

# Heather Fleming

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4926631/publications.pdf>

Version: 2024-02-01

52  
papers

9,485  
citations

94433

37  
h-index

182427

51  
g-index

56  
all docs

56  
docs citations

56  
times ranked

13554  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Distinct Hepatic Gene Expression Patterns of NAFLD in Patients With Obesity. <i>Hepatology Communications</i> , 2022, 6, 77-89.                                       | 4.3  | 25        |
| 2  | Protease activity sensors enable real-time treatment response monitoring in lymphangi leiomyomatosis. <i>European Respiratory Journal</i> , 2022, 59, 2100664.        | 6.7  | 5         |
| 3  | Directing Cholangiocyte Morphogenesis in Natural Biomaterial Scaffolds. <i>Advanced Science</i> , 2022, 9, e2102698.  | 11.2 | 5         |
| 4  | Host protease activity classifies pneumonia etiology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .           | 7.1  | 9         |
| 5  | Protease Activity Analysis: A Toolkit for Analyzing Enzyme Activity Data. <i>ACS Omega</i> , 2022, 7, 24292-24301.  | 3.5  | 3         |
| 6  | Activatable Zymography Probes Enable <i>In Situ</i> Localization of Protease Dysregulation in Cancer. <i>Cancer Research</i> , 2021, 81, 213-224.                     | 0.9  | 15        |
| 7  | Microenvironment-triggered multimodal precision diagnostics. <i>Nature Materials</i> , 2021, 20, 1440-1448.   | 27.5 | 42        |
| 8  | Synthetic Circuit-Driven Expression of Heterologous Enzymes for Disease Detection. <i>ACS Synthetic Biology</i> , 2021, 10, 2231-2242.                                | 3.8  | 5         |
| 9  | Synthetic biomarkers: a twenty-first century path to early cancer detection. <i>Nature Reviews Cancer</i> , 2021, 21, 655-668.  | 28.4 | 84        |
| 10 | Engineering synthetic breath biomarkers for respiratory disease. <i>Nature Nanotechnology</i> , 2020, 15, 792-800.  | 31.5 | 59        |
| 11 | Controlled Apoptosis of Stromal Cells to Engineer Human Microivers. <i>Advanced Functional Materials</i> , 2020, 30, 1910442.   | 14.9 | 9         |
| 12 | Urinary detection of lung cancer in mice via noninvasive pulmonary protease profiling. <i>Science Translational Medicine</i> , 2020, 12, .                            | 12.4 | 58        |
| 13 | Transient Support from Fibroblasts is Sufficient to Drive Functional Vascularization in Engineered Tissues. <i>Advanced Functional Materials</i> , 2020, 30, 2003777. | 14.9 | 38        |
| 14 | Hepatic tissue engineering. , 2020, , 737-753.  |      | 3         |
| 15 | Activity-Based Diagnostics: An Emerging Paradigm for Disease Detection and Monitoring. <i>Trends in Molecular Medicine</i> , 2020, 26, 450-468.                       | 6.7  | 51        |
| 16 | Renal clearable catalytic gold nanoclusters for in vivo disease monitoring. <i>Nature Nanotechnology</i> , 2019, 14, 883-890.   | 31.5 | 333       |
| 17 | Synthetic and living micropropellers for convection-enhanced nanoparticle transport. <i>Science Advances</i> , 2019, 5, eaav4803.                                     | 10.3 | 109       |
| 18 | Acidification of Tumor at Stromal Boundaries Drives Transcriptome Alterations Associated with Aggressive Phenotypes. <i>Cancer Research</i> , 2019, 79, 1952-1966.    | 0.9  | 157       |

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|----|---|------|-----------|
| 19 | Non-viral delivery of CRISPR/Cas9 complex using CRISPR-GPS nanocomplexes. <i>Nanoscale</i> , 2019, 11, 21317-21323.   | 5.6  | 34        |
| 20 | Harnessing Protease Activity to Improve Cancer Care. <i>Annual Review of Cancer Biology</i> , 2018, 2, 353-376.   | 4.5  | 70        |
| 21 | Engineered Livers for Infectious Diseases. <i>Cellular and Molecular Gastroenterology and Hepatology</i> , 2018, 5, 131-144.  | 4.5  | 41        |
| 22 | Protease activity sensors noninvasively classify bacterial infections and antibiotic responses. <i>EBioMedicine</i> , 2018, 38, 248-256.  | 6.1  | 22        |
| 23 | iRGD-guided Tumor-penetrating Nanocomplexes for Therapeutic siRNA Delivery to Pancreatic Cancer. <i>Molecular Cancer Therapeutics</i> , 2018, 17, 2377-2388.  | 4.1  | 52        |
| 24 | Classification of prostate cancer using a protease activity nanosensor library. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8954-8959.                                    | 7.1  | 53        |
| 25 | Ultrasensitive tumour-penetrating nanosensors of protease activity. <i>Nature Biomedical Engineering</i> , 2017, 1, .   | 22.5 | 94        |
| 26 | Tumor-Penetrating Delivery of siRNA against TNF $\alpha$ to Human Vestibular Schwannomas. <i>Scientific Reports</i> , 2017, 7, 12922.   | 3.3  | 15        |
| 27 | Potential role of intratumor bacteria in mediating tumor resistance to the chemotherapeutic drug gemcitabine. <i>Science</i> , 2017, 357, 1156-1160.  | 12.6 | 1,059     |
| 28 | In situ expansion of engineered human liver tissue in a mouse model of chronic liver disease. <i>Science Translational Medicine</i> , 2017, 9, .  | 12.4 | 133       |
| 29 | Comparison of Modular PEG Incorporation Strategies for Stabilization of Peptide-siRNA Nanocomplexes. <i>Bioconjugate Chemistry</i> , 2016, 27, 2323-2331.   | 3.6  | 14        |
| 30 | Development of Light-Activated CRISPR Using Guide RNAs with Photocleavable Protectors. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 12440-12444.  | 13.8 | 144       |
| 31 | Neuron-Targeted Nanoparticle for siRNA Delivery to Traumatic Brain Injuries. <i>ACS Nano</i> , 2016, 10, 7926-7933.   | 14.6 | 110       |
| 32 | Programmable probiotics for detection of cancer in urine. <i>Science Translational Medicine</i> , 2015, 7, 289ra84.   | 12.4 | 326       |
| 33 | Degradable hydrogels derived from PEG-diacrylamide for hepatic tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 3331-3338.   | 4.0  | 62        |
| 34 | Mathematical framework for activity-based cancer biomarkers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12627-12632.   | 7.1  | 50        |
| 35 | Point-of-care diagnostics for noncommunicable diseases using synthetic urinary biomarkers and paper microfluidics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3671-3676. | 7.1  | 167       |
| 36 | Disease Detection by Ultrasensitive Quantification of Microdosed Synthetic Urinary Biomarkers. <i>Journal of the American Chemical Society</i> , 2014, 136, 13709-13714.  | 13.7 | 50        |

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|----|--|------|-----------|
| 37 | Cell and tissue engineering for liver disease. <i>Science Translational Medicine</i> , 2014, 6, 245sr2.  | 12.4 | 247       |
| 38 | A computational framework for identifying design guidelines to increase the penetration of targeted nanoparticles into tumors. <i>Nano Today</i> , 2013, 8, 566-576.   | 11.9 | 43        |
| 39 | Nanoparticles That Sense Thrombin Activity As Synthetic Urinary Biomarkers of Thrombosis. <i>ACS Nano</i> , 2013, 7, 9001-9009.  | 14.6 | 98        |
| 40 | Mass-encoded synthetic biomarkers for multiplexed urinary monitoring of disease. <i>Nature Biotechnology</i> , 2013, 31, 63-70.  | 17.5 | 176       |
| 41 | InVERT molding for scalable control of tissue microarchitecture. <i>Nature Communications</i> , 2013, 4, 1847.   | 12.8 | 124       |
| 42 | Identification of small molecules for human hepatocyte expansion and iPS differentiation. <i>Nature Chemical Biology</i> , 2013, 9, 514-520.   | 8.0  | 230       |
| 43 | Geometric control of vascular networks to enhance engineered tissue integration and function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 7586-7591. | 7.1  | 237       |
| 44 | Targeted Tumor-Penetrating siRNA Nanocomplexes for Credentialing the Ovarian Cancer Oncogene <i>CD44</i> . <i>Science Translational Medicine</i> , 2012, 4, 147ra112.  | 12.4 | 157       |
| 45 | Identification and Characterization of Receptor-Specific Peptides for siRNA Delivery. <i>ACS Nano</i> , 2012, 6, 8620-8631.  | 14.6 | 68        |
| 46 | Rapid casting of patterned vascular networks for perfusable engineered three-dimensional tissues. <i>Nature Materials</i> , 2012, 11, 768-774.   | 27.5 | 1,661     |
| 47 | Humanized mice with ectopic artificial liver tissues. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 11842-11847.                                       | 7.1  | 144       |
| 48 | Magnetic Iron Oxide Nanoworms for Tumor Targeting and Imaging. <i>Advanced Materials</i> , 2008, 20, 1630-1635.  | 21.0 | 516       |
| 49 | Microscale culture of human liver cells for drug development. <i>Nature Biotechnology</i> , 2008, 26, 120-126.   | 17.5 | 1,088     |
| 50 | Micromechanical control of cell-cell interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 5722-5726.  | 7.1  | 353       |
| 51 | Effect of cell-cell interactions in preservation of cellular phenotype: cocultivation of hepatocytes and nonparenchymal cells. <i>FASEB Journal</i> , 1999, 13, 1883-1900.                                   | 0.5  | 827       |
| 52 | Prenatal detection and mapping of a distal 8p deletion associated with congenital heart disease. <i>Prenatal Diagnosis</i> , 1999, 19, 863-7.  | 2.3  | 4         |