

# Matthias Gärger

## List of Publications by Year in descending order

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Version: 2024-02-01

76  
papers

1,441  
citations

471061

17  
h-index

377514

34  
g-index

86  
all docs

86  
docs citations

86  
times ranked

1658  
citing authors

#	ARTICLE	IF	CITATIONS
1	Prediction Model Performance With Different Imputation Strategies: A Simulation Study Using a North American ICU Registry. <i>Pediatric Critical Care Medicine</i> , 2022, 23, e29-e44.	0.2	6
2	Blood pressure nomograms for children undergoing general anesthesia, stratified by age and anesthetic type, using data from a retrospective cohort at a tertiary pediatric center. <i>Journal of Clinical Monitoring and Computing</i> , 2022, 36, 1667-1677.	0.7	1
3	Effectiveness of Mobile Apps in Promoting Healthy Behavior Changes and Preventing Obesity in Children: Systematic Review. <i>JMIR Pediatrics and Parenting</i> , 2022, 5, e34967.	0.8	5
4	Empowering Patients Through Virtual Care Delivery: Qualitative Study With Micropractice Clinic Patients and Health Care Providers. <i>JMIR Formative Research</i> , 2022, 6, e32528.	0.7	11
5	Has Virtual Care Arrived? A Survey of Rural Canadian Providers During the Early Stages of the COVID-19 Pandemic. <i>Health Services Insights</i> , 2022, 15, 117863292210960.	0.6	5
6	Identification of Requirements for a Postoperative Pediatric Pain Risk Communication Tool: Focus Group Study With Clinicians and Family Members. <i>JMIR Pediatrics and Parenting</i> , 2022, 5, e37353.	0.8	3
7	Effect of ketamine on the NeuroSENSE WAVCNS during propofol anesthesia; a randomized feasibility trial. <i>Journal of Clinical Monitoring and Computing</i> , 2021, 35, 557-567.	0.7	4
8	Anesthesia in the modern world of apps and technology: Implications and impact on wellness. <i>Paediatric Anaesthesia</i> , 2021, 31, 31-38.	0.6	4
9	Preferred Functions of Personal Health Records in Rural Primary Health Clinics in Canada: Health Care Team Perspectives. <i>Applied Clinical Informatics</i> , 2021, 12, 041-048.	0.8	2
10	The Effect of Low-Dose Intraoperative Ketamine on Closed-Loop-Controlled General Anesthesia: A Randomized Controlled Equivalence Trial. <i>Anesthesia and Analgesia</i> , 2021, 133, 1215-1224.	1.1	3
11	Characteristics and Timing of Mortality in Children Dying With Infections in North American PICUs*. <i>Pediatric Critical Care Medicine</i> , 2021, 22, 365-379.	0.2	10
12	News Article Portrayal of Virtual Care for Health Care Delivery in the First 7 Months of the COVID-19 Pandemic. <i>Telemedicine Reports</i> , 2021, 2, 108-117.	0.5	5
13	The effect of intraoperative lidocaine infusion on postoperative opioid consumption in adolescents undergoing posterior spinal instrumentation and fusion for idiopathic scoliosis. <i>Spine Journal</i> , 2021, 21, 1047-1048.	0.6	2
14	A majority of uninfected adults show preexisting antibody reactivity against SARS-CoV-2. <i>JCI Insight</i> , 2021, 6, .	2.3	39
15	Association of dexmedetomidine with recovery room and hospital discharge times: A retrospective cohort analysis. <i>Paediatric Anaesthesia</i> , 2021, 31, 1170-1178.	0.6	10
16	An Artificial Neural Network-Based Pediatric Mortality Risk Score: Development and Performance Evaluation Using Data From a Large North American Registry. <i>JMIR Medical Informatics</i> , 2021, 9, e24079.	1.3	1
17	The Effect of Carbetocin Dose on Transmural Dispersion of Myocardial Repolarization in Healthy Parturients Scheduled for Elective Cesarean Delivery Under Spinal Anesthesia: A Prospective, Randomized Clinical Trial. <i>Anesthesia and Analgesia</i> , 2021, 132, 485-492.	1.1	6
18	Perceptions of Personal Health Records in Rural Primary Health Clinics in Canada - Patient Perspectives. <i>Studies in Health Technology and Informatics</i> , 2021, 284, 285-289.	0.2	0

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19	Zero-heat-flux core temperature monitoring system: an observational secondary analysis to evaluate agreement with naso-/oropharyngeal probe during anesthesia. <i>Journal of Clinical Monitoring and Computing</i> , 2020, 34, 1121-1129.	0.7	15
20	Evaluating NeuroSENSE for assessing depth of hypnosis during desflurane anesthesia: an adaptive, randomized-controlled trial. <i>Canadian Journal of Anaesthesia</i> , 2020, 67, 324-335.	0.7	3
21	Reducing preoperative anxiety with Child Life preparation prior to intravenous induction of anesthesia: A randomized controlled trial. <i>Paediatric Anaesthesia</i> , 2020, 30, 168-180.	0.6	24
22	The effect of ketamine on depth of hypnosis indices during total intravenous anesthesia—a comparative study using a novel electroencephalography case replay system. <i>Journal of Clinical Monitoring and Computing</i> , 2020, 35, 1027-1036.	0.7	8
23	Intravenous cannula placement in children for induction of general anesthesia: Prospective audit and identification of success factors. <i>Paediatric Anaesthesia</i> , 2020, 30, 874-884.	0.6	7
24	Grappling With Real-Time Diagnosis and Public Health Surveillance in Sepsis. <i>Pediatric Critical Care Medicine</i> , 2020, 21, 196-197.	0.2	1
25	Augmented intelligence in pediatric anesthesia and pediatric critical care. <i>Current Opinion in Anaesthesiology</i> , 2020, 33, 404-410.	0.9	10
26	Evaluation of a digital triage platform in Uganda: A quality improvement initiative to reduce the time to antibiotic administration. <i>PLoS ONE</i> , 2020, 15, e0240092.	1.1	7
27	What You Need to Know Before Implementing a Clinical Research Data Warehouse: Comparative Review of Integrated Data Repositories in Health Care Institutions. <i>JMIR Formative Research</i> , 2020, 4, e17687.	0.7	17
28	Feasibility of Using a Single Heart Rate–Based Measure for Real-time Feedback in a Voluntary Deep Breathing App for Children: Data Collection and Algorithm Development. <i>JMIR Perioperative Medicine</i> , 2020, 3, e16639.	0.3	0
29	Optimizing Robust PID Control of Propofol Anesthesia for Children: Design and Clinical Evaluation. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 2918-2923.	2.5	17
30	Universal Risk Scores and Local Relevance. <i>Pediatric Critical Care Medicine</i> , 2019, 20, 790-792.	0.2	0
31	Effects of Dexmedetomidine on Myocardial Repolarization in Children Undergoing General Anesthesia. <i>Anesthesia and Analgesia</i> , 2019, 129, 1100-1108.	1.1	4
32	Effects of Dexmedetomidine on Blood Glucose and Serum Potassium Levels in Children Undergoing General Anesthesia. <i>Anesthesia and Analgesia</i> , 2019, 129, 1093-1099.	1.1	7
33	Integrating intraoperative physiology data into outcome analysis for the ACS Pediatric National Surgical Quality Improvement Program. <i>Paediatric Anaesthesia</i> , 2019, 29, 27-37.	0.6	11
34	Derivation and internal validation of a data-driven prediction model to guide frontline health workers in triaging children under-five in Nairobi, Kenya. <i>Wellcome Open Research</i> , 2019, 4, 121.	0.9	6
35	Derivation and internal validation of a data-driven prediction model to guide frontline health workers in triaging children under-five in Nairobi, Kenya. <i>Wellcome Open Research</i> , 2019, 4, 121.	0.9	4
36	A Postoperative Pain Management Mobile App (Panda) for Children at Home After Discharge: Usability and Feasibility. <i>JMIR Perioperative Medicine</i> , 2019, 2, e12305.	0.3	14

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37	Development and Implementation of the Portable Operating Room Tracker App With Vital Signs Streaming Infrastructure: Operational Feasibility Study. <i>JMIR Perioperative Medicine</i> , 2019, 2, e13559.	0.3	7
38	Feasibility of continuous sedation monitoring in critically ill intensive care unit patients using the NeuroSENSE WAVCNS index. <i>Journal of Clinical Monitoring and Computing</i> , 2018, 32, 1081-1091.	0.7	9
39	Clinician-Driven Design of <i>VitalPAD</i> —An Intelligent Monitoring and Communication Device to Improve Patient Safety in the Intensive Care Unit. <i>IEEE Journal of Translational Engineering in Health and Medicine</i> , 2018, 6, 1-14.	2.2	31
40	Design and Evaluation of a Closed-Loop Anesthesia System With Robust Control and Safety System. <i>Anesthesia and Analgesia</i> , 2018, 127, 883-894.	1.1	43
41	External Validation of the “Quick” Pediatric Logistic Organ Dysfunction-2 Score Using a Large North American Cohort of Critically Ill Children With Suspected Infection. <i>Pediatric Critical Care Medicine</i> , 2018, 19, 1114-1119.	0.2	6
42	In-hospital usability and feasibility evaluation of Panda, an app for the management of pain in children at home. <i>Paediatric Anaesthesia</i> , 2018, 28, 897-905.	0.6	16
43	Mortality Risk Using a Pediatric Quick Sequential (Sepsis-Related) Organ Failure Assessment Varies With Vital Sign Thresholds*. <i>Pediatric Critical Care Medicine</i> , 2018, 19, e394-e402.	0.2	15
44	Effect of preoperative warming on intraoperative hypothermia: a randomized-controlled trial. <i>Canadian Journal of Anaesthesia</i> , 2018, 65, 1029-1040.	0.7	61
45	Data Access and Usage Practices Across a Cohort of Researchers at a Large Tertiary Pediatric Hospital: Qualitative Survey Study. <i>JMIR Medical Informatics</i> , 2018, 6, e32.	1.3	3
46	Sequential allocation trial design in anesthesia: an introduction to methods, modeling, and clinical applications. <i>Paediatric Anaesthesia</i> , 2017, 27, 240-247.	0.6	44
47	Using physiological monitoring data for performance feedback: an initiative using thermoregulation metrics. <i>Canadian Journal of Anaesthesia</i> , 2017, 64, 245-251.	0.7	14
48	In Response. <i>Anesthesia and Analgesia</i> , 2017, 124, 1735-1736.	1.1	0
49	Closed-Loop Control of Total Intravenous Anesthesia During Significant Intraoperative Blood Loss. A & A Case Reports, 2017, 9, 239-243.	0.7	3
50	An Ethnographic Observational Study to Evaluate and Optimize the Use of Respiratory Acoustic Monitoring in Children Receiving Postoperative Opioid Infusions. <i>Anesthesia and Analgesia</i> , 2016, 122, 1132-1140.	1.1	1
51	Preoperative warming and undesired surgical and anesthesia outcomes in pediatric spinal surgery—a retrospective cohort study. <i>Paediatric Anaesthesia</i> , 2016, 26, 866-875.	0.6	21
52	Developing an objective method for analyzing vital signs changes in neonates during general anesthesia. <i>Paediatric Anaesthesia</i> , 2016, 26, 1071-1081.	0.6	18
53	A Procedural Electroencephalogram Simulator for Evaluation of Anesthesia Monitors. <i>Anesthesia and Analgesia</i> , 2016, 123, 1136-1140.	1.1	12
54	Changes in $QT_c$ associated with a rapid bolus dose of dexmedetomidine in patients receiving TIVA: a retrospective study. <i>Paediatric Anaesthesia</i> , 2015, 25, 1287-1293.	0.6	14

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55	Dexmedetomidine and hydromorphone: A novel pain management strategy for the oncology ward setting during anti-CD2 immunotherapy for high-risk neuroblastoma in children. <i>Pediatric Blood and Cancer</i> , 2015, 62, 29-34.	0.8	17
56	A Scheme-Based Closed-Loop Anesthesia System. , 2014, , .		2
57	Development of mHealth Applications for Pre-Eclampsia Triage. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2014, 18, 1857-1864.	3.9	71
58	Using machine-to-machine / &#x201C;Internet of Things&#x201D; communication to simplify medical device information exchange. , 2014, , .		4
59	Identifying a rapid bolus dose of dexmedetomidine (<sc>ED</sc>50) with acceptable hemodynamic outcomes in children. <i>Paediatric Anaesthesia</i> , 2014, 24, 1260-1267.	0.6	46
60	Evaluation of the effect of information integration in displays for ICU nurses on situation awareness and task completion time: A prospective randomized controlled study. <i>International Journal of Medical Informatics</i> , 2013, 82, 665-675.	1.6	64
61	Experience report. , 2013, , .		16
62	A retrospective audit to examine the effectiveness of preoperative warming on hypothermia in spine deformity surgery patients. <i>Paediatric Anaesthesia</i> , 2013, 23, 1054-1061.	0.6	19
63	Changes in cardiac index and blood pressure on positioning children prone for scoliosis surgery. <i>Anaesthesia</i> , 2013, 68, 742-746.	1.8	20
64	Mobile Patient Monitoring for the Pediatric Intensive Care Unit Work Domain Analysis and Rapid Prototyping Results. , 2013, , .		10
65	Experience report. <i>ACM SIGPLAN Notices</i> , 2013, 48, 357-362.	0.2	5
66	An Evaluation of an Expert System for Detecting Critical Events During Anesthesia in a Human Patient Simulator. <i>Anesthesia and Analgesia</i> , 2013, 117, 380-391.	1.1	16
67	Intensive care unit nurses' information needs and recommendations for integrated displays to improve nurses' situation awareness. <i>Journal of the American Medical Informatics Association: JAMIA</i> , 2012, 19, 583-590.	2.2	65
68	University of Queensland Vital Signs Dataset. <i>Anesthesia and Analgesia</i> , 2012, 114, 584-589.	1.1	113
69	Evaluation of an integrated intensive care unit monitoring display by critical care fellow physicians. <i>Journal of Clinical Monitoring and Computing</i> , 2012, 26, 429-436.	0.7	27
70	Medical device alarms. <i>Biomedizinische Technik</i> , 2011, 56, 73-83.	0.9	92
71	A Far-View Intensive Care Unit Monitoring Display Enables Faster Triage. <i>Dimensions of Critical Care Nursing</i> , 2011, 30, 206-217.	0.4	24
72	A tool predicting future mean arterial blood pressure values improves the titration of vasoactive drugs. <i>Journal of Clinical Monitoring and Computing</i> , 2010, 24, 223-235.	0.7	11

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73	Evaluation of an Ambient Color Coded Display to Communicate Changes in the Patient's Condition to ICU Nurses and Improve the Therapeutic Environment. Proceedings of the Human Factors and Ergonomics Society, 2010, 54, 1566-1570.	0.2	0
74	Improving Alarm Performance in the Medical Intensive Care Unit Using Delays and Clinical Context. Anesthesia and Analgesia, 2009, 108, 1546-1552.	1.1	176
75	Evaluations of Physiological Monitoring Displays: A Systematic Review. Journal of Clinical Monitoring and Computing, 2008, 22, 45-66.	0.7	48
76	An Algorithm for Early Detection of Sepsis Using Traditional Statistical Regression Modeling. , 0, , .		3