Giovanni Traverso

List of Publications by Year in descending order

124 papers	10,449 citations	71004 43 h-index	38517 99 g-index
131 all docs	131 docs citations	131 times ranked	14104 citing authors

#	Article	IF	Citations
1	Oral delivery of systemic monoclonal antibodies, peptides and small molecules using gastric auto-injectors. Nature Biotechnology, 2022, 40, 103-109.	9.4	64
2	Preferences of Persons With or at Risk for Hepatitis C for Long-Acting Treatments. Clinical Infectious Diseases, 2022, 75, 3-10.	2.9	4
3	Foundations of gastrointestinal-based drug delivery and future developments. Nature Reviews Gastroenterology and Hepatology, 2022, 19, 219-238.	8.2	66
4	Oral mRNA delivery using capsule-mediated gastrointestinal tissue injections. Matter, 2022, 5, 975-987.	5.0	48
5	Bioplastics for a circular economy. Nature Reviews Materials, 2022, 7, 117-137.	23.3	550
6	Dynamic omnidirectional adhesive microneedle system for oral macromolecular drug delivery. Science Advances, 2022, 8, eabk1792.	4.7	54
7	An automated all-in-one system for carbohydrate tracking, glucose monitoring, and insulin delivery. Journal of Controlled Release, 2022, 343, 31-42.	4.8	6
8	Low-cost gastrointestinal manometry via siliconeâ€“liquid-metal pressure transducers resembling a quipu. Nature Biomedical Engineering, 2022, 6, 1092-1104.	11.6	30
9	A Retractable Six-Prong Laparoscopic Grasper for Laparoscopic Myomectomy. Journal of Medical Devices, Transactions of the ASME, 2022, 16, .	0.4	0
10	Respirators in Healthcare: Material, Design, Regulatory, Environmental, and Economic Considerations for Clinical Efficacy. Global Challenges, 2022, 6, .	1.8	1
11	Mobile Robotic Platform for Contactless Vital Sign Monitoring. Cyborg and Bionic Systems, 2022, 2022, .	3.7	20
12	Development of oil-based gels as versatile drug delivery systems for pediatric applications. Science Advances, 2022, 8, .	4.7	19
13	Delivery of therapeutic carbon monoxide by gas-entrapping materials. Science Translational Medicine, 2022, 14, .	5.8	21
14	Oral Biologic Delivery: Advances Toward Oral Subunit, DNA, and mRNA Vaccines and the Potential for Mass Vaccination During Pandemics. Annual Review of Pharmacology and Toxicology, 2021, 61, 517-540.	4.2	38
15	Closed-Loop Region of Interest Enabling High Spatial and Temporal Resolutions in Object Detection and Tracking via Wireless Camera. IEEE Access, 2021, 9, 87340-87350.	2.6	5
16	A microneedle platform for buccal macromolecule delivery. Science Advances, 2021, 7, .	4.7	70
17	Powering Implantable and Ingestible Electronics. Advanced Functional Materials, 2021, 31, 2009289.	7.8	57
18	Nanotechnology approaches for global infectious diseases. Nature Nanotechnology, 2021, 16, 369-384.	15.6	232

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19	Computationally guided high-throughput design of self-assembling drug nanoparticles. Nature Nanotechnology, 2021, 16, 725-733.	15.6	64
20	Multi-MHz MEMS-VCSEL swept-source optical coherence tomography for endoscopic structural and angiographic imaging with miniaturized brushless motor probes. Biomedical Optics Express, 2021, 12, 2384.	1.5	18
21	Assessment of the Acceptability and Feasibility of Using Mobile Robotic Systems for Patient Evaluation. JAMA Network Open, 2021, 4, e210667.	2.8	13
22	Personalized Radiation Attenuating Materials for Gastrointestinal Mucosal Protection. Advanced Science, 2021, 8, 2100510.	5.6	3
23	Zero-Crossing-Based Bio-Engineered Sensor. , 2021, , .		3
24	The potential of porcine ex vivo platform for intestinal permeability screening of FcRn-targeted drugs. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 162, 99-104.	2.0	2
25	Kirigami-inspired stents for sustained local delivery of therapeutics. Nature Materials, 2021, 20, 1085-1092.	13.3	52
26	Thinking green: modelling respirator reuse strategies to reduce cost and waste. BMJ Open, 2021, 11, e048687.	0.8	12
27	Identification of bile acid and fatty acid species as candidate rapidly bactericidal agents for topical treatment of gonorrhoea. Journal of Antimicrobial Chemotherapy, 2021, 76, 2569-2577.	1.3	3
28	Prevention of diabetes-associated fibrosis: Strategies in FcRn-targeted nanosystems for oral drug delivery. Advanced Drug Delivery Reviews, 2021, 175, 113778.	6.6	13
29	Devices for drug delivery in the gastrointestinal tract: A review of systems physically interacting with the mucosa for enhanced delivery. Advanced Drug Delivery Reviews, 2021, 177, 113926.	6.6	26
30	Dynamic Monitoring of Systemic Biomarkers with Gastric Sensors. Advanced Science, 2021, 8, e2102861.	5.6	5
31	Implantable system for chronotherapy. Science Advances, 2021, 7, eabj4624.	4.7	9
32	Patient and Health Care Worker Perceptions of Communication and Ability to Identify Emotion When Wearing Standard and Transparent Masks. JAMA Network Open, 2021, 4, e2135386.	2.8	7
33	Platform for the Delivery of Unformulated RNA In Vivo. Journal of Pharmaceutical Sciences, 2021, , .	1.6	1
34	From Molecule to Patient: A Biotech Perspective. Clinical Pharmacology and Therapeutics, 2020, 107, 65-67.	2.3	3
35	Injection Molded Autoclavable, Scalable, Conformable (iMASC) system for aerosol-based protection: a prospective single-arm feasibility study. BMJ Open, 2020, 10, e039120.	0.8	17
36	Prospective Evaluation of the Transparent, Elastomeric, Adaptable, Long-Lasting (TEAL) Respirator. ACS Pharmacology and Translational Science, 2020, 3, 1076-1082.	2.5	6

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37	Electroceuticals in the Gastrointestinal Tract. Trends in Pharmacological Sciences, 2020, 41, 960-976.	4.0	18
38	Ingestible transiently anchoring electronics for microstimulation and conductive signaling. Science Advances, 2020, 6, eaaz0127.	4.7	35
39	Drug Delivery: Heparinâ€Coated Albumin Nanoparticles for Drug Combination in Targeting Inflamed Intestine (Adv. Healthcare Mater. 16/2020). Advanced Healthcare Materials, 2020, 9, 2070052.	3.9	0
40	Gastrointestinal synthetic epithelial linings. Science Translational Medicine, 2020, 12, .	5.8	36
41	Historical Evolution and Provider Awareness of Inactive Ingredients in Oral Medications. Pharmaceutical Research, 2020, 37, 234.	1.7	0
42	Development of a long-acting direct-acting antiviral system for hepatitis C virus treatment in swine. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 11987-11994.	3.3	15
43	A rapidly deployable individualized system for augmenting ventilator capacity. Science Translational Medicine, 2020, 12, .	5.8	23
44	Bioinspired kirigami metasurfaces as assistive shoe grips. Nature Biomedical Engineering, 2020, 4, 778-786.	11.6	61
45	Machine Learning Uncovers Food- and Excipient-Drug Interactions. Cell Reports, 2020, 30, 3710-3716.e4.	2.9	37
46	Heparinâ€Coated Albumin Nanoparticles for Drug Combination in Targeting Inflamed Intestine. Advanced Healthcare Materials, 2020, 9, e2000536.	3.9	17
47	Light-degradable hydrogels as dynamic triggers for gastrointestinal applications. Science Advances, 2020, 6, eaay0065.	4.7	71
48	Robotically handled whole-tissue culture system for the screening of oral drug formulations. Nature Biomedical Engineering, 2020, 4, 544-559.	11.6	35
49	Clinical Opportunities for Continuous Biosensing and Closed-Loop Therapies. Trends in Chemistry, 2020, 2, 319-340.	4.4	39
50	Local Targeting of NAD+ Salvage Pathway Alters the Immune Tumor Microenvironment and Enhances Checkpoint Immunotherapy in Glioblastoma. Cancer Research, 2020, 80, 5024-5034.	0.4	28
51	Ex Vivo and In Vivo Imaging Study of Ultrasound Capsule Endoscopy. Journal of Medical Devices, Transactions of the ASME, 2020, 14, 021005.	0.4	4
52	Endoscopically Injectable Shearâ€Thinning Hydrogels Facilitating Polyp Removal. Advanced Science, 2019, 6, 1901041.	5.6	47
53	A luminal unfolding microneedle injector for oral delivery of macromolecules. Nature Medicine, 2019, 25, 1512-1518.	15.2	167
54	Ingestible hydrogel device. Nature Communications, 2019, 10, 493.	5.8	168

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55	Quantifying the Value of Orally Delivered Biologic Therapies: AÂCost-Effectiveness Analysis of Oral Semaglutide. Journal of Pharmaceutical Sciences, 2019, 108, 3138-3145.	1.6	21
56	Challenges in IBD Research: Novel Technologies. Inflammatory Bowel Diseases, 2019, 25, S24-S30.	0.9	14
57	Temperature-responsive biometamaterials for gastrointestinal applications. Science Translational Medicine, 2019, 11, .	5.8	51
58	Ultra-rapid drug delivery in the oral cavity using ultrasound. Journal of Controlled Release, 2019, 304, 1-6.	4.8	12
59	Microbial therapeutics: New opportunities for drug delivery. Journal of Experimental Medicine, 2019, 216, 1005-1009.	4.2	57
60	A gastric resident drug delivery system for prolonged gram-level dosing of tuberculosis treatment. Science Translational Medicine, 2019, 11, .	5.8	38
61	â€œInactiveâ€•ingredients in oral medications. Science Translational Medicine, 2019, 11, .	5.8	68
62	Making the case: developing innovative adherence solutions for the treatment of tuberculosis. BMJ Global Health, 2019, 4, e001323.	2.0	10
63	An ingestible self-orienting system for oral delivery of macromolecules. Science, 2019, 363, 611-615.	6.0	287
64	A once-a-month oral contraceptive. Science Translational Medicine, 2019, 11, .	5.8	33
65	Ingestible electronics for diagnostics and therapy. Nature Reviews Materials, 2019, 4, 83-98.	23.3	146
66	3Dâ€Printed Gastric Resident Electronics. Advanced Materials Technologies, 2019, 4, 1800490.	3.0	72
67	Convergence for Translation: Drugâ€Delivery Research in Multidisciplinary Teams. Angewandte Chemie - International Edition, 2018, 57, 4156-4163.	7.2	8
68	Translation durch Konvergenz: Drugâ€Deliveryâ€Forschung in multidisziplinÃren Teams. Angewandte Chemie, 2018, 130, 4226-4234.	1.6	2
69	Caffeine-catalyzed gels. Biomaterials, 2018, 170, 127-135.	5.7	9
70	Development of an oral once-weekly drug delivery system for HIV antiretroviral therapy. Nature Communications, 2018, 9, 2.	5.8	180
71	Changing the pill: developments toward the promise of an ultra-long-acting gastroretentive dosage form. Expert Opinion on Drug Delivery, 2018, 15, 1189-1198.	2.4	38
72	Enabling deep-tissue networking for miniature medical devices. , 2018, , .		59

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73	An ingestible bacterial-electronic system to monitor gastrointestinal health. Science, 2018, 360, 915-918.	6.0	380
74	Genotype-targeted local therapy of glioma. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8388-E8394.	3.3	40
75	Scalable Gastric Resident Systems for Veterinary Application. Scientific Reports, 2018, 8, 11816.	1.6	8
76	Ultrasound-Mediated Delivery of RNA to Colonic Mucosa of LiveÂMice. Gastroenterology, 2017, 152, 1151-1160.	0.6	46
77	Prolonged energy harvesting for ingestible devices. Nature Biomedical Engineering, 2017, 1, .	11.6	148
78	Wireless Power Transfer to Millimeter-Sized Gastrointestinal Electronics Validated in a Swine Model. Scientific Reports, 2017, 7, 46745.	1.6	45
79	Flexible piezoelectric devices for gastrointestinal motility sensing. Nature Biomedical Engineering, 2017, 1, 807-817.	11.6	127
80	Nanoparticulate drug delivery systems targeting inflammation for treatment of inflammatory bowel disease. Nano Today, 2017, 16, 82-96.	6.2	136
81	Defining optimal permeant characteristics for ultrasound-mediated gastrointestinal delivery. Journal of Controlled Release, 2017, 268, 113-119.	4.8	12
82	Transmitting location. Nature Biomedical Engineering, 2017, 1, 684-685.	11.6	3
83	Evolution of macromolecular complexity in drug delivery systems. Nature Reviews Chemistry, 2017, 1, .	13.8	233
84	Oral delivery of biologics using drug-device combinations. Current Opinion in Pharmacology, 2017, 36, 8-13.	1.7	41
85	Triggerable tough hydrogels for gastric resident dosage forms. Nature Communications, 2017, 8, 124.	5.8	106
86	Circumferential optical coherence tomography angiography imaging of the swine esophagus using a micromotor balloon catheter. Biomedical Optics Express, 2016, 7, 2927.	1.5	27
87	Oral, ultraâ€“long-lasting drug delivery: Application toward malaria elimination goals. Science Translational Medicine, 2016, 8, 365ra157.	5.8	181
88	Past, Present, and Future Drug Delivery Systems for Antiretrovirals. Journal of Pharmaceutical Sciences, 2016, 105, 3471-3482.	1.6	23
89	A Janus Mucoadhesive and Omniphobic Device for Gastrointestinal Retention. Advanced Healthcare Materials, 2016, 5, 1141-1146.	3.9	27
90	Low-frequency ultrasound for drug delivery in the gastrointestinal tract. Expert Opinion on Drug Delivery, 2016, 13, 1045-1048.	2.4	27

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91	Of microneedles and ultrasound: Physical modes of gastrointestinal macromolecule delivery. Tissue Barriers, 2016, 4, e1150235.	1.6	18
92	Whole-Exome Sequencing Analyses of Inflammatory Bowel Diseaseâ"Associated Colorectal Cancers. Gastroenterology, 2016, 150, 931-943.	0.6	208
93	Eating at the right time. Science Translational Medicine, 2016, 8, .	5.8	0
94	Linked in: Cholesterol connects oligos to liver. Science Translational Medicine, 2016, 8, .	5.8	0
95	Abstract 127: The genomic landscapes of inflammatory bowel disease-associated colorectal cancers. , 2016, , .		0
96	A pH-responsive supramolecular polymer gel as an enteric elastomer for use in gastric devices. Nature Materials, 2015, 14, 1065-1071.	13.3	268
97	Engineering precision. Science Translational Medicine, 2015, 7, 289ed6.	5.8	10
98	Perspective: Special delivery for the gut. Nature, 2015, 519, S19-S19.	13.7	59
99	Ultrahigh speed en face OCT capsule for endoscopic imaging. Biomedical Optics Express, 2015, 6, 1146.	1.5	60
100	Ultrasound-mediated gastrointestinal drug delivery. Science Translational Medicine, 2015, 7, 310ra168.	5.8	95
101	An inflammation-targeting hydrogel for local drug delivery in inflammatory bowel disease. Science Translational Medicine, 2015, 7, 300ra128.	5.8	288
102	Microneedles for Drug Delivery via the Gastrointestinal Tract. Journal of Pharmaceutical Sciences, 2015, 104, 362-367.	1.6	133
103	Why some fish donâ€™t tan. Science Translational Medicine, 2015, 7, .	5.8	1
104	Physiologic Status Monitoring via the Gastrointestinal Tract. PLoS ONE, 2015, 10, e0141666.	1.1	28
105	A sticky situation helps colitis. Science Translational Medicine, 2015, 7, .	5.8	0
106	AIRE ing out the gut. Science Translational Medicine, 2015, 7, .	5.8	0
107	A soothing MSC-based ulcer treatment. Science Translational Medicine, 2015, 7, .	5.8	0
108	A self-propelled colon scope. Science Translational Medicine, 2015, 7, .	5.8	0

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109	Protease inhibitor passes oral exam. Science Translational Medicine, 2015, 7, .	5.8	0
110	Simple battery armor to protect against gastrointestinal injury from accidental ingestion. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16490-16495.	3.3	33
111	System for clinical photometric stereo endoscopy. Proceedings of SPIE, 2014, , .	0.8	2
112	Towards wireless capsule endoscopic ultrasound (WCEU). , 2014, , .		10
113	Photometric stereo endoscopy. Journal of Biomedical Optics, 2013, 18, 1.	1.4	36
114	Residency Training and International Medical Graduates. JAMA - Journal of the American Medical Association, 2012, 308, 2193.	3.8	25
115	Three Classes of Genes Mutated In Colorectal Cancers with Chromosomal Instability. Cancer Research, 2004, 64, 2998-3001.	0.4	174
116	Multicolor in vitro translation. Nature Biotechnology, 2003, 21, 1093-1097.	9.4	24
117	Transforming single DNA molecules into fluorescent magnetic particles for detection and enumeration of genetic variations. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 8817-8822.	3.3	744
118	Hyper-recombination and genetic instability in BLM-deficient epithelial cells. Cancer Research, 2003, 63, 8578-81.	0.4	38
119	Detection ofAPCMutations in Fecal DNA from Patients with Colorectal Tumors. New England Journal of Medicine, 2002, 346, 311-320.	13.9	320
120	Detection of proximal colorectal cancers through analysis of faecal DNA. Lancet, The, 2002, 359, 403-404.	6.3	142
121	Germline mutations of the gene encoding bone morphogenetic protein receptor 1A in juvenile polyposis. Nature Genetics, 2001, 28, 184-187.	9.4	591
122	Top-down morphogenesis of colorectal tumors. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 2640-2645.	3.3	319
123	Genes Expressed in Human Tumor Endothelium. Science, 2000, 289, 1197-1202.	6.0	1,733
124	Thinking Green: Respirator Reuse Strategies to Reduce Cost and Waste. SSRN Electronic Journal, 0, , .	0.4	0