

# Peter Kazanzides

## List of Publications by Year in descending order

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Version: 2024-02-01

188  
papers

4,907  
citations

159358

30  
h-index

138251

58  
g-index

189  
all docs

189  
docs citations

189  
times ranked

3771  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Medical roboticsâ€™Regulatory, ethical, and legal considerations for increasing levels of autonomy. Science Robotics, 2017, 2, .  | 9.9 | 349       |
| 2  | Design and Integration of a Telerobotic System for Minimally Invasive Surgery of the Throat. International Journal of Robotics Research, 2009, 28, 1134-1153.   | 5.8 | 342       |
| 3  | High-Resolution, Small Animal Radiation Research Platform With X-Ray Tomographic Guidance Capabilities. International Journal of Radiation Oncology Biology Physics, 2008, 71, 1591-1599.                                   | 0.4 | 314       |
| 4  | An open-source research kit for the da VinciÂ® Surgical System. , 2014, , .   |     | 309       |
| 5  | An image-directed robotic system for precise orthopaedic surgery. IEEE Transactions on Automation Science and Engineering, 1994, 10, 261-275.   | 2.4 | 271       |
| 6  | Investigation of Attitude Tracking Using an Integrated Inertial and Magnetic Navigation System for Hand-Held Surgical Instruments. IEEE/ASME Transactions on Mechatronics, 2012, 17, 210-217.                               | 3.7 | 150       |
| 7  | Anatomy-based registration of CT-scan and intraoperative X-ray images for guiding a surgical robot. IEEE Transactions on Medical Imaging, 1998, 17, 715-728.  | 5.4 | 130       |
| 8  | An integrated system for planning, navigation and robotic assistance for skull base surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2008, 4, 321-330.                                     | 1.2 | 126       |
| 9  | Surgical and Interventional Robotics - Core Concepts, Technology, and Design [Tutorial]. IEEE Robotics and Automation Magazine, 2008, 15, 122-130.  | 2.2 | 115       |
| 10 | Intraoperative Image-based Multiview 2D/3D Registration for Image-Guided Orthopaedic Surgery: Incorporation of Fiducial-Based C-Arm Tracking and GPU-Acceleration. IEEE Transactions on Medical Imaging, 2012, 31, 948-962. | 5.4 | 110       |
| 11 | Computer-integrated revision total hip replacement surgery: concept and preliminary results. Medical Image Analysis, 1999, 3, 301-319.  | 7.0 | 107       |
| 12 | Robotic assistance for ultrasound-guided prostate brachytherapy. Medical Image Analysis, 2008, 12, 535-545.   | 7.0 | 104       |
| 13 | Development and Application of a New Steady-Hand Manipulator for Retinal Surgery. , 2007, , .   |     | 93        |
| 14 | Multisensor Data Fusion in an Integrated Tracking System for Endoscopic Surgery. IEEE Transactions on Information Technology in Biomedicine, 2012, 16, 106-111.   | 3.6 | 78        |
| 15 | Image-guided small animal radiation research platform: calibration of treatment beam alignment. Physics in Medicine and Biology, 2009, 54, 891-905.   | 1.6 | 72        |
| 16 | Comparison of optical see-through head-mounted displays for surgical interventions with object-anchored 2D-display. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 901-910.                    | 1.7 | 69        |
| 17 | A Review of Augmented Reality in Robotic-Assisted Surgery. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 1-16.  | 2.1 | 69        |
| 18 | Localization of Transcranial Targets for Photoacoustic-Guided Endonasal Surgeries. Photoacoustics, 2015, 3, 78-87.  | 4.4 | 67        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | ARssist: augmented reality on a head-mounted display for the first assistant in robotic surgery. Healthcare Technology Letters, 2018, 5, 194-200.   | 1.9 | 61        |
| 20 | Photoacoustic-based approach to surgical guidance performed with and without a da Vinci robot. Journal of Biomedical Optics, 2017, 22, 1.   | 1.4 | 58        |
| 21 | Vision-Based Calibration of Dual RCM-Based Robot Arms in Human-Robot Collaborative Minimally Invasive Surgery. IEEE Robotics and Automation Letters, 2018, 3, 672-679.                        | 3.3 | 56        |
| 22 | Accelerating Surgical Robotics Research: A Review of 10 Years With the da Vinci Research Kit. IEEE Robotics and Automation Magazine, 2021, 28, 56-78.   | 2.2 | 56        |
| 23 | Surgical and interventional robotics: part III [Tutorial]. IEEE Robotics and Automation Magazine, 2008, 15, 84-93.  | 2.2 | 44        |
| 24 | Challenges in image-guided therapy system design. NeuroImage, 2007, 37, S144-S151.  | 2.1 | 41        |
| 25 | A C-Arm Fluoroscopy-Guided Progressive Cut Refinement Strategy Using a Surgical Robot. Computer Aided Surgery, 2000, 5, 373-390.  | 1.8 | 40        |
| 26 | Surgical and interventional robotics: Part II. IEEE Robotics and Automation Magazine, 2008, 15, 94-102.   | 2.2 | 37        |
| 27 | Robotic needle guide for prostate brachytherapy: Clinical testing of feasibility and performance. Brachytherapy, 2011, 10, 57-63.   | 0.2 | 37        |
| 28 | A robotic system for $^{68}\text{Ga}$ -PET-guided intratumoral measurements. Medical Physics, 2009, 36, 5301-5309.  | 1.6 | 36        |
| 29 | In vivo reproducibility of robotic probe placement for a novel ultrasound-guided radiation therapy system. Journal of Medical Imaging, 2014, 1, 1.  | 0.8 | 36        |
| 30 | A Surgical Robotic System for Treatment of Pelvic Osteolysis Using an FBG-Equipped Continuum Manipulator and Flexible Instruments. IEEE/ASME Transactions on Mechatronics, 2021, 26, 369-380. | 3.7 | 36        |
| 31 | Providing visual information to validate 2-D to 3-D registration. Medical Image Analysis, 2000, 4, 357-374.   | 7.0 | 35        |
| 32 | An Inertial and Optical Sensor Fusion Approach for Six Degree-of-Freedom Pose Estimation. Sensors, 2015, 15, 16448-16465.   | 2.1 | 34        |
| 33 | SPARTA: multiple signal processors for high-performance robot control. IEEE Transactions on Automation Science and Engineering, 1989, 5, 628-640.   | 2.4 | 33        |
| 34 | Software Architecture of the Da Vinci Research Kit. , 2017, , .   |     | 32        |
| 35 | Neural Network based Inverse Dynamics Identification and External Force Estimation on the da Vinci Research Kit. , 2020, , .  |     | 29        |
| 36 | System Integration and In Vivo Testing of a Robot for Ultrasound Guidance and Monitoring During Radiotherapy. IEEE Transactions on Biomedical Engineering, 2017, 64, 1608-1618.               | 2.5 | 28        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Safety design for medical robots. , 2009, 2009, 7208-11.  |     | 26        |
| 38 | Certifying the safe design of a virtual fixture control algorithm for a surgical robot. , 2013, , .   |     | 26        |
| 39 | Virtual fixture assistance for needle passing and knot tying. , 2016, , .   |     | 26        |
| 40 | Augmented reality environment with virtual fixtures for robotic telemanipulation in space. , 2012, , .  |     | 25        |
| 41 | Augmented reality goggles with an integrated tracking system for navigation in neurosurgery. , 2012, , .  |     | 24        |
| 42 | Model-based telerobotic control with virtual fixtures for satellite servicing tasks. , 2013, , .  |     | 23        |
| 43 | Development of a surgical robot for cementless total hip replacement. Robotica, 1993, 11, 553-560.  | 1.3 | 22        |
| 44 | A cooperatively controlled robot for ultrasound monitoring of radiation therapy. , 2013, 2013, 3071-3076.   |     | 22        |
| 45 | A Unified Framework for the Teleoperation of Surgical Robots in Constrained Workspaces. , 2019, , .   |     | 22        |
| 46 | A C-arm fluoroscopy-guided progressive cut refinement strategy using a surgical robot. Computer Aided Surgery, 2000, 5, 373-390.  | 1.8 | 22        |
| 47 | Small Animal Radiation Research Platform: Imaging, Mechanics, Control and Calibration. , 2007, 10, 926-934.   |     | 21        |
| 48 | Toward Standardized Acoustic Radiation Force (ARF)-Based Ultrasound Elasticity Measurements With Robotic Force Control. IEEE Transactions on Biomedical Engineering, 2016, 63, 1517-1524.             | 2.5 | 21        |
| 49 | Feasibility study of ultrasound imaging for stereotactic body radiation therapy with active breathing coordinator in pancreatic cancer. Journal of Applied Clinical Medical Physics, 2017, 18, 84-96. | 0.8 | 21        |
| 50 | Design and Evaluation of a Performance-based Adaptive Curriculum for Robotic Surgical Training: a Pilot Study. , 2018, 2018, 2162-2165.   |     | 21        |
| 51 | A Paired-Orientation Alignment Problem in a Hybrid Tracking System for Computer Assisted Surgery. Journal of Intelligent and Robotic Systems: Theory and Applications, 2011, 63, 151-161.             | 2.0 | 20        |
| 52 | Augmented Reality Assisted Instrument Insertion and Tool Manipulation for the First Assistant in Robotic Surgery. , 2019, , .   |     | 20        |
| 53 | Robotic Assistance for Ultrasound Guided Prostate Brachytherapy. Lecture Notes in Computer Science, 2007, 10, 119-127.  | 1.0 | 20        |
| 54 | Accuracy improvement of a neurosurgical robot system. , 2008, , .   |     | 19        |

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|----|--|-----|-----------|
| 55 | Force-Controlled Exploration for Updating Virtual Fixture Geometry in Model-Mediated Telemanipulation. <i>Journal of Mechanisms and Robotics</i> , 2017, 9, .  | 1.5 | 18        |
| 56 | 2D ultrasound imaging based intra-fraction respiratory motion tracking for abdominal radiation therapy using machine learning. <i>Physics in Medicine and Biology</i> , 2019, 64, 185006.  | 1.6 | 18        |
| 57 | Validation of <sc>GPU</sc>â€accelerated superpositionâ€convolution dose computations for the Small Animal Radiation Research Platform. <i>Medical Physics</i> , 2018, 45, 2252-2265.   | 1.6 | 17        |
| 58 | Cooperative Control with Ultrasound Guidance for Radiation Therapy. <i>Frontiers in Robotics and AI</i> , 2016, 3, .   | 2.0 | 16        |
| 59 | Augmented virtuality for model-based teleoperation. , 2017, , .  |     | 16        |
| 60 | Restoring the Awareness in the Occluded Visual Field for Optical See-Through Head-Mounted Displays. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2018, 24, 2936-2946.   | 2.9 | 16        |
| 61 | SCAN: System for Camera Autonomous Navigation in Robotic-Assisted Surgery. , 2020, , .   |     | 16        |
| 62 | ARAMIS: Augmented Reality Assistance for Minimally Invasive Surgery Using a Head-Mounted Display. <i>Lecture Notes in Computer Science</i> , 2019, , 74-82.  | 1.0 | 16        |
| 63 | Development of an image-guided robot for small animal research. <i>Computer Aided Surgery</i> , 2007, 12, 357-365.   | 1.8 | 15        |
| 64 | Metrology and standards needs for some categories of medical devices. <i>Journal of Research of the National Institute of Standards and Technology</i> , 2008, 113, 121.   | 0.4 | 15        |
| 65 | Experimental evaluation of force control for virtual-fixture-assisted teleoperation for on-orbit manipulation of satellite thermal blanket insulation. , 2015, , .   |     | 15        |
| 66 | Can Mixed-Reality Improve the Training of Medical Procedures?. , 2018, 2018, 4065-4068.  |     | 15        |
| 67 | Medical robotics and computer-integrated interventional medicine. , 2020, , 617-672.   |     | 15        |
| 68 | AR-Loupe: Magnified Augmented Reality by Combining an Optical See-Through Head-Mounted Display and a Loupe. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2022, 28, 2550-2562.   | 2.9 | 15        |
| 69 | A component-based architecture for flexible integration of robotic systems. , 2010, , .  |     | 14        |
| 70 | Medical Robotics and Computer-Integrated Interventional Medicine**Reprinted from <i>Biomedical Information Technology</i> , D. Feng, Ed.; Russell Taylor and Peter Kazanzides, â€œMedical Robotics and Computer-Integrated Interventional Medicineâ€, pp. 393-416, 2007, Reprinted with permission from Elsevier.. <i>Advances in Computers</i> , 2008, 73, 219-260. | 1.2 | 13        |
| 71 | Centralized processing and distributed I/O for robot control. , 2008, , .  |     | 13        |
| 72 | An Interactive Mixed Reality Platform for Bedside Surgical Procedures. <i>Lecture Notes in Computer Science</i> , 2020, , 65-75.   | 1.0 | 13        |

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|----|--|-----|-----------|
| 73 | Incremental Encoder Based Position and Velocity Measurements VLSI Chip with Serial Peripheral Interface. , 2007, , .   |     | 12        |
| 74 | Medical Robotics and Computer-Integrated Interventional Medicine. , 2008, , 393-416.   |     | 12        |
| 75 | A constrained optimization approach to virtual fixtures for multi-robot collaborative teleoperation. , 2011, , .   |     | 12        |
| 76 | Preliminary study of virtual nonholonomic constraints for time-delayed teleoperation. , 2015, , .  |     | 12        |
| 77 | Photoacoustic image guidance for robot-assisted skull base surgery. , 2015, , .  |     | 12        |
| 78 | System integration and preliminary in-vivo experiments of a robot for ultrasound guidance and monitoring during radiotherapy. , 2015, 2015, 53-59.   |     | 12        |
| 79 | Scene Modeling and Augmented Virtuality Interface for Telerobotic Satellite Servicing. IEEE Robotics and Automation Letters, 2018, 3, 4241-4248.   | 3.3 | 12        |
| 80 | Precision Radiotherapy for Small Animal Research. Lecture Notes in Computer Science, 2008, 11, 619-626.  | 1.0 | 12        |
| 81 | An image-directed robotic system for hip replacemetn surgery.. Journal of the Robotics Society of Japan, 1990, 8, 615-620.   | 0.0 | 11        |
| 82 | A wide speed range and high precision position and velocity measurements chip with serial peripheral interface. The Integration VLSI Journal, 2008, 41, 297-305.   | 1.3 | 11        |
| 83 | Safety Design View: A conceptual framework for systematic understanding of safety features of medical robot systems. , 2014, , .   |     | 11        |
| 84 | Feasibility of photoacoustic image guidance for telerobotic endonasal transsphenoidal surgery. , 2016, , .   |     | 11        |
| 85 | Leveraging vision and kinematics data to improve realism of biomechanic soft tissue simulation for robotic surgery. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 811-818. | 1.7 | 11        |
| 86 | An image-guided femoroplasty system: development and initial cadaver studies. Proceedings of SPIE, 2010, , .   | 0.8 | 10        |
| 87 | A Computational Framework for Complementary Situational Awareness (CSA) in Surgical Assistant Robots. , 2018, , .  |     | 10        |
| 88 | FPGA-Based Velocity Estimation for Control of Robots with Low-Resolution Encoders. , 2018, , .   |     | 10        |
| 89 | Evaluation of Optical See-Through Head-Mounted Displays in Training for Critical Care and Trauma. , 2018, , .  |     | 10        |
| 90 | A Reliable Gravity Compensation Control Strategy for dVRK Robotic Arms With Nonlinear Disturbance Forces. IEEE Robotics and Automation Letters, 2019, 4, 3892-3899.                                      | 3.3 | 10        |

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|-----|--|-----|-----------|
| 91  | Virtual reality for synergistic surgical training and data generation. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2022, 10, 366-374.              | 1.3 | 10        |
| 92  | A Deep Learning Approach to Intrinsic Force Sensing on the da Vinci Surgical Robot. , 2020, , .  |     | 10        |
| 93  | Open Simulation Environment for Learning and Practice of Robot-Assisted Surgical Suturing. IEEE Robotics and Automation Letters, 2022, 7, 3843-3850.   | 3.3 | 10        |
| 94  | Hybrid attitude estimation for laparoscopic surgical tools: A preliminary study. , 2009, 2009, 5583-6.   |     | 9         |
| 95  | Robotic delivery of complex radiation volumes for small animal research. , 2010, 2010, 2056-2061.  |     | 9         |
| 96  | Prioritization and static error compensation for multi-camera collaborative tracking in augmented reality. , 2017, , .   |     | 9         |
| 97  | Improving the safety of telerobotic drilling of the skull base via photoacoustic sensing of the carotid arteries. , 2017, , .  |     | 9         |
| 98  | Experimental Evaluation of Teleoperation Interfaces for Cutting of Satellite Insulation. , 2019, , .   |     | 9         |
| 99  | FlexiVision: Teleporting the Surgeon's Eyes via Robotic Flexible Endoscope and Head-Mounted Display. , 2020, , .   |     | 9         |
| 100 | Robust optical see-through head-mounted display calibration: Taking anisotropic nature of user interaction errors into account. , 2017, , .  |     | 8         |
| 101 | Real-Time Image-Guided Telerobotic System Integrating 3D Slicer and the Da Vinci Research Kit. , 2017, , .   |     | 8         |
| 102 | Cross-modal self-supervised representation learning for gesture and skill recognition in robotic surgery. International Journal of Computer Assisted Radiology and Surgery, 2021, 16, 779-787. | 1.7 | 8         |
| 103 | The Surgical Assistant Workstation (SAW) in Minimally-Invasive Surgery and Microsurgery. , 2010, , .   |     | 8         |
| 104 | Interactive Planning and Supervised Execution for High-Risk, High-Latency Teleoperation. , 2020, , .   |     | 8         |
| 105 | Collaborative Robotics Toolkit (CRTK): Open Software Framework for Surgical Robotics Research. , 2020, , .   |     | 8         |
| 106 | Surgical navigation with a head-mounted tracking system and display. Studies in Health Technology and Informatics, 2013, 184, 363-9.   | 0.2 | 8         |
| 107 | <title>Anatomy-based registration of CT-scan and x-ray fluoroscopy data for intraoperative guidance of a surgical robot</title>. , 1998, , .   |     | 7         |
| 108 | An architecture for safe and efficient multi-threaded robot software. , 2008, , .  |     | 7         |

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|-----|---|-----|-----------|
| 109 | Feasibility of transcranial photoacoustic imaging for interventional guidance of endonasal surgeries. Proceedings of SPIE, 2014, , .  | 0.8 | 7         |
| 110 | Updating Virtual Fixtures From Exploration Data in Force-Controlled Model-Based Telemanipulation. , 2016, , .   |     | 7         |
| 111 | Image-Based Trajectory Tracking Control of 4-DoF Laparoscopic Instruments Using a Rotation Distinguishing Marker. IEEE Robotics and Automation Letters, 2017, 2, 1586-1592. | 3.3 | 7         |
| 112 | Fiducial-based registration with a touchable region model. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 277-289.                             | 1.7 | 7         |
| 113 | Telerobotic Operation of Intensive Care Unit Ventilators. Frontiers in Robotics and AI, 2021, 8, 612964.  | 2.0 | 7         |
| 114 | Development of an image-guided robot for small animal research. Computer Aided Surgery, 2007, 12, 357-365.  | 1.8 | 7         |
| 115 | An Open-Source Hardware and Software Platform for Telesurgical Robotics Research. , 2013, , .   |     | 7         |
| 116 | A multiprocessor system for real-time robotic control. Information Sciences, 1988, 44, 225-247.   | 4.0 | 6         |
| 117 | A scalable system for real-time control of dexterous surgical robots. , 2009, , .   |     | 6         |
| 118 | A modular Clinical Decision Support System Clinical prototype extensible into multiple clinical settings. , 2009, , .   |     | 6         |
| 119 | Image guided complex dose delivery for small animal radiotherapy. , 2009, , .   |     | 6         |
| 120 | Reduction of Interaction Space in Single Point Active Alignment Method for Optical See-Through Head-Mounted Display Calibration. , 2016, , .                                |     | 6         |
| 121 | Robotic system with multiplex power transmission for MRI-guided percutaneous interventions. , 2016, 2016, 5228-5232.  |     | 6         |
| 122 | Modeling Physical Structure as Additional Constraints for Stereoscopic Optical See-Through Head-Mounted Display Calibration. , 2016, , .                                    |     | 6         |
| 123 | A Framework for Customizable Multi-User Teleoperated Control. IEEE Robotics and Automation Letters, 2021, 6, 3256-3263.   | 3.3 | 6         |
| 124 | A Progressive Cut Refinement Scheme for Revision Total Hip Replacement Surgery Using C-arm Fluoroscopy. Lecture Notes in Computer Science, 1999, , 1010-1019.               | 1.0 | 6         |
| 125 | A distributed I/O low-level controller for highly-dexterous snake robots. , 2008, , .   |     | 5         |
| 126 | Patient motion tracking in the presence of measurement errors. , 2009, 2009, 5563-6.  |     | 5         |



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|-----|--|-----|-----------|
| 127 | Enabling technologies for natural orifice transluminal endoscopic surgery (N.O.T.E.S) using robotically guided elasticity imaging. Proceedings of SPIE, 2012, , .  | 0.8 | 5         |
| 128 | Force-controlled ultrasound robot for consistent tissue pre-loading: Implications for acoustic radiation force elasticity imaging. , 2014, , .   |     | 5         |
| 129 | Strategies and models for cutting satellite insulation in telerobotic servicing missions. , 2014, , .  |     | 5         |
| 130 | Quantifying bone thickness, light transmission, and contrast interrelationships in transcranial photoacoustic imaging. Proceedings of SPIE, 2015, , .  | 0.8 | 5         |
| 131 | Minimally invasive registration for computer-assisted orthopedic surgery: combining tracked ultrasound and bone surface points via the P-IMLOP algorithm. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 761-771. | 1.7 | 5         |
| 132 | Task frame estimation during model-based teleoperation for satellite servicing. , 2016, , .  |     | 5         |
| 133 | An architectural approach to safety of component-based robotic systems. , 2016, , .  |     | 5         |
| 134 | Experimental assessment of energy requirements and tool tip visibility for photoacoustic-guided endonasal surgery. , 2016, , .   |     | 5         |
| 135 | Integration of a Low-Cost Three-Axis Sensor for Robot Force Control. , 2018, , .   |     | 5         |
| 136 | An Iterative Framework for Improving the Accuracy of Intraoperative Intensity-Based 2D/3D Registration for Image-Guided Orthopedic Surgery. Lecture Notes in Computer Science, 2010, , 23-33.  | 1.0 | 5         |
| 137 | Design and Validation of an Image-Guided Robot for Small Animal Research. Lecture Notes in Computer Science, 2006, 9, 50-57.   | 1.0 | 5         |
| 138 | A Treatment Planning System for the Small Animal Radiation Research Platform (SARRP) based on 3D Slicer. , 2012, , .   |     | 5         |
| 139 | A cooperatively-controlled image guided robot system for skull base surgery. Studies in Health Technology and Informatics, 2008, 132, 198-203.   | 0.2 | 5         |
| 140 | AutoInFocus, a new paradigm for ultrasound-guided spine intervention: a multi-platform validation study. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 911-920.  | 1.7 | 5         |
| 141 | Multi-kilohertz control of multiple robots via IEEE-1394 (firewire). , 2014, , .   |     | 4         |
| 142 | Accuracy of a novel photoacoustic-based approach to surgical guidance performed with and without a da Vinci robot. , 2017, , .   |     | 4         |
| 143 | dVRK-XR: Mixed Reality Extension for da Vinci Research Kit. , 2019, , .  |     | 4         |
| 144 | Teleoperation and Visualization Interfaces for Remote Intervention in Space. Frontiers in Robotics and AI, 2021, 8, 747917.  | 2.0 | 4         |

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|-----|--|-----|-----------|
| 145 | Designing and Developing Medical Device Software Systems Using the Model Driven Architecture (MDA). , 2007, , .  |     | 3         |
| 146 | Proving the correctness of concurrent robot software. , 2012, , .  |     | 3         |
| 147 | Fault Detection and Diagnosis for Component-based Robotic Systems. , 2012, , .   |     | 3         |
| 148 | Modular Interoperability in Surgical Robotics Software. Mechanical Engineering, 2015, 137, S19-S22.  | 0.0 | 3         |
| 149 | Parameter estimation and anomaly detection while cutting insulation during telerobotic satellite servicing. , 2015, , .  |     | 3         |
| 150 | Interactive Navigation System in Mixed-Reality for Neurosurgery. , 2020, , .   |     | 3         |
| 151 | Evaluation of Hybrid Control and Palpation Assistance for Situational Awareness in Telemanipulated Task Execution. IEEE Transactions on Medical Robotics and Bionics, 2021, 3, 31-43.                | 2.1 | 3         |
| 152 | Learning Deep Nets for Gravitational Dynamics With Unknown Disturbance Through Physical Knowledge Distillation: Initial Feasibility Study. IEEE Robotics and Automation Letters, 2021, 6, 2658-2665. | 3.3 | 3         |
| 153 | Fusion of Inertial Sensing to Compensate for Partial Occlusions in Optical Tracking Systems. Lecture Notes in Computer Science, 2014, , 60-69.   | 1.0 | 3         |
| 154 | MO-FG-CAMPUS-JeP3-04: Feasibility Study of Real-Time Ultrasound Monitoring for Abdominal Stereotactic Body Radiation Therapy. Medical Physics, 2016, 43, 3727-3727.                                  | 1.6 | 3         |
| 155 | Interactive Training and Operation Ecosystem for Surgical Tasks in Mixed Reality. Lecture Notes in Computer Science, 2018, , 20-29.  | 1.0 | 3         |
| 156 | Dose Painting with a Variable Collimator for the Small Animal Radiation Research Platform (SARRP). , 2014, , .   |     | 3         |
| 157 | Robot Force Estimation with Learned Intraoperative Correction. , 2021, , .   |     | 3         |
| 158 | SIERA: A Multiprocessor System For Robotics. , 1987, , .   |     | 2         |
| 159 | Surgical Case Identification for an Image-Guided Interventional System. , 2010, , .  |     | 2         |
| 160 | Toward practical semi-autonomous teleoperation: Do what i intend, not what i do. , 2011, , .   |     | 2         |
| 161 | Particle filtering to improve the dynamic accuracy of electromagnetic tracking. , 2013, , .  |     | 2         |
| 162 | Force control of a non-backdrivable robot without a force sensor. , 2013, , .  |     | 2         |

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|-----|---|-----|-----------|
| 163 | An Ethernet to FireWire bridge for real-time control of the da Vinci Research Kit (dVRK). , 2015, , .   |     | 2         |
| 164 | System integration. , 2020, , 861-891.  |     | 2         |
| 165 | TH-B-224C-03: Robotically Assisted Needle Placement for Prostate Brachytherapy. Medical Physics, 2006, 33, 2264-2264.   | 1.6 | 2         |
| 166 | Interactive OCT Annotation and Visualization for Vitreoretinal Surgery. Lecture Notes in Computer Science, 2013, , 142-152.   | 1.0 | 2         |
| 167 | Transfer of learned dynamics between different surgical robots and operative configurations. International Journal of Computer Assisted Radiology and Surgery, 2022, 17, 903-910. | 1.7 | 2         |
| 168 | Learning Based Estimation of 7 DOF Instrument and Grasping Forces on the da Vinci Research Kit. , 2022, , .   |     | 2         |
| 169 | Bridging 3D Slicer and ROS2 for Image-Guided Robotic Interventions. Sensors, 2022, 22, 5336.  | 2.1 | 2         |
| 170 | Design of a scalable real-time robot controller and application to a dexterous manipulator. , 2011, , .   |     | 1         |
| 171 | Bayesian filtering to improve the dynamic accuracy of electromagnetic tracking. , 2013, , .   |     | 1         |
| 172 | In vivo reproducibility of robotic probe placement for an integrated US-CT image-guided radiation therapy system. , 2014, , .   |     | 1         |
| 173 | Needle release mechanism enabling multiple insertions with an ultrasound-guided prostate brachytherapy robot. , 2017, 2017, 4339-4342.  |     | 1         |
| 174 | Teleoperative control of intraocular robotic snake: Vision-based angular calibration. , 2017, , .   |     | 1         |
| 175 | Fast Inverse Planning of Beam Directions and Weights for Small Animal Radiotherapy. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 215-222.                 | 2.7 | 1         |
| 176 | Model-based Design and Digital Implementation to Improve Control of the da Vinci Research Kit Telerobotic Surgical System. , 2021, , .  |     | 1         |
| 177 | Visual Monitoring and Servoing of a Cutting Blade during Telerobotic Satellite Servicing. , 2020, , .   |     | 1         |
| 178 | Learning Soft-Tissue Simulation from Models and Observation. , 2021, , .  |     | 1         |
| 179 | Calibration of the treatment beam of the Small Animal Radiation Research Platform. , 2008, , .  |     | 0         |
| 180 | Treatment planning and delivery of shell dose distribution for precision irradiation. Proceedings of SPIE, 2010, , .  | 0.8 | 0         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 181 | Decision support systems for robotic surgery and acute care. Proceedings of SPIE, 2012, , .   | 0.8 | 0         |
| 182 | Event-based patient motion detection and compensation in image-guided robotics. , 2012, , .   |     | 0         |
| 183 | Feasibility of a photoacoustic image guided telerobotic system for skull base surgery. , 2017, , .  |     | 0         |
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