Magdy M Mahfouz

List of Publications by Year in Descending Order

84 papers	5,531 citations	40 h-index	74 g-index
98 ext. papers	7,288 ext. citations	8.6 avg, IF	6.37 L-index

#	Paper	IF	Citations
84	Microbial Biocontainment Systems for Clinical, Agricultural, and Industrial Applications.. *Frontiers in Bioengineering and Biotechnology*, **2022**, 10, 830200	5.8	0
83	The Rice Serine/Arginine Splicing Factor RS33 Regulates Pre-mRNA Splicing during Abiotic Stress Responses. *Cells*, **2022**, 11, 1796	7.9	0
82	iSCAN-V2: A One-Pot RT-RPA-CRISPR/Cas12b Assay for Point-of-Care SARS-CoV-2 Detection.. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 800104	5.8	1
81	LAMP-Coupled CRISPR-Cas12a Module for Rapid and Sensitive Detection of Plant DNA Viruses. *Viruses*, **2021**, 13,	6.2	22
80	Chemical activation of Arabidopsis SnRK2.6 by pladienolide B. *Plant Signaling and Behavior*, **2021**, 16, 1885165	2.5	0
79	Vigilant: An Engineered VirD2-Cas9 Complex for Lateral Flow Assay-Based Detection of SARS-CoV2. *Nano Letters*, **2021**, 21, 3596-3603	11.5	16
78	CRISPR/Cas systems versus plant viruses: engineering plant immunity and beyond. *Plant Physiology*, **2021**, 186, 1770-1785	6.6	2
77	Overlapping roles of spliceosomal components SF3B1 and PHF5A in rice splicing regulation. *Communications Biology*, **2021**, 4, 529	6.7	2
76	Polycomb-dependent differential chromatin compartmentalization determines gene coregulation in. *Genome Research*, **2021**,	9.7	6
75	Pre-mRNA alternative splicing as a modulator for heat stress response in plants. *Trends in Plant Science*, **2021**, 26, 1153-1170	13.1	8
74	CRISPR-Based Crop Improvements: A Way Forward to Achieve Zero Hunger. *Journal of Agricultural and Food Chemistry*, **2021**, 69, 8307-8323	5.7	10
73	A Novel Miniature CRISPR-Cas13 System for SARS-CoV-2 Diagnostics. *ACS Synthetic Biology*, **2021**, 10, 2541-2551	5.7	9
72	Synthetic directed evolution in plants: unlocking trait engineering and improvement. *Synthetic Biology*, **2021**, 6, ysab025	3.3	2
71	Bio-SCAN: A CRISPR/dCas9-Based Lateral Flow Assay for Rapid, Specific, and Sensitive Detection of SARS-CoV-2.. *ACS Synthetic Biology*, **2021**,	5.7	2
70	Engineering herbicide resistance via prime editing in rice. *Plant Biotechnology Journal*, **2020**, 18, 2370-2372	11.6	77
69	GCN5 modulates salicylic acid homeostasis by regulating H3K14ac levels at the 5′and 3′ends of its target genes. *Nucleic Acids Research*, **2020**, 48, 5953-5966	20.1	18
68	Genome Editing Technologies for Rice Improvement: Progress, Prospects, and Safety Concerns. *Frontiers in Genome Editing*, **2020**, 2, 5	2.5	21

67	Nucleic Acid Detection Using CRISPR/Cas Biosensing Technologies. *ACS Synthetic Biology*, **2020**, 9, 1226-1233	5.7	105
66	Fusion of the Cas9 endonuclease and the VirD2 relaxase facilitates homology-directed repair for precise genome engineering in rice. *Communications Biology*, **2020**, 3, 44	6.7	48
65	Wheat chromatin architecture is organized in genome territories and transcription factories. *Genome Biology*, **2020**, 21, 104	18.3	44
64	Efficient, Rapid, and Sensitive Detection of Plant RNA Viruses With One-Pot RT-RPA-CRISPR/Cas12a Assay. *Frontiers in Microbiology*, **2020**, 11, 610872	5.7	35
63	CRISPR-TSKO: A Tool for Tissue-Specific Genome Editing in Plants. *Trends in Plant Science*, **2020**, 25, 123-126	15.1	15
62	iSCAN: An RT-LAMP-coupled CRISPR-Cas12 module for rapid, sensitive detection of SARS-CoV-2. *Virus Research*, **2020**, 288, 198129	6.4	102
61	Engineering crops of the future: CRISPR approaches to develop climate-resilient and disease-resistant plants. *Genome Biology*, **2020**, 21, 289	18.3	31
60	CRISPR/Cas9 Mutagenesis by Translocation of Cas9 Protein Into Plant Cells via the Type IV Secretion System. *Frontiers in Genome Editing*, **2020**, 2, 6	2.5	8
59	CRISPR-Based Directed Evolution for Crop Improvement. *Trends in Biotechnology*, **2020**, 38, 236-240	15.1	21
58	Thermopriming reprograms metabolic homeostasis to confer heat tolerance. *Scientific Reports*, **2019**, 9, 181	4.9	45
57	A Simplified Method to Engineer CRISPR/Cas9-Mediated Geminivirus Resistance in Plants. *Methods in Molecular Biology*, **2019**, 2028, 167-183	1.4	4
56	CRISPR directed evolution of the spliceosome for resistance to splicing inhibitors. *Genome Biology*, **2019**, 20, 73	18.3	70
55	Plant Genome Engineering for Targeted Improvement of Crop Traits. *Frontiers in Plant Science*, **2019**, 10, 114	6.2	105
54	New plant breeding technologies for food security. *Science*, **2019**, 363, 1390-1391	33.3	85
53	Serine/Arginine-rich protein family of splicing regulators: New approaches to study splice isoform functions. *Plant Science*, **2019**, 283, 127-134	5.3	13
52	Multiplex CRISPR Mutagenesis of the Serine/Arginine-Rich (SR) Gene Family in Rice. *Genes*, **2019**, 10,	4.2	17
51	CRISPR-Cas13d mediates robust RNA virus interference in plants. *Genome Biology*, **2019**, 20, 263	18.3	65
50	Virus-Mediated Genome Editing in Plants Using the CRISPR/Cas9 System. *Methods in Molecular Biology*, **2019**, 1917, 311-326	1.4	10

49	Thermopriming triggers splicing memory in Arabidopsis. *Journal of Experimental Botany*, **2018**, 69, 2659-2675	7	64
48	CRISPR/Cas13 as a Tool for RNA Interference. *Trends in Plant Science*, **2018**, 23, 374-378	13.1	40
47	Pea early-browning virus-mediated genome editing via the CRISPR/Cas9 system in Nicotiana benthamiana and Arabidopsis. *Virus Research*, **2018**, 244, 333-337	6.4	63
46	Engineering virus resistance via CRISPR-Cas systems. *Current Opinion in Virology*, **2018**, 32, 1-8	7.5	38
45	RNA virus interference via CRISPR/Cas13a system in plants. *Genome Biology*, **2018**, 19, 1	18.3	409
44	CRISPR base editors: genome editing without double-stranded breaks. *Biochemical Journal*, **2018**, 475, 1955-1964	3.8	132
43	Harnessing CRISPR/Cas systems for programmable transcriptional and post-transcriptional regulation. *Biotechnology Advances*, **2018**, 36, 295-310	17.8	60
42	Engineering RNA Virus Interference via the CRISPR/Cas13 Machinery in Arabidopsis. *Viruses*, **2018**, 10,	6.2	46
41	Engineering resistance against Tomato yellow leaf curl virus via the CRISPR/Cas9 system in tomato. *Plant Signaling and Behavior*, **2018**, 13, e1525996	2.5	103
40	Engineering plant architecture via CRISPR/Cas9-mediated alteration of strigolactone biosynthesis. *BMC Plant Biology*, **2018**, 18, 174	5.3	65
39	Targeted genome regulation via synthetic programmable transcriptional regulators. *Critical Reviews in Biotechnology*, **2017**, 37, 429-440	9.4	18
38	Genome editing: The efficient tool CRISPR-Cpf1. *Nature Plants*, **2017**, 3, 17028	11.5	23
37	CRISPR-Cpf1: A New Tool for Plant Genome Editing. *Trends in Plant Science*, **2017**, 22, 550-553	13.1	91
36	Engineering Molecular Immunity Against Plant Viruses. *Progress in Molecular Biology and Translational Science*, **2017**, 149, 167-186	4	12
35	Herboxidiene triggers splicing repression and abiotic stress responses in plants. *BMC Genomics*, **2017**, 18, 260	4.5	20
34	The Arabidopsis SWI/SNF protein BAF60 mediates seedling growth control by modulating DNA accessibility. *Genome Biology*, **2017**, 18, 114	18.3	30
33	Pre-mRNA splicing repression triggers abiotic stress signaling in plants. *Plant Journal*, **2017**, 89, 291-309	6.9	39
32	Efficient CRISPR/Cas9-Mediated Genome Editing Using a Chimeric Single-Guide RNA Molecule. *Frontiers in Plant Science*, **2017**, 8, 1441	6.2	72

31	Genome editing: the road of CRISPR/Cas9 from bench to clinic. *Experimental and Molecular Medicine* , **2016**, 48, e265	12.8	55
30	CRISPR/Cas9-Mediated Immunity to Geminiviruses: Differential Interference and Evasion. *Scientific Reports*, **2016**, 6, 26912	4.9	146
29	Engineering Plants for Geminivirus Resistance with CRISPR/Cas9 System. *Trends in Plant Science*, **2016**, 21, 279-281	13.1	47
28	Engineering Plant Immunity: Using CRISPR/Cas9 to Generate Virus Resistance. *Frontiers in Plant Science*, **2016**, 7, 1673	6.2	109
27	High efficiency of targeted mutagenesis in arabidopsis via meiotic promoter-driven expression of Cas9 endonuclease. *Plant Cell Reports*, **2016**, 35, 1555-8	5.1	37
26	CRISPR/Cas9-mediated target validation of the splicing inhibitor Pladienolide B. *Biochimie Open*, **2016**, 3, 72-75	0	7
25	Transcription activator-like effector nucleases mediated metabolic engineering for enhanced fatty acids production in Saccharomyces cerevisiae. *Journal of Bioscience and Bioengineering*, **2015**, 120, 364-71	2.3	21
24	Efficient Virus-Mediated Genome Editing in Plants Using the CRISPR/Cas9 System. *Molecular Plant*, **2015**, 8, 1288-91	14.4	178
23	CRISPR/Cas9-mediated viral interference in plants. *Genome Biology*, **2015**, 16, 238	18.3	299
22	RNA-guided transcriptional regulation in planta via synthetic dCas9-based transcription factors. *Plant Biotechnology Journal*, **2015**, 13, 578-89	11.6	245
21	Activity and specificity of TRV-mediated gene editing in plants. *Plant Signaling and Behavior*, **2015**, 10, e1044191	2.5	48
20	Efficient fdCas9 Synthetic Endonuclease with Improved Specificity for Precise Genome Engineering. *PLoS ONE*, **2015**, 10, e0133373	3.7	42
19	Activities and specificities of homodimeric TALENs in Saccharomyces cerevisiae. *Current Genetics*, **2014**, 60, 61-74	2.9	35
18	Genome engineering via TALENs and CRISPR/Cas9 systems: challenges and perspectives. *Plant Biotechnology Journal*, **2014**, 12, 1006-14	11.6	86
17	Detection of a Usp-like gene in Calotropis procera plant from the de novo assembled genome contigs of the high-throughput sequencing dataset. *Comptes Rendus - Biologies*, **2014**, 337, 86-94	1.4	10
16	Characterization and DNA-binding specificities of Ralstonia TAL-like effectors. *Molecular Plant*, **2013**, 6, 1318-30	14.4	44
15	Targeted transcriptional repression using a chimeric TALE-SRDX repressor protein. *Plant Molecular Biology*, **2012**, 78, 311-21	4.6	118
14	Rapid and highly efficient construction of TALE-based transcriptional regulators and nucleases for genome modification. *Plant Molecular Biology*, **2012**, 78, 407-16	4.6	92

13	Structural basis for sequence-specific recognition of DNA by TAL effectors. *Science*, **2012**, 335, 720-3	33.3	432
12	Recognition of methylated DNA by TAL effectors. *Cell Research*, **2012**, 22, 1502-4	24.7	97
11	De novo-engineered transcription activator-like effector (TALE) hybrid nuclease with novel DNA binding specificity creates double-strand breaks. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 2623-8	11.5	339
10	TALE nucleases and next generation GM crops. *GM Crops*, **2011**, 2, 99-103		41
9	RNA-directed DNA methylation: mechanisms and functions. *Plant Signaling and Behavior*, **2010**, 5, 806-16	2.5	28
8	The Anticancer Activity of the N-Terminal CARD-Like Domain of Arginine Deiminase (ADI) from Pseudomonas aeruginosa. *Letters in Drug Design and Discovery*, **2009**, 6, 403-412	0.8	5
7	Bacterial proteins and CpG-rich extrachromosomal DNA in potential cancer therapy. *Plasmid*, **2007**, 57, 4-17	3.3	22
6	Cupredoxin-cancer interrelationship: azurin binding with EphB2, interference in EphB2 tyrosine phosphorylation, and inhibition of cancer growth. *Biochemistry*, **2007**, 46, 1799-810	3.2	55
5	Arabidopsis TARGET OF RAPAMYCIN interacts with RAPTOR, which regulates the activity of S6 kinase in response to osmotic stress signals. *Plant Cell*, **2006**, 18, 477-90	11.6	267
4	Callose synthase (CalS5) is required for exine formation during microgametogenesis and for pollen viability in Arabidopsis. *Plant Journal*, **2005**, 42, 315-28	6.9	250
3	Engineering Plant Architecture via CRISPR/Cas9-mediated Alteration of Strigolactone Biosynthesis		1
2	iSCAN: An RT-LAMP-coupled CRISPR-Cas12 module for rapid, sensitive detection of SARS-CoV-2		2
1	Engineering resistance against Tomato yellow leaf curl virus via the CRISPR/Cas9 system in tomato		3