

# Axel Boese

## List of Publications by Year in descending order

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Version: 2024-02-01

84  
papers

474  
citations

758635

12  
h-index

794141

19  
g-index

84  
all docs

84  
docs citations

84  
times ranked

463  
citing authors

#	ARTICLE	IF	CITATIONS
1	Epileptic seizure detection using cross-bispectrum of electroencephalogram signal. <i>Seizure: the Journal of the British Epilepsy Association</i> , 2019, 66, 4-11.	0.9	70
2	Effects of grain shape on packing and dilatancy of sheared granular materials. <i>Soft Matter</i> , 2014, 10, 5157.	1.2	58
3	Novel clinical device tracking and tissue event characterization using proximally placed audio signal acquisition and processing. <i>Scientific Reports</i> , 2018, 8, 12070.	1.6	27
4	Radiation therapy techniques in the treatment of skin cancer: an overview of the current status and outlook. <i>Journal of Dermatological Treatment</i> , 2019, 30, 831-839.	1.1	27
5	Experimental investigation of intravascular OCT for imaging of intracranial aneurysms. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2016, 11, 231-241.	1.7	17
6	Endoscopic Imaging Technology Today. <i>Diagnostics</i> , 2022, 12, 1262.	1.3	17
7	Proximal detection of guide wire perforation using feature extraction from bispectral audio signal analysis combined with machine learning. <i>Computers in Biology and Medicine</i> , 2019, 107, 10-17.	3.9	15
8	Evaluation of Vascular Patterns Using Contact Endoscopy and Narrow-Band Imaging (CE-NBI) for the Diagnosis of Vocal Fold Malignancy. <i>Cancers</i> , 2020, 12, 248.	1.7	14
9	Texture differentiation using audio signal analysis with robotic interventional instruments. <i>Computers in Biology and Medicine</i> , 2019, 112, 103370.	3.9	13
10	Novel automated vessel pattern characterization of larynx contact endoscopic video images. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2019, 14, 1751-1761.	1.7	13
11	Laryngeal Lesion Classification Based on Vascular Patterns in Contact Endoscopy and Narrow Band Imaging: Manual Versus Automatic Approach. <i>Sensors</i> , 2020, 20, 4018.	2.1	13
12	Evolution of shear zones in granular materials. <i>Physical Review E</i> , 2014, 90, 032205.	0.8	12
13	A Novel Technique for the Measurement of CBF and CBV with Robot-Arm-Mounted Flat Panel CT in a Large-Animal Model. <i>American Journal of Neuroradiology</i> , 2014, 35, 1740-1745.	1.2	10
14	Proximally placed signal acquisition sensoric for robotic tissue tool interactions. <i>Current Directions in Biomedical Engineering</i> , 2018, 4, 67-70.	0.2	9
15	Deep Convolution Neural Network for Laryngeal Cancer Classification on Contact Endoscopy-Narrow Band Imaging. <i>Sensors</i> , 2021, 21, 8157.	2.1	9
16	Cyclist Effort Features: A Novel Technique for Image Texture Characterization Applied to Larynx Cancer Classification in Contact Endoscopy-Narrow Band Imaging. <i>Diagnostics</i> , 2021, 11, 432.	1.3	8
17	Increasing the visibility of thin NITINOL vascular implants. <i>Current Directions in Biomedical Engineering</i> , 2015, 1, 503-506.	0.2	7
18	Virtual Inflation of the Cerebral Artery Wall for the Integrated Exploration of OCT and Histology Data. <i>Computer Graphics Forum</i> , 2017, 36, 57-68.	1.8	7

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19	Comparison of Deep Learning Algorithms for Semantic Segmentation of Ultrasound Thyroid Nodules. Current Directions in Biomedical Engineering, 2021, 7, 879-882.	0.2	7
20	Conceptual design of a personalized radiation therapy patch for skin cancer. Current Directions in Biomedical Engineering, 2018, 4, 607-610.	0.2	6
21	Surgical Audio Guidance SurAG: Extracting Non-Invasively Meaningful Guidance Information During Minimally Invasive Procedures. , 2019, , .		6
22	Seizure prediction with cross-higher-order spectral analysis of EEG signals. Signal, Image and Video Processing, 2020, 14, 821-828.	1.7	6
23	Performance evaluation of a C-Arm CT perfusion phantom. International Journal of Computer Assisted Radiology and Surgery, 2013, 8, 799-807.	1.7	5
24	Vascular pattern detection and recognition in endoscopic imaging of the vocal folds. Current Directions in Biomedical Engineering, 2018, 4, 75-78.	0.2	5
25	Superficial skin cancer therapy with Yâ€90 microspheres: A feasibility study on patch preparation. Skin Research and Technology, 2020, 26, 25-29.	0.8	5
26	Intravascular endoscopy improvement through narrow-band imaging. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 2015-2021.	1.7	4
27	A Preliminary Study on Automatic Characterization and Classification of Vascular Patterns of Contact Endoscopy Images. , 2019, 2019, 2703-2706.		4
28	Design of an Auscultation System for Phonoangiography and Monitoring of Carotid Artery Diseases. , 2019, 2019, 1776-1779.		4
29	Feasibility test of Dynamic Cooling for detection of small tumors in IR thermographic breast imaging. Current Directions in Biomedical Engineering, 2019, 5, 397-399.	0.2	4
30	Collaborative Robot as Scrub Nurse. Current Directions in Biomedical Engineering, 2021, 7, 162-165.	0.2	4
31	Surgical audio information as base for haptic feedback in robotic-assisted procedures. Current Directions in Biomedical Engineering, 2020, 6, .	0.2	4
32	Acoustic sensing of tissue-tool interactions â€ potential applications in arthroscopic surgery. Current Directions in Biomedical Engineering, 2020, 6, 595-598.	0.2	4
33	â€Hands free for interventionâ€, a new approach for transoral endoscopic surgery. Current Directions in Biomedical Engineering, 2015, 1, 157-159.	0.2	3
34	Development of a skull phantom for the assessment of implant X-ray visibility. Current Directions in Biomedical Engineering, 2016, 2, 351-354.	0.2	3
35	In-room ultrasound fusion combined with fully compatible 3D-printed holding arm &ndash; rethinking interventional MRI. Medical Devices: Evidence and Research, 2018, Volume 11, 77-85.	0.4	3
36	&lt;p&gt;NITINOL-based actuator for device control even in high-field MRI environment&lt;/p&gt;. Medical Devices: Evidence and Research, 2019, Volume 12, 285-296.	0.4	3

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37	Improved Acquisition of Vibroarthrographic Signals of the Knee Joint. , 2019, 2019, 1259-1262.		3
38	Optical endovascular imaging combining endoscopy, NBI and OCT, a feasibility study. Current Directions in Biomedical Engineering, 2019, 5, 577-580.	0.2	3
39	Study of needle punctures into soft tissue through audio and force sensing: can audio be a simple alternative for needle guidance?. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 1683-1697.	1.7	3
40	Technology Roadmap for Integration of Resonant Markers in MRI Compatible Instruments. Biomedizinische Technik, 2012, 57, .	0.9	2
41	Intravascular optical coherence tomography (OCT) as an additional tool for the assessment of stent structures. Current Directions in Biomedical Engineering, 2015, 1, 257-260.	0.2	2
42	Interactive monitoring system for visual respiratory biofeedback. Current Directions in Biomedical Engineering, 2016, 2, 723-726.	0.2	2
43	Contactless respiratory monitoring system for magnetic resonance imaging applications using a laser range sensor. Current Directions in Biomedical Engineering, 2016, 2, 719-722.	0.2	2
44	INNOLAB- image guided surgery and therapy lab. Current Directions in Biomedical Engineering, 2017, 3, 235-237.	0.2	2
45	Characterization of a Carotid Distension Waveform from Audio Signal Acquired with a Stethoscope. , 0, , .		2
46	Time-varying Acoustic Emission Characterization for Guidewire Coronary Artery Perforation Identification. , 2017, , .		2
47	Primary Design Concept for Non-metallic Needle for MRI Guided Spinal Applications. , 2019, 2019, 1994-1997.		2
48	Computer Assisted Auscultation System for Phonoangiography of the Carotid Artery. Current Directions in Biomedical Engineering, 2019, 5, 175-178.	0.2	2
49	A new 3D printed applicator with radioactive gel for conformal brachytherapy of superficial skin tumors. , 2019, 2019, 6979-6982.		2
50	<p>Auscultation System for Acquisition of Vascular Sounds â€œ Towards Sound-Based Monitoring of the Carotid Artery</p>. Medical Devices: Evidence and Research, 2020, Volume 13, 349-364.	0.4	2
51	Surgical Audio Guidance: Feasibility Check for Robotic Surgery Procedures. Current Directions in Biomedical Engineering, 2020, 6, 571-574.	0.2	2
52	Feasibility Check: Can Audio Be a Simple Alternative to Force-Based Feedback for Needle Guidance?. Lecture Notes in Computer Science, 2020, , 24-33.	1.0	2
53	Manual versus Automatic Classification of Laryngeal Lesions based on Vascular Patterns in CE+NBI Images. Current Directions in Biomedical Engineering, 2020, 6, 70-73.	0.2	2
54	Inside-Out access strategy using new trans-vascular catheter approach. Current Directions in Biomedical Engineering, 2016, 2, 455-458.	0.2	1

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55	Miniature CNT-based X-ray tube: assessment for use in intraoperative radiation therapy. Current Directions in Biomedical Engineering, 2017, 3, 643-646.	0.2	1
56	Trans-oral miniature X-ray radiation delivery system with endoscopic optical feedback. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 1995-2002.	1.7	1
57	Evaluation and image quality comparison of ultra-thin fibre endoscopes for vascular endoscopy. Current Directions in Biomedical Engineering, 2017, 3, 231-233.	0.2	1
58	Flexible interventional imaging system based on miniaturized X-ray tubes (FlexScan). Current Directions in Biomedical Engineering, 2018, 4, 63-66.	0.2	1
59	Audio waves and its loss of energy in puncture needles. Current Directions in Biomedical Engineering, 2019, 5, 21-24.	0.2	1
60	Vascular Auscultation of Carotid Artery: Towards Biometric Identification and Verification of Individuals. Sensors, 2021, 21, 6656.	2.1	1
61	Endoscopic filter fluorometer for emission detection of Protoporphyrin IX and its direct precursors in PDT and PDD. Current Directions in Biomedical Engineering, 2020, 6, 587-590.	0.2	1
62	How do we need to adapt Biomedical Engineering Education for the Health 4.0 challenges?. Current Directions in Biomedical Engineering, 2020, 6, 604-607.	0.2	1
63	BODYTUNE: Multi Auscultation Device – Personal Health Parameter Monitoring at Home. Current Directions in Biomedical Engineering, 2021, 7, 5-8.	0.2	1
64	Hybrid handheld gamma-ultrasound prototype for radioguided surgery: initial results. Current Directions in Biomedical Engineering, 2021, 7, 140-142.	0.2	1
65	Definition of product requirements of a MR compatible bone biopsy system using workflow analysis. Biomedizinische Technik, 2012, 57, .	0.9	0
66	Evaluation of flow parameters of a catheter for intravascular cooling. Biomedizinische Technik, 2012, 57, .	0.9	0
67	Resectoscope with an easy to use twist mechanism for improved handling. Current Directions in Biomedical Engineering, 2016, 2, 379-382.	0.2	0
68	Setup and initial testing of an endoscope manipulator system for assistance in transoral endoscopic surgery. Biomedizinische Technik, 2019, 64, 347-356.	0.9	0
69	Feasibility and Initial Results of Assisted Ultrasound Scan Acquisition for Improved Tomographic Visualization. , 2019, , .		0
70	Temperature Controlled and Monitored Ex Vivo Lung Perfusion System for Research and Training Purposes. Current Directions in Biomedical Engineering, 2019, 5, 293-295.	0.2	0
71	&lt;p&gt;Injection And Infusion Technology Disruption For Use In MRI&lt;/p&gt;. Medical Devices: Evidence and Research, 2019, Volume 12, 469-478.	0.4	0
72	Endoscopic filter fluorometer for detection of accumulation of Protoporphyrin IX to improve photodynamic diagnostic (PDD). Current Directions in Biomedical Engineering, 2020, 6, .	0.2	0

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73	Frequency and average gray-level information for thermal ablation status in ultrasound B-Mode sequences. Current Directions in Biomedical Engineering, 2020, 6, .	0.2	0
74	Novel flexible endoscope concept with swiveling camera tip. Current Directions in Biomedical Engineering, 2020, 6, 288-291.	0.2	0
75	Novel Assistive Device for Tomographic Ultrasound Neck Imaging vs. Freehand. Current Directions in Biomedical Engineering, 2020, 6, 28-31.	0.2	0
76	Is a thin diameter ureteroscope feasible for image guided intravascular procedures?. Current Directions in Biomedical Engineering, 2020, 6, 591-594.	0.2	0
77	Sensor-based measurement for advanced monitoring and early detection of PE wear in total knee arthroplasties. Current Directions in Biomedical Engineering, 2021, 7, 283-286.	0.2	0
78	Concept for parallel placement of flexible needles for Irreversible Electroporation. Current Directions in Biomedical Engineering, 2021, 7, 219-222.	0.2	0
79	Design and implementation of a medical device test stand for micro-catheters and guide-wires. Current Directions in Biomedical Engineering, 2021, 7, 339-342.	0.2	0
80	Image processing-based mTICI grading after endovascular treatment for acute ischemic stroke. Current Directions in Biomedical Engineering, 2021, 7, 235-238.	0.2	0
81	Towards an intraoperative feedback system for laparoscopic access with the Veress needle. Current Directions in Biomedical Engineering, 2021, 7, 29-32.	0.2	0
82	Carotid Sound Signal Artifact Detection based on Discrete Wavelet Transform Decomposition. Current Directions in Biomedical Engineering, 2021, 7, 299-302.	0.2	0
83	State-of-the-Art: Biodesign based Innovation Ecosystems in Europe. Current Directions in Biomedical Engineering, 2021, 7, 231-234.	0.2	0
84	A transurethral catheter-based ultrasound system for multi-modal fusion. Studies in Health Technology and Informatics, 2012, 173, 463-8.	0.2	0