Kevin M Esvelt

List of Publications by Year in Descending Order

53 papers	12,765 citations	23 h-index	61 g-index
61 ext. papers	14,927 ext. citations	17.4 avg, IF	6.62 L-index

#	Paper	IF	Citations
53	Enabling high-throughput biology with flexible open-source automation. *Molecular Systems Biology*, **2021**, 17, e9942	12.2	7
52	Low-N protein engineering with data-efficient deep learning. *Nature Methods*, **2021**, 18, 389-396	21.6	50
51	Safety and security concerns regarding transmissible vaccines. *Nature Ecology and Evolution*, **2021**, 5, 405-406	12.3	2
50	Bidirectional contact tracing could dramatically improve COVID-19 control. *Nature Communications*, **2021**, 12, 232	17.4	48
49	Systematic molecular evolution enables robust biomolecule discovery.. *Nature Methods*, **2021**,	21.6	3
48	A machine learning toolkit for genetic engineering attribution to facilitate biosecurity. *Nature Communications*, **2020**, 11, 6293	17.4	4
47	Core commitments for field trials of gene drive organisms. *Science*, **2020**, 370, 1417-1419	33.3	35
46	The biosecurity benefits of genetic engineering attribution. *Nature Communications*, **2020**, 11, 6294	17.4	4
45	Mice Against Ticks: an experimental community-guided effort to prevent tick-borne disease by altering the shared environment. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2019**, 374, 20180105	5.8	28
44	Daisy-chain gene drives for the alteration of local populations. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 8275-8282	11.5	93
43	Harnessing gene drive. *Journal of Responsible Innovation*, **2018**, 5, S40-S65	2.1	23
42	Inoculating science against potential pandemics and information hazards. *PLoS Pathogens*, **2018**, 14, e1007286	7.6	10
41	Editing nature: Local roots of global governance. *Science*, **2018**, 362, 527-529	33.3	45
40	Current CRISPR gene drive systems are likely to be highly invasive in wild populations. *ELife*, **2018**, 7,	8.9	96
39	Precaution: Open gene drive research. *Science*, **2017**, 355, 589-590	33.3	10
38	Evolutionary dynamics of CRISPR gene drives. *Science Advances*, **2017**, 3, e1601964	14.3	134
37	Conservation demands safe gene drive. *PLoS Biology*, **2017**, 15, e2003850	9.7	124

36	Driving towards ecotechnologies. *Pathogens and Global Health*, **2017**, 111, 448-458	3.1	10
35	Gene editing can drive science to openness. *Nature*, **2016**, 534, 153	50.4	20
34	Characterizing Cas9 Protospacer-Adjacent Motifs with High-Throughput Sequencing of Library Depletion Experiments. *Cold Spring Harbor Protocols*, **2016**, 2016,	1.2	2
33	Characterization of Cas9-Guide RNA Orthologs. *Cold Spring Harbor Protocols*, **2016**, 2016,	1.2	10
32	BIOSAFETY. Safeguarding gene drive experiments in the laboratory. *Science*, **2015**, 349, 927-9	33.3	215
31	Complete Genome Sequences of T4-Like Bacteriophages RB3, RB5, RB6, RB7, RB9, RB10, RB27, RB33, RB55, RB59, and RB68. *Genome Announcements*, **2015**, 3,		8
30	Calls for caution in genome engineering should be a model for similar dialogue on pandemic pathogen research. *Annals of Internal Medicine*, **2015**, 163, 790-1	8	2
29	Safeguarding CRISPR-Cas9 gene drives in yeast. *Nature Biotechnology*, **2015**, 33, 1250-1255	44.5	231
28	Biotechnology. Regulating gene drives. *Science*, **2014**, 345, 626-8	33.3	232
27	Concerning RNA-guided gene drives for the alteration of wild populations. *ELife*, **2014**, 3,	8.9	525
26	Gene drives raise dual-use concerns--response. *Science*, **2014**, 345, 1010-1	33.3	10
25	CRISPR/Cas9-mediated phage resistance is not impeded by the DNA modifications of phage T4. *PLoS ONE*, **2014**, 9, e98811	3.7	22
24	Author response: Concerning RNA-guided gene drives for the alteration of wild populations **2014**,		8
23	CAS9 transcriptional activators for target specificity screening and paired nickases for cooperative genome engineering. *Nature Biotechnology*, **2013**, 31, 833-8	44.5	1341
22	Orthogonal Cas9 proteins for RNA-guided gene regulation and editing. *Nature Methods*, **2013**, 10, 1116-21	21.6	615
21	Cas9 as a versatile tool for engineering biology. *Nature Methods*, **2013**, 10, 957-63	21.6	897
20	RNA-guided human genome engineering via Cas9. *Science*, **2013**, 339, 823-6	33.3	6363
19	Genome-scale engineering for systems and synthetic biology. *Molecular Systems Biology*, **2013**, 9, 641	12.2	231

18	Heritable genome editing in C. elegans via a CRISPR-Cas9 system. *Nature Methods*, **2013**, 10, 741-3	21.6	669
17	Experimental interrogation of the path dependence and stochasticity of protein evolution using phage-assisted continuous evolution. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 9007-12	11.5	71
16	A system for the continuous directed evolution of biomolecules. *Nature*, **2011**, 472, 499-503	50.4	383
15	Inhibition of bacterial conjugation by phage M13 and its protein g3p: quantitative analysis and model. *PLoS ONE*, **2011**, 6, e19991	3.7	61
14	DNA fingerprints provide a patient-specific breast cancer marker. *Annals of Surgical Oncology*, **2004**, 11, 560-7	3.1	4
13	Concerning RNA-Guided Gene Drives for the Alteration of Wild Populations		21
12	RNA-guided gene drives can efficiently and reversibly bias inheritance in wild yeast		6
11	Evolutionary dynamics of CRISPR gene drives		9
10	Daisy-chain gene drives for the alteration of local populations		31
9	Daisyfield gene drive systems harness repeated genomic elements as a generational clock to limit spread		11
8	Daisy quorum drives for the genetic restoration of wild populations		14
7	A high-throughput platform for feedback-controlled directed evolution		3
6	Flexible open-source automation for robotic bioengineering		1
5	Bidirectional contact tracing dramatically improves COVID-19 control		7
4	Current CRISPR gene drive systems are likely to be highly invasive in wild populations		10
3	The feasibility of targeted test-trace-isolate for the control of SARS-CoV-2 variants. *F1000Research* ,10, 291	3.6	0
2	Measuring the tolerance of the genetic code to altered codon size		2
1	The feasibility of targeted test-trace-isolate for the control of SARS-CoV-2 variants		1