

Giovanni Traverso

List of Publications by Year in descending order

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Version: 2024-02-01

124
papers

10,449
citations

61984

43
h-index

33894

99
g-index

131
all docs

131
docs citations

131
times ranked

12508
citing authors

#	ARTICLE	IF	CITATIONS
1	Genes Expressed in Human Tumor Endothelium. <i>Science</i> , 2000, 289, 1197-1202.	12.6	1,733
2	Transforming single DNA molecules into fluorescent magnetic particles for detection and enumeration of genetic variations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 8817-8822.	7.1	744
3	Germline mutations of the gene encoding bone morphogenetic protein receptor 1A in juvenile polyposis. <i>Nature Genetics</i> , 2001, 28, 184-187.	21.4	591
4	Bioplastics for a circular economy. <i>Nature Reviews Materials</i> , 2022, 7, 117-137.	48.7	550
5	An ingestible bacterial-electronic system to monitor gastrointestinal health. <i>Science</i> , 2018, 360, 915-918.	12.6	380
6	Detection of APC Mutations in Fecal DNA from Patients with Colorectal Tumors. <i>New England Journal of Medicine</i> , 2002, 346, 311-320.	27.0	320
7	Top-down morphogenesis of colorectal tumors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 2640-2645.	7.1	319
8	An inflammation-targeting hydrogel for local drug delivery in inflammatory bowel disease. <i>Science Translational Medicine</i> , 2015, 7, 300ra128.	12.4	288
9	An ingestible self-orienting system for oral delivery of macromolecules. <i>Science</i> , 2019, 363, 611-615.	12.6	287
10	A pH-responsive supramolecular polymer gel as an enteric elastomer for use in gastric devices. <i>Nature Materials</i> , 2015, 14, 1065-1071.	27.5	268
11	Evolution of macromolecular complexity in drug delivery systems. <i>Nature Reviews Chemistry</i> , 2017, 1, .	30.2	233
12	Nanotechnology approaches for global infectious diseases. <i>Nature Nanotechnology</i> , 2021, 16, 369-384.	31.5	232
13	Whole-Exome Sequencing Analyses of Inflammatory Bowel Disease-Associated Colorectal Cancers. <i>Gastroenterology</i> , 2016, 150, 931-943.	1.3	208
14	Oral, ultra-long-lasting drug delivery: Application toward malaria elimination goals. <i>Science Translational Medicine</i> , 2016, 8, 365ra157.	12.4	181
15	Development of an oral once-weekly drug delivery system for HIV antiretroviral therapy. <i>Nature Communications</i> , 2018, 9, 2.	12.8	180
16	Three Classes of Genes Mutated In Colorectal Cancers with Chromosomal Instability. <i>Cancer Research</i> , 2004, 64, 2998-3001.	0.9	174
17	Ingestible hydrogel device. <i>Nature Communications</i> , 2019, 10, 493.	12.8	168
18	A luminal unfolding microneedle injector for oral delivery of macromolecules. <i>Nature Medicine</i> , 2019, 25, 1512-1518.	30.7	167

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19	Prolonged energy harvesting for ingestible devices. <i>Nature Biomedical Engineering</i> , 2017, 1, .	22.5	148
20	Ingestible electronics for diagnostics and therapy. <i>Nature Reviews Materials</i> , 2019, 4, 83-98.	48.7	146
21	Detection of proximal colorectal cancers through analysis of faecal DNA. <i>Lancet, The</i> , 2002, 359, 403-404.	13.7	142
22	Nanoparticulate drug delivery systems targeting inflammation for treatment of inflammatory bowel disease. <i>Nano Today</i> , 2017, 16, 82-96.	11.9	136
23	Microneedles for Drug Delivery via the Gastrointestinal Tract. <i>Journal of Pharmaceutical Sciences</i> , 2015, 104, 362-367.	3.3	133
24	Flexible piezoelectric devices for gastrointestinal motility sensing. <i>Nature Biomedical Engineering</i> , 2017, 1, 807-817.	22.5	127
25	Triggerable tough hydrogels for gastric resident dosage forms. <i>Nature Communications</i> , 2017, 8, 124.	12.8	106
26	Ultrasound-mediated gastrointestinal drug delivery. <i>Science Translational Medicine</i> , 2015, 7, 310ra168.	12.4	95
27	3D-Printed Gastric Resident Electronics. <i>Advanced Materials Technologies</i> , 2019, 4, 1800490.	5.8	72
28	Light-degradable hydrogels as dynamic triggers for gastrointestinal applications. <i>Science Advances</i> , 2020, 6, eaay0065.	10.3	71
29	A microneedle platform for buccal macromolecule delivery. <i>Science Advances</i> , 2021, 7, .	10.3	70
30	“Inactive” ingredients in oral medications. <i>Science Translational Medicine</i> , 2019, 11, .	12.4	68
31	Foundations of gastrointestinal-based drug delivery and future developments. <i>Nature Reviews Gastroenterology and Hepatology</i> , 2022, 19, 219-238.	17.8	66
32	Computationally guided high-throughput design of self-assembling drug nanoparticles. <i>Nature Nanotechnology</i> , 2021, 16, 725-733.	31.5	64
33	Oral delivery of systemic monoclonal antibodies, peptides and small molecules using gastric auto-injectors. <i>Nature Biotechnology</i> , 2022, 40, 103-109.	17.5	64
34	Bioinspired kirigami metasurfaces as assistive shoe grips. <i>Nature Biomedical Engineering</i> , 2020, 4, 778-786.	22.5	61
35	Ultrahigh speed en face OCT capsule for endoscopic imaging. <i>Biomedical Optics Express</i> , 2015, 6, 1146.	2.9	60
36	Perspective: Special delivery for the gut. <i>Nature</i> , 2015, 519, S19-S19.	27.8	59

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37	Enabling deep-tissue networking for miniature medical devices. , 2018, , .		59
38	Microbial therapeutics: New opportunities for drug delivery. <i>Journal of Experimental Medicine</i> , 2019, 216, 1005-1009.	8.5	57
39	Powering Implantable and Ingestible Electronics. <i>Advanced Functional Materials</i> , 2021, 31, 2009289.	14.9	57
40	Dynamic omnidirectional adhesive microneedle system for oral macromolecular drug delivery. <i>Science Advances</i> , 2022, 8, eabk1792.	10.3	54
41	Kirigami-inspired stents for sustained local delivery of therapeutics. <i>Nature Materials</i> , 2021, 20, 1085-1092.	27.5	52
42	Temperature-responsive biometamaterials for gastrointestinal applications. <i>Science Translational Medicine</i> , 2019, 11, .	12.4	51
43	Oral mRNA delivery using capsule-mediated gastrointestinal tissue injections. <i>Matter</i> , 2022, 5, 975-987.	10.0	48
44	Endoscopically Injectable Shearâ€¢Thinning Hydrogels Facilitating Polyp Removal. <i>Advanced Science</i> , 2019, 6, 1901041.	11.2	47
45	Ultrasound-Mediated Delivery of RNA to Colonic Mucosa of LiveÂ¢Mice. <i>Gastroenterology</i> , 2017, 152, 1151-1160.	1.3	46
46	Wireless Power Transfer to Millimeter-Sized Gastrointestinal Electronics Validated in a Swine Model. <i>Scientific Reports</i> , 2017, 7, 46745.	3.3	45
47	Oral delivery of biologics using drug-device combinations. <i>Current Opinion in Pharmacology</i> , 2017, 36, 8-13.	3.5	41
48	Genotype-targeted local therapy of glioma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E8388-E8394.	7.1	40
49	Clinical Opportunities for Continuous Biosensing and Closed-Loop Therapies. <i>Trends in Chemistry</i> , 2020, 2, 319-340.	8.5	39
50	Changing the pill: developments toward the promise of an ultra-long-acting gastroretentive dosage form. <i>Expert Opinion on Drug Delivery</i> , 2018, 15, 1189-1198.	5.0	38
51	A gastric resident drug delivery system for prolonged gram-level dosing of tuberculosis treatment. <i>Science Translational Medicine</i> , 2019, 11, .	12.4	38
52	Oral Biologic Delivery: Advances Toward Oral Subunit, DNA, and mRNA Vaccines and the Potential for Mass Vaccination During Pandemics. <i>Annual Review of Pharmacology and Toxicology</i> , 2021, 61, 517-540.	9.4	38
53	Hyper-recombination and genetic instability in BLM-deficient epithelial cells. <i>Cancer Research</i> , 2003, 63, 8578-81.	0.9	38
54	Machine Learning Uncovers Food- and Excipient-Drug Interactions. <i>Cell Reports</i> , 2020, 30, 3710-3716.e4.	6.4	37

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55	Photometric stereo endoscopy. <i>Journal of Biomedical Optics</i> , 2013, 18, 1.	2.6	36
56	Gastrointestinal synthetic epithelial linings. <i>Science Translational Medicine</i> , 2020, 12, .	12.4	36
57	Ingestible transiently anchoring electronics for microstimulation and conductive signaling. <i>Science Advances</i> , 2020, 6, eaaz0127.	10.3	35
58	Robotically handled whole-tissue culture system for the screening of oral drug formulations. <i>Nature Biomedical Engineering</i> , 2020, 4, 544-559.	22.5	35
59	Simple battery armor to protect against gastrointestinal injury from accidental ingestion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 16490-16495.	7.1	33
60	A once-a-month oral contraceptive. <i>Science Translational Medicine</i> , 2019, 11, .	12.4	33
61	Low-cost gastrointestinal manometry via silicone liquid-metal pressure transducers resembling a quipu. <i>Nature Biomedical Engineering</i> , 2022, 6, 1092-1104.	22.5	30
62	Local Targeting of NAD ⁺ Salvage Pathway Alters the Immune Tumor Microenvironment and Enhances Checkpoint Immunotherapy in Glioblastoma. <i>Cancer Research</i> , 2020, 80, 5024-5034.	0.9	28
63	Physiologic Status Monitoring via the Gastrointestinal Tract. <i>PLoS ONE</i> , 2015, 10, e0141666.	2.5	28
64	Circumferential optical coherence tomography angiography imaging of the swine esophagus using a micromotor balloon catheter. <i>Biomedical Optics Express</i> , 2016, 7, 2927.	2.9	27
65	A Janus Mucoadhesive and Omniphobic Device for Gastrointestinal Retention. <i>Advanced Healthcare Materials</i> , 2016, 5, 1141-1146.	7.6	27
66	Low-frequency ultrasound for drug delivery in the gastrointestinal tract. <i>Expert Opinion on Drug Delivery</i> , 2016, 13, 1045-1048.	5.0	27
67	Devices for drug delivery in the gastrointestinal tract: A review of systems physically interacting with the mucosa for enhanced delivery. <i>Advanced Drug Delivery Reviews</i> , 2021, 177, 113926.	13.7	26
68	Residency Training and International Medical Graduates. <i>JAMA - Journal of the American Medical Association</i> , 2012, 308, 2193.	7.4	25
69	Multicolor in vitro translation. <i>Nature Biotechnology</i> , 2003, 21, 1093-1097.	17.5	24
70	Past, Present, and Future Drug Delivery Systems for Antiretrovirals. <i>Journal of Pharmaceutical Sciences</i> , 2016, 105, 3471-3482.	3.3	23
71	A rapidly deployable individualized system for augmenting ventilator capacity. <i>Science Translational Medicine</i> , 2020, 12, .	12.4	23
72	Quantifying the Value of Orally Delivered Biologic Therapies: A Cost-Effectiveness Analysis of Oral Semaglutide. <i>Journal of Pharmaceutical Sciences</i> , 2019, 108, 3138-3145.	3.3	21

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73	Delivery of therapeutic carbon monoxide by gas-entrapping materials. <i>Science Translational Medicine</i> , 2022, 14, .	12.4	21
74	Mobile Robotic Platform for Contactless Vital Sign Monitoring. <i>Cyborg and Bionic Systems</i> , 2022, .	7.9	20
75	Development of oil-based gels as versatile drug delivery systems for pediatric applications. <i>Science Advances</i> , 2022, 8, .	10.3	19
76	Of microneedles and ultrasound: Physical modes of gastrointestinal macromolecule delivery. <i>Tissue Barriers</i> , 2016, 4, e1150235.	3.2	18
77	Electroceuticals in the Gastrointestinal Tract. <i>Trends in Pharmacological Sciences</i> , 2020, 41, 960-976.	8.7	18
78	Multi-MHz MEMS-VCSEL swept-source optical coherence tomography for endoscopic structural and angiographic imaging with miniaturized brushless motor probes. <i>Biomedical Optics Express</i> , 2021, 12, 2384.	2.9	18
79	Injection Molded Autoclavable, Scalable, Conformable (iMASC) system for aerosol-based protection: a prospective single-arm feasibility study. <i>BMJ Open</i> , 2020, 10, e039120.	1.9	17
80	Heparinâ€Coated Albumin Nanoparticles for Drug Combination in Targeting Inflamed Intestine. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000536.	7.6	17
81	Development of a long-acting direct-acting antiviral system for hepatitis C virus treatment in swine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 11987-11994.	7.1	15
82	Challenges in IBD Research: Novel Technologies. <i>Inflammatory Bowel Diseases</i> , 2019, 25, S24-S30.	1.9	14
83	Assessment of the Acceptability and Feasibility of Using Mobile Robotic Systems for Patient Evaluation. <i>JAMA Network Open</i> , 2021, 4, e210667.	5.9	13
84	Prevention of diabetes-associated fibrosis: Strategies in FcRn-targeted nanosystems for oral drug delivery. <i>Advanced Drug Delivery Reviews</i> , 2021, 175, 113778.	13.7	13
85	Defining optimal permeant characteristics for ultrasound-mediated gastrointestinal delivery. <i>Journal of Controlled Release</i> , 2017, 268, 113-119.	9.9	12
86	Ultra-rapid drug delivery in the oral cavity using ultrasound. <i>Journal of Controlled Release</i> , 2019, 304, 1-6.	9.9	12
87	Thinking green: modelling respirator reuse strategies to reduce cost and waste. <i>BMJ Open</i> , 2021, 11, e048687.	1.9	12
88	Towards wireless capsule endoscopic ultrasound (WCEU). , 2014, , .		10
89	Engineering precision. <i>Science Translational Medicine</i> , 2015, 7, 289ed6.	12.4	10
90	Making the case: developing innovative adherence solutions for the treatment of tuberculosis. <i>BMJ Global Health</i> , 2019, 4, e001323.	4.7	10

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91	Caffeine-catalyzed gels. <i>Biomaterials</i> , 2018, 170, 127-135.	11.4	9
92	Implantable system for chronotherapy. <i>Science Advances</i> , 2021, 7, eabj4624.	10.3	9
93	Convergence for Translation: Drug Delivery Research in Multidisciplinary Teams. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4156-4163.	13.8	8
94	Scalable Gastric Resident Systems for Veterinary Application. <i>Scientific Reports</i> , 2018, 8, 11816.	3.3	8
95	Patient and Health Care Worker Perceptions of Communication and Ability to Identify Emotion When Wearing Standard and Transparent Masks. <i>JAMA Network Open</i> , 2021, 4, e2135386.	5.9	7
96	Prospective Evaluation of the Transparent, Elastomeric, Adaptable, Long-Lasting (TEAL) Respirator. <i>ACS Pharmacology and Translational Science</i> , 2020, 3, 1076-1082.	4.9	6
97	An automated all-in-one system for carbohydrate tracking, glucose monitoring, and insulin delivery. <i>Journal of Controlled Release</i> , 2022, 343, 31-42.	9.9	6
98	Closed-Loop Region of Interest Enabling High Spatial and Temporal Resolutions in Object Detection and Tracking via Wireless Camera. <i>IEEE Access</i> , 2021, 9, 87340-87350.	4.2	5
99	Dynamic Monitoring of Systemic Biomarkers with Gastric Sensors. <i>Advanced Science</i> , 2021, 8, e2102861.	11.2	5
100	Preferences of Persons With or at Risk for Hepatitis C for Long-Acting Treatments. <i>Clinical Infectious Diseases</i> , 2022, 75, 3-10.	5.8	4
101	Ex Vivo and In Vivo Imaging Study of Ultrasound Capsule Endoscopy. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2020, 14, 021005.	0.7	4
102	Transmitting location. <i>Nature Biomedical Engineering</i> , 2017, 1, 684-685.	22.5	3
103	From Molecule to Patient: A Biotech Perspective. <i>Clinical Pharmacology and Therapeutics</i> , 2020, 107, 65-67.	4.7	3
104	Personalized Radiation Attenuating Materials for Gastrointestinal Mucosal Protection. <i>Advanced Science</i> , 2021, 8, 2100510.	11.2	3
105	Zero-Crossing-Based Bio-Engineered Sensor. , 2021, , .		3
106	Identification of bile acid and fatty acid species as candidate rapidly bactericidal agents for topical treatment of gonorrhoea. <i>Journal of Antimicrobial Chemotherapy</i> , 2021, 76, 2569-2577.	3.0	3
107	System for clinical photometric stereo endoscopy. <i>Proceedings of SPIE</i> , 2014, , .	0.8	2
108	Translation durch Konvergenz: Drug Delivery-Forschung in multidisziplinären Teams. <i>Angewandte Chemie</i> , 2018, 130, 4226-4234.	2.0	2

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109	The potential of porcine ex vivo platform for intestinal permeability screening of FcRn-targeted drugs. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2021, 162, 99-104.	4.3	2
110	Why some fish don't tan. <i>Science Translational Medicine</i> , 2015, 7, .	12.4	1
111	Platform for the Delivery of Unformulated RNA In Vivo. <i>Journal of Pharmaceutical Sciences</i> , 2021, , .	3.3	1
112	Respirators in Healthcare: Material, Design, Regulatory, Environmental, and Economic Considerations for Clinical Efficacy. <i>Global Challenges</i> , 2022, 6, .	3.6	1
113	Drug Delivery: Heparin-Coated Albumin Nanoparticles for Drug Combination in Targeting Inflamed Intestine (<i>Adv. Healthcare Mater.</i> 16/2020). <i>Advanced Healthcare Materials</i> , 2020, 9, 2070052.	7.6	0
114	Historical Evolution and Provider Awareness of Inactive Ingredients in Oral Medications. <i>Pharmaceutical Research</i> , 2020, 37, 234.	3.5	0
115	A sticky situation helps colitis. <i>Science Translational Medicine</i> , 2015, 7, .	12.4	0
116	AIRE-ing out the gut. <i>Science Translational Medicine</i> , 2015, 7, .	12.4	0
117	A soothing MSC-based ulcer treatment. <i>Science Translational Medicine</i> , 2015, 7, .	12.4	0
118	A self-propelled colon scope. <i>Science Translational Medicine</i> , 2015, 7, .	12.4	0
119	Protease inhibitor passes oral exam. <i>Science Translational Medicine</i> , 2015, 7, .	12.4	0
120	Eating at the right time. <i>Science Translational Medicine</i> , 2016, 8, .	12.4	0
121	Linked in: Cholesterol connects oligos to liver. <i>Science Translational Medicine</i> , 2016, 8, .	12.4	0
122	Abstract 127: The genomic landscapes of inflammatory bowel disease-associated colorectal cancers. , 2016, , .		0
123	Thinking Green: Respirator Reuse Strategies to Reduce Cost and Waste. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
124	A Retractable Six-Prong Laparoscopic Grasper for Laparoscopic Myomectomy. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2022, 16, .	0.7	0