James C Y Dunn

List of Publications by Year
in descending order

89 papers	2,049 citations	23 h-index (279487)	40 g-index (288905)
92 all docs	92 docs citations	92 times ranked	2444 citing authors

#	Article	IF	Citations
1	A tissue-like neurotransmitter sensor for the brain and gut. Nature, 2022, 606, 94-101.	13.7	162
2	Intestinal Subepithelial Myofibroblasts Support in vitro and in vivo Growth of Human Small Intestinal Epithelium. PLoS ONE, 2011, 6, e26898.	1.1	149
3	Analysis of Cell Growth in Three-Dimensional Scaffolds. Tissue Engineering, 2006, 12, 705-716.	4.9	98
4	Type I Collagen as an Extracellular Matrix for the In Vitro Growth of Human Small Intestinal Epithelium. PLoS ONE, 2014, 9, e107814.	1.1	98
5	Intestinal Subepithelial Myofibroblasts Support the Growth of Intestinal Epithelial Stem Cells. PLoS ONE, 2014, 9, e84651.	1.1	91
6	Mechanically induced development and maturation of human intestinal organoids in vivo. Nature Biomedical Engineering, 2018, 2, 429-442.	11.6	79
7	Development of Functional Microfold (M) Cells from Intestinal Stem Cells in Primary Human Enteroids. PLoS ONE, 2016, 11, e0148216.	1.1	78
8	The effect of scaffold macroporosity on angiogenesis and cell survival in tissue-engineered smooth muscle. Biomaterials, 2014, 35, 5129-5137.	5.7	75
9	Pharmacologically blocking p53-dependent apoptosis protects intestinal stem cells and mice from radiation. Scientific Reports, 2015, 5, 8566.	1.6	63
10	Disrupting the LINC complex in smooth muscle cells reduces aortic disease in a mouse model of Hutchinson-Gilford progeria syndrome. Science Translational Medicine, 2018, 10, .	5.8	63
11	Initial Laparotomy Versus Peritoneal Drainage in Extremely Low Birthweight Infants With Surgical Necrotizing Enterocolitis or Isolated Intestinal Perforation. Annals of Surgery, 2021, 274, e370-e380.	2.1	62
12	A novel culture system for adult porcine intestinal crypts. Cell and Tissue Research, 2016, 365, 123-134.	1.5	56
13	Enterogenesis by mechanical lengthening: Morphology and function of the lengthened small intestine. Journal of Pediatric Surgery, 2004, 39, 1823-1827.	0.8	51
14	Orthogonally oriented scaffolds with aligned fibers for engineering intestinal smooth muscle. Biomaterials, 2015, 61, 75-84.	5.7	37
15	Global comparison of pediatric surgery workforce and training. Journal of Pediatric Surgery, 2015, 50, 1180-1183.	0.8	37
16	Long-term renewable human intestinal epithelial stem cells as monolayers: A potential for clinical use. Journal of Pediatric Surgery, 2016, 51, 995-1000.	0.8	34
17	The feasibility of using an endoluminal device for intestinal lengthening. Journal of Pediatric Surgery, 2010, 45, 1575-1580.	0.8	29
18	A novel biodegradable device for intestinal lengthening. Journal of Pediatric Surgery, 2014, 49, 109-113.	0.8	29

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19	Concise Review: The Potential Use of Intestinal Stem Cells to Treat Patients with Intestinal Failure. Stem Cells Translational Medicine, 2017, 6, 666-676.	1.6	29
20	Intestinal lengthening in an innovative rodent surgical model. Journal of Pediatric Surgery, 2014, 49, 1791-1794.	0.8	27
21	Spring-mediated distraction enterogenesis in-continuity. Journal of Pediatric Surgery, 2016, 51, 1983-1987.	0.8	25
22	Distension enterogenesis: increasing the size and function of small intestine. Journal of Pediatric Surgery, 2006, 41, 763-767.	0.8	23
23	Restoration of mechanically lengthened jejunum into intestinal continuity in rats. Journal of Pediatric Surgery, 2011, 46, 2321-2326.	0.8	23
24	Intestinal lengthening in rats after massive small intestinal resection. Surgery, 2009, 146, 291-295.	1.0	22
25	Longâ€Term Outcomes in Children With Intestinal Failureâ€"Associated Liver Disease Treated With 6 Months of Intravenous Fish Oil Followed by Resumption of Intravenous Soybean Oil. Journal of Parenteral and Enteral Nutrition, 2019, 43, 708-716.	1.3	22
26	Repeated Mechanical Lengthening of Intestinal Segments in a Novel Model. Journal of Pediatric Surgery, 2015, 50, 954-957.	0.8	21
27	A Wireless Implant for Gastrointestinal Motility Disorders. Micromachines, 2018, 9, 17.	1.4	21
28	Development of an endoluminal intestinal lengthening capsule. Journal of Pediatric Surgery, 2012, 47, 136-141.	0.8	20
29	Scalability of an endoluminal spring for distraction enterogenesis. Journal of Pediatric Surgery, 2016, 51, 1988-1992.	0.8	20
30	Smooth Muscle Strips for Intestinal Tissue Engineering. PLoS ONE, 2014, 9, e114850.	1.1	19
31	Bioengineering functional smooth muscle with spontaneous rhythmic contraction in vitro. Scientific Reports, 2018, 8, 13544.	1.6	18
32	Transplantation of Enteric Cells into the Aganglionic Rodent Small Intestines. Journal of Surgical Research, 2012, 176, 20-28.	0.8	17
33	Function of mechanically lengthened jejunum after restoration into continuity. Journal of Pediatric Surgery, 2014, 49, 971-975.	0.8	17
34	Intestinal lengthening via multiple in-continuity springs. Journal of Pediatric Surgery, 2019, 54, 39-43.	0.8	16
35	Adrenal cortical cell transplantation. Journal of Pediatric Surgery, 2004, 39, 1856-1858.	0.8	15
36	Is the tissue-engineered intestine clinically viable?. Nature Reviews Gastroenterology & Hepatology, 2008, 5, 366-367.	1.7	15

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37	Transplanted skin-derived precursor stem cells generate enteric ganglion-like structures in vivo. Journal of Pediatric Surgery, 2014, 49, 1319-1325.	0.8	15
38	Mechanical lengthening in multiple intestinal segments in-series. Journal of Pediatric Surgery, 2016, 51, 957-959.	0.8	15
39	Transplantation of Enteric Cells Expressing p75 in the Rodent Stomach. Journal of Surgical Research, 2012, 174, 257-265.	0.8	14
40	Bioengineered intestinal muscularis complexes with long-term spontaneous and periodic contractions. PLoS ONE, 2018, 13, e0195315.	1.1	14
41	Feasibility and scalability of spring parameters in distraction enterogenesis in a murine model. Journal of Surgical Research, 2017, 215, 219-224.	0.8	13
42	Increased expression of insulin-like growth factor in intestinal lengthening by mechanical force in rats. Journal of Pediatric Surgery, 2007, 42, 2057-2061.	0.8	12
43	Intestinal epithelial replacement by transplantation of cultured murine and human cells into the small intestine. PLoS ONE, 2019, 14, e0216326.	1.1	12
44	Transplantation of Adrenal Cortical Progenitor Cells Enriched by Nile Red. Journal of Surgical Research, 2009, 156, 317-324.	0.8	11
45	A novel inÂvivo model of permanent intestinal aganglionosis. Journal of Surgical Research, 2014, 192, 27-33.	0.8	11
46	Biomechanical signaling and collagen fiber reorientation during distraction enterogenesis. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 101, 103425.	1.5	11
47	Epigenetic Targeting of <i>TERT</i>-Associated Gene Expression Signature in Human Neuroblastoma with <i>TERT</i> Overexpression. Cancer Research, 2020, 80, 1024-1035.	0.4	11
48	Magnetically actuable polymer nanocomposites for bioengineering applications. Journal of Materials Science, 2007, 42, 6139-6147.	1.7	10
49	Innovation in Pediatric Surgical Education for General Surgery Residents: A Mobile Web Resource. Journal of Surgical Education, 2015, 72, 1190-1194.	1.2	10
50	New Insights and Interventions for Short Bowel Syndrome. Current Pediatrics Reports, 2017, 5, 1-5.	1.7	10
51	Comparison of laparoscopic and open pediatric inguinal hernia repairs at two institutions. Pediatric Surgery International, 2018, 34, 1293-1298.	0.6	10
52	Biomechanics of small intestine during distraction enterogenesis with an intraluminal spring. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 101, 103413.	1.5	10
53	The effect of colonic tissue electrical stimulation and celiac branch of the abdominal vagus nerve neuromodulation on colonic motility in anesthetized pigs. Neurogastroenterology and Motility, 2020, 32, e13925.	1.6	10
54	Benzalkonium chlorideâ€“treated anorectums mimicked endothelin-3â€“deficient aganglionic anorectums on manometry. Journal of Pediatric Surgery, 2010, 45, 2408-2411.	0.8	9

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55	Double plication for spring-mediated intestinal lengthening of a defunctionalized Roux limb. Journal of Pediatric Surgery, 2018, 53, 1806-1810.	0.8	9
56	Mechanisms for intestinal regeneration. Current Opinion in Pediatrics, 2018, 30, 424-429.	1.0	9
57	Intravenous Fish Oil and Serum Fatty Acid Profiles in Pediatric Patients With Intestinal Failureâ€"Associated Liver Disease. Journal of Parenteral and Enteral Nutrition, 2019, 43, 717-725.	1.3	9
58	Double plication for spring-mediated in-continuity intestinal lengthening in a porcine model. Surgery, 2019, 165, 389-392.	1.0	9
59	Biomechanical Force Prediction for Lengthening of Small Intestine during Distraction Enterogenesis. Bioengineering, 2020, 7, 140.	1.6	9
60	Mechanical lengthening of porcine small intestine with decreased forces. Journal of Pediatric Surgery, 2021, 56, 1192-1198.	0.8	9
61	A novel method of esophageal lengthening in a large animal model of long gap esophageal atresia. Journal of Pediatric Surgery, 2015, 50, 928-932.	0.8	8
62	Intestinal adaptation following spring insertion into a roux limb in mice. Journal of Pediatric Surgery, 2021, 56, 346-351.	0.8	8
63	Skin-derived precursors generate enteric-type neurons in aganglionic jejunum. Journal of Pediatric Surgery, 2014, 49, 1809-1814.	0.8	7
64	The cellular regulators PTEN and BMI1 help mediate NEUROGENIN-3â€"induced cell cycle arrest. Journal of Biological Chemistry, 2019, 294, 15182-15192.	1.6	7
65	Intestinal Electrical Stimulation to Increase the Rate of Peristalsis. Journal of Surgical Research, 2019, 236, 153-158.	0.8	7
66	Tissue Engineering and Regenerative Science in Pediatrics. Pediatric Research, 2008, 63, 459-460.	1.1	6
67	Basic fibroblast growth factor eluting microspheres enhance distraction enterogenesis. Journal of Pediatric Surgery, 2016, 51, 960-965.	0.8	6
68	Mouse model of endoscopically ablated enteric nervous system. Journal of Surgical Research, 2016, 200, 117-121.	0.8	6
69	A Wireless Implantable System for Facilitating Gastrointestinal Motility. Micromachines, 2019, 10, 525.	1.4	6
70	Optimization of In-Continuity Spring-Mediated Intestinal Lengthening. Journal of Pediatric Surgery, 2020, 55, 158-163.	0.8	6
71	A durable model of Hirschsprungâ€™s colon. Journal of Pediatric Surgery, 2014, 49, 1804-1808.	0.8	5
72	Autologous Transplantation of Skin-Derived Precursor Cells in a Porcine Model. Journal of Pediatric Surgery, 2020, 55, 194-200.	0.8	5

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73	Tumescent Injections in Subcutaneous Pig Tissue Disperse Fluids Volumetrically and Maintain Elevated Local Concentrations of Additives for Several Hours, Suggesting a Treatment for Drug Resistant Wounds. Pharmaceutical Research, 2020, 37, 51.	1.7	5
74	Electroacupuncture to Increase Neuronal Stem Cell Growth. Medical Acupuncture, 2020, 32, 16-23.	0.3	5
75	Surgical Treatment of Short Bowel Syndromeâ€"The Past, the Present and the Future, a Descriptive Review of the Literature. Children, 2022, 9, 1024.	0.6	5
76	Three-dimensionally printed surface features to anchor endoluminal spring for distraction enterogenesis. PLoS ONE, 2018, 13, e0200529.	1.1	4
77	Human skin-derived precursor cells xenografted in aganglionic bowel. Journal of Pediatric Surgery, 2020, 55, 2791-2796.	0.8	4
78	Mesenteric neovascularization during spring-mediated intestinal lengthening. Journal of Pediatric Surgery, 2021, 56, 5-10.	0.8	4
79	Distraction enterogenesis in the murine colon. Journal of Pediatric Surgery, 2021, , .	0.8	4
80	Primary Myofibroblasts Maintain Short-Term Viability following Submucosal Injection in Syngeneic, Immune-Competent Mice Utilizing Murine Colonoscopy. PLoS ONE, 2015, 10, e0127258.	1.1	3
81	Interstitial Matrix Prevents Therapeutic Ultrasound From Causing Inertial Cavitation in Tumescent Subcutaneous Tissue. Ultrasound in Medicine and Biology, 2018, 44, 177-186.	0.7	3
82	Gastrointestinal Myoelectric Measurements viaÂSimultaneous External and Internal ElectrodesÂin Pigs. Journal of Surgical Research, 2022, 279, 119-126.	0.8	3
83	Subcutaneous cefazolin to reduce surgical site infections in a porcine model. Journal of Surgical Research, 2018, 224, 156-159.	0.8	2
84	Irreversible Electroporation for De-epithelialization of Murine Small Intestine. Journal of Surgical Research, 2020, 256, 602-610.	0.8	2
85	Cutaneous Patches to Monitor Myoelectric Activity of the Gastrointestinal Tract in Postoperative Pediatric Patients. Pediatric Gastroenterology, Hepatology and Nutrition, 2019, 22, 518.	0.4	2
86	Fluid flow in tumescent subcutaneous tissue observed with 3D scanning: massage accelerates injection dispersal. Biomedical Physics and Engineering Express, 2018, 4, 045014.	0.6	1
87	Delayed appearance of mature ganglia in an infant with an atypical presentation of total colonic and small bowel aganglionosis: a case report. BMC Pediatrics, 2019, 19, 93.	0.7	1
88	Collagen and heparan sulfate coatings differentially alter cell proliferation and attachment in vitro and in vivo. Technology, 2016, 04, 159-169.	1.4	0
89	Intestinal Bioengineering. Clinical Transplants, 2016, 32, 1-4.	0.2	0