum squamous cell carcinoma antigen as an early indicator of response during therapy of cervical cancer. 2018 , 118, 72-78	31
1123	Polyploidy and Mitotic Cell Death Are Two Distinct HIV-1 Vpr-Driven Outcomes in Renal Tubule Epithelial Cells. 2018 , 92,	6
1122	Modeling Cancer in the CRISPR Era. 2018 , 2, 111-131	10
1121	CRISPR/Cas9 library screening for drug target discovery. 2018 , 63, 179-186	43
1120	Emerging Approaches for Spatiotemporal Control of Targeted Genome with Inducible CRISPR-Cas9. 2018 , 90, 429-439	26
1119	BAP1 Is a Novel Target in HPV-Negative Head and Neck Cancer. 2018 , 24, 600-607	15
1118	Animal Models of Melanoma. 2018 , 1-31	1
1117	Diverse Class 2 CRISPR-Cas Effector Proteins for Genome Engineering Applications. 2018 , 13, 347-356	16
1116	CRISPR editing in biological and biomedical investigation. 2018 , 233, 3875-3891	15
1115	The Many Faces of Long Noncoding RNAs in Cancer. 2018 , 29, 922-935	27
1114	Application of Arrayed CRISPR/cas9 Screen and its Data Analysis: a Systematic Review. 2018 ,	
1113	Progress Toward Precise Genetic Repair in Neurons. 2018 , 18, 121-122	
1112	Genome-wide CRISPR-dCas9 screens in E. coli identify essential genes and phage host factors. 2018 , 14, e1007749	87
1111	Arginine methylation of SIRT7 couples glucose sensing with mitochondria biogenesis. 2018 , 19,	37
1110	Step I: Target Identification. 2018 , 1-31	

1109	A hPSC-based platform to discover gene-environment interactions that impact human T cell and dopamine neuron survival. 2018 , 9, 4815	16
1108	Genome-wide CRISPR screens for Shiga toxins and ricin reveal Golgi proteins critical for glycosylation. 2018 , 16, e2006951	38
1107	Inhibition of Membrane-Bound BAFF by the Anti-BAFF Antibody Belimumab. 2018 , 9, 2698	20
1106	Enhancer Architecture and Essential Core Regulatory Circuitry of Chronic Lymphocytic Leukemia. 2018 , 34, 982-995.e7	58
1105	Modulating the expression of long non-coding RNAs for functional studies. 2018 , 19,	34
1104	Unbiased Fitness Estimation of Pooled Barcode or Amplicon Sequencing Studies. 2018 , 7, 521-525.e4	10
1103	Efficiency breakthrough for radical LEDs. 2018 , 563, 480-481	7
1102	Genome-wide CRISPR Screens in Primary Human T Cells Reveal Key Regulators of Immune Function. 2018 , 175, 1958-1971.e15	196
1101	LZTR1 is a regulator of RAS ubiquitination and signaling. <i>Science</i> , 2018 , 362, 1171-1177	33-3 87
1100	CRISPR/Cas9 for Cancer Therapy: Hopes and Challenges. 2018 , 6,	50
1099	Identification of phagocytosis regulators using magnetic genome-wide CRISPR screens. 2018 , 50, 1716-1727	67
1098	Cyclosporine H Overcomes Innate Immune Restrictions to Improve Lentiviral Transduction and Gene Editing In Human Hematopoietic Stem Cells. 2018 , 23, 820-832.e9	53
1097	Biologic Tools for Genetic Engineering Chronic Wounds. 2018 , 27-35	1
1096	Proteasomal degradation of NOD2 by NLRP12 in monocytes promotes bacterial tolerance and colonization by enteropathogens. 2018 , 9, 5338	22
1095	Optimized libraries for CRISPR-Cas9 genetic screens with multiple modalities. 2018 , 9, 5416	229
1094	Applications of CRISPR-Cas in Bioengineering, Biotechnology, and Translational Research. 2018 , 1, 379-404	7
1093	Homology-independent multiallelic disruption via CRISPR/Cas9-based knock-in yields distinct functional outcomes in human cells. 2018 , 16, 151	5
1092	High-resolution mapping of cancer cell networks using co-functional interactions. 2018 , 14, e8594	32

1091	Repairing the Brain: Gene Therapy. 2018 , 8, S123-S130	3
1090	An inflammatory-CCRK circuitry drives mTORC1-dependent metabolic and immunosuppressive reprogramming in obesity-associated hepatocellular carcinoma. 2018 , 9, 5214	42
1089	Emerging Concepts and Techniques. 2018 , 729-743	
1088	Genetic Mouse Models for Female Reproductive Toxicology Studies. 2018 , 470-494	
1087	Apigenin suppresses the stem cell-like properties of triple-negative breast cancer cells by inhibiting YAP/TAZ activity. 2018 , 4, 105	54
1086	Mutant p53s generate pro-invasive niches by influencing exosome podocalyxin levels. 2018 , 9, 5069	60
1085	ROR α controls inflammatory state of human macrophages. 2018 , 13, e0207374	27
1084	Searching for Essential Genes in the Cancer Genome. 2018 , 12, 283-296	
1083	Ten years of progress and promise of induced pluripotent stem cells: historical origins, characteristics, mechanisms, limitations, and potential applications. 2018 , 6, e4370	72
1082	Loss of the FAT1 Tumor Suppressor Promotes Resistance to CDK4/6 Inhibitors via the Hippo Pathway. 2018 , 34, 893-905.e8	166
1081	Modern Approaches in Synthetic Biology: Genome Editing, Quorum Sensing, and Microbiome Engineering. 2018 , 189-205	2
1080	The construction of drug-resistant cancer cell lines by CRISPR/Cas9 system for drug screening. 2018 , 63, 1411-1419	7
1079	Guide Swap enables genome-scale pooled CRISPR-Cas9 screening in human primary cells. 2018 , 15, 941-946	33
1078	Abl2 is recruited to ventral actin waves through cytoskeletal interactions to promote lamellipodium extension. 2018 , 29, 2863-2873	4
1077	Snail promotes metastasis of nasopharyngeal carcinoma partly by down-regulating TEL2. 2018 , 38, 58	13
1076	Deletion 6q Drives T-cell Leukemia Progression by Ribosome Modulation. 2018 , 8, 1614-1631	19
1075	High-Throughput Genotyping of CRISPR/Cas Edited Cells in 96-Well Plates. 2018 , 1,	3
1074	Blank spots on the map: some current questions on nuclear organization and genome architecture. 2018 , 150, 579-592	15

1073	CRISPR-Based Editing Reveals Edge-Specific Effects in Biological Networks. 2018 , 1, 286-293	8
1072	Synthetic Biology. 2018 ,	
1071	Role of PDGF receptor- β during human cytomegalovirus entry into fibroblasts. 2018 , 115, E9889-E9898	47
1070	Towards quantitative and multiplexed in vivo functional cancer genomics. 2018 , 19, 741-755	34
1069	Double Selection Enhances the Efficiency of Target-AID and Cas9-Based Genome Editing in Yeast. 2018 , 8, 3163-3171	12
1068	CRISPR-Mediated Reorganization of Chromatin Loop Structure. 2018 ,	3
1067	Microvesicles from malaria-infected red blood cells activate natural killer cells via MDA5 pathway. 2018 , 14, e1007298	31
1066	In vivo epigenome editing and transcriptional modulation using CRISPR technology. 2018 , 27, 489-509	17
1065	DNA damage sensitivity of SWI/SNF-deficient cells depends on TFIIH subunit p62/GTF2H1. 2018 , 9, 4067	14
1064	Emerging role of precision medicine in biliary tract cancers. 2018 , 2, 21	19
1063	CRISPR Activation Screens Systematically Identify Factors that Drive Neuronal Fate and Reprogramming. 2018 , 23, 758-771.e8	103
1062	A New Era in Functional Genomics Using CRISPR/Cas9 Knockout Screening. 2018 , 12,	
1061	Cancer stem cells and tumorigenesis. 2018 , 4, 178-188	43
1060	A Conditional Dependency on MELK for the Proliferation of Triple-Negative Breast Cancer Cells. 2018 , 9, 149-160	8
1059	Genome-wide screening for functional long noncoding RNAs in human cells by Cas9 targeting of splice sites. 2018 ,	71
1058	Pathogen blockade of TAK1 triggers caspase-8-dependent cleavage of gasdermin D and cell death. <i>Science</i> , 2018 , 362, 1064-1069	33-3 362
1057	CRISPR/Cas9 System: A Bacterial Tailor for Genomic Engineering. 2018 , 2018, 3797214	12
1056	Synthetic lethality between HER2 and transaldolase in intrinsically resistant HER2-positive breast cancers. 2018 , 9, 4274	13

1055	CRISPR knockout screening identifies combinatorial drug targets in pancreatic cancer and models cellular drug response. 2018 , 9, 4275		34
1054	FACT Inhibition Blocks Induction But Not Maintenance of Pluripotency. 2018 , 27, 1693-1701		14
1053	Stem Cells, Genome Editing, and the Path to Translational Medicine. 2018 , 175, 615-632		72
1052	Cellular barcoding: lineage tracing, screening and beyond. 2018 , 15, 871-879		73
1051	A new road to cancer-drug resistance. 2018 , 563, 478-480		7
1050	DYNLL1 binds to MRE11 to limit DNA end resection in BRCA1-deficient cells. 2018 , 563, 522-526		110
1049	Acceleration of cancer science with genome editing and related technologies. 2018 , 109, 3679-3685		13
1048	Human tumor genomics and zebrafish modeling identify loss as a driver of mucosal melanoma. <i>Science</i> , 2018 , 362, 1055-1060	33.3	69
1047	Altered patterns of global protein synthesis and translational fidelity in RPS15-mutated chronic lymphocytic leukemia. 2018 , 132, 2375-2388		31
1046	A CRISPR screen identifies IFI6 as an ER-resident interferon effector that blocks flavivirus replication. 2018 , 3, 1214-1223		74
1045	HOIL1 Is Essential for the Induction of Type I and III Interferons by MDA5 and Regulates Persistent Murine Norovirus Infection. 2018 , 92,		21
1044	Barcoding chemical modifications into nucleic acids improves drug stability. 2018 , 6, 7197-7203		9
1043	BH3 mimetics induce apoptosis independent of DRP-1 in melanoma. 2018 , 9, 907		16
1042	hsp63 Suppresses TGFB2 Expression and RHOA Activity to Drive Cell Proliferation in Squamous Cell Carcinomas. 2018 , 24, 3224-3236		23
1041	Contribution of allelic imbalance to colorectal cancer. 2018 , 9, 3664		11
1040	Off-target predictions in CRISPR-Cas9 gene editing using deep learning. 2018 , 34, i656-i663		65
1039	Multiple Routes to Oncogenesis Are Promoted by the Human Papillomavirus-Host Protein Network. 2018 , 8, 1474-1489		43
1038	Interrogating the protein interactomes of RAS isoforms identifies PIP5K1A as a KRAS-specific vulnerability. 2018 , 9, 3646		35

1037	Delivery approaches for CRISPR/Cas9 therapeutics in vivo: advances and challenges. 2018 , 15, 905-913	54
1036	Overcoming Resistance to Dual Innate Immune and MEK Inhibition Downstream of KRAS. 2018 , 34, 439-452.e624	
1035	Patchable micro/nanodevices interacting with skin. 2018 , 122, 189-204	36
1034	Unraveling of Central Nervous System Disease Mechanisms Using CRISPR Genome Manipulation. 2018 , 10, 1179573518787469	6
1033	Establishing a dual knock-out cell line by lentivirus based combined CRISPR/Cas9 and Loxp/Cre system. 2018 , 70, 1595-1605	0
1032	RNF144A sustains EGFR signaling to promote EGF-dependent cell proliferation. 2018 , 293, 16307-16323	10
1031	Shedding Light on the Dark Cancer Genomes: Long Noncoding RNAs as Novel Biomarkers and Potential Therapeutic Targets for Cancer. 2018 , 17, 1816-1823	26
1030	Genome editing in diatoms: achievements and goals. 2018 , 37, 1401-1408	36
1029	Head and Neck Tumors. 2018 , 1-136	1
1028	The Hippo pathway effector proteins YAP and TAZ have both distinct and overlapping functions in the cell. 2018 , 293, 11230-11240	108
1027	Delivering CRISPR: a review of the challenges and approaches. 2018 , 25, 1234-1257	452
1026	Using iPSC Models to Probe Regulation of Cardiac Ion Channel Function. 2018 , 20, 57	5
1025	Developmental Sensitivity in Schistosoma mansoni to Puromycin To Establish Drug Selection of Transgenic Schistosomes. 2018 , 62,	7
1024	The new normal of structure/function studies in the era of CRISPR/Cas9. 2018 , 475, 1635-1642	1
1023	A Non-integrating Lentiviral Approach Overcomes Cas9-Induced Immune Rejection to Establish an Immunocompetent Metastatic Renal Cancer Model. 2018 , 9, 203-210	21
1022	CRISPR/Cas9 system targeting regulatory genes of HIV-1 inhibits viral replication in infected T-cell cultures. 2018 , 8, 7784	55
1021	MUC1-C drives myeloid leukaemogenesis and resistance to treatment by a survivin-mediated mechanism. 2018 , 22, 3887	7
1020	Combining Induced Pluripotent Stem Cells and Genome Editing Technologies for Clinical Applications. 2018 , 27, 379-392	22

1019	Acid Suspends the Circadian Clock in Hypoxia through Inhibition of mTOR. 2018 , 174, 72-87.e32	104
1018	Insights into the mechanisms underlying the inactivation of HIV-1 proviruses by CRISPR/Cas. 2018 , 520, 116-126	17
1017	Improved design and analysis of CRISPR knockout screens. 2018 , 34, 4095-4101	21
1016	CRISPR/Cas9 mediated targeting of multiple genes in Dictyostelium. 2018 , 8, 8471	35
1015	A Convergence-Based Framework for Cancer Drug Resistance. 2018 , 33, 801-815	104
1014	NDF, a nucleosome-destabilizing factor that facilitates transcription through nucleosomes. 2018 , 32, 682-694	22
1013	Tipifarnib Inhibits HRAS-Driven Dedifferentiated Thyroid Cancers. 2018 , 78, 4642-4657	36
1012	CTCF boundary remodels chromatin domain and drives aberrant gene transcription in acute myeloid leukemia. 2018 , 132, 837-848	38
1011	Application of the CRISPR/Cas9 System to Drug Resistance in Breast Cancer. 2018 , 5, 1700964	35
1010	The CRISPR tool kit for genome editing and beyond. 2018 , 9, 1911	684
1009	Mxra8 is a receptor for multiple arthritogenic alphaviruses. 2018 , 557, 570-574	132
1008	Genome-scale identification of transcription factors that mediate an inflammatory network during breast cellular transformation. 2018 , 9, 2068	14
1007	Expression of Long Noncoding RNA Promotes Glycolysis in Breast Cancer. 2018 , 78, 4524-4532	40
1006	Focal Adhesions Undergo Longitudinal Splitting into Fixed-Width Units. 2018 , 28, 2033-2045.e5	13
1005	Apoptosis-derived membrane vesicles drive the cGAS-STING pathway and enhance type I IFN production in systemic lupus erythematosus. 2018 , 77, 1507-1515	83
1004	Export Depth of the TEX86 Signal. 2018 , 33, 666-671	20
1003	MELK expression correlates with tumor mitotic activity but is not required for cancer growth. 2018 , 7,	43
1002	Integrative Bayesian Analysis Identifies Rhabdomyosarcoma Disease Genes. 2018 , 24, 238-251	15

1001	SOD2 is upregulated in periodontitis to reduce further inflammation progression. 2018 , 24, 1572-1580	18
1000	Human MxB Protein Is a Pan-herpesvirus Restriction Factor. 2018 , 92,	41
999	CRISPR/Cas9 Genome Editing of Epidermal Growth Factor Receptor Sufficiently Abolished Oncogenicity in Anaplastic Thyroid Cancer. 2018 , 2018, 3835783	13
998	The Role of Chromosome Deletions in Human Cancers. 2018 , 1044, 135-148	6
997	Chromosome Translocation. 2018 ,	0
996	HDAd5/35 Adenovirus Vector Expressing Anti-CRISPR Peptides Decreases CRISPR/Cas9 Toxicity in Human Hematopoietic Stem Cells. 2018 , 9, 390-401	42
995	Functional Genomics. 2018 , 77-88	
994	Synthetic Lethal Networks for Precision Oncology: Promises and Pitfalls. 2018 , 430, 2900-2912	14
993	Role of MxB in Alpha Interferon-Mediated Inhibition of HIV-1 Infection. 2018 , 92,	11
992	Myopia-Inhibiting Concentrations of Muscarinic Receptor Antagonists Block Activation of Alpha2A-Adrenoceptors In Vitro. 2018 , 59, 2778-2791	31
991	Target Control in Logical Models Using the Domain of Influence of Nodes. 2018 , 9, 454	19
990	Tumor innate immunity primed by specific interferon-stimulated endogenous retroviruses. 2018 , 24, 1143-1150	131
989	Genome-scale CRISPR-Cas9 screen identifies druggable dependencies in wild-type Ewing sarcoma. 2018 , 215, 2137-2155	43
988	The Current State and Future of CRISPR-Cas9 gRNA Design Tools. 2018 , 9, 749	67
987	Genome-wide screen identifies cullin-RING ligase machinery required for lenalidomide-dependent CRL4 activity. 2018 , 132, 1293-1303	56
986	Application of CRISPR for Pooled, Vector-based Functional Genomic Screening in Mammalian Cell Lines. 209-222	
985	Generation and Utilization of CRISPR/Cas9 Screening Libraries in Mammalian Cells. 223-234	1
984	CRISPR/Cas9-based In Vivo Models of Cancer. 315-336	1

- 983 Use of the CRISPR/Cas9 System for Genome Editing of Immune System Cells, Defense Against HIV-1 and Cancer Therapies. 401-413
- 982 USP18 (UBP43) Abrogates p21-Mediated Inhibition of HIV-1. **2018**, 92, 16
- 981 Small RNA-mediated prevention, diagnosis and therapies of cancer. **2018**, 341-436
- 980 CRISPR-Cas System: History and Prospects as a Genome Editing Tool in Microorganisms. **2018**, 75, 1675-1683 20
- 979 Zika Virus Non-structural Protein 4A Blocks the RLR-MAVS Signaling. **2018**, 9, 1350 55
- 978 Molecular Mechanisms for the Adaptive Switching Between the OAS/RNase L and OASL/RIG-I Pathways in Birds and Mammals. **2018**, 9, 1398 17
- 977 Simultaneous and stoichiometric purification of hundreds of oligonucleotides. **2018**, 9, 2467 17
- 976 Improved pathway reconstruction from RNA interference screens by exploiting off-target effects. **2018**, 34, i519-i527 5
- 975 Plant Tissue Culture: A Battle Horse in the Genome Editing Using CRISPR/Cas9. **2018**, 1815, 131-148 5
- 974 Structure and Mechanisms of NT5C2 Mutations Driving Thiopurine Resistance in Relapsed Lymphoblastic Leukemia. **2018**, 34, 136-147.e6 25
- 973 The Zinc Transporter SLC39A7 (ZIP7) Is Essential for Regulation of Cytosolic Zinc Levels. **2018**, 94, 1092-1100 17
- 972 Application of CRISPR-Cas9 Based Genome-Wide Screening Approaches to Study Cellular Signalling Mechanisms. **2018**, 19, 30
- 971 NF2/Merlin Inactivation and Potential Therapeutic Targets in Mesothelioma. **2018**, 19, 37
- 970 Natural Products for Drug Discovery in the 21st Century: Innovations for Novel Drug Discovery. **2018**, 19, 380
- 969 CRISPR-Cas Targeting of Host Genes as an Antiviral Strategy. **2018**, 10, 26
- 968 CRISPR-Cas9 Genetic Analysis of Virus-Host Interactions. **2018**, 10, 18
- 967 An enhanced CRISPR repressor for targeted mammalian gene regulation. **2018**, 15, 611-616 192
- 966 Shieldin complex promotes DNA end-joining and counters homologous recombination in BRCA1-null cells. **2018**, 20, 954-965 178

965	The shieldin complex mediates 53BP1-dependent DNA repair. 2018 , 560, 117-121	277
964	Functional Interrogation of Primary Human T Cells via CRISPR Genetic Editing. 2018 , 201, 1586-1598	21
963	Covalent linkage of the DNA repair template to the CRISPR-Cas9 nuclease enhances homology-directed repair. 2018 , 7,	88
962	An automated microfluidic gene-editing platform for deciphering cancer genes. 2018 , 18, 2300-2312	21
961	Estrogen-regulated feedback loop limits the efficacy of estrogen receptor-targeted breast cancer therapy. 2018 , 115, 7869-7878	39
960	Genome-wide CRISPR-KO Screen Uncovers mTORC1-Mediated Gsk3 Regulation in Naive Pluripotency Maintenance and Dissolution. 2018 , 24, 489-502	42
959	Single-Cell Multi-omics: An Engine for New Quantitative Models of Gene Regulation. 2018 , 34, 653-665	63
958	Histidine catabolism is a major determinant of methotrexate sensitivity. 2018 , 559, 632-636	137
957	Primary tumor-derived exosomes facilitate metastasis by regulating adhesion of circulating tumor cells via SMAD3 in liver cancer. 2018 , 37, 6105-6118	77
956	Gene drive systems: do they have a place in agricultural weed management?. 2018 , 74, 2671-2679	49
955	PRMT5-mediated regulation of developmental myelination. 2018 , 9, 2840	46
954	CRISPR/Cas9-Mediated Genome Editing-Challenges and Opportunities. 2018 , 9, 240	36
953	Efficient genome editing in <i>Fusarium oxysporum</i> based on CRISPR/Cas9 ribonucleoprotein complexes. 2018 , 117, 21-29	66
952	Construction of CRISPR Libraries for Functional Screening. 2018 , 1772, 139-150	1
951	Targeted Genome Editing Using DNA-Free RNA-Guided Cas9 Ribonucleoprotein for CHO Cell Engineering. 2018 , 1772, 151-169	6
950	Genome-wide and high-density CRISPR-Cas9 screens identify point mutations in PARP1 causing PARP inhibitor resistance. 2018 , 9, 1849	189
949	Translating GWAS in rheumatic disease: approaches to establishing mechanism and function for genetic associations with ankylosing spondylitis. 2018 , 17, 308-318	3
948	Clustered Regularly Interspaced Short Palindromic Repeats-Based Genome Surgery for the Treatment of Autosomal Dominant Retinitis Pigmentosa. 2018 , 125, 1421-1430	65

947	Building a genome engineering toolbox in nonmodel prokaryotic microbes. 2018 , 115, 2120-2138	17
946	Using pgRNA-Cas9 system to knockout MKL1 inhibited cell migration and proliferation. 2018 , 4, 1426255	
945	Selective gene dependencies in MYCN-amplified neuroblastoma include the core transcriptional regulatory circuitry. 2018 , 50, 1240-1246	94
944	Testing thousands of nanoparticles using DNA barcodes. 2018 , 7, 1-8	30
943	SIRT6 haploinsufficiency induces BRAF melanoma cell resistance to MAPK inhibitors via IGF signalling. 2018 , 9, 3440	51
942	Curcumin mediates polyamine metabolism and sensitizes gastrointestinal cancer cells to antitumor polyamine-targeted therapies. 2018 , 13, e0202677	17
941	Target identification of hepcidin production inhibitors by a combination of chemical proteomics and radioactive compound binding assay. 2018 , 503, 2878-2884	3
940	The Implications of CRISPR-Cas9 Genome Editing for IR. 2018 , 29, 1264-1267.e1	
939	MAIT cells protect against pulmonary Legionella longbeachae infection. 2018 , 9, 3350	111
938	Multifunctional Nanotherapeutics for Photothermal Combination Therapy of Cancer. 2018 , 1, 1800049	10
937	A Membrane Potential- and Calpain-Dependent Reversal of Caspase-1 Inhibition Regulates Canonical NLRP3 Inflammasome. 2018 , 24, 2356-2369.e5	26
936	Screening for genes that regulate the differentiation of human megakaryocytic lineage cells. 2018 , 115, E9308-E9316	13
935	Cytosolic Aspartate Availability Determines Cell Survival When Glutamine Is Limiting. 2018 , 28, 706-720.e6	79
934	Dismissal of RNA Polymerase II Underlies a Large Ligand-Induced Enhancer Decommissioning Program. 2018 , 71, 526-539.e8	11
933	Gene essentiality landscape and druggable oncogenic dependencies in herpesviral primary effusion lymphoma. 2018 , 9, 3263	27
932	CRISPR/Cas9 Application for Gene Copy Fate Survey of Polyploid Vertebrates. 2018 , 9, 260	6
931	TRPS1 shapes YAP/TEAD-dependent transcription in breast cancer cells. 2018 , 9, 3115	31
930	Stem cell bioengineering: building from stem cell biology. 2018 , 19, 595-614	51

929	A genome-wide net to catch and understand cancer. 2018 , 10,	1
928	Genome-wide CRISPR screen identifies <i>ASPM</i> as a gene required for autophagosome formation. 2018 , 217, 3817-3828	105
927	Cancer-Associated MORC2-Mutant M276I Regulates an hnRNPM-Mediated CD44 Splicing Switch to Promote Invasion and Metastasis in Triple-Negative Breast Cancer. 2018 , 78, 5780-5792	40
926	Gene editing in the context of an increasingly complex genome. 2018 , 19, 595	5
925	CRISPR/Cas9-based gene targeting using synthetic guide RNAs enables robust cell biological analyses. 2018 , 29, 2370-2377	7
924	STAT3 associates with vacuolar H-ATPase and regulates cytosolic and lysosomal pH. 2018 , 28, 996-1012	48
923	O-GlcNAc modification of eIF4GI acts as a translational switch in heat shock response. 2018 , 14, 909-916	16
922	Unsupervised correction of gene-independent cell responses to CRISPR-Cas9 targeting. 2018 , 19, 604	44
921	CRISPR Technology for Breast Cancer: Diagnostics, Modeling, and Therapy. 2018 , 2, 1800132	4
920	ZCCHC3 is a co-sensor of cGAS for dsDNA recognition in innate immune response. 2018 , 9, 3349	55
919	Commentary on Some Recent Theses Relevant to Combating Aging: August 2018. 2018 , 21, 374-379	9
918	Genetic and Chemical Screenings Identify HDAC3 as a Key Regulator in Hepatic Differentiation of Human Pluripotent Stem Cells. 2018 , 11, 22-31	20
917	Cell Lysate Microarray for Mapping the Network of Genetic Regulators for Histone Marks. 2018 , 17, 1720-1736	1
916	Loss of USP28-mediated BRAF degradation drives resistance to RAF cancer therapies. 2018 , 215, 1913-1928	21
915	Producing anti-inflammatory macrophages by nanoparticle-triggered clustering of mannose receptors. 2018 , 178, 95-108	53
914	UBXN3B positively regulates STING-mediated antiviral immune responses. 2018 , 9, 2329	30
913	Different Methods of Delivering CRISPR/Cas9 Into Cells. 2018 , 159, 157-176	17
912	Decoding the noncoding genome via large-scale CRISPR screens. 2018 , 52, 70-76	9

911	Addition of m6A to SV40 late mRNAs enhances viral structural gene expression and replication. 2018 , 14, e1006919	80
910	Employing CRISPR/Cas9 genome engineering to dissect the molecular requirements for mitosis. 2018 , 144, 75-105	0
909	Dimer-specific immunoprecipitation of active caspase-2 identifies TRAF proteins as novel activators. 2018 , 37,	16
908	CRISPR base editors: genome editing without double-stranded breaks. 2018 , 475, 1955-1964	132
907	Dying cells expose a nuclear antigen cross-reacting with anti-PD-1 monoclonal antibodies. 2018 , 8, 8810	7
906	targets the purine salvage pathway to kill phagocytes. 2018 , 115, 6846-6851	16
905	CRISPR therapeutic tools for complex genetic disorders and cancer (Review). 2018 , 53, 443-468	21
904	DHX29 functions as an RNA co-sensor for MDA5-mediated EMCV-specific antiviral immunity. 2018 , 14, e1006886	21
903	Twist1 Activation in Muscle Progenitor Cells Causes Muscle Loss Akin to Cancer Cachexia. 2018 , 45, 712-725.e630	
902	Asf1a resolves bivalent chromatin domains for the induction of lineage-specific genes during mouse embryonic stem cell differentiation. 2018 , 115, E6162-E6171	14
901	CRISPR/Cas9 Genome Editing To Demonstrate the Contribution of Cyp51A Gly138Ser to Azole Resistance in <i>Aspergillus fumigatus</i> . 2018 , 62,	25
900	Unique properties of TCR-activated p38 are necessary for NFAT-dependent T-cell activation. 2018 , 16, e2004111	7
899	Viral delivery of genome-modifying proteins for cellular reprogramming. 2018 , 52, 92-99	3
898	Straightforward Delivery of Linearized Double-Stranded DNA Encoding sgRNA and Donor DNA for the Generation of Single Nucleotide Variants Based on the CRISPR/Cas9 System. 2018 , 7, 1651-1659	1
897	A multiprotein supercomplex controlling oncogenic signalling in lymphoma. 2018 , 560, 387-391	172
896	The E3 ligases Itch and WWP2 cooperate to limit T2 differentiation by enhancing signaling through the TCR. 2018 , 19, 766-775	22
895	Genome-scale identification of cellular pathways required for cell surface recognition. 2018 , 28, 1372-1382	19
894	Preferential interaction of MHC class I with TAPBPR in the absence of glycosylation. 2019 , 113, 58-66	14

893	The Role of Next-Generation Sequencing in Pharmacogenetics and Pharmacogenomics. 2019 , 9,	31
892	Functional Genomics via CRISPR-Cas. 2019 , 431, 48-65	35
891	The advances in CRISPR technology and 3D genome. 2019 , 90, 54-61	6
890	A genome-scale CRISPR-Cas9 screening in myeloma cells identifies regulators of immunomodulatory drug sensitivity. 2019 , 33, 171-180	39
889	Using Large Datasets to Understand Nanotechnology. 2019 , 31, e1902798	31
888	CRISPR for Neuromuscular Disorders: Gene Editing and Beyond. 2019 , 34, 341-353	9
887	Animal Models of Melanoma. 2019 , 303-333	
886	A Pliable Mediator Acts as a Functional Rather Than an Architectural Bridge between Promoters and Enhancers. 2019 , 178, 1145-1158.e20	86
885	Allele specific repair of splicing mutations in cystic fibrosis through AsCas12a genome editing. 2019 , 10, 3556	39
884	CRISPR-Cas9 mediated CD133 knockout inhibits colon cancer invasion through reduced epithelial-mesenchymal transition. 2019 , 14, e0220860	11
883	PORCN inhibition synergizes with PI3K/mTOR inhibition in Wnt-addicted cancers. 2019 , 38, 6662-6677	33
882	PAK4 suppresses RELB to prevent senescence-like growth arrest in breast cancer. 2019 , 10, 3589	18
881	The Upregulation of Toll-Like Receptor 3 via Autocrine IFN- γ Signaling Drives the Senescence of Human Umbilical Cord Blood-Derived Mesenchymal Stem Cells Through JAK1. 2019 , 10, 1659	9
880	CRISPR Interference-Based Platform for Multimodal Genetic Screens in Human iPSC-Derived Neurons. 2019 , 104, 239-255.e12	127
879	CDK4 Regulates Lysosomal Function and mTORC1 Activation to Promote Cancer Cell Survival. 2019 , 79, 5245-5259	19
878	Synthetic Lethal Interactions for Kinase Deficiencies to DNA Damage Chemotherapeutics. 2019 , 79, 5693-5698	0
877	The Hippo pathway modulates resistance to BET proteins inhibitors in lung cancer cells. 2019 , 38, 6801-6817	34
876	Triple-Targeting Delivery of CRISPR/Cas9 To Reduce the Risk of Cardiovascular Diseases. 2019 , 131, 12534-12538	8

875	Synthetic Lethality Signatures Uncovered by Genotype-Specific CRISPR-Cas9 Screens. 2019 , 2, 230-245	7
874	Identifying chemogenetic interactions from CRISPR screens with drugZ. 2019 , 11, 52	45
873	CRISPR screens and the best cancer drug targets: picking the needle out of the haystack. 2019 , 3, 10-10	
872	Recent advances in the applications of iPSC technology. 2019 , 60, 250-258	28
871	CRISPR Tools for Systematic Studies of RNA Regulation. 2019 , 11,	11
870	TRIM69 Inhibits Vesicular Stomatitis Indiana Virus. 2019 , 93,	14
869	The small GTPase RAB1B promotes antiviral innate immunity by interacting with TNF receptor-associated factor 3 (TRAF3). 2019 , 294, 14231-14240	12
868	A CRISPR-Cas9 screen identifies essential CTCF anchor sites for estrogen receptor-driven breast cancer cell proliferation. 2019 , 47, 9557-9572	8
867	A CRISPR Screen Identifies the Cell Polarity Determinant Crumbs 3 as an Adeno-associated Virus Restriction Factor in Hepatocytes. 2019 , 93,	7
866	Src-Dependent DBL Family Members Drive Resistance to Vemurafenib in Human Melanoma. 2019 , 79, 5074-5087	8
865	High-efficiency genomic editing in Epstein-Barr virus-transformed lymphoblastoid B cells using a single-stranded donor oligonucleotide strategy. 2019 , 2, 312	1
864	Systematic Immunotherapy Target Discovery Using Genome-Scale In Vivo CRISPR Screens in CD8 ⁺ Cells. 2019 , 178, 1189-1204.e23	104
863	Membrane protein-regulated networks across human cancers. 2019 , 10, 3131	26
862	Triple-Targeting Delivery of CRISPR/Cas9 To Reduce the Risk of Cardiovascular Diseases. 2019 , 58, 12404-12408	7
861	Protective effects of hepatocyte growth factor gene overexpression against hydrogen peroxide-induced apoptosis in mesenchymal stem cells. 2019 , 34, 1236-1245	4
860	Pooled library screening with multiplexed Cpf1 library. 2019 , 10, 3144	19
859	Biogenesis of lysosome-related organelles complex-1 (BORC) regulates late endosomal/lysosomal size through PIKfyve-dependent phosphatidylinositol-3,5-bisphosphate. 2019 , 20, 674-696	18
858	Establishment of Nrf2-deficient HaCaT and immortalized primary human foreskin keratinocytes and characterization of their responses to ROS-induced cytotoxicity. 2019 , 61, 104602	4

857	The transporters SLC35A1 and SLC30A1 play opposite roles in cell survival upon VSV virus infection. 2019 , 9, 10471	8
856	Delivering Cas9/sgRNA ribonucleoprotein (RNP) by lentiviral capsid-based bionanoparticles for efficient 'hit-and-run' genome editing. 2019 , 47, e99	36
855	Emodin Induced SREBP1-Dependent and SREBP1-Independent Apoptosis in Hepatocellular Carcinoma Cells. 2019 , 10, 709	13
854	Transmembrane Protein Aptamer Induces Cooperative Signaling by the EPO Receptor and the Cytokine Receptor ECommon Subunit. 2019 , 17, 167-181	8
853	ARIH2 Is a Vif-Dependent Regulator of CUL5-Mediated APOBEC3G Degradation in HIV Infection. 2019 , 26, 86-99.e7	23
852	CRISPR-Cas9 system: A new-fangled dawn in gene editing. 2019 , 232, 116636	62
851	Notum produced by Paneth cells attenuates regeneration of aged intestinal epithelium. 2019 , 571, 398-402	72
850	Augmenting Immunotherapy Impact by Lowering Tumor TNF Cytotoxicity Threshold. 2019 , 178, 585-599.e15	82
849	Functional Relevance of Interleukin-1 Receptor Inter-domain Flexibility for Cytokine Binding and Signaling. 2019 , 27, 1296-1307.e5	2
848	Potential of Genome Editing to Improve Aquaculture Breeding and Production. 2019 , 35, 672-684	76
847	Genome-Wide CRISPR-Cas9 Screening Identifies NF- κ B/E2F6 Responsible for EGFRVIII-Associated Temozolomide Resistance in Glioblastoma. 2019 , 6, 1900782	26
846	Flower isoforms promote competitive growth in cancer. 2019 , 572, 260-264	53
845	A large-scale CRISPR screen and identification of essential genes in cellular senescence bypass. 2019 , 11, 4011-4031	3
844	AAGAB Controls AP2 Adaptor Assembly in Clathrin-Mediated Endocytosis. 2019 , 50, 436-446.e5	20
843	Essential genes shape cancer genomes through linear limitation of homozygous deletions. 2019 , 2, 262	6
842	P11 Loss-of-Function is Associated with Decreased Cell Proliferation and Neurobehavioral Disorders in Mice. 2019 , 15, 1383-1395	5
841	Stabilizing heterochromatin by DGCR8 alleviates senescence and osteoarthritis. 2019 , 10, 3329	41
840	Cell sensing and decision-making in confinement: The role of TRPM7 in a tug of war between hydraulic pressure and cross-sectional area. 2019 , 5, eaaw7243	29

839	Optimizing Systems for Cas9 Expression in <i>Toxoplasma gondii</i> . 2019 , 4,	17
838	Mammalian synthetic biology by CRISPRs engineering and applications. 2019 , 52, 79-84	4
837	Rational targeting of a NuRD subcomplex guided by comprehensive in situ mutagenesis. 2019 , 51, 1149-1159	44
836	CRISPR-Cas Gene Editing for Neurological Disease. 2019 , 365-376	0
835	Targeted genetic screening in mice through haploid embryonic stem cells identifies critical genes in bone development. 2019 , 17, e3000350	12
834	Friend or Foe? Evidence Indicates Endogenous Exosomes Can Deliver Functional gRNA and Cas9 Protein. 2019 , 15, e1902686	29
833	Inadequate DNA Damage Repair Promotes Mammary Transdifferentiation, Leading to BRCA1 Breast Cancer. 2019 , 178, 135-151.e19	38
832	Targeting hypoxia downstream signaling protein, CAIX, for CAR T-cell therapy against glioblastoma. 2019 , 21, 1436-1446	30
831	Newcastle Disease Virus V Protein Degrades Mitochondrial Antiviral Signaling Protein To Inhibit Host Type I Interferon Production via E3 Ubiquitin Ligase RNF5. 2019 , 93,	29
830	Pooled clone collections by multiplexed CRISPR-Cas12a-assisted gene tagging in yeast. 2019 , 10, 2960	10
829	The role of ZAP and OAS3/RNaseL pathways in the attenuation of an RNA virus with elevated frequencies of CpG and UpA dinucleotides. 2019 , 47, 8061-8083	50
828	The Y SZ, Planck Y SZ, XMM scaling relation and its difference between cool-core and non-cool-core clusters. 2019 , 19, 104	
827	Regulation of ETAA1-mediated ATR activation couples DNA replication fidelity and genome stability. 2019 , 218, 3943-3953	9
826	Optical Pooled Screens in Human Cells. 2019 , 179, 787-799.e17	78
825	Serine-Phosphorylated STAT3 Promotes Tumorigenesis via Modulation of RNA Polymerase Transcriptional Activity. 2019 , 79, 5272-5287	11
824	ER-shaping atlastin proteins act as central hubs to promote flavivirus replication and virion assembly. 2019 , 4, 2416-2429	28
823	Adaption of Generic Metabolic Models to Specific Cell Lines for Improved Modeling of Biopharmaceutical Production and Prediction of Processes. 2019 , 127-162	
822	CRISPR Toolbox for Mammalian Cell Engineering. 2019 , 185-206	0

821	Antiapoptotic properties of MALT1 protease are associated with redox homeostasis in ABC-DLBCL cells. 2019 , 58, 2340-2352	3
820	CRISPR-Cas9-mediated loss-of-function screens. 2019 , 12, 1-13	2
819	Rev-erb α inhibits proliferation by reducing glycolytic flux and pentose phosphate pathway in human gastric cancer cells. 2019 , 8, 57	13
818	N-methyladenosine mRNA marking promotes selective translation of regulons required for human erythropoiesis. 2019 , 10, 4596	26
817	A one-step tRNA-CRISPR system for genome-wide genetic interaction mapping in mammalian cells. 2019 , 9, 14499	2
816	CRISPR/Cas9 facilitates genomic editing for large-scale functional studies in pluripotent stem cell cultures. 2019 , 138, 1217-1225	8
815	CRISPR-Cas9 Screens Identify the RNA Helicase DDX3X as a Repressor of C9ORF72 (GGGGCC) _n Repeat-Associated Non-AUG Translation. 2019 , 104, 885-898.e8	56
814	Allele-specific genome editing of imprinting genes by preferentially targeting non-methylated loci using Staphylococcus aureus Cas9 (SaCas9). 2019 , 64, 1592-1600	6
813	Efficient and Dynamic Byzantine Fault-tolerant Protocol. 2019 , 1237, 022063	0
812	Design of car carrier robot for stereoscopic garage based on TRIZ1141. 2019 , 252, 022097	0
811	EYA4 inhibits hepatocellular carcinoma by repressing MYCBP by dephosphorylating β catenin at Ser552. 2019 , 110, 3110-3121	6
810	MYC predetermines the sensitivity of gastrointestinal cancer to antifolate drugs through regulating TYMS transcription. 2019 , 48, 289-300	10
809	CRISPR-Cas9-mediated knockout of SPRY2 in human hepatocytes leads to increased glucose uptake and lipid droplet accumulation. 2019 , 19, 115	3
808	Pooled CRISPR Screens in Drosophila Cells. 2019 , 129, e111	5
807	The classic metal-sensing transcription factor MTF1 promotes myogenesis in response to copper. 2019 , 33, 14556-14574	13
806	Misc. medical devices and technologies. 2019 , 573-615	
805	STING-Mediated IFI16 Degradation Negatively Controls Type I Interferon Production. 2019 , 29, 1249-1260.e4	23
804	Heat Shock Proteins in Neuroscience. 2019 ,	

803	Genome-scale CRISPR screens are efficient in non-homologous end-joining deficient cells. 2019 , 9, 15751	9
802	SpCas9 activity prediction by DeepSpCas9, a deep learning-based model with high generalization performance. 2019 , 5, eaax9249	52
801	A Compendium of Genetic Modifiers of Mitochondrial Dysfunction Reveals Intra-organelle Buffering. 2019 , 179, 1222-1238.e17	47
800	Pannexin-1 limits the production of proinflammatory cytokines during necroptosis. 2019 , 20, e47840	16
799	Pooled CRISPR-Based Genetic Screens in Mammalian Cells. 2019 ,	5
798	Integrin β subunit is required for the tumor supportive role of fibroblasts in colorectal adenocarcinoma and serves as a potential stroma prognostic marker. 2019 , 13, 2697-2714	12
797	Prediction of sgRNA on-target activity in bacteria by deep learning. 2019 , 20, 517	6
796	Alzheimer's Disease risk modifier genes do not impact tau aggregate uptake, seeding or maintenance in cell models.	
795	CRISPR/Cas9 Gene Targeting in Primary Mouse Bone Marrow-Derived Macrophages. 2020 , 2097, 223-230	2
794	The Hippo pathway oncoprotein YAP promotes melanoma cell invasion and spontaneous metastasis.	
793	FLIP(L) determines p53 induced life or death.	
792	CRISPR Screens Identify Essential Cell Growth Mediators in BRAF-inhibitor Resistant Melanoma.	
791	Pooled analysis of radiation hybrids identifies loci for growth and drug action in mammalian cells.	
790	Construction of Minimal Genomes and Synthetic Cells. 2020 , 45-67	
789	Laminin alpha 5 is Necessary for Mammary Epithelial Growth and Function by Maintaining Luminal Epithelial Cell Identity.	
788	CRISPR/Cas9: A New Revolutionary Science in Agricultural and Horticulture. 2020 , 195-205	1
787	Parallel CRISPR-Cas9 screens clarify impacts of p53 on screen performance.	
786	Novel Approaches to Profile Functional Long Noncoding RNAs Associated with Stem Cell Pluripotency. 2020 , 21, 37-45	0

- 785 Optimized sgRNA design by deep learning to balance the off-target effects and on-target activity of CRISPR/Cas9.
- 784 Massively parallel quantification of CRISPR editing in cells by TRAP-seq enables better design of Cas9, ABE, CBE gRNAs of high efficiency and accuracy.
- 783 CEN-tools: An integrative platform to identify the contexts of essential genes.
- 782 ZDHHC5 directs Protocadherin 7 to the mitotic cell surface and cleavage furrow by a palmitoylation-dependent mechanism for a successful cell division.
- 781 Inositol hexakisphosphate (IP6) and inositol pentakisphosphate (IP5) are required for viral particle release of retroviruses belonging to the primate lentivirus genus.
- 780 Sequential Activation of Guide RNAs for Algorithmic Multiplexing of Cas9 Activities.
- 779 Specific ZNF274 binding interference at SNORD116 activates the maternal transcripts in Prader-Willi syndrome neurons.
- 778 GO-CRISPR: a highly controlled workflow to discover gene essentiality in loss-of-function screens.
- 777 Activation of pancreatic β cell genes by multiplex epigenetic CRISPR-editing. 0
- 776 An integrative oncogene-dependency map identifies unique vulnerabilities of oncogenic EGFR, KRAS, and RIT1 in lung cancer. 1
- 775 ASH2L drives proliferation and sensitivity to bleomycin and other genotoxins in Hodgkin lymphoma and testicular cancer cells.
- 774 Transcription factor-target relationships complicated by knockout analysis.
- 773 ZNF410 represses fetal globin by devoted control of CHD4/NuRD.
- 772 A genome-wide screen in macrophages identifies new regulators of IFN γ -inducible MHCII that contribute to T cell activation. 1
- 771 CRISPR approach in environmental chemical screening focusing on population variability. **2021**, 46, 499-507
- 770 Identification of Essential Genes Using Sequential CRISPR and siRNA Screens. **2022**, 2377, 89-107
- 769 STK11 Prevents Invasion Through STAT3/5 and FAK Repression in Cutaneous Melanoma. **2021**, 0
- 768 Target Identification of Small Molecules Using Large-Scale CRISPR-Cas Mutagenesis Scanning of Essential Genes. **2022**, 2377, 43-67

- 767 Establishment of a pig CRISPR/Cas9 knockout library for functional gene screening in pig cells. **2021**, e2100408 1
- 766 Integrated loss- and gain-of-function screens define a core network governing human embryonic stem cell behavior. **2021**, 35, 1527-1547 0
- 765 Genetic, cellular, and structural characterization of the membrane potential-dependent cell-penetrating peptide translocation pore. **2021**, 10, 4
- 764 Computational Approaches for Designing Highly Specific and Efficient sgRNAs. **2022**, 2349, 147-166
- 763 A Simple Method that Combines CRISPR and AID to Quickly Generate Conditional Knockouts for Essential Genes in Various Vertebrate Cell Lines. **2022**, 2377, 109-122
- 762 Loss of p16INK4a in neuroblastoma cells induces shift to an immature state with mesenchymal characteristics and increases sensitivity to EGFR inhibitors.
- 761 Enabling cancer target validation with genetically encoded systems for ligand-induced protein degradation. **2021**, 1, 100011 0
- 760 Chapter 4:CRISPR/Cas-based Functional Genomic Approaches to Phenotypic Screening. **2020**, 58-82
- 759 Most commonly mutated genes in High Grade Serous Ovarian Carcinoma are nonessential for ovarian surface epithelial stem cell transformation. 1
- 758 Drug mechanism-of-action discovery through the integration of pharmacological and CRISPR screens.
- 757 A CRISPR Competition Assay to Identify Cancer Genetic Dependencies. **2020**, 10, e3682 1
- 756 Paracrine interactions between epithelial cells promote colon cancer growth.
- 755 Liposome-Templated Hydrogel Nanoparticles for Targeted Delivery of CRISPR/Cas9 to Brain Tumors. **2021**, 245-257 1
- 754 CRISPR/Cas9-Based Genome Editing of the *Saccharomyces cerevisiae* ADE2 Gene with Restriction-Free Cloning and a Rapid BamHI Digest Readout. **2020**, 21, e45
- 753 Transgelin: A New Gene Involved in LDL Endocytosis Identified by a Genome-wide CRISPR-Cas9 Screen.
- 752 High-Throughput CRISPR Screening Identifies Genes Involved in Macrophage Viability and Inflammatory Pathways. **2020**, 33, 108541 2
- 751 HLA-E restricted, HIV-1 suppressing, Gag specific CD8+ T cells offer universal vaccine opportunities.
- 750 Two Plasmid-Based Systems for CRISPR/Cas9 Mediated Knockout of Target Genes. **2021**, 2255, 213-232

- 749 Computational prediction of CRISPR-impaired non-coding regulatory regions.
- 748 CRISPR-mediated dense mutagenesis: a tool for rational targeting of multiprotein complexes and the noncoding genome. **2022**, 57-64
- 747 Newly Identified Phenolic Compounds from Different Plant Families. **2020**, 157-181 1
- 746 A Systematic CRISPR Screen Reveals an IL-20/IL20RA-Mediated Peritoneal Crosstalk to Prevent the Ovarian Cancer Metastasis.
- 745 High-throughput screens of PAM-flexible Cas9 variants for gene knock-out and transcriptional modulation. 2
- 744 A global lipid map defines a network essential for Zika virus replication.
- 743 Tumorigenesis-Related Long Noncoding RNAs and Their Targeting as Therapeutic Approach in Cancer. **2020**, 277-303
- 742 Unbiased and Tailored CRISPR/Cas gRNA Libraries by Synthesizing Covalently-closed-circular (3Cs) DNA. **2020**, 10, e3472 1
- 741 Multiplex generation, tracking, and functional screening of substitution mutants using a CRISPR/retron system. 1
- 740 Genome Engineering Tools in Immunotherapy. **2020**, 73-102
- 739 Screening Method for CRISPR/Cas9 Inhibition of a Human DNA Virus: Herpes Simplex Virus. **2020**, 10, e3748 1
- 738 A genome-wide CRISPR screen reveals a role for the BRD9-containing non-canonical BAF complex in regulatory T cells.
- 737 CRNKL1 is a highly selective regulator of intron-retaining HIV-1 and cellular mRNAs. 1
- 736 ELP-dependent expression of MCL1 promotes resistance to EGFR inhibition in triple-negative breast cancer cells.
- 735 Illuminating host-mycobacterial interactions with functional genomic screening to inhibit mycobacterial pathogenesis.
- 734 The functional landscape of patient derived RNF43 mutations predicts Wnt inhibitor sensitivity.
- 733 Macrophage scavenger receptor 1 controls Chikungunya virus infection through autophagy. 0
- 732 Role of the C-terminal tail in regulating Proteinase Activated Receptor 2 (PAR2) signalling.

731	CiBER-seq dissects genetic networks by quantitative CRISPRi profiling of expression phenotypes.	4
730	Target deconvolution using in vitro evolution in haploid human cells.	
729	An inducible CRISPR-interference library for genetic interrogation of <i>Saccharomyces cerevisiae</i> biology.	1
728	Pooled CRISPR screening at high sensitivity with an empirically designed sgRNA library.	1
727	CLUE: a bioinformatic and wet-lab pipeline for multiplexed cloning of custom sgRNA libraries.	
726	Targeting subtype-specific metabolic preferences in nucleotide biosynthesis inhibits tumor growth in a breast cancer model.	
725	A genetic screen in macrophages identifies new regulators of IFN γ -inducible MHCII that contribute to T cell activation. 2021 , 10,	4
724	Longitudinal single-cell analysis of a myeloma mouse model identifies subclonal molecular programs associated with progression. 2021 , 12, 6322	1
723	Large-scale genomic sequencing reveals adaptive opportunity of targeting mutated-PI3K α in early and advanced HER2-positive breast cancer. 2021 , 11, e589	0
722	Comprehensive Analysis of microRNAs in Human Adult Erythropoiesis. 2021 , 10,	1
721	SPINDOC binds PARP1 to facilitate PARylation. 2021 , 12, 6362	0
720	Regulation of PP2A, PP4, and PP6 holoenzyme assembly by carboxyl-terminal methylation.	0
719	Cellular microRNA-127-3p suppresses oncogenic herpesvirus-induced transformation and tumorigenesis via down-regulation of SKP2. 2021 , 118,	1
718	CRISPR/Cas-Based Modifications for Therapeutic Applications: A Review. 2021 , 1	4
717	Reprogramming of the heavy-chain CDR3 regions of a human antibody repertoire. 2021 ,	1
716	Integrating genetic dependencies and genomic alterations across pathways and cancer types.	
715	High-content Imaging-based Pooled CRISPR Screens in Mammalian Cells.	0
714	Genome-Scale CRISPR Screening reveals novel factors regulating Wnt-dependent regeneration of mouse gastric organoids.	

- 713 Identification of pathways modulating Vemurafenib resistance in melanoma cells via a genome-wide CRISPR/Cas9 screen.
- 712 Nef enhances HIV-1 replication and infectivity independently of SERINC3 and SERINC5 in CEM T cells.
- 711 RhoA effectors LOK/SLK activate ERM proteins to locally inhibit RhoA and define apical morphology.
- 710 SLALOM: A Simple and Rapid Method for Enzymatic Synthesis of CRISPR-Cas9 sgRNA Libraries.
- 709 A simple and highly efficient method for multi-allelic CRISPR-Cas9 editing in primary cell cultures. ○
- 708 Rapid degradation of GRASP55 and GRASP65 reveals their immediate impact on the Golgi structure.
- 707 Genome-Wide CRISPR Screen Identifies Non-Canonical NF- κ B Signaling as a Potent Regulator of Density-dependent Proliferation.
- 706 Unbiased identification of nanoparticle cell uptake mechanism via a genome-wide CRISPR/Cas9 knockout screen.
- 705 Cloud-Based Design of Short Guide RNA (sgRNA) Libraries for CRISPR Experiments. **2021**, 2162, 3-22
- 704 CRISPR screening identifies novel PARP inhibitor classification based on distinct base excision repair pathway dependencies.
- 703 The DEAD box RNA helicase DDX42 is an intrinsic inhibitor of positive-strand RNA viruses. ○
- 702 Cargo receptor-assisted endoplasmic reticulum export of pathogenic α -antitrypsin polymers.
- 701 Identification of the transcription factor Miz1 as an essential regulator of diphthamide biosynthesis using a CRISPR-mediated genome-wide screen. **2020**, 16, e1009068 1
- 700 SF3B1 promotes tumor malignancy through splicing-independent activation of HIF1 β ○
- 699 SAM homeostasis is regulated by CFIm-mediated splicing of MAT2A.
- 698 TC10 regulates breast cancer invasion and metastasis by controlling membrane type-1 matrix metalloproteinase at invadopodia.
- 697 N6-methyladenosine (m6A) is an endogenous A3 adenosine receptor ligand.
- 696 TALEN and CRISPR/Cas Genome Editing Systems: Tools of Discovery. **2014**, 6, 19-40 62

695	[Application Progress of CRISPR/Cas9 System for Gene Editing in Tumor Research]. 2015 , 18, 571-9	
694	Species-specific function of microRNA-7702 in human colorectal cancer cells via targeting TADA1. 2018 , 10, 2579-2589	3
693	Loss of ZNF587B and SULF1 contributed to cisplatin resistance in ovarian cancer cell lines based on Genome-scale CRISPR/Cas9 screening. 2019 , 9, 988-998	12
692	Genome-scale CRISPR activation screening identifies a role of ELAVL2-CDKN1A axis in paclitaxel resistance in esophageal squamous cell carcinoma. 2019 , 9, 1183-1200	6
691	[Development of CRISPR technology and its application in bone and cartilage tissue engineering]. 2019 , 39, 1515-1520	
690	CRISPR screen in cancer: status quo and future perspectives. 2021 , 11, 1031-1050	2
689	Delivery of CRISPR-Cas9 system for screening and editing RNA binding proteins in cancer. 2021 , 180, 114042	5
688	Excessive DNA damage mediates ECM degradation via the RBBP8/NOTCH1 pathway in sporadic aortic dissection. 2021 , 1868, 166303	2
687	Pharmacologic profiling reveals lapatinib as a novel antiviral against SARS-CoV-2 in vitro. 2021 , 566, 60-68	5
686	Expression levels and activation status of Yap splicing isoforms determine self-renewal and differentiation potential of embryonic stem cells. 2021 , 39, 1178-1191	2
685	The membrane-associated E3 ubiquitin ligase MARCH3 downregulates the IL-6 receptor and suppresses colitis-associated carcinogenesis. 2021 , 18, 2648-2659	1
684	CRISPR/Cas System and Factors Affecting Its Precision and Efficiency.. 2021 , 9, 761709	0
683	NUDT2 initiates viral RNA degradation by removal of 5'-phosphates. 2021 , 12, 6918	0
682	Assembly of Long-Adapter Single-Strand Oligonucleotide (LASSO) Probes for Massively Parallel Capture of Kilobase Size DNA Targets. 2021 , 1, e278	
681	Venetoclax in Acute Myeloid Leukemia: Molecular Basis, Evidences for Preclinical and Clinical Efficacy and Strategies to Target Resistance. 2021 , 13,	1
680	Bi-directional ribosome scanning controls the stringency of start codon selection. 2021 , 12, 6604	0
679	Metabolic resistance to the inhibition of mitochondrial transcription revealed by CRISPR-Cas9 screen. 2021 , e53054	0
678	Mammalian Chemical Genomics towards Identifying Targets and Elucidating Modes-of-Action of Bioactive Compounds. 2021 ,	0

677	Applications of CRISPR-Cas Technologies to Proteomics. 2021 , 12,	1
676	LIN28B alters ribosomal dynamics to promote metastasis in MYCN-driven malignancy. 2021 , 131,	0
675	N4BP3 Regulates RIG-I-Like Receptor Antiviral Signaling Positively by Targeting Mitochondrial Antiviral Signaling Protein. 2021 , 12, 770600	0
674	Click chemistry-enabled CRISPR screening reveals GSK3 as a regulator of PLD signaling. 2021 , 118,	2
673	Identification of Cellular Factors Required for SARS-CoV-2 Replication. 2021 , 10,	2
672	Discovering new biology with drug-resistance alleles. 2021 , 17, 1219-1229	1
671	Random clonal expansion as a limiting factor in transplantable in vivo CRISPR/Cas9 screens.	1
670	MTHFD2 is a metabolic checkpoint controlling effector and regulatory T cell fate and function. 2021 ,	7
669	CHK1 protects oncogenic KRAS-expressing cells from DNA damage and is a target for pancreatic cancer treatment. 2021 , 37, 110060	3
668	Genome-wide CRISPR screen identifies CDK6 as a therapeutic target in Adult T-cell leukemia/lymphoma. 2021 ,	0
667	Regulation of PP2A, PP4, and PP6 holoenzyme assembly by carboxyl-terminal methylation. 2021 , 11, 23031	0
666	To Discover the Efficient and Novel Drug Targets in Human Cancers Using CRISPR/Cas Screening and Databases. 2021 , 22,	0
665	Pluripotency-Independent Induction of Human Trophoblast Stem Cells from Fibroblasts.	
664	Molecular Mechanisms of Cereblon-Interacting Small Molecules in Multiple Myeloma Therapy. 2021 , 11,	0
663	piggyPrime: High-Efficacy Prime Editing in Human Cells Using piggyBac-Based DNA Transposition. 2021 , 3, 786893	1
662	The coagulation factor IX (F9) loss of function prevents the cell cycle arrest induced by CDK4/6 inhibitors treatment.	
661	CRISPR-Cas9 sgRNA design and outcome assessment: Bioinformatics tools and aquaculture applications. 2021 , 7, 121-121	5
660	A Critical Review: Recent Advancements in the Use of CRISPR/Cas9 Technology to Enhance Crops and Alleviate Global Food Crises. 2021 , 43, 1950-1976	9

659	CRISPR Screen Contributes to Novel Target Discovery in Prostate Cancer. 2021 , 22,	4
658	Inhibition of XPO1 sensitizes small cell lung cancer to first- and second-line chemotherapy. 2021 ,	0
657	CRISPR-Cas9-mediated editing of starch branching enzymes results in altered starch structure in <i>Brassica napus</i> . 2021 ,	2
656	CRISPR Screening: Molecular Tools for Studying Virus-Host Interactions. 2021 , 13,	0
655	Natural variation in gene expression and Zika virus susceptibility revealed by villages of neural progenitor cells.	0
654	TIAM1-RAC1 promote small-cell lung cancer cell survival through antagonizing Nur77-induced BCL2 conformational change. 2021 , 37, 109979	2
653	Folliculin impairs breast tumor growth by repressing TFE3-dependent induction of the Warburg effect and angiogenesis. 2021 , 131,	1
652	The rise of the biocyborg: synthetic biology, artificial chimerism and human enhancement. 1-21	3
651	KAT6A and ENL form an epigenetic transcriptional control module to drive critical leukemogenic gene expression programs. 2021 ,	1
650	Extracellular cathepsin Z signals through the β 1-integrin and augments NLRP3 inflammasome activation. 2021 , 101459	1
649	The power and the promise of CRISPR/Cas9 genome editing for clinical application with gene therapy. 2021 ,	0
648	Sequence motifs and prediction model of GBE editing outcomes based on target library analysis and machine learning. 2021 ,	0
647	RIPK1 dephosphorylation and kinase activation by PPP1R3G/PP1 β promote apoptosis and necroptosis. 2021 , 12, 7067	1
646	miR-6077 Promotes Cisplatin/Pemetrexed Resistance in Lung Adenocarcinoma by Targeting CDKN1A/Cell Cycle Arrest and KEAP1/Ferroptosis Pathways.	
645	Delivery Methods for CRISPR/Cas Reagents. 2022 , 113-148	
644	Cell-based screen identifies human type I interferon-stimulated regulators of <i>Toxoplasma gondii</i> Infection.	0
643	O-GlcNAcylation regulates β 1,4-GlcNAc-branched N-glycan biosynthesis via the OGT/SLC35A3/GnT-IV axis. 2022 , 36, e22149	0
642	Defining the Sensitivity Landscape of 74,389 EGFR Variants to Tyrosine Kinase Inhibitors.	

641	Distal and proximal cis-regulatory elements sense X chromosome dosage and developmental state at the Xist locus.. 2021 ,	4
640	CRISPR-Cas9 Screen Identifies DYRK1A as a Target for Radiotherapy Sensitization in Pancreatic Cancer.. 2022 , 14,	1
639	Four-dimensional nuclear speckle phase separation dynamics regulate proteostasis.. 2022 , 8, eabl4150	1
638	O-GlcNAcylation of MORC2 at threonine 556 by OGT couples TGF- β signaling to breast cancer progression.. 2022 ,	4
637	CRISPR for Rewriting Genetic Code. 2022 , 255-283	
636	CRISPR/Cas9 delivery by NIR-responsive biomimetic nanoparticles for targeted HBV therapy.. 2022 , 20, 27	3
635	RAB18 is a key regulator of GalNAc conjugated siRNA induced silencing in Hep3B cells.	
634	NAD bioavailability mediates PARG inhibition-induced replication arrest, intra S-phase checkpoint and apoptosis in glioma stem cells. 2021 , 3, zcab044	2
633	Structural organization of erythrocyte membrane microdomains and their relation with malaria susceptibility. 2021 , 4, 1375	0
632	Human Induced Pluripotent Stem Cell as a Disease Modeling and Drug Development Platform-A Cardiac Perspective.. 2021 , 10,	0
631	KDM6A depletion in breast epithelial cells leads to reduced sensitivity to anticancer agents and increased TGF- β activity.. 2022 ,	0
630	Obesity-Induced miR-455 Upregulation Promotes Adaptive Pancreatic β Cell Proliferation Through the CPEB1/CDKN1B Pathway.. 2022 ,	0
629	Full Issue PDF.. 2022 , 35, 1-96	
628	Transgelin: A New Gene Involved in LDL Endocytosis Identified by a Genome-wide CRISPR-Cas9 Screen.. 2021 , 100160	0
627	In vivo genome-editing screen identifies tumor suppressor genes that cooperate with Trp53 loss during mammary tumorigenesis.. 2022 ,	1
626	Efficient generation of lower induced Motor Neurons by coupling Ngn2 expression with developmental cues.	1
625	A molecular brake that modulates spliceosome pausing at detained introns contributes to neurodegeneration.	0
624	Phosphoantigens are Molecular Glues that Promote Butyrophilin 3A1/2A1 Association Leading to V β V β T Cell Activation.	0

623	In vivo modeling of patient genetic heterogeneity identifies new ways to target cholangiocarcinoma.. 2022 ,	0
622	USP49-mediated histone H2B deubiquitination regulates HCT116 cell proliferation through MDM2-p53 axis.. 2022 , MCB0043421	
621	Protein allostery and ligand design: Computational design meets experiments to discover novel chemical probes.. 2022 , 167468	2
620	High-throughput methods for genome editing: the more the better.. 2022 ,	1
619	History and Classification of CRISPR/Cas System. 2022 , 29-52	0
618	Genome-wide CRISPR/Cas9 knockout screening uncovers ZNF319 as a novel tumor suppressor critical for breast cancer metastasis.. 2021 , 589, 107-115	0
617	MARCH3 negatively regulates IL-3-triggered inflammatory response by mediating K48-linked polyubiquitination and degradation of IL-3Rβ 2022 , 7, 21	0
616	Autophagy inhibits cancer stemness in triple-negative breast cancer via miR-181a-mediated regulation of ATG5 and/or ATG2B.. 2022 ,	2
615	hiPSCs for population genetics. 2022 , 19-44	
614	Identification and characterisation of novel MPC1 gene variants causing mitochondrial pyruvate carrier deficiency. 2021 ,	1
613	Bioinformatic Tools in CRISPR/Cas Platform. 2022 , 53-111	
612	CRISPR Technology in Cancer Diagnosis and Treatment: Opportunities and Challenges.. 2022 , 1	1
611	Core Transcription Programs Controlling Injury-Induced Neurodegeneration of Retinal Ganglion Cells.	
610	Genome-scale CRISPR screens identify host factors that promote human coronavirus infection.. 2022 , 14, 10	5
609	Utilization of CRISPR-Mediated Tools for Studying Functional Genomics in Hematological Malignancies: An Overview on the Current Perspectives, Challenges, and Clinical Implications.. 2021 , 12, 767298	0
608	Pregnancy, Preeclampsia and Maternal Aging: From Epidemiology to Functional Genomics. 2021 , 73, 101535	1
607	Pooled genetic perturbation screens with image-based phenotypes.. 2022 ,	3
606	Reading Frame Repair of TTN Truncation Variants Restores Titin Quantity and Functions.. 2021 ,	0

605	Deubiquitinating enzymes USP4 and USP17 finetune the trafficking of PDGFR β and affect PDGF-BB-induced STAT3 signalling.. 2022 , 79, 85	0
604	The deubiquitinase Usp27x as a novel regulator of cFLIP protein expression and sensitizer to death-receptor-induced apoptosis.. 2022 , 27, 112	0
603	A genome-wide screen identifies SCAI as a modulator of the UV-induced replicative stress response in human cells.	
602	Dimethyl Fumarate Combined With Vemurafenib Enhances Anti-Melanoma Efficacy Inhibiting the Hippo/YAP, NRF2-ARE, and AKT/mTOR/ERK Pathways in A375 Melanoma Cells.. 2022 , 12, 794216	1
601	Pseudouridine synthases modify human pre-mRNA co-transcriptionally and affect pre-mRNA processing.. 2022 ,	5
600	scTenifoldKnk: An efficient virtual knockout tool for gene function predictions via single-cell gene regulatory network perturbation.. 2022 , 3, 100434	0
599	Leucine retention in lysosomes is regulated by starvation.. 2022 , 119,	0
598	The P5-type ATPase ATP13A1 modulates major histocompatibility complex I-related protein 1 (MR1)-mediated antigen presentation.. 2021 , 101542	0
597	Activation of osteoblast ferroptosis via the METTL3/ASK1-p38 signaling pathway in high glucose and high fat (HGHF)-induced diabetic bone loss.. 2022 , 36, e22147	6
596	CRISPR-based therapeutics: current challenges and future applications.. 2021 ,	5
595	SOX9 negatively regulates the RLR antiviral signaling by targeting MAVS.. 2022 , 58, 122	0
594	Targeted deletion of glycoprotein B gene by CRISPR/Cas9 nuclease inhibits type 3 in dually-infected Marek's disease virus-transformed lymphoblastoid cell line MSB-1.. 2022 , jvi0202721	1
593	Generating 3D human cardiac constructs from pluripotent stem cells.. 2022 , 76, 103813	4
592	TCR-Induced Tyrosine Phosphorylation at Tyr270 of SUMO Protease SENP1 by Lck Modulates SENP1 Enzyme Activity and Specificity.. 2021 , 9, 789348	0
591	High-content CRISPR screening. 2022 , 2,	10
590	Requirement of Xk and Vps13a for the P2X7-mediated phospholipid scrambling and cell lysis in mouse T cells.. 2022 , 119,	1
589	SuperDendrix algorithm integrates genetic dependencies and genomic alterations across pathways and cancer types.. 2022 , 2, 100099-100099	0
588	Elucidation of CRISPR-Cas9 application in novel cellular immunotherapy.. 2022 , 1	3

587	Identification of novel HPFH-like mutations by CRISPR base editing that elevate the expression of fetal hemoglobin.. 2022 , 11,	3
586	The use of new CRISPR tools in cardiovascular research and medicine.. 2022 ,	1
585	Targeting HNRNPU to overcome cisplatin resistance in bladder cancer.. 2022 , 21, 37	2
584	Glioblastoma exosomes influence glial cell hyaluronic acid deposition to promote invasiveness.	
583	CRISPR and biochemical screens identify MAZ as a cofactor in CTCF-mediated insulation at Hox clusters.. 2022 , 54, 202-212	2
582	Dynamic eIF3a O-GlcNAcylation controls translation reinitiation during nutrient stress. 2021 ,	0
581	A genome-wide CRISPR screen identifies interactors of the autophagy pathway as conserved coronavirus targets.. 2021 , 19, e3001490	3
580	Next-Generation Cell Engineering Platform for Improving Recombinant Protein Production in Mammalian Cells. 2021 , 189-224	0
579	outer hair cell gene editing ameliorates progressive hearing loss in dominant-negative murine model.. 2022 , 12, 2465-2482	3
578	Reduced Gene Templates for Supervised Analysis of Scale-Limited CRISPR-Cas9 Fitness Screens.	
577	Gene Editing Through CRISPR-Based Technology. 2022 , 23-92	
576	CRISPR Screen to Identify Factors that Render Tumor Cells Sensitive or Resistant to Killing by NK Cells.. 2022 , 2463, 269-288	
575	CRISPR Guide RNA Library Screens in Human Induced Pluripotent Stem Cells.. 2022 , 1	1
574	Application of CRISPR-Based Technology in Medical Research and Disease Treatment. 2022 , 141-197	
573	A Whole Genome CRISPR/Cas9 Screening Approach for Identifying Genes Encoding DNA End-Processing Proteins.. 2022 , 2444, 15-27	
572	CRISPR Guides. 2022 , 227-240	
571	CRISPR-Based Screening for Stress Response Factors in Mammalian Cells.. 2022 , 2428, 19-40	
570	Dissecting Molecular Phenotypes Through FACS-Based Pooled CRISPR Screens.. 2022 , 1	1

569	Current applications and future perspective of CRISPR/Cas9 gene editing in cancer.. 2022 , 21, 57	7
568	Genome wide CRISPR/Cas9 screen identifies the coagulation factor IX (F9) as a regulator of senescence.. 2022 , 13, 163	0
567	DOT1L activity in leukemia cells requires interaction with ubiquitylated H2B that promotes productive nucleosome binding.. 2022 , 38, 110369	2
566	A guide for the diagnosis of rare and undiagnosed disease: beyond the exome.. 2022 , 14, 23	3
565	Low Density Lipoprotein Receptor-Related Protein 1 (LRP1) is a host factor for RNA viruses including SARS-CoV-2.	0
564	TP53 promotes lineage commitment of human embryonic stem cells through ciliogenesis and sonic hedgehog signaling.. 2022 , 38, 110395	1
563	MicroRNA-200c-targeted contactin 1 facilitates the replication of influenza A virus by accelerating the degradation of MAVS.. 2022 , 18, e1010299	2
562	Cyclin-Dependent Kinases (CDKs) and the Human Cytomegalovirus-Encoded CDK Ortholog pUL97 Represent Highly Attractive Targets for Synergistic Drug Combinations.. 2022 , 23,	2
561	Genome-wide in vivo CRISPR screens identify GATOR1 as a TP53 induced tumour suppressor.	0
560	Cxcl10 chemokine induces migration of ING4-deficient breast cancer cells via a novel crosstalk mechanism between the Cxcr3 and Egfr receptors. 2021 , MCB0038221	1
559	Phosphorylated NFS1 weakens oxaliplatin-based chemosensitivity of colorectal cancer by preventing PANoptosis.. 2022 , 7, 54	5
558	Extracting functional insights from loss-of-function screens using deep link prediction.. 2022 , 2, 100171	
557	CRISPR in cancer biology and therapy.. 2022 ,	11
556	Regulation of influenza A virus infection by Lnc-PINK1-2:5.. 2022 ,	1
555	A novel Bayesian factor analysis method improves detection of genes and biological processes affected by perturbations in single-cell CRISPR screening.	0
554	Identification of New Regulators of Pancreatic Cancer Cell Sensitivity to Oxaliplatin and Cisplatin.. 2022 , 27,	0
553	Viral Generation, Packaging, and Transduction on a Digital Microfluidic Platform.. 2022 , 94, 4039-4047	1
552	The mA reader YTHDC2 is essential for escape from KSHV SOX-induced RNA decay.. 2022 , 119,	4

551	??CRISPR/Cas9????????β-?????????. 2022,	0
550	Fetal Liver-Derived Alveolar-like Macrophages: A Self-Replicating Ex Vivo Model of Alveolar Macrophages for Functional Genetic Studies.. 2022, 6, 156-169	0
549	Cohesin mutation sensitizes cancer cells to anti-PD-1 therapy through endogenous retrovirus-mediated PD-L1 upregulation.	
548	Identifying novel therapeutic targets in gastric cancer using genome-wide CRISPR-Cas9 screening.. 2022,	0
547	Genome-Wide CRISPR-Cas9 Screen Does Not Identify Host Factors Modulating Streptococcus agalactiae β -Hemolysin/Cytolysin-Induced Cell Death.. 2022, 10, e0218621	
546	Generation of CRISPR-Cas9-mediated genetic knockout human intestinal tissue-derived enteroid lines by lentivirus transduction and single-cell cloning.. 2022,	1
545	HSF2 cooperates with HSF1 to drive a transcriptional program critical for the malignant state.. 2022 , 8, eabj6526	1
544	Reciprocal regulation of IL-33 receptor-mediated inflammatory response and pulmonary fibrosis by TRAF6 and USP38.. 2022, 119, e2116279119	0
543	Pooled CRISPR KO Screens for Target Identification. 2022, 113-125	
542	Base editing screens map mutations affecting IFN β signalling in cancer.	1
541	Sequence Diversification Screens with CRISPR-Cas9-Guided Base Editors. 2022, 151-164	
540	The BTB transcription factors ZBTB11 and ZFP131 maintain pluripotency by repressing pro-differentiation genes.. 2022, 38, 110524	0
539	Bcl-xL enforces a slow-cycling state necessary for survival in the nutrient-deprived microenvironment of pancreatic cancer.. 2022,	0
538	miR-6077 promotes cisplatin/pemetrexed resistance in lung adenocarcinoma via CDKN1A/cell cycle arrest and KEAP1/ferroptosis pathways.. 2022, 28, 366-386	2
537	Genome-Wide Knockout Screen Identifies EGLN3 Involving in Ammonia Neurotoxicity.. 2022, 10, 820692	0
536	RAS activation induces synthetic lethality of MEK inhibition with mitochondrial oxidative metabolism in acute myeloid leukemia.. 2022,	0
535	Hematopoietic differentiation is characterized by a transient peak of entropy at a single-cell level.. 2022, 20, 60	1
534	Targeted intracellular delivery of Cas13 and Cas9 nucleases using bacterial toxin-based platforms.. 2022, 38, 110476	1

533	CRISPR/Cas9-Based Functional Genomics in Human Induced Pluripotent Stem Cell-Derived Models: Can "the Stars Align" for Neurodegenerative Diseases?. 2022,	0
532	PRMT5 Interacting Partners and Substrates in Oligodendrocyte Lineage Cells.. 2022, 16, 820226	1
531	Benchmarking of SpCas9 variants enables deeper base editor screens of BRCA1 and BCL2.. 2022, 13, 1318	1
530	Uncovering Novel Viral Innate Immune Evasion Strategies: What Has SARS-CoV-2 Taught Us?. 2022, 13, 844447	0
529	Confined migration promotes cancer metastasis through resistance to anoikis and increased invasiveness.. 2022, 11,	3
528	Evolution of Molecular Targeted Cancer Therapy: Mechanisms of Drug Resistance and Novel Opportunities Identified by CRISPR-Cas9 Screening.. 2022, 12, 755053	2
527	Cas13d: A New Molecular Scissor for Transcriptome Engineering.. 2022, 10, 866800	5
526	Historical Overview of Genome Editing from Bacteria to Higher Eukaryotes. 2022, 9-17	
525	CRISPRcleanRWebApp: an interactive web application for processing genome-wide pooled CRISPR-Cas9 viability screen.	
524	Hijacking Cellular Stress Responses to Promote Lifespan. 2022, 3,	0
523	Computational tools and resources for CRISPR/Cas genome editing.. 2022,	4
522	Chemical and genetic screens identify new regulators of tetracycline-inducible gene expression system in mammalian cells.	
521	Global chromosome rearrangement induced by CRISPR-Cas9 reshapes the genome and transcriptome of human cells.. 2022,	1
520	Swine Interferon-Inducible Transmembrane Proteins Potently Inhibit African Swine Fever Virus Replication.. 2022, 13, 827709	2
519	Principles and Applications of CRISPR Toolkit in Virus Manipulation, Diagnosis, and Virus-Host Interactions.. 2022, 11,	1
518	CRISPR-Cas9 gene editing induced complex on-target outcomes in human cells.. 2022,	0
517	Reprogramming of fibroblasts into expandable cardiovascular progenitor cells via small molecules in xeno-free conditions.. 2022,	2
516	A rich get richer effect governs intracellular condensate size distributions.	

515	Spatiotemporal Diversity and Regulation of Glycosaminoglycans in Cell Homeostasis and Human Disease.. 2022,	5
514	Genome-wide CRISPR-Cas9 screening identifies the CYTH2 host gene as a potential therapeutic target of influenza viral infection.. 2022, 38, 110559	0
513	KAT5 activity regulates G0-like states in human gliomas.	
512	Small-molecule targeted therapies induce dependence on DNA double-strand break repair in residual tumor cells.. 2022, 14, eabc7480	1
511	Reduced gene templates for supervised analysis of scale-limited CRISPR-Cas9 fitness screens.	
510	Baicalein Activates Parkin-Dependent Mitophagy through NDP52 and OPTN.. 2022, 11,	0
509	Rapid in vivo multiplexed editing (RIME) of the adult mouse liver.	0
508	is a key regulator of GalNAc-conjugated siRNA-induced silencing in Hep3B cells.. 2022, 28, 423-434	0
507	Development and Application of CRISPR-Cas Based Tools.. 2022, 10, 834646	2
506	CRISPR-Cas9-based genome-wide screening identified novel targets for treating sorafenib-resistant hepatocellular carcinoma: a cross-talk between FGF21 and the NRF2 pathway.. 2022, 1	0
505	Ubiquitin ligase STUB1 destabilizes IFN β receptor complex to suppress tumor IFN β signaling.. 2022, 13, 1923	3
504	Patient-Derived Tumor Organoids: New Progress and Opportunities to Facilitate Precision Cancer Immunotherapy.. 2022, 12, 872531	0
503	Mitochondrial Dysfunction is a Driver of SP-2509 Drug Resistance in Ewing Sarcoma.. 2022,	
502	Altered BAF occupancy and transcription factor dynamics in PBAF-deficient melanoma.. 2022, 39, 110637	0
501	Recombinase-mediated cassette exchange-based screening of a CRISPR/Cas9 library for enhanced recombinant protein production in human embryonic kidney cells: Improving resistance to hyperosmotic stress.. 2022,	0
500	Genome-wide CRISPR/Cas9 screen identifies host factors important for porcine reproductive and respiratory syndrome virus replication.. 2022, 314, 198738	0
499	1-deoxysphingolipids bind to COUP-TF to modulate lymphatic and cardiac cell development. 2021, 56, 3128-3145.e15	0
498	FLAMs: A self-replicating ex vivo model of alveolar macrophages for functional genetic studies.	

497	Encapsidation of Staufen-2 Enhances Infectivity of HIV-1.. 2021 , 13,	0
496	Unexpected gene activation following CRISPR-Cas9-mediated genome editing.. 2021 , e53902	0
495	Transcription Factor RFX3 Stabilizes Mammary Basal Cell Identity.	
494	FOXO3 regulates a common genomic program in aging and glioblastoma stem cells. 2021 , 2, 137-159	0
493	C/EBP β Induced epigenetic changes control the dynamic gene transcription of S100A8 and S100A9.	
492	Syk-MyD88 Axis Is a Critical Determinant of Inflammatory-Response in Activated Macrophages.. 2021 , 12, 767366	2
491	Mitochondrial Dysfunction is a Driver for SP-2509 Drug Resistance in Ewing Sarcoma.	1
490	Viral Traits and Cellular Knock-Out Genotype Affect Dependence of BVDV on Bovine CD46.. 2021 , 10,	0
489	KDM6B sensitizes PARthanatos via suppression of O6-methylguanine DNA methyltransferase repair and sustained checkpoint response.	
488	A genome-wide CRISPR/Cas9 gene knockout screen identifies immunoglobulin superfamily DCC subclass member 4 as a key host factor that promotes influenza virus endocytosis. 2021 , 17, e1010141	4
487	A specific inhibitor of ALDH1A3 regulates retinoic acid biosynthesis in glioma stem cells.. 2021 , 4, 1420	3
486	CRISPR/Cas proteins are secreted virulence factors that trigger cellular immune responses. 2021 , 12, 3032-3044	1
485	CRISPR-Based Approaches for the High-Throughput Characterization of Long Non-Coding RNAs.. 2021 , 7,	0
484	AXL Knock-Out in SNU475 Hepatocellular Carcinoma Cells Provides Evidence for Lethal Effect Associated with G2 Arrest and Polyploidization.. 2021 , 22,	2
483	CRISPR Screens to Identify Regulators of Tumor Immunity. 2022 , 6,	1
482	State-of-the-art CRISPR for in vivo and cell-based studies in Drosophila.. 2021 ,	2
481	Common computational tools for analyzing CRISPR screens. 2021 ,	1
480	Efficient CRISPR/Cas12a-based genome editing toolbox for metabolic engineering in <i>Methanococcus maripaludis</i> .	1

479	Bi-allelic variants in OGDHL cause a neurodevelopmental spectrum disease featuring epilepsy, hearing loss, visual impairment, and ataxia. 2021 , 108, 2368-2384	1
478	The Kinase MAP4K1 Inhibits Cytosolic RNA-Induced Antiviral Signaling by Promoting Proteasomal Degradation of TBK1/IKK β 2021 , 9, e0145821	1
477	Gene editing and its applications in biomedicine.. 2022 , 65, 660	3
476	Genetic correction of TRMU allele restored the mitochondrial dysfunction-induced deficiencies in iPSCs-derived hair cells of hearing-impaired patients.. 2022 ,	1
475	The use of base editing technology to characterize single nucleotide variants.. 2022 , 20, 1670-1680	0
474	Loss of CD99L2 Contributed to Temozolomide Resistance and Glioblastoma Tumorigenesis Based on Genome-Scale CRISPR/Cas9 Screening.	
473	Multiplexes Death-Effector Deoxyribonucleosides to Neutralize Phagocytes.. 2022 , 13, 847171	0
472	Developing CRISPR/Cas9-Mediated Fluorescent Reporter Human Pluripotent Stem-Cell Lines for High-Content Screening.. 2022 , 27,	0
471	Modeling common and rare genetic risk factors of neuropsychiatric disorders in human induced pluripotent stem cells.. 2022 ,	0
470	Application of CRISPR-Cas9 System to Study Biological Barriers to Drug Delivery. 2022 , 14, 894	1
469	Influence of circular RNA topology on microRNA stability.	
468	A mitochondrial iron-sensing pathway regulated by DELE1.	0
467	A universal sequencing read interpreter.	
466	Inducible CRISPR activation screen for interferon-stimulated genes identifies OAS1 as a SARS-CoV-2 restriction factor.. 2022 , 18, e1010464	0
465	Rational Engineering of CRISPR-Cas9 Nuclease to Attenuate Position-Dependent Off-Target Effects.. 2022 , 5, 329-340	0
464	SLC35B2 Acts in a Dual Role in the Host Sulfation Required for EV71 Infection.. 2022 , e0204221	2
463	Disruption of dNTPs Homeostasis by Ribonucleotide Reductase Hyperactivation Overcomes AML Differentiation Blockade.. 2022 ,	0
462	A whole genome CRISPR screen identifies AHR loss as a mechanism of PARP7 inhibitor resistance.. 2022 ,	0

- 461 High-throughput functional evaluation of human cancer-associated mutations using base editors.. **2022**, 0
- 460 Extracellular N6-isopentenyladenosine (i6A) addition induces co-transcriptional i6A incorporation into ribosomal RNAs.. **2022**,
- 459 Ubiquitin-like protein 3 (UBL3) is required for MARCH ubiquitination of major histocompatibility complex class II and CD86.. **2022**, 13, 1934 1
- 458 The novel mechanism of Med12-mediated drug resistance in a TGFBR2-independent manner.. **2022**, 610, 1-7 0
- 457 Image_1.JPEG. **2020**,
- 456 Table_1.DOCX. **2020**,
- 455 Table_2.XLSX. **2020**,
- 454 Table_3.XLSX. **2020**,
- 453 Table_4.XLSX. **2020**,
- 452 Table_5.DOCX. **2020**,
- 451 Table_6.XLSX. **2020**,
- 450 Data_Sheet_1.docx. **2019**,
- 449 Video_1.AVI. **2020**,
- 448 Video_2.AVI. **2020**,
- 447 Image_1.TIF. **2019**,
- 446 Image_2.TIF. **2019**,
- 445 Image_3.TIF. **2019**,
- 444 Image_4.TIF. **2019**,

443 Image_5.TIF. 2019,

442 Table_1.DOCX. 2019,

441 Table_1.xlsx. 2020,

440 Table_2.XLSX. 2020,

439 Table_1.docx. 2020,

438 data_sheet_1.docx. 2018,

437 Data_Sheet_1.pdf. 2018,

436 Data_Sheet_2.PDF. 2018,

435 Table_1.PDF. 2018,

434 Image_1.pdf. 2019,

433 Table_1.DOCX. 2020,

432 Data_Sheet_1.ZIP. 2019,

431 Image_1.JPEG. 2019,

430 Table_1.XLSX. 2019,

429 Data_Sheet_1.CSV. 2019,

428 Table_1.XLSX. 2019,

427 Table_2.XLSX. 2019,

426 Table_1.DOCX. 2018,

425	Table_2.DOCX. 2018,	
424	Data_Sheet_1.XLSX. 2018,	
423	Presentation_1.pdf. 2018,	
422	CRISPR-Based Screening in Three-Dimensional Organoid Cultures to Identify TGF- β Pathway Regulators.. 2022 , 2488, 99-111	0
421	Concurrent Inhibition of ERK and Farnesyltransferase Suppresses the Growth of HRAS Mutant Head and Neck Squamous Cell Carcinoma.. 2022,	1
420	Genome-wide CRISPR screen identified Rad18 as a determinant of doxorubicin sensitivity in osteosarcoma.. 2022 , 41, 154	2
419	Iron-induced NCOA4 condensation regulates ferritin fate and iron homeostasis.. 2022 , e54278	2
418	Lessons from a genome-wide CRISPR-Cas9 screening: what researchers should know before start.. 2021 , 20, 1615-1620	
417	Fast-Track and Integration-Free Method of Genome Editing by CRISPR/Cas9 in Murine Pluripotent Stem Cells.. 2022 , 10, 819906	0
416	OUP accepted manuscript.	0
415	CRISPR-Cas9 library screening approach for anti-cancer drug discovery: overview and perspectives.. 2022 , 12, 3329-3344	2
414	Functional dissection of human mitotic genes using CRISPR-Cas9 tiling screens.. 2022,	
413	Transmembrane serine protease 2 (TMPRSS2) proteolytically activates the epithelial sodium channel (ENaC) by cleaving the channel's β subunit.. 2022 , 102004	1
412	Stepwise-edited, human melanoma models reveal mutations' effect on tumor and microenvironment.. <i>Science</i> , 2022 , 376, eabi8175	33.3 1
411	Rapid intraspecies evolution of fitness effects of yeast genes.. 2022,	
410	Deficiency in coatamer complex I causes aberrant activation of STING signalling.. 2022 , 13, 2321	4
409	C/EBP β -induced epigenetic changes control the dynamic gene transcription of and .. 2022 , 11,	0
408	CRISPR/Cas9 in Chronic Lymphocytic Leukemia. 2022 , 2, 928-936	1

407	CREB5 reprograms FOXA1 nuclear interactions to promote resistance to androgen receptor targeting therapies.. 2022 , 11,	0
406	ISL2 is a putative tumor suppressor whose epigenetic silencing reprograms the metabolism of pancreatic cancer.. 2022 ,	0
405	SPATA33 affects the formation of cell adhesion complex by interacting with CTNNA3 in TM4 cells.. 2022 ,	
404	Genetic physical unclonable functions in human cells.. 2022 , 8, eabm4106	
403	The E3 ubiquitin ligase RNF216/TRIAD3 is a key coordinator of the hypothalamic-pituitary-gonadal axis. 2022 , 104386	
402	Paracrine signalling between intestinal epithelial and tumour cells induces a regenerative programme.. 2022 , 11,	0
401	HSP90 N-terminal inhibitors target oncoprotein MORC2 for autophagic degradation and suppress MORC2-driven breast cancer progression.. 2022 , 12, e825	1
400	Abnormal triaging of misfolded proteins by adult neuronal ceroid lipofuscinosis-associated DNAJC5/CSP β mutants causes lipofuscin accumulation.. 2022 , 1-20	2
399	PAUF as a Target for Treatment of High PAUF-Expressing Ovarian Cancer. 2022 , 13,	
398	A genome-wide CRISPR-Cas9 knockout screen identifies essential and growth-restricting genes in human trophoblast stem cells.. 2022 , 13, 2548	2
397	Generation of an RNF1-deficient human pluripotent stem cell line using CRISPR/Cas9 technology.. 2022 , 62, 102809	
396	A CRISPR view on autophagy.. 2022 ,	1
395	AG1478 Elicits a Novel Anti-Influenza Function via an EGFR-Independent, GBF1-Dependent Pathway. 2022 , 23, 5557	0
394	Developments in high-throughput functional epigenomics: CRISPR-single-cell assay for transposase-accessible chromatin using sequencing screens.. 2022 ,	
393	Disruption of the cGAS/STING axis does not impair sensing of MVA in BHK21 cells.. 2022 , 103,	0
392	Genome-wide CRISPR screens of T cell exhaustion identify chromatin remodeling factors that limit T cell persistence.	0
391	Connexin 43 Hemichannels Regulate Osteoblast to Osteocyte Differentiation. 2022 , 10,	3
390	Application of CRISPR/Cas Genomic Editing Tools for HIV Therapy: Toward Precise Modifications and Multilevel Protection. 2022 , 12,	1

- 389 CRISPR loss of function screening to identify genes involved in human primordial germ cell-like cells development.
- 388 A CRISPR-screen in intestinal epithelial cells identifies novel factors for polarity and apical transport.
- 387 Crosstalk between IL-15R α tumor-associated macrophages and breast cancer cells reduces CD8 + T cell recruitment. 1
- 386 Advances in CRISPR-Based Functional Genomics and Nucleic Acid Detection in Pigs. 13,
- 385 NLRP3 licenses NLRP11 for inflammasome activation in human macrophages. 1
- 384 p53 engages the cGAS/STING cytosolic DNA sensing pathway for tumor suppression.
- 383 dbEssLnc: A manually curated database of human and mouse essential lncRNA genes. **2022**, 0
- 382 Robust and Versatile Arrayed Libraries for Human Genome-Wide CRISPR Activation, Deletion and Silencing. 1
- 381 Elucidating the importance and regulation of key enhancers for human MEIS1 expression. 1
- 380 Epigenetic regulation of T cell exhaustion. 3
- 379 KDM6B promotes PARthanatos via suppression of O6-methylguanine DNA methyltransferase repair and sustained checkpoint response. 2
- 378 Targeting LIPA independent of its lipase activity is a therapeutic strategy in solid tumors via induction of endoplasmic reticulum stress. 0
- 377 Harnessing CRISPR-Cas9 for Epigenetic Engineering. **2022**, 237-251 0
- 376 Carotenoid modifying enzymes in metazoans. **2022**, 0
- 375 Tonic inhibition of the chloride/proton antiporter CLC-7 by PI(3,5)P2 is crucial for lysosomal pH maintenance. 11, 3
- 374 CRISPR/Cas9 gene editing: a new approach for overcoming drug resistance in cancer. **2022**, 27, 2
- 373 Loss of Spindly sensitizes EML4-ALK v3 lung cancer cells to HSP90 inhibitors.
- 372 Not all cortical organoids are created equal. **2022**, 24, 805-806

371	RNF31 inhibition sensitizes tumors to bystander killing by innate and adaptive immune cells. 2022 , 3, 100655	1
370	Using population selection and sequencing to characterize natural variation of starvation resistance in <i>C. elegans</i> . 11,	0
369	Reconstitution of <i>Mycobacterium marinum</i> Nonhomologous DNA End Joining Pathway in <i>Leishmania</i> .	0
368	Controllable assembly of synthetic constructs with programmable ternary DNA interaction.	1
367	Bridging Glycomics and Genomics: New Uses of Functional Genetics in the Study of Cellular Glycosylation. 9,	0
366	Targeting EP2 receptor with multifaceted mechanisms for high-risk neuroblastoma. 2022 , 39, 111000	0
365	Secretion of IFN- γ by Transgenic Mammary Epithelial Cells in vitro Reduced Mastitis Infection Risk in Goats. 9,	0
364	Targeted Degradation of mRNA Decapping Enzyme DcpS by a VHL-Recruiting PROTAC.	0
363	CRISPR-Cas9-Based Technology and Its Relevance to Gene Editing in Parkinson's Disease. 2022 , 14, 1252	2
362	LDL receptor-related protein 1 (LRP1), a novel target for opening the blood-labyrinth barrier (BLB). 2022 , 7,	0
361	Large-scale genetic screens identify BET-1 as a cytoskeleton regulator promoting actin health and lifespan.	0
360	Synthetic Vulnerabilities in the KRAS Pathway. 2022 , 14, 2837	0
359	Chemogenetic profiling reveals PP2A-independent cytotoxicity of proposed PP2A activators iHAP1 and DT-061.	2
358	Genome-wide CRISPR screens of T γ cell exhaustion identify chromatin remodeling factors that limit T γ cell persistence. 2022 ,	6
357	CRISPR/Cas9-induced saturated mutagenesis identifies Rad51 haplotype as a marker of PARP inhibitor sensitivity in breast cancer. 2022 , 26,	0
356	Integrated screens uncover a cell surface tumor suppressor gene KIRREL involved in Hippo pathway. 2022 , 119,	0
355	A mitochondrial contribution to anti-inflammatory shear stress signaling in vascular endothelial cells. 2022 , 221,	3
354	Genome-wide CRISPR/Cas9 screening for therapeutic targets in NSCLC carrying wild-type TP53 and receptor tyrosine kinase genes. 2022 , 12,	0

353	MicroRNA-202 safeguards meiotic progression by preventing premature SEPARASE-mediated REC8 cleavage.	2
352	P2RY2-AKT activation is a therapeutically actionable consequence of XPO1 inhibition in acute myeloid leukemia.	0
351	CRISPR screening in cancer stem cells.	1
350	Diethyl phthalate (DEP) perturbs nitrogen metabolism in <i>Saccharomyces cerevisiae</i> . 2022 , 12,	
349	A genome-wide CRISPR-Cas9 screen identifies CENPJ as a host regulator of altered microtubule organization during <i>Plasmodium</i> liver infection. 2022 ,	1
348	Endogenous spacing enables co-processing of microRNAs and efficient combinatorial RNAi. 2022 , 100239	0
347	Application and prospects of high-throughput screening for in vitro neurogenesis. 2022 , 14, 393-419	
346	Efficient CRISPR/Cas12a-Based Genome-Editing Toolbox for Metabolic Engineering in <i>Methanococcus maripaludis</i> .	0
345	Downregulation of HINFP induces senescence-associated secretory phenotype to promote metastasis in a non-cell-autonomous manner in bladder cancer.	1
344	Structure of the human heparan sulfate polymerase complex EXT1-EXT2.	
343	Generating Custom Pooled CRISPR Libraries for Genetic Dissection of Biological Pathways. 2022 , 333-347	
342	CD147 a direct target of miR-146a supports energy metabolism and promotes tumor growth in ALK+ ALCL.	1
341	Pancreatic tumors activate arginine biosynthesis to adapt to myeloid-driven amino acid stress.	0
340	Enhanced Myogenesis by Silencing Myostatin with Nonviral Delivery of dCas9 Ribonucleoprotein Complex.	
339	Dynamic rewiring of biological activity across genotype and lineage revealed by context-dependent functional interactions. 2022 , 23,	0
338	Nicotinamide riboside alleviates cisplatin-induced peripheral neuropathy via SIRT2 activation.	
337	Core transcription programs controlling injury-induced neurodegeneration of retinal ganglion cells. 2022 ,	2
336	Avian and Human Influenza Viruses Exhibit Distinct Glycoconjugate Receptor Specificities in Human Lung Cells.	

335	Soybean Molecular Design Breeding.	
334	Accounting for small variations in the tracrRNA sequence improves sgRNA activity predictions for CRISPR screening.	
333	Antigen glycosylation regulates efficacy of CAR T cells targeting CD19. 2022 , 13,	1
332	In vivo multidimensional CRISPR screens identify Lgals2 as an immunotherapy target in triple-negative breast cancer. 2022 , 8,	1
331	Viral-Host Dependency Factors as Therapeutic Targets to Overcome Antiviral Drug-Resistance: A Focus on Innate Immune Modulation. 2,	1
330	Suppression of heparan sulfation re-sensitizes YAP1-driven melanoma to MAPK pathway inhibitors.	0
329	Spatial regulation of AMPK signaling revealed by a sensitive kinase activity reporter. 2022 , 13,	0
328	Application of Gene Editing Technology in Resistance Breeding of Livestock. 2022 , 12, 1070	0
327	Glutathione S-Transferase Alpha 4 Promotes Proliferation and Chemoresistance in Colorectal Cancer Cells. 12,	
326	Screening circular RNAs with functional potential using the RfxCas13d/BSJ-gRNA system.	0
325	The Maternal Microbiome Programs the m6A Epitranscriptome of the Mouse Fetal Brain and Intestine. 10,	1
324	Oncogenic BRAF induces whole-genome doubling through suppression of cytokinesis. 2022 , 13,	0
323	Genome-wide CRISPR Screening Reveals Pyrimidine Metabolic Reprogramming in 5-FU Chronochemotherapy of Colorectal Cancer. 12,	1
322	Vitamin B12 Regulates the Transcriptional, Metabolic, and Epigenetic Programing in Human Ileal Epithelial Cells. 2022 , 14, 2825	0
321	An autoregulatory feedback loop converging on H2A ubiquitination drives synovial sarcoma.	
320	CRISPR/Cas9-based genome-wide screening of Dictyostelium. 2022 , 12,	0
319	Genome-wide CRISPR screen identified a role for commander complex mediated ITGB1 recycling in basal insulin secretion. 2022 , 63, 101541	1
318	ZetaSuite: computational analysis of two-dimensional high-throughput data from multi-target screens and single-cell transcriptomics. 2022 , 23,	

317	Natural killer cells in antitumour adoptive cell immunotherapy.	15
316	Improvements of nuclease and nickase gene modification techniques for the treatment of genetic diseases. 4,	1
315	Stabilization of CCDC102B by Loss of RACK1 Through the CMA Pathway Promotes Breast Cancer Metastasis via Activation of the NF- κ B Pathway. 12,	1
314	High-Throughput CRISPR Screening in Hematological Neoplasms. 2022 , 14, 3612	0
313	p53 restoration in small cell lung cancer identifies a latent Cyclophilin-dependent necrosis mechanism.	
312	A Genome-Wide CRISPR Screen Identifies Factors Regulating Pluripotency Exit in Mouse Embryonic Stem Cells. 2022 , 11, 2289	1
311	Predicting and explaining the impact of genetic disruptions and interactions on organismal viability.	
310	Bidirectional genome-wide CRISPR screens reveal host factors regulating SARS-CoV-2, MERS-CoV and seasonal HCoVs.	1
309	Reduced gene templates for supervised analysis of scale-limited CRISPR-Cas9 fitness screens. 2022 , 40, 111145	0
308	Human papillomaviruses sensitize cells to DNA damage induced apoptosis by targeting the innate immune sensor cGAS. 2022 , 18, e1010725	0
307	CD44 Depletion in Glioblastoma Cells Suppresses Growth and Stemness and Induces Senescence. 2022 , 14, 3747	
306	NBBt-test: a versatile method for differential analysis of multiple types of RNA-seq data. 2022 , 12,	0
305	Targeted Lipidomics Analysis of Lysine 179 Acetylation of ACSF2 in Rat Hepatic Stellate Cells. 2022 , 106671	0
304	Pharmacological inhibition of NT5C2 reverses genetic and non-genetic drivers of 6-MP resistance in acute lymphoblastic leukemia.	0
303	Disruption of nuclear envelope integrity as a possible initiating event in tauopathies. 2022 , 40, 111249	1
302	MYO10 contributes to the malignant phenotypes of colorectal cancer via RACK1 by activating integrin/Src/ FAK signaling.	
301	Genome-wide CRISPR knockout screening identified G protein pathway suppressor 2 as a novel tumor suppressor for uveal melanoma metastasis.	0
300	Application of CRISPR-Cas9 Gene Editing for HIV Host Factor Discovery and Validation. 2022 , 11, 891	0

- 299 Nucleobase adduct-containing metabolites are MR1 ligands that stimulate self-reactive MR1T cells.
- 298 The CRISPR Revolution in the Drug Discovery Workflow: An Industry Perspective.
- 297 Targeting DNA repair with combined inhibition of NHEJ and MMEJ induces synthetic lethality in TP53-mutant cancers. 1
- 296 New Advances in Using Virus-like Particles and Related Technologies for Eukaryotic Genome Editing Delivery. **2022**, 23, 8750
- 295 Identification of novel proteins involved in P2X7-mediated signaling cascades.
- 294 Single-cell functional genomics of natural killer cell evasion in blood cancers.
- 293 Genome-wide CRISPR/Cas9 Screens Reveal Shared and Bespoke Mechanisms of Resistance to SHP2 inhibition. 0
- 292 Identification of β microglobulin, the product of B2M gene, as a Host Factor for Vaccinia Virus Infection by Genome-Wide CRISPR genetic screens.
- 291 Genomic approaches for improving resistance to Phytophthora crown rot caused by P. cactorum in strawberry (Fragaria ~~lananassa~~). 4,
- 290 FAK-SFK Signaling Integrates ECM Rigidity Sensing and Engagement of ERBB2 to Activate YAP and Promote Invasive Growth and Metastasis in Breast Cancer.
- 289 Accurate determination of CRISPR-mediated gene fitness in transplantable tumours. **2022**, 13,
- 288 Mitochondrial microproteins link metabolic cues to respiratory chain biogenesis. **2022**, 40, 111204 1
- 287 A stimulus-contingent positive feedback loop enables IFN- α -dose-dependent activation of pro-inflammatory genes.
- 286 SF3B1 facilitates HIF1-signaling and promotes malignancy in pancreatic cancer. **2022**, 40, 111266
- 285 Precise somatic genome editing for treatment of inborn errors of immunity. 13,
- 284 EPIKOL, a chromatin-focused CRISPR/Cas9-based screening platform, to identify cancer-specific epigenetic vulnerabilities. **2022**, 13, 0
- 283 The membrane-associated ubiquitin ligases MARCH2 and MARCH3 target IL-5 receptor alpha to negatively regulate eosinophilic airway inflammation.
- 282 Human TRUB1 is a highly conserved pseudouridine synthase responsible for the formation of β 5 in mitochondrial tRNAAsn, tRNAGln, tRNAGlu and tRNAPro.

- 281 Resolving deleterious and near-neutral effects requires different pooled fitness assay designs. ○
- 280 Mapping the landscape of genetic dependencies in chordoma.
- 279 CRISPR-OTE: Prediction of CRISPR On-Target Efficiency Based on Multi-Dimensional Feature Fusion. **2022**,
- 278 Loss of mitochondrial fatty acid oxidation protein short-chain Enoyl-CoA hydratase disrupts oxidative phosphorylation protein complex stability and function. ○
- 277 Harnessing nucleic acid technologies for human health on earth and in space. **2022**, ○
- 276 Autocrine Proteinase Activated Receptor (PAR) mediated signaling in prostate cancer cells.
- 275 Protocol for genome-wide CRISPR knockout screens of bacterial cytotoxins in HeLa cells. **2022**, 3, 101595
- 274 Extended DNA threading through a dual-engine motor module in the activating signal co-integrator complex. ○
- 273 New regulators of the tetracycline-inducible gene expression system identified by chemical and genetic screens. ○
- 272 Generation of corrected hiPSC clones from a Cornelia de Lange Syndrome (CdLS) patient through CRISPR-Cas-based technology. **2022**, 13, ○
- 271 Therapeutic Applications of the CRISPR-Cas System. **2022**, 9, 477 ○
- 270 Hyaluronic acid extracellularly inhibits ferroptosis via cell-surface receptors in acute traumatic brain injury. **2022**, 46, 101625 1
- 269 CRISPR-Cas9 screen in human embryonic stem cells to identify genes required for neural differentiation. **2022**, 3, 101682 ○
- 268 Identification of Drug Resistance Mechanisms Using Genome-Wide CRISPR-Cas9 Screens. **2022**, 141-156 ○
- 267 Improvement of Genetic Variation for Nutrients and Bioactive Food Components in Cereal Crops. **2022**, 51-80 ○
- 266 Genome-Wide CRISPR Screening to Identify Mammalian Factors that Regulate Intron Retention. **2022**, 263-284 ○
- 265 Identification of Genes Regulating Hepatocyte Injury by a Genome-Wide CRISPR-Cas9 Screen. **2022**, 227-251 ○
- 264 Ginsenoside Rd inhibits migration and invasion of tongue cancer cells through H19/miR-675-5p/CDH1 axis. 30, ○

- 263 The application of genome-wide CRISPR-Cas9 screens to dissect the molecular mechanisms of toxins. **2022**, 20, 5076-5084 ○
- 262 Xenotransplantation: The Contribution of CRISPR/Cas9 Gene Editing Technology. ○
- 261 Rapid in vivo multiplexed editing (RIME) of the adult mouse liver. ○
- 260 CRISPR Screens. **2022**, 213-232 ○
- 259 S100A9 Derived from Chemoembolization-Induced Hypoxia Governs Mitochondrial Function in Hepatocellular Carcinoma Progression. 2202206 ○
- 258 CRISPR-based knockout screening identifies the loss of MIEF2 to enhance oxaliplatin resistance in colorectal cancer through inhibiting the mitochondrial apoptosis pathway. 12, ○
- 257 The DEAD box RNA helicase DDX42 is an intrinsic inhibitor of positive-strand RNA viruses. ○
- 256 Mediator Kinase Inhibition Impedes Transcriptional Plasticity and Prevents Resistance to ERK/MAPK-Targeted Therapy in KRAS-Mutant Cancers. ○
- 255 Genome-wide CRISPR/Cas9 Screen Identifies Etoposide Response Modulators Associated with Outcomes in Pediatric AML. ○
- 254 GRETA: an R package for mapping in silico genetic interaction and essentiality networks. 1
- 253 Zebrafish as a Mainstream Model for In Vivo Systems Pharmacology and Toxicology. **2023**, 63, 3
- 252 Loss of ZNF251 stimulates NHEJ resulting in PARP inhibitor resistance in BRCA1-mutated cancer cells. ○
- 251 De novo sphingolipid biosynthesis necessitates detoxification in cancer cells. **2022**, 40, 111415 1
- 250 Cellular Target Deconvolution of Small Molecules Using a Selection-Based Genetic Screening Platform. ○
- 249 Benchmark data and software for assessing genome-wide CRISPR-Cas9 screening pipelines. ○
- 248 The mitochondrial Cu⁺ transporter PiC2 (SLC25A3) is a target of MTF1 and contributes to the development of skeletal muscle in vitro. ○
- 247 Cut it out! A CRISPR-Cas9 screen identifies host regulators of the Plasmodium liver stage. **2022**, 29, 1365-1367 ○
- 246 TP53 mutations in endometrial cancer contribute to clinically-relevant radiation resistance and highlight the potential for biomarker-driven radiosensitization strategies. ○

245	Genome-Scale CRISPR screen identifies LAPT M5 driving lenvatinib resistance in hepatocellular carcinoma. 1-15	0
244	Dihydroceramide desaturase 1 (DES1) promotes anchorage-independent survival downstream of HER2 -driven glucose uptake and metabolism. 2022, 36,	1
243	De novo assembly and annotation of the CHOZN \square GS \square genome supports high-throughput genome-scale screening.	0
242	CRISPR screens in Drosophila cells identify Vsg as a Tc toxin receptor.	0
241	Mutagenesis of the odorant receptor co-receptor (Orco) reveals severe olfactory defects in the crop pest moth Helicoverpa armigera. 2022, 20,	0
240	Sublethal cytochrome c release generates drug-tolerant persister cells. 2022, 185, 3356-3374.e22	1
239	Developmental reprogramming mediates aberrant cell state plasticity in colorectal cancer initiation.	0
238	Apolipoprotein E mediates cell resistance to influenza virus infection. 2022, 8,	1
237	Accounting for small variations in the tracrRNA sequence improves sgRNA activity predictions for CRISPR screening. 2022, 13,	0
236	A competitive precision CRISPR method to identify the fitness effects of transcription factor binding sites.	0
235	Translational enhancement by base editing of the Kozak sequence rescues haploinsufficiency.	0
234	Lineage-coupled clonal capture identifies clonal evolution mechanisms and vulnerabilities of BRAFV600E inhibition resistance in melanoma. 2022, 8,	0
233	Druggable host \square gene dependencies in primary \square effusion lymphoma. 2022, 56, 101270	0
232	A Theory for High-Throughput Genetic Interaction Screening.	0
231	Optimised whole-genome CRISPR interference screens identify ARID1A-dependent growth regulators in human induced pluripotent stem cells.	0
230	The lncRNA ALPHA specifically targets chikungunya virus to control infection. 2022, 82, 3729-3744.e10	1
229	The HASTER lncRNA promoter is a cis-acting transcriptional stabilizer of HNF1A.	0
228	CRISPR/Cas9: A revolutionary genome editing tool for human cancers treatment. 2022, 21, 153303382211320	0

- 227 Syk promotes phagocytosis by inducing reactive oxygen species generation and suppressing SOCS1 in macrophage-mediated inflammatory responses. **2022**, 36, 039463202211330 ○
- 226 Polymeric Micelles for Targeted Drug Delivery Systems. **2022**, 521-559 ○
- 225 Evaluation of efficiency prediction algorithms and development of ensemble model for CRISPR/Cas9 gRNA selection. ○
- 224 Delivering genes with human immunodeficiency virus-derived vehicles: still state-of-the-art after 25 years. **2022**, 29, ○
- 223 Quantitative Framework for Bench-to-Bedside Cancer Research. **2022**, 14, 5254 ○
- 222 Metabolic-associated signature and hub genes associated with immune microenvironment and prognosis in bladder cancer. ○
- 221 Current understanding of epigenetics role in melanoma treatment and resistance. **2022**, 22, ○
- 220 Molecular Biology, Genetics, and Translational Models of Human Cancer. 1-34 ○
- 219 Advances in approaches to study cell-type specific cortical circuits throughout development. 16, ○
- 218 A Novel CRISPR Interference Effector Enabling Functional Gene Characterization with Synthetic Guide RNAs. ○
- 217 Multiple centrosomes enhance migration and immune cell effector functions of mature dendritic cells. **2022**, 221, 1
- 216 Application of CRISPR for In Vivo Mouse Cancer Studies. **2022**, 14, 5014 ○
- 215 The IRE1 β XBP1 signaling axis promotes glycolytic reprogramming in response to inflammatory stimuli. ○
- 214 Chicken genome editing for investigating poultry pathogens. 1-11 ○
- 213 Utilizing an Endogenous Progesterone Receptor Reporter Gene for Drug Screening and Mechanistic Study in Endometrial Cancer. **2022**, 14, 4883 ○
- 212 Adding a Chemical Biology Twist to CRISPR Screening. ○
- 211 CEDA: integrating gene expression data with CRISPR-pooled screen data identifies essential genes with higher expression. ○
- 210 Cancer Gene Therapy. 1-11 ○

- 209 Hepatic glutamine synthetase controls N5-methylglutamine in homeostasis and cancer. ○
- 208 Loss of NECTIN1 triggers melanoma dissemination upon local IGF1 depletion. ○
- 207 Thioredoxin-1 regulates self-renewal and differentiation of murine hematopoietic stem cells through p53 tumor suppressor. **2022**, 11, ○
- 206 Targeting androgen receptor phase separation to overcome antiandrogen resistance. 2
- 205 ATP7B-Deficient Hepatocytes Reveal the Importance of Protein Misfolding Induced at Low Copper Concentration. **2022**, 11, 3400 ○
- 204 FBXO34 promotes latent HIV-1 activation by post-transcriptional modulation. 1-101 ○
- 203 Engineered SMCHD1 and D4Z4 mutations reveal roles of D4Z4 heterochromatin disruption and feedforward DUX4 network activation in FSHD. ○
- 202 CRISPRi screening identifies CASP8AP2 as an essential viability factor in lung cancer controlling tumor cell death via the AP-1 pathway. **2022**, 215958 ○
- 201 A genome-wide screen identifies SCAI as a modulator of the UV-induced replicative stress response. **2022**, 20, e3001543 ○
- 200 A reversible SRC-relayed COX2-inflammatory program drives therapeutic resistance in BRAFV600E colorectal tumors. ○
- 199 A Genome-Wide CRISPR-Cas9 Loss-of-Function Screening to Identify Host Restriction Factors Modulating Oncolytic Virotherapy. **2023**, 379-399 ○
- 198 Recognition of cyclic dinucleotides and folates by human SLC19A1. ○
- 197 Feasibility Study of Dendrimer-Based TTR-CRISPR pDNA Polyplex for Ocular Amyloidosis &i>in Vitro&/i>. **2022**, 45, 1660-1668 ○
- 196 Optimization of genomewide CRISPR screens using AsCas12a and multi-guide arrays. ○
- 195 Loss of CD99L2 contributed to temozolomide resistance and glioblastoma tumorigenesis based on Genome-scale CRISPR/Cas9 screening. ○
- 194 Inactivating a herbicide-resistance transgene in Nicotiana tabacum plants using CRISPR/Cas9. **2022**, 32, 100387 ○
- 193 Genome Editing: A Review of the Challenges and Approaches. **2022**, 71-101 ○
- 192 Human IFNAR2 Mutant Generated by CRISPR/Cas9-Induced Exon Skipping Upregulates a Subset of Tonic-Like Interferon-Stimulated Genes Upon IFNβ stimulation. **2022**, 42, 580-589 ○

191	Studying Virus-Host Interactions with CRISPR Technology. 2023 , 105-117	0
190	Toll-like receptor 2 orchestrates a tumor suppressor response in non-small cell lung cancer. 2022 , 41, 111596	1
189	Combination Therapies with CDK4/6 Inhibitors to Treat KRAS-mutant Pancreatic Cancer.	2
188	Identification of TFPI as a receptor reveals recombination-driven receptor switching in <i>Clostridioides difficile</i> toxin B variants. 2022 , 13,	0
187	PRPS2 mutations drive acute lymphoblastic leukemia relapse through influencing PRPS1/2 hexamer stability. Publish Ahead of Print,	0
186	Pooled genetic screens with image-based profiling. 2022 , 18,	1
185	Defining the Sensitivity Landscape of EGFR Variants to Tyrosine Kinase Inhibitors. 2022 ,	1
184	Mitochondrial Factor C20orf7 Facilitates the EMT-Mediated Cancer Cell Migration and the Proliferation of Colon Cancer In Vitro and In Vivo. 2022 , 13, 2111	0
183	Rapid iPSC inclusionopathy models shed light on formation, consequence and molecular subtype of Synuclein inclusions.	0
182	Genome-scale CRISPR screening in a single mouse liver. 2022 , 100217	0
181	The Hippo signalling pathway and its implications in human health and diseases. 2022 , 7,	1
180	A CRISPR Path to Finding Vulnerabilities and Solving Drug Resistance: Targeting the Diverse Cancer Landscape and Its Ecosystem. 2200014	0
179	Arenobufagin causes ferroptosis in human gastric cancer cells by increasing rev-erb α expression. 2022 ,	0
178	Targeting NRAS via miR-1304-5p or farnesyltransferase inhibition confers collateral sensitivity to ALK inhibitors in high-risk neuroblastoma.	0
177	The mitochondrial Cu ⁺ transporter PiC2 (SLC25A3) is a target of MTF1 and contributes to the development of skeletal muscle in vitro. 9,	1
176	11-Cl-BBQ , a Select Modulator of AhR -regulated Transcription, Suppresses Lung Cancer Cell Growth via activation of p53 and p27 Kip1 .	1
175	Integration of CRISPR/Cas9 with artificial intelligence for improved cancer therapeutics. 2022 , 20,	1
174	Structure of the human heparan sulfate polymerase complex EXT1-EXT2. 2022 , 13,	1

- 173 Atlas of interactions between SARS-CoV-2 macromolecules and host proteins. **2022**, 100068 ○
- 172 Transcriptional Antagonism by CDK8 Inhibition Improves Therapeutic Efficacy of MEK Inhibitors. ○
- 171 Germline variation contributes to false negatives in CRISPR-based experiments with varying burden across ancestries. ○
- 170 Large-scale genetic screens identify BET -1 as a cytoskeleton regulator promoting actin function and life span. ○
- 169 Design, synthesis and pharmacological evaluation of Ecarboline derivatives as potential antitumor agent via targeting autophagy. **2023**, 246, 114955 ○
- 168 Epigenetic Mechanisms Underlying Melanoma Resistance to Immune and Targeted Therapies. **2022**, 14, 5858 ○
- 167 Forward Genetic Screens as Tools to Investigate Role and Mechanisms of EMT in Cancer. **2022**, 14, 5928 ○
- 166 Application of combined CRISPR screening for genetic and chemical-genetic interaction profiling in *Mycobacterium tuberculosis*. **2022**, 8, ○
- 165 PTEN deficiency exposes a requirement for an ARF GTPase module in integrin-dependent invasion in ovarian cancer. ○
- 164 High-content CRISPR screening in tumor immunology. 13, ○
- 163 Extensive androgen receptor enhancer heterogeneity in primary prostate cancers underlies transcriptional diversity and metastatic potential. **2022**, 13, 2
- 162 Synthetic lethality between CCNE1 hyperactivity and PARG inhibition in breast cancer. ○
- 161 Multiplexed engineering and precision gene editing in cellular immunotherapy. 13, ○
- 160 The Role of Bone Morphogenetic Protein Receptor Type 2 (BMP2) and the Prospects of Utilizing Induced Pluripotent Stem Cells (iPSCs) in Pulmonary Arterial Hypertension Disease Modeling. **2022**, 11, 3823 ○
- 159 Long noncoding RNA study: Genome-wide approaches. **2022**, ○
- 158 Validation of Promoters and Codon Optimization on CRISPR/Cas9-Engineered Jurkat Cells Stably Expressing Rep4E3 for Interfering with HIV-1 Replication. **2022**, 23, 15049 ○
- 157 Establishment of a CRISPR/Cas9 knockout library for screening type I interferon-inducible antiviral effectors in pig cells. 13, ○
- 156 Laminin matrix adhesion regulates basal mammary epithelial cell identity. **2022**, 135, ○

155	Resistance mechanism to Notch inhibition and combination therapy in human T cell acute lymphoblastic leukemia.	0
154	Frame Editors for Precise, Template-Free Frameshifting.	0
153	Pan-cancer analysis identifies DDX56 as a prognostic biomarker associated with immune infiltration and drug sensitivity. 13,	0
152	Introducing the CRISPR/Cas9 cytosine base editor toolbox [LeishBASEedit] Gene editing and high-throughput screening in Leishmania without requiring DNA double-strand breaks, homologous recombination or donor DNA.	1
151	Massively Parallel CRISPR-Based Genetic Perturbation Screening at Single-Cell Resolution. 2204484	0
150	Identification of hyperosmotic stress-responsive genes in Chinese hamster ovary cells via genome-wide virus-free CRISPR/Cas9 screening.	0
149	PAX5 epigenetically orchestrates CD58 transcription and modulates blinatumomab response in acute lymphoblastic leukemia. 2022, 8,	0
148	Small Molecule PTPN2 Inhibitors Sensitize Resistant Melanoma to Anti-PD-1 Immunotherapy.	0
147	Host autophagy limits Toxoplasma gondii proliferation in the absence of IFN- γ by affecting the hijack of Rab11A-positive vesicles. 13,	1
146	Brain metastatic outgrowth and osimertinib resistance are potentiated by RhoA in EGFR-mutant lung cancer. 2022, 13,	0
145	Senolytic treatment preserves biliary regenerative capacity lost through cellular senescence during cold storage. 2022, 14,	1
144	Yap governs a lineage-specific neuregulin1 pathway-driven adaptive resistance to RAF kinase inhibitors. 2022, 21,	0
143	The IRE1-XBP1 Signaling Axis Promotes Glycolytic Reprogramming in Response to Inflammatory Stimuli.	0
142	ST3GAL5 -catalyzed gangliosides inhibit TGF- β -induced epithelial-mesenchymal transition via TBI degradation.	1
141	Stress-induced reversible cell-cycle arrest requires PRC2/PRC1-mediated control of mitophagy in Drosophila germline stem cells and human iPSCs. 2022,	0
140	The sound of silence: Transgene silencing in mammalian cell engineering. 2022, 13, 950-973	0
139	High-efficiency genome editing of an extreme thermophile Thermus thermophilus using endogenous type I and type III CRISPR-Cas systems. 2022, 1, 412-427	0
138	Tumor Cell-Intrinsic BTLA Receptor Inhibits the Proliferation of Tumor Cells via ERK1/2. 2022, 11, 4021	1

- 137 Phenolics: Key Players in Interaction Between Plants and Their Environment. **2023**, 23-46 ○
- 136 The psychosis risk factor RBM12 encodes a novel repressor of GPCR/cAMP signal transduction. ○
- 135 Adrenoreceptor-triggered PKA activation negatively regulates the innate antiviral response. ○
- 134 Construction of Sphingolipid Remodeled Cells by Genome Editing. **2023**, 111-125 ○
- 133 A CRISPR Platform for Targeted In Vivo Screens. **2023**, 397-409 ○
- 132 Entry receptors are the gateway to alphavirus infection. **2023**, 133, ○
- 131 Ribosomal RNA-based epitranscriptomic regulation of chondrocyte translation and proteome in osteoarthritis. **2023**, ○
- 130 Duck cGAS inhibits DNA and RNA virus replication by activating IFNs and antiviral ISGs. 14, ○
- 129 Efficient generation of lower induced motor neurons by coupling Ngn2 expression with developmental cues. **2023**, 111896 ○
- 128 Identification and evaluation of midbrain specific longevity-related genes in exceptionally long-lived but healthy mice. 14, ○
- 127 Genetic and pharmacological modulation of DNA mismatch repair heterogeneous tumors promotes immune surveillance. **2023**, 41, 196-209.e5 1
- 126 p53 controls choice between apoptotic and non-apoptotic death following DNA damage. ○
- 125 An interactive web application for processing, correcting, and visualizing genome-wide pooled CRISPR-Cas9 screens. **2023**, 100373 ○
- 124 Spatial and single-cell transcriptomics decipher the cellular environment containing HLA-G+ cancer cells and SPP1+ macrophages in colorectal cancer. **2023**, 42, 111929 ○
- 123 Interactions between TULP3 tubby domain and ARL13B amphipathic helix promote lipidated protein transport to cilia. ○
- 122 Targeting KRAS-mutant stomach/colorectal tumors by disrupting the ERK2-p53 complex. **2023**, 42, 111972 ○
- 121 p53 engages the cGAS/STING cytosolic DNA sensing pathway for tumor suppression. **2023**, 2
- 120 Genome-wide CRISPR screen reveals genetic modifiers of Ca²⁺-mediated cell death. ○

- 119 The germline factor DDX4 contributes to the chemoresistance of small cell lung cancer cells. **2023**, 6,
- 118 Nef enhances HIV-1 replication and infectivity independently of SERINC5 in CEM T cells. **2023**, 578, 154-162
- 117 A universal sequencing read interpreter. **2023**, 9,
- 116 Guide RNA library-based CRISPR screens in plants: opportunities and challenges. **2023**, 79, 102883
- 115 Identification of β microglobulin, the product of B2M gene, as a Host Factor for Vaccinia Virus Infection by Genome-Wide CRISPR genetic screens. **2022**, 18, e1010800
- 114 Endogenous Retrovirus Elements Are Co-Expressed with IFN Stimulation Genes in the JAK/STAT Pathway. **2023**, 15, 60
- 113 PAXIP1 and STAG2 converge to maintain 3D genome architecture and facilitate promoter/enhancer contacts to enable stress hormone-dependent transcription.
- 112 Posttranslational Modifications of Rev-Erb β Protein and Abnormal Inflammatory Response in Gastric Cancer. **2022**, 2022, 1-13
- 111 CRISPR engineering in organoids for gene repair and disease modelling. **2023**, 1, 32-45
- 110 Monoamine oxidase A-dependent ROS formation modulates human cardiomyocyte differentiation through AKT and WNT activation. **2023**, 118,
- 109 A CRISPR screen in intestinal epithelial cells identifies novel factors for polarity and apical transport. 12,
- 108 In situ modeling of acquired resistance to RTK/RAS pathway targeted therapies.
- 107 Resistance to vincristine in cancerous B-cells by disruption of p53-dependent mitotic surveillance.
- 106 Mitochondrial citrate metabolism and efflux regulates trophoblast differentiation.
- 105 Resistance mechanism to Notch inhibition and combination therapy in human T cell acute lymphoblastic leukemia.
- 104 Base editing screens map mutations affecting interferon- β signaling in cancer. **2023**,
- 103 Gene Modulation with CRISPR-based Tools in Human iPSC-Cardiomyocytes.
- 102 RNA mis-splicing drives viral mimicry response after DNMTi therapy in SETD2-mutant kidney cancer. **2023**, 42, 112016

- 101 Transgenesis. **2021**, 155-190 ○
- 100 Knockouts of TUT7 and 3'UTR show that they cooperate in histone mRNA maintenance and degradation. **2022**, 28, 1519-1533 ○
- 99 CRISPR/Cas9 Gene Disruption Studies in F0 Xenopus Tadpoles: Understanding Development and Disease in the Frog. **2023**, 111-130 ○
- 98 Generation, storage, and utilizations of mutant libraries. **2023**, 403-420 ○
- 97 Phosphomevalonate Kinase Controls β -Catenin Signaling via the Metabolite 5-Diphosphomevalonate. 2204909 ○
- 96 TFIIIC as a Potential Epigenetic Modulator of Histone Acetylation in Human Stem Cells. **2023**, 24, 3624 ○
- 95 The bromodomain inhibitor JQ1 is a molecular glue targeting centromeres. ○
- 94 Genome-scale CRISPR-Cas9 knockout screening in nasopharyngeal carcinoma for radiosensitive and radioresistant genes. **2023**, 30, 101625 ○
- 93 Neurodegeneration-associated protein VAPB regulates proliferation in medulloblastoma. ○
- 92 Use of CRISPR-based screens to identify mechanisms of chemotherapy resistance. ○
- 91 Improving recombinant protein production in CHO cells using the CRISPR-Cas system. **2023**, 64, 108115 ○
- 90 GOLGA8 increases bulk antisense oligonucleotide uptake and activity in mammalian cells. **2023**, 32, 289-301 ○
- 89 CRISPR technology: A versatile tool to model, screen, and reverse drug resistance in cancer. **2023**, 102, 151299 ○
- 88 Protocol for genome-scale *in vivo* CRISPR screening to study protection of beta cells under autoimmunity in a type 1 diabetes mouse model. **2023**, 4, 102155 ○
- 87 A multi-omics integrative analysis based on CRISPR screens re-defines the pluripotency regulatory network in ESCs. **2023**, 6, ○
- 86 Epigenetics and cutaneous neoplasms: from mechanism to therapy. ○
- 85 Viral Vectors, Exosomes, and Vexosomes: Potential Armamentarium for Delivering CRISPR/Cas to Cancer Cells. **2023**, 115555 ○
- 84 Protocol using lentivirus to establish THP-1 suspension cell lines for immunostaining and confocal microscopy. **2023**, 4, 102032 ○

- 83 Targets of Immune Escape Mechanisms in Cancer: Basis for Development and Evolution of Cancer Immune Checkpoint Inhibitors. **2023**, 12, 218 ○
- 82 E3 ubiquitin ligase ASB8 promotes selinexor-induced proteasomal degradation of XPO1. **2023**, 160, 114305 ○
- 81 Identifying CDC7 as a synergistic target of chemotherapy in resistant small-cell lung cancer via CRISPR/Cas9 screening. **2023**, 9, ○
- 80 CRISPR activation screening in a mouse model for drivers of hepatocellular carcinoma growth and metastasis. **2023**, 26, 106099 ○
- 79 Size distributions of intracellular condensates reflect competition between coalescence and nucleation. **2023**, 19, 586-596 ○
- 78 Editorial: Synthetic biology in Vertebrate Model system: New clinical and preclinical translational applications. 10, ○
- 77 PET117 Modulates Mitochondrial-encoded COX1 Translation by stabilizing TACO1. ○
- 76 CRISPR/Cas genome editing in triple negative breast cancer: Current situation and future directions. **2023**, 209, 115449 ○
- 75 Lymphoma cells lacking pro-apoptotic BAX are highly resistant to BH3-mimetics targeting pro-survival MCL-1 but retain sensitivity to conventional DNA-damaging drugs. **2023**, 30, 1005-1017 ○
- 74 MYC/Glutamine Dependency Is a Therapeutic Vulnerability in Pancreatic Cancer with Deoxycytidine Kinase Inactivation-Induced Gemcitabine Resistance. OF1-OF14 ○
- 73 TRAF3 Suppression Encourages B Cell Recruitment and Prolongs Survival of Microbiome-Intact Mice with Ovarian Cancer. ○
- 72 A reversible SRC-relayed COX2 inflammatory program drives resistance to BRAF and EGFR inhibition in BRAFV600E colorectal tumors. **2023**, 4, 240-256 ○
- 71 Revolutionizing DNA repair research and cancer therapy with CRISPR/Cas screens. ○
- 70 Androgen Signaling Restricts Glutaminolysis to Drive Sex-Specific Th17 Metabolism. ○
- 69 Peroxidase-catalyzed proximity labeling to survey the proteome of nanomaterial-cell interface during macropinocytosis-mediated internalization. ○
- 68 TUBB4B is a novel therapeutic target in non-alcoholic fatty liver disease-associated hepatocellular carcinoma. **2023**, 260, 71-83 ○
- 67 TRAF3 Suppression Encourages B Cell Recruitment and Prolongs Survival of Microbiome-Intact Mice with Ovarian Cancer. ○
- 66 Optimization of Genomewide CRISPR Screens Using AsCas12a and Multi-Guide Arrays. **2023**, 6, 75-82 ○

- 65 The history and conceptual framework of assays and screens. **2023**, 45, ○
- 64 Natural variation in gene expression and viral susceptibility revealed by neural progenitor cell villages. **2023**, 30, 312-332.e13 ○
- 63 Research and Therapeutic Approaches in Stem Cell Genome Editing by CRISPR Toolkit. **2023**, 28, 1982 ○
- 62 Interferon inhibits a model RNA virus via a limited set of inducible effector genes. ○
- 61 Complex regulation of alarmins S100A8/A9 and secretion via gasdermin D pores exacerbates autoinflammation in familial Mediterranean fever. **2023**, ○
- 60 Dimensionality reduction methods for extracting functional networks from large-scale CRISPR screens. ○
- 59 Genome-wide CRISPR/Cas9 screens reveal shared and cell-specific mechanisms of resistance to SHP2 inhibition. **2023**, 220, ○
- 58 Efficient prioritization of CRISPR screen hits by accounting for targeting efficiency of guide RNA. **2023**, 21, ○
- 57 Silk-Gel Powered Adenoviral Vector Enables Robust Genome Editing of PD-L1 to Augment Immunotherapy across Multiple Tumor Models. 2206399 ○
- 56 Sterile 20-like kinase 3 promotes tick-borne encephalitis virus assembly by interacting with NS2A and prM and enhancing the NS2A/NS4A association. **2023**, 95, ○
- 55 Contributions of stem cell engineering to new therapies for joint and bone diseases. **2023**, 35-51 ○
- 54 Viral vectors and extracellular vesicles: innate delivery systems utilized in CRISPR/Cas-mediated cancer therapy. ○
- 53 Downregulation of KEAP1 in melanoma promotes resistance to immune checkpoint blockade. **2023**, 7, ○
- 52 Remodeling oncogenic transcriptomes by small molecules targeting NONO. ○
- 51 RTP4 silencing provokes tumor-intrinsic resistance to immune checkpoint blockade in colorectal cancer. ○
- 50 A simple, rapid, and efficient method for generating multigene-knockout culture cells by the CRISPR/Cas9 system. ○
- 49 Actin-rich lamellipodia-like protrusions contribute to the integrity of epithelial cell-cell junctions. **2023**, 104571 ○
- 48 Improving the Editing Efficiency of CRISPR-Cas9 by Reducing the Generation of Escapers Based on the Surviving Mechanism. **2023**, 12, 672-680 ○

- 47 Fit-Seq2.0: An Improved Software for High-Throughput Fitness Measurements Using Pooled Competition Assays. ○
- 46 MAPT expression is mediated by long-range interactions with cis-regulatory elements. ○
- 45 Identification of Three Human POLH Germline Variants Defective in Complementing the UV- and Cisplatin-Sensitivity of POLH-Deficient Cells. **2023**, 24, 5198 ○
- 44 FAM193A is a positive regulator of p53 activity. **2023**, 42, 112230 ○
- 43 Tetracycline-dependent inhibition of mitochondrial protein elongation in mitochondrial disease mutant cells suppresses IRE1 α to promote cell survival. ○
- 42 Brain metastasis in breast cancer: focus on genes and signaling pathways involved, blood-brain barrier and treatment strategies. **2023**, 25, 1218-1241 ○
- 41 In vivo CRISPR screens identify RhoV as a pro-metastasis factor of triple-negative breast cancer. ○
- 40 A multi-omics integrative analysis based on CRISPR screens re-defines the pluripotency regulatory network in ESCs. ○
- 39 Cas12a/Cpf1 knock-in mice enable efficient multiplexed immune cell engineering. ○
- 38 CARD-only proteins regulate in vivo inflammasome responses and ameliorate gout. **2023**, 42, 112265 ○
- 37 Multimodal CRISPR perturbations of GWAS loci associated with coronary artery disease in vascular endothelial cells. **2023**, 19, e1010680 ○
- 36 A stimulus-contingent positive feedback loop enables IFN- α -dose-dependent activation of pro-inflammatory genes. ○
- 35 Analyzing CRISPR screens in non-conventional microbes. **2023**, 50, ○
- 34 Bioinformatics approaches to analyzing CRISPR screen data: from dropout screens to single-cell CRISPR screens. **2022**, 10, 307 ○
- 33 To metabolomics and beyond: a technological portfolio to investigate cancer metabolism. **2023**, 8, ○
- 32 Antigen discrimination by T cells relies on size-constrained microvillar contact. **2023**, 14, ○
- 31 Evaluation of Radiation Sensitivity Differences in Mouse Liver Tumor Organoids Using CRISPR/Cas9-Mediated Gene Mutation. **2023**, 22, 153303382311651 ○
- 30 Mapping cellular responses to DNA double-strand breaks using CRISPR technologies. **2023**, ○

- 29 Loss of TTC17 promotes breast cancer metastasis through RAP1/CDC42 signaling and sensitizes it to rapamycin and paclitaxel. **2023**, 13, ○
- 28 Disrupting the phase separation of KAT8/IRF1 diminishes PD-L1 expression and promotes antitumor immunity. **2023**, 4, 382-400 ○
- 27 Setd2 inactivation sensitizes lung adenocarcinoma to inhibitors of oxidative respiration and mTORC1 signaling. **2023**, 6, ○
- 26 Targeting a mitochondrial E3 ubiquitin ligase complex to overcome AML cell-intrinsic Venetoclax resistance. ○
- 25 CRISPR/Cas9-mediated genome editing of the *BRCA1* gene. **2022**, 51, 20220597 ○
- 24 Detailed profiling with MaChIAto reveals various genomic and epigenomic features affecting the efficacy of knock-out, short homology-based knock-in and Prime Editing. ○
- 23 Extended DNA threading through a dual-engine motor module of the activating signal co-integrator 1 complex. **2023**, 14, ○
- 22 Mapping the landscape of genetic dependencies in chordoma. **2023**, 14, ○
- 21 Haploinsufficiency of ZNF251 causes DNA-PKcs-dependent resistance to PARP inhibitors in BRCA1-mutated cancer cells. ○
- 20 Optimized whole-genome CRISPR interference screens identify ARID1A-dependent growth regulators in human induced pluripotent stem cells. **2023**, ○
- 19 Spatial Transcriptomics: Technical Aspects of Recent Developments and Their Applications in Neuroscience and Cancer Research. ○
- 18 Reinstating targeted protein degradation with DCAF1 PROTACs in CRBN PROTAC resistant settings. ○
- 17 Understanding neural development and diseases using CRISPR screens in human pluripotent stem cell-derived cultures. 11, ○
- 16 Aberrant cell state plasticity mediated by developmental reprogramming precedes colorectal cancer initiation. **2023**, 9, ○
- 15 A Review of CRISPR-Based Advances in Dermatological Diseases. ○
- 14 CRISPR/Cas9-Editing-Based Modeling of Tumor Hypoxia. **2023**, 275-295 ○
- 13 STING activation of IRF3 is tuned by PELI2 to suppress basal activation and reinforce the anti-viral response. ○
- 12 A kinome-wide CRISPR screen identifies CK1 α as a target to overcome enzalutamide resistance of prostate cancer. **2023**, 4, 101015 ○

- 11 CRISPR/Cas9 genetic screens in hepatocellular carcinoma gene discovery. **2023**, 5, 100127
- 10 In silico interrogation of the miRNAome of infected haematopoietic cells to predict processes important for human cytomegalovirus latent infection. **2023**, 104727
- 9 Low-density lipoprotein receptor-related protein 1 (LRP1) as an auxiliary host factor for RNA viruses. **2023**, 6, e202302005
- 8 Use of a human small airway epithelial cell line to study the interactions of *Aspergillus fumigatus* with pulmonary epithelial cells.
- 7 Role of FLCN Phosphorylation in Insulin-Mediated mTORC1 Activation and Tumorigenesis.
- 6 Using traditional machine learning and deep learning methods for on- and off-target prediction in CRISPR/Cas9: a review.
- 5 Post-transcriptional regulation of erythropoiesis. Publish Ahead of Print,
- 4 Genome-Wide Screening Identifies Gene AKR1C1 Critical for Resistance to Pirarubicin in Bladder Cancer. **2023**, 15, 2487
- 3 Loss of AMPK α promotes melanoma tumor growth and brain metastasis. **2023**, 26, 106791
- 2 Mitochondrial citrate metabolism and efflux regulate BeWo differentiation. **2023**, 13,
- 1 Resistance to vincristine in DLBCL by disruption of p53-induced cell cycle arrest and apoptosis mediated by KIF18B and USP28.