Vitaly Herasevich

List of Publications by Year
in descending order

142 papers	5,110 citations	117625 34 h-index	106344 65 g-index
149 all docs	149 docs citations	149 times ranked	6885 citing authors

#	Article	IF	Citations
1	Validation of a Machine Learning Model for Early Shock Detection. Military Medicine, 2022, 187, 82-88.	0.8	4
2	Implementation and evaluation of sepsis surveillance and decision support in medical ICU and emergency department. American Journal of Emergency Medicine, 2022, 51, 378-383.	1.6	6
3	A multidisciplinary approach to the development of digital twin models of critical care delivery in intensive care units. International Journal of Production Research, 2022, 60, 4197-4213.	7.5	8
4	Improving In-Hospital Patient Rescue: What Are Studies on Early Warning Scores Missing? A Scoping Review. , 2022, 4, e0644.		2
5	1267: HEALTH INFORMATION TECHNOLOGY TO DETECT PATIENT DETERIORATION: SYSTEMATIC REVIEW AND META-ANALYSIS. Critical Care Medicine, 2022, 50, 634-634.	0.9	0
6	31: EXAMINING THE ASSOCIATION BETWEEN ICU OPERATIONAL CONDITIONS AND CLINICAL DECISION-MAKING. Critical Care Medicine, 2022, 50, 16-16.	0.9	0
7	The Impact of Health Information Technology for Early Detection of Patient Deterioration on Mortality and Length of Stay in the Hospital Acute Care Setting: Systematic Review and Meta-Analysis*. Critical Care Medicine, 2022, 50, 1198-1209.	0.9	7
8	Association of blood pressure variability with short- and long-term cognitive outcomes in patients with critical illness. Journal of Critical Care, 2022, 71, 154107.	2.2	2
9	Are We Ready for Video Recognition and Computer Vision in the Intensive Care Unit? A Survey. Applied Clinical Informatics, 2021, 12, 120-132.	1.7	2
10	Patient Monitoring Systems. , 2021, , 693-732.		0
11	Decision Support for Tactical Combat Casualty Care Using Machine Learning to Detect Shock. Military Medicine, 2021, 186, 273-280.	0.8	12
12	Utility of AI models in critical care: union of man and the machine. Critical Care, 2021, 25, 46.	5.8	3
13	Improving the delivery of palliative care through predictive modeling and healthcare informatics. Journal of the American Medical Informatics Association: JAMIA, 2021, 28, 1065-1073.	4.4	19
14	Bedside Clinicians' Perceptions on the Contributing Role of Diagnostic Errors in Acutely Ill Patient Presentation. Journal of Patient Safety, 2021, Publish Ahead of Print, e454-e462.	1.7	4
15	Convalescent Plasma Antibody Levels and the Risk of Death from Covid-19. New England Journal of Medicine, 2021, 384, 1015-1027.	27.0	438
16	A Living, Interactive Systematic Review and Network Meta-analysis of First-line Treatment of Metastatic Renal Cell Carcinoma. European Urology, 2021, 80, 712-723.	1.9	43
17	Interaction Time with Electronic Health Records: A Systematic Review. Applied Clinical Informatics, 2021, 12, 788-799.	1.7	13
18	Mortality in individuals treated with COVID-19 convalescent plasma varies with the geographic provenance of donors. Nature Communications, 2021, 12, 4864.	12.8	49

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19	Outcome after intubation for septic shock with respiratory distress and hemodynamic compromise: an observational study. BMC Anesthesiology, 2021, 21, 253.	1.8	4
20	1214: Development and Verification of a Digital Twin Patient Model to Predict Treatment Response in Sepsis. Critical Care Medicine, 2021, 49, 611-611.	0.9	1
21	1108: Secondary Analysis of Diagnostic Error Rate in Patients Requiring Rapid Response Team Activation. Critical Care Medicine, 2021, 49, 555-555.	0.9	0
22	1053: Survey of Perception of Using Video Recognition and Computer Vision in the Intensive Care Unit. Critical Care Medicine, 2021, 49, 526-526.	0.9	1
23	Access to and safety of COVID-19 convalescent plasma in the United States Expanded Access Program: A national registry study. PLoS Medicine, 2021, 18, e1003872.	8.4	43
24	1729: DEVELOPMENT OF A MACHINE LEARNING MODEL FOR EARLY SHOCK DETECTION. Critical Care Medicine, 2020, 48, 839-839.	0.9	0
25	Tele-Critical Care: An Update From the Society of Critical Care Medicine Tele-ICU Committee*. Critical Care Medicine, 2020, 48, 553-561.	0.9	67
26	Safety Update. Mayo Clinic Proceedings, 2020, 95, 1888-1897.	3.0	364
27	Feasibility and Reliability Testing of Manual Electronic Health Record Reviews as a Tool for Timely Identification of Diagnostic Error in Patients at Risk. Applied Clinical Informatics, 2020, 11, 474-482.	1.7	7
28	Development and Verification of a Digital Twin Patient Model to Predict Specific Treatment Response During the First 24 Hours of Sepsis. , 2020, 2, e0249.		30
29	Validation of automated sepsis surveillance based on the Sepsis-3 clinical criteria against physician record review in a general hospital population: observational study using electronic health records data. BMJ Quality and Safety, 2020, 29, 735-745.	3.7	36
30	Early safety indicators of COVID-19 convalescent plasma in 5000 patients. Journal of Clinical Investigation, 2020, 130, 4791-4797.	8.2	386
31	Artificial intelligence and computer simulation models in critical illness. World Journal of Critical Care Medicine, 2020, 9, 13-19.	1.8	21
32	Clinical Decision Support. , 2020, , 149-171.		0
33	Novel evidence synthesis system to support living systematic reviews and living guidelines for cancer immunotherapy.. Journal of Clinical Oncology, 2020, 38, 2054-2054.	1.6	0
34	1364: USING AN ACUTE CARE LEARNING LAB TO TEST RELIABILITY OF A SEARCH STRATEGY FOR DIAGNOSTIC ERROR/DELAY. Critical Care Medicine, 2020, 48, 659-659.	0.9	0
35	Starter Kit for Geotagging and Geovisualization in Health Care: Resource Paper. JMIR Formative Research, 2020, 4, e23379.	1.4	3
36	HAI-Proactive: Development of an Automated Surveillance System for Healthcare-Associated Infections in Sweden. Infection Control and Hospital Epidemiology, 2020, 41, s39-s39.	1.8	2

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37	Clinical impact of intraoperative electronic health record downtime on surgical patients. Journal of the American Medical Informatics Association: JAMIA, 2019, 26, 928-933.	4.4	11
38	Tele-ICU Technologies. Critical Care Clinics, 2019, 35, 427-438.	2.6	14
39	Trauma Care Decision Support Under Fire. , 2019, , .		4
40	A living systematic review of immune checkpoint inhibitors in cancer patients: A novel platform for evidence synthesis in oncology.. Journal of Clinical Oncology, 2019, 37, 6596-6596.	1.6	0
41	Living systematic reviews: A novel mechanism for improving efficiency and quality of evidence synthesis in oncology.. Journal of Clinical Oncology, 2019, 37, 241-241.	1.6	0
42	Innovation in evidence synthesis: A living systematic review of immune checkpoint inhibitors in cancer patients.. Journal of Global Oncology, 2019, 5, 80-80.	0.5	0
43	Relationship Between Very Cold Outside Weather and Surgical Outcome: Integrating Shallow and Deep Artificial Neural Nets. Studies in Health Technology and Informatics, 2019, 264, 1783-1784.	0.3	1
44	1242: ICU-ACQUIRED VANCOMYCIN-RESISTANT ENTEROCOCCUS: MIND THE NEIGHBORS!. Critical Care Medicine, 2018, 46, 604-604.	0.9	1
45	1500: SEPSIS PREDICTION USING BIG DATA ANALYTICS-BASED TOOLS. Critical Care Medicine, 2018, 46, 734-734.	0.9	0
46	It Was the Best of Rounds, It Was the Worst of Rounds, It Was the Age of Wisdom, It Was the Age of Electronic Health Recordsâ€¦*. Critical Care Medicine, 2018, 46, 1685-1686.	0.9	2
47	1098: PRELIMINARY ANALYSIS OF PAGER ALERT SYSTEM EFFECT ON PROVIDER BEHAVIOR WITH CHECKLIST USE. Critical Care Medicine, 2018, 46, 532-532.	0.9	0
48	Multicenter derivation and validation of an early warning score for acute respiratory failure or death in the hospital. Critical Care, 2018, 22, 286.	5.8	42
49	Editorâ€™s Choice-Clinical impact of delirium and antipsychotic therapy: 10-Year experience from a referral coronary care unit. European Heart Journal: Acute Cardiovascular Care, 2017, 6, 560-568.	1.0	21
50	An appraisal of published usability evaluations of electronic health records via systematic review. Journal of the American Medical Informatics Association: JAMIA, 2017, 24, 218-226.	4.4	86
51	Effect of daily use of electronic checklist on physical rehabilitation consultations in critically ill patients. Journal of Critical Care, 2017, 38, 357-361.	2.2	3
52	Prospective validation of a near real-time EHR-integrated automated SOFA score calculator. International Journal of Medical Informatics, 2017, 103, 1-6.	3.3	51
53	Evaluating Muscle Mass by Using Markers of Kidney Function: Development of the Sarcopenia Index. Critical Care Medicine, 2017, 45, e23-e29.	0.9	179
54	Association of Serum Magnesium on Mortality in Patients Admitted to the Intensive Cardiac Care Unit. American Journal of Medicine, 2017, 130, 229.e5-229.e13.	1.5	46

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55	Automating Clinical Score Calculation within the Electronic Health Record. Applied Clinical Informatics, 2017, 08, 369-380.	1.7	22
56	Information needs for the rapid response team electronic clinical tool. BMC Medical Informatics and Decision Making, 2017, 17, 142.	3.0	2
57	A Multisite Survey Study of EMR Review Habits, Information Needs, and Display Preferences among Medical ICU Clinicians Evaluating New Patients. Applied Clinical Informatics, 2017, 08, 1197-1207.	1.7	14
58	Health IT Usability Focus Section: Data Use and Navigation Patterns among Medical ICU Clinicians during Electronic Chart Review. Applied Clinical Informatics, 2017, 08, 1117-1126.	1.7	25
59	Iterative User Interface Design for Automated Sequential Organ Failure Assessment Score Calculator in Sepsis Detection. JMIR Human Factors, 2017, 4, e14.	2.0	14
60	Towards automated calculation of evidence-based clinical scores. World Journal of Methodology, 2017, 7, 16.	3.5	10
61	Comparison of methods of alert acknowledgement by critical care clinicians in the ICU setting. PeerJ, 2017, 5, e3083.	2.0	7
62	DOCtimer: A Timing and Event Recording Tool for Direct Observational Research. Studies in Health Technology and Informatics, 2017, 245, 1309.	0.3	0
63	Predictors of Delayed Postoperative Respiratory Depression Assessed From Naloxone Administration. Survey of Anesthesiology, 2016, 60, 26.	0.1	0
64	Early Computerization of Patient Care at Mayo Clinic. Mayo Clinic Proceedings, 2016, 91, e93-e101.	3.0	2
65	Information Needs Assessment for a Medicine Ward-Focused Rounding Dashboard. Journal of Medical Systems, 2016, 40, 183.	3.6	3
66	Decision Support Tool to Improve Glucose Control Compliance After Cardiac Surgery. AACN Advanced Critical Care, 2016, 27, 274-282.	1.1	4
67	Testing modes of computerized sepsis alert notification delivery systems. BMC Medical Informatics and Decision Making, 2016, 16, 156.	3.0	11
68	Early intervention of patients at risk for acute respiratory failure and prolonged mechanical ventilation with a checklist aimed at the prevention of organ failure: protocol for a pragmatic stepped-wedged cluster trial of PROOFCheck: TableÂ1. BMJ Open, 2016, 6, e011347.	1.9	19
69	116: IMPROVING TEAMWORK IN THE ICU: ELECTRONIC TASK LIST COMPLETION. Critical Care Medicine, 2016, 44, 106-106.	0.9	0
70	369: CLINICAL INFORMATION NEEDS FOR THE RAPID RESPONSE TEAM ELECTRONIC CONSULTATION TOOL. Critical Care Medicine, 2016, 44, 169-169.	0.9	0
71	1346: CREATION AND VALIDATION OF AN EHR INTEGRATED AUTOMATED SOFA SCORE CALCULATOR. Critical Care Medicine, 2016, 44, 412-412.	0.9	0
72	1380: TIME-MOTION ANALYSIS AND ECONOMIC IMPACT OF SOFA SCORE INTEGRATION INTO THE NEW SEPSIS-3 DEFINITION. Critical Care Medicine, 2016, 44, 420-420.	0.9	1

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73	Delayed Rapid Response Team Activation Is Associated With Increased Hospital Mortality, Morbidity, and Length of Stay in a Tertiary Care Institution. Survey of Anesthesiology, 2016, 60, 200.	0.1	0
74	Predicting Outcomes From Respiratory Distress. Critical Care Medicine, 2016, 44, 1437-1438.	0.9	2
75	Delayed Rapid Response Team Activation Is Associated With Increased Hospital Mortality, Morbidity, and Length of Stay in a Tertiary Care Institution*. Critical Care Medicine, 2016, 44, 54-63.	0.9	110
76	Clinical calculators in hospital medicine: Availability, classification, and needs. Computer Methods and Programs in Biomedicine, 2016, 133, 1-6.	4.7	14
77	Overestimation of Glomerular Filtration Rate Among Critically Ill Adults With Hospital-Acquired Oligoanuric Acute Kidney Injury. Journal of Pharmacy Practice, 2016, 29, 125-131.	1.0	9
78	User perception and experience of the introduction of a novel critical care patient viewer in the ICU setting. International Journal of Medical Informatics, 2016, 88, 86-91.	3.3	27
79	The Effect of an Electronic Checklist on Critical Care Provider Workload, Errors, and Performance. Journal of Intensive Care Medicine, 2016, 31, 205-212.	2.8	51
80	Development and Implementation of Sepsis Alert Systems. Clinics in Chest Medicine, 2016, 37, 219-229.	2.1	42
81	Differentiating infectious and noninfectious ventilator-associated complications: A new challenge. American Journal of Infection Control, 2016, 44, 661-665.	2.3	3
82	Creation of the Prevention of Organ Failure Checklist. A Multidisciplinary Approach Using the Modified Delphi Technique. Annals of the American Thoracic Society, 2016, 13, 910-916.	3.2	3
83	Automatic quality improvement reports in the intensive care unit: One step closer toward meaningful use. World Journal of Critical Care Medicine, 2016, 5, 165.	1.8	9
84	961. Critical Care Medicine, 2015, 43, 241-242.	0.9	0
85	Utilities of Electronic Medical Records to Improve Quality of Care for Acute Kidney Injury: Past, Present, Future. Nephron, 2015, 131, 92-96.	1.8	17
86	Automated Sepsis Detection, Alert, and Clinical Decision Support. Critical Care Medicine, 2015, 43, 1776-1777.	0.9	11
87	Predictors of Delayed Postoperative Respiratory Depression Assessed from Naloxone Administration. Anesthesia and Analgesia, 2015, 121, 422-429.	2.2	101
88	198. Critical Care Medicine, 2015, 43, 51.	0.9	1
89	A Survey from a Large Academic Medical Center. Applied Clinical Informatics, 2015, 06, 305-317.	1.7	14
90	Automating Quality Metrics in the Era of Electronic Medical Records: Digital Signatures for Ventilator Bundle Compliance. BioMed Research International, 2015, 2015, 1-6.	1.9	5

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91	Description and pilot evaluation of the Metabolic Irregularities Narrowing down Device software: a case analysis of physician programming. Journal of Community Hospital Internal Medicine Perspectives, 2015, 5, 25793.	0.8	1
92	Impact of the Electronic Medical Record on Mortality, Length of Stay, and Cost in the Hospital and ICU. Critical Care Medicine, 2015, 43, 1276-1282.	0.9	58
93	The implementation of clinician designed, human-centered electronic medical record viewer in the intensive care unit: A pilot step-wedge cluster randomized trial. International Journal of Medical Informatics, 2015, 84, 299-307.	3.3	82
94	Do patients in a medical or surgical ICU benefit from a neurologic consultation?. International Journal of Neuroscience, 2015, 125, 512-520.	1.6	10
95	Developing the Surveillance Algorithm for Detection of Failure to Recognize and Treat Severe Sepsis. Mayo Clinic Proceedings, 2015, 90, 166-175.	3.0	45
96	Important clinician information needs about family members in the intensive care unit. Journal of Critical Care, 2015, 30, 1317-1323.	2.2	16
97	Abstract 344: Optimal Serum Potassium, Calcium and Magnesium in the Coronary Care Unit. Circulation: Cardiovascular Quality and Outcomes, 2015, 8, .	2.2	0
98	Towards Prevention of Acute Syndromes. Applied Clinical Informatics, 2014, 05, 58-72.	1.7	15
99	Information needs for the OR and PACU electronic medical record. Applied Clinical Informatics, 2014, 05, 630-641.	1.7	16
100	Clinical data needs in the neonatal intensive care unit electronic medical record. BMC Medical Informatics and Decision Making, 2014, 14, 92.	3.0	23
101	Findings from the Implementation of a Validated Readmission Predictive Tool in the Discharge Workflow of a Medical Intensive Care Unit. Annals of the American Thoracic Society, 2014, 11, 737-743.	3.2	14
102	Decision support tool for differential diagnosis of Acute Respiratory Distress Syndrome (ARDS) vs Cardiogenic Pulmonary Edema (CPE): a prospective validation and meta-analysis. Critical Care, 2014, 18, 659.	5.8	7
103	Derivation and validation of a search algorithm to retrospectively identify mechanical ventilation initiation in the intensive care unit. BMC Medical Informatics and Decision Making, 2014, 14, 55.	3.0	17
104	233. Critical Care Medicine, 2014, 42, A1417.	0.9	1
105	Customized Reference Ranges for Laboratory Values Decrease False Positive Alerts in Intensive Care Unit Patients. PLoS ONE, 2014, 9, e107930.	2.5	12
106	Connecting the dots: rule-based decision support systems in the modern EMR era. Journal of Clinical Monitoring and Computing, 2013, 27, 443-448.	1.6	29
107	Electronic health record surveillance algorithms facilitate the detection of transfusion‑related pulmonary complications. Transfusion, 2013, 53, 1205-1216.	1.6	41
108	Sniffing out acute kidney injury in the ICU. Current Opinion in Critical Care, 2013, 19, 531-536.	3.2	20

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109	Trends in the Incidence and Outcomes of Disseminated Intravascular Coagulation in Critically Ill Patients (2004-2010). Chest, 2013, 143, 1235-1242.	0.8	42
110	Data Utilization for Medical Decision Making at the Time of Patient Admission to ICU*. Critical Care Medicine, 2013, 41, 1502-1510.	0.9	66
111	Retrospective Derivation and Validation of a Search Algorithm to Identify Emergent Endotracheal Intubations in the Intensive Care Unit. Applied Clinical Informatics, 2013, 04, 419-427.	1.7	12
112	Diagnostic Performance of Electronic Syndromic Surveillance Systems in Acute Care. Applied Clinical Informatics, 2013, 04, 212-224.	1.7	11
113	Validation of Computerized Automatic Calculation of the Sequential Organ Failure Assessment Score. Critical Care Research and Practice, 2013, 2013, 1-8.	1.1	21
114	Severe sepsis and septic shock in patients with pre-existing non-cardiac pulmonary hypertension: contemporary management and outcomes. Critical Care and Resuscitation: Journal of the Australasian Academy of Critical Care Medicine, 2013, 15, 103-9.	0.1	4
115	Clinical review: The hospital of the future - building intelligent environments to facilitate safe and effective acute care delivery. Critical Care, 2012, 16, 220.	5.8	51
116	Clinical Spectrum, Frequency, and Significance of Myocardial Dysfunction in Severe Sepsis and Septic Shock. Mayo Clinic Proceedings, 2012, 87, 620-628.	3.0	251
117	Derivation and Validation of Automated Electronic Search Strategies to Extract Charlson Comorbidities From Electronic Medical Records. Mayo Clinic Proceedings, 2012, 87, 817-824.	3.0	181
118	A Comparison of Administrative and Physiologic Predictive Models in Determining Risk Adjusted Mortality Rates in Critically Ill Patients. PLoS ONE, 2012, 7, e32286.	2.5	7
119	Clinical Knowledge-Based Inference Model for Early Detection of Acute Lung Injury. Annals of Biomedical Engineering, 2012, 40, 1131-1141.	2.5	13
120	Derivation and Validation of Automated Electronic Search Strategies to Identify Pertinent Risk Factors for Postoperative Acute Lung Injury. Mayo Clinic Proceedings, 2011, 86, 382-388.	3.0	79
121	The accuracy and efficiency of electronic screening for recruitment into a clinical trial on COPD. Respiratory Medicine, 2011, 105, 1501-1506.	2.9	31
122	Limiting ventilator-induced lung injury through individual electronic medical record surveillance*. Critical Care Medicine, 2011, 39, 34-39.	0.9	77
123	The effect of two different electronic health record user interfaces on intensive care provider task load, errors of cognition, and performance*. Critical Care Medicine, 2011, 39, 1626-1634.	0.9	161
124	Sepsis in critically ill patients with trauma*. Critical Care Medicine, 2011, 39, 876-878.	0.9	3
125	Epidemiology of Critical Care Syndromes, Organ Failures, and Life-Support Interventions in a Suburban US Community. Chest, 2011, 140, 1447-1455.	0.8	53
126	Development and Validation of an Observation Tool for ICU Rounds. Chest, 2011, 140, 958A.	0.8	0

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127	The use of an electronic medical record based automatic calculation tool to quantify risk of unplanned readmission to the intensive care unit: A validation study. Journal of Critical Care, 2011, 26, 634.e9-634.e15.	2.2	20
128	Mapping physicians' admission diagnoses to structured concepts towards fully automatic calculation of acute physiology and chronic health evaluation score. BMJ Open, 2011, 1, e000216-e000216.	1.9	33
129	Enrollment into a time sensitive clinical study in the critical care setting: results from computerized septic shock sniffer implementation. Journal of the American Medical Informatics Association: JAMIA, 2011, 18, 639-644.	4.4	63
130	Acute lung injury prediction score: derivation and validation in a population-based sample. European Respiratory Journal, 2011, 37, 604-609.	6.7	134
131	Timing of the Onset of Acute Respiratory Distress Syndrome: A Population-Based Study. Respiratory Care, 2011, 56, 576-582.	1.6	49
132	Bedside Implementation of a Readmission Prediction Model (Stability and Workload Index for) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542	0.8	0
133	ICU data mart: a non-iT approach. A team of clinicians, researchers and informatics personnel at the Mayo Clinic have taken a homegrown approach to building an ICU data mart. Healthcare Informatics: the Business Magazine for Information and Communication Systems, 2011, 28, 42, 44-5.	0.0	49
134	Feasibility Study Of Automated Surveillance Of Septic Shock Outside Of The Intensive Care Unit. , 2010, , .		0
135	Preoperative Inhaled Steroids Did Not Protect Against Early Postoperative Acute Lung Injury (ALI). , 2010, , .		0
136	Novel Representation of Clinical Information in the ICU. Applied Clinical Informatics, 2010, 01, 116-131.	1.7	71
137	Will the Electronic Medical Record Live Up to Its Promise?. American Journal of Respiratory and Critical Care Medicine, 2010, 182, 585-588.	5.6	8
138	Informatics Infrastructure for Syndrome Surveillance, Decision Support, Reporting, and Modeling of Critical Illness. Mayo Clinic Proceedings, 2010, 85, 247-254.	3.0	209
139	Validation of an electronic surveillance system for acute lung injury. Intensive Care Medicine, 2009, 35, 1018-1023.	8.2	156
140	VALIDATION OF AUTOMATIC CLINICAL DATA EXTRACTION ON ICU PATIENTS FROM ELECTRONIC MEDICAL RECORDS FOR RESEARCH PURPOSES. Chest, 2009, 136, 14S.	0.8	1
141	Medical Informatics: An Essential Tool for Health Sciences Research in Acute Care. Bosnian Journal of Basic Medical Sciences, 2009, 9, S34-S39.	1.0	8
142	45: Computerized Recruiting for Clinical Research in the Emergency Department. Annals of Emergency Medicine, 2008, 52, S55.	0.6	0