# Kevin M Esvelt

## List of Publications by Citations



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|---|---|---|---|
| 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 | RNA-guided human genome engineering via Cas9. *Science*, **2013**, 339, 823-6 | 33.3 | 6363 |
| 52 | CAS9 transcriptional activators for target specificity screening and paired nickases for cooperative genome engineering. *Nature Biotechnology*, **2013**, 31, 833-8 | 44.5 | 1341 |
| 51 | Cas9 as a versatile tool for engineering biology. *Nature Methods*, **2013**, 10, 957-63 | 21.6 | 897 |
| 50 | Heritable genome editing in C. elegans via a CRISPR-Cas9 system. *Nature Methods*, **2013**, 10, 741-3 | 21.6 | 669 |
| 49 | Orthogonal Cas9 proteins for RNA-guided gene regulation and editing. *Nature Methods*, **2013**, 10, 1116-21 | 21.6 | 615 |
| 48 | Concerning RNA-guided gene drives for the alteration of wild populations. *ELife*, **2014**, 3, | 8.9 | 525 |
| 47 | A system for the continuous directed evolution of biomolecules. *Nature*, **2011**, 472, 499-503 | 50.4 | 383 |
| 46 | Biotechnology. Regulating gene drives. *Science*, **2014**, 345, 626-8 | 33.3 | 232 |
| 45 | Genome-scale engineering for systems and synthetic biology. *Molecular Systems Biology*, **2013**, 9, 641 | 12.2 | 231 |
| 44 | Safeguarding CRISPR-Cas9 gene drives in yeast. *Nature Biotechnology*, **2015**, 33, 1250-1255 | 44.5 | 231 |
| 43 | BIOSAFETY. Safeguarding gene drive experiments in the laboratory. *Science*, **2015**, 349, 927-9 | 33.3 | 215 |
| 42 | Evolutionary dynamics of CRISPR gene drives. *Science Advances*, **2017**, 3, e1601964 | 14.3 | 134 |
| 41 | Conservation demands safe gene drive. *PLoS Biology*, **2017**, 15, e2003850 | 9.7 | 124 |
| 40 | Current CRISPR gene drive systems are likely to be highly invasive in wild populations. *ELife*, **2018**, 7, | 8.9 | 96 |
| 39 | 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 |
| 38 | 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 |
| 37 | Inhibition of bacterial conjugation by phage M13 and its protein g3p: quantitative analysis and model. *PLoS ONE*, **2011**, 6, e19991 | 3.7 | 61 |

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| 36 | Low-N protein engineering with data-efficient deep learning. *Nature Methods*, **2021**, 18, 389-396 | 21.6 | 50 |
| 35 | Bidirectional contact tracing could dramatically improve COVID-19 control. *Nature Communications*, **2021**, 12, 232 | 17.4 | 48 |
| 34 | Editing nature: Local roots of global governance. *Science*, **2018**, 362, 527-529 | 33.3 | 45 |
| 33 | Core commitments for field trials of gene drive organisms. *Science*, **2020**, 370, 1417-1419 | 33.3 | 35 |
| 32 | Daisy-chain gene drives for the alteration of local populations | | 31 |
| 31 | 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 |
| 30 | Harnessing gene drive. *Journal of Responsible Innovation*, **2018**, 5, S40-S65 | 2.1 | 23 |
| 29 | CRISPR/Cas9-mediated phage resistance is not impeded by the DNA modifications of phage T4. *PLoS ONE*, **2014**, 9, e98811 | 3.7 | 22 |
| 28 | Concerning RNA-Guided Gene Drives for the Alteration of Wild Populations | | 21 |
| 27 | Gene editing can drive science to openness. *Nature*, **2016**, 534, 153 | 50.4 | 20 |
| 26 | Daisy quorum drives for the genetic restoration of wild populations | | 14 |
| 25 | Daisyfield gene drive systems harness repeated genomic elements as a generational clock to limit spread | | 11 |
| 24 | Precaution: Open gene drive research. *Science*, **2017**, 355, 589-590 | 33.3 | 10 |
| 23 | Driving towards ecotechnologies. *Pathogens and Global Health*, **2017**, 111, 448-458 | 3.1 | 10 |
| 22 | Gene drives raise dual-use concerns--response. *Science*, **2014**, 345, 1010-1 | 33.3 | 10 |
| 21 | Current CRISPR gene drive systems are likely to be highly invasive in wild populations | | 10 |
| 20 | Characterization of Cas9-Guide RNA Orthologs. *Cold Spring Harbor Protocols*, **2016**, 2016, | 1.2 | 10 |
| 19 | Inoculating science against potential pandemics and information hazards. *PLoS Pathogens*, **2018**, 14, e1007286 | 7.6 | 10 |

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| 18 | Evolutionary dynamics of CRISPR gene drives | | 9 |
| 17 | Complete Genome Sequences of T4-Like Bacteriophages RB3, RB5, RB6, RB7, RB9, RB10, RB27, RB33, RB55, RB59, and RB68. *Genome Announcements*, **2015**, 3, | | 8 |
| 16 | Author response: Concerning RNA-guided gene drives for the alteration of wild populations **2014**, | | 8 |
| 15 | Bidirectional contact tracing dramatically improves COVID-19 control | | 7 |
| 14 | Enabling high-throughput biology with flexible open-source automation. *Molecular Systems Biology*, **2021**, 17, e9942 | 12.2 | 7 |
| 13 | RNA-guided gene drives can efficiently and reversibly bias inheritance in wild yeast | | 6 |
| 12 | A machine learning toolkit for genetic engineering attribution to facilitate biosecurity. *Nature Communications*, **2020**, 11, 6293 | 17.4 | 4 |
| 11 | DNA fingerprints provide a patient-specific breast cancer marker. *Annals of Surgical Oncology*, **2004**, 11, 560-7 | 3.1 | 4 |
| 10 | The biosecurity benefits of genetic engineering attribution. *Nature Communications*, **2020**, 11, 6294 | 17.4 | 4 |
| 9 | A high-throughput platform for feedback-controlled directed evolution | | 3 |
| 8 | Systematic molecular evolution enables robust biomolecule discovery.. *Nature Methods*, **2021**, | 21.6 | 3 |
| 7 | 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 |
| 6 | Measuring the tolerance of the genetic code to altered codon size | | 2 |
| 5 | Characterizing Cas9 Protospacer-Adjacent Motifs with High-Throughput Sequencing of Library Depletion Experiments. *Cold Spring Harbor Protocols*, **2016**, 2016, | 1.2 | 2 |
| 4 | Safety and security concerns regarding transmissible vaccines. *Nature Ecology and Evolution*, **2021**, 5, 405-406 | 12.3 | 2 |
| 3 | Flexible open-source automation for robotic bioengineering | | 1 |
| 2 | The feasibility of targeted test-trace-isolate for the control of SARS-CoV-2 variants | | 1 |
| 1 | The feasibility of targeted test-trace-isolate for the control of SARS-CoV-2 variants. *F1000Research* ,10, 291 | 3.6 | 0 |