# Bryan P Ruddy

List of Publications by Year
in descending order



| 56 | 358 | 840119 11 | 996533 15 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 56 | 56 | 56 | 189 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The effect of jet speed on large volume jet injection. Journal of Controlled Release, 2018, 280, 51-57. | 4.8 | 44 |
| 2 | Optimization of Portable Electronically Controlled Needle-Free Jet Injection Systems. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2013-2021. | 3.7 | 28 |
| 3 | Characterization of needle-assisted jet injections. Journal of Controlled Release, 2016, 243, 195-203. | 4.8 | 24 |
| 4 | A high-resolution thermoelectric module-based calorimeter for measuring the energetics of isolated ventricular trabeculae at body temperature. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H318-H324. | 1.5 | 21 |
| 5 | Design and optimization strategies for muscle-like direct-drive linear permanent-magnet motors. International Journal of Robotics Research, 2011, 30, 834-845. | 5.8 | 19 |
| 6 | Measuring the mechanical efficiency of a working cardiac muscle sample at body temperature using a flow-through calorimeter. , 2015, 2015, 7966-9. | | 19 |
| 7 | Power-efficient controlled jet injection using a compound ampoule. Journal of Controlled Release, 2018, 291, 127-134. | 4.8 | 16 |
| 8 | Design of a Xenia Coral Robot Using a High-Stroke Compliant Linear Electromagnetic Actuator. ASME Letters in Dynamic Systems and Control, 2021, 1, . | 0.4 | 15 |
| 9 | Optimal voice coil actuators for needle-free jet injection. , 2014, 2014, 2144-8. | | 14 |
| 10 | Analysis of Moving-Coil Actuator Jet Injectors for Viscous Fluids. IEEE Transactions on Biomedical Engineering, 2016, 63, 1099-1106. | 2.5 | 14 |
| 11 | Subcutaneous nicotine delivery via needle-free jet injection: A porcine model. Journal of Controlled Release, 2019, 306, 83-88. | 4.8 | 13 |
| 12 | Compliant Electromagnetic Actuator Architecture for Soft Robotics. , 2020, , . | | 13 |
| 13 | A Flowthrough Infusion Calorimeter for Measuring Muscle Energetics: Design and Performance. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 1690-1699. | 2.4 | 12 |
| 14 | A Linear Permanent Magnet Synchronous Motor for Large Volume Needle-Free Jet Injection. IEEE Transactions on Industry Applications, 2019, 55, 1437-1446. | 3.3 | 11 |
| 15 | Cortical recording with polypyrrole microwire electrodes. , 2008, 2008, 5794-7. | | 6 |
| 16 | A compound ampoule for large-volume controllable jet injection. , 2015, 2015, 7341-4. | | 6 |
| 17 | A compact direct-drive linear synchronous motor with muscle-like performance. , 2013, , . | | 5 |
| 18 | A device for controlled jet injection of large volumes of liquid. , 2016, 2016, 553-556. | | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Design of a linear permanent magnet synchronous motor for needle-free jet injection. , 2017, , . | | 5 |
| 20 | A dynamometer for nature's engines. IEEE Instrumentation and Measurement Magazine, 2019, 22, 10-16. | 1.2 | 5 |
| 21 | Optimization of linear permanent magnet synchronous motors for needle-free jet injection. , 2015, , . | | 4 |
| 22 | Four-Dimensional Imaging of Cardiac Trabeculae Contracting In Vitro Using Gated OCT. IEEE Transactions on Biomedical Engineering, 2017, 64, 218-224. | 2.5 | 4 |
| 23 | Development of Jet-injection Nozzles for Blood Release. , 2018, , . | | 4 |
| 24 | Blood Dilution Measurement by a Dual Laser Fluorimeter. , 2020, , . | | 4 |
| 25 | Optical coherence tomography imaging of cardiac trabeculae. , 2014, 2014, 182-5. | | 3 |
| 26 | Sensorless position control of voice-coil motors for needle-free jet injection. , 2015, , . | | 3 |
| 27 | High-speed X-ray analysis of liquid delivery during jet injection. , 2017, 2017, 296-299. | | 3 |
| 28 | Spatially resolved diffuse imaging for highâ€speed depth estimation of jet injection. Journal of Biophotonics, 2019, 12, e201900205. | 1.1 | 3 |
| 29 | High-speed light source depth estimation using spatially-resolved diffuse imaging. Journal of Optics (United Kingdom), 2019, 21, 015604. | 1.0 | 3 |
| 30 | Viscous Heating Assists Jet Formation During Needle-Free Jet Injection of Viscous Drugs. IEEE Transactions on Biomedical Engineering, 2019, 66, 3472-3479. | 2.5 | 3 |
| 31 | Blood Collection from The Porcine Ear Using a Jet Injector. , 2020, 2020, 5119-5123. | | 3 |
| 32 | Jet-Induced Blood Release From Human Fingertips: A Single-Blind, Randomized, Crossover Trial. Journal of Diabetes Science and Technology, 2021, , 193229682110538. | 1.3 | 3 |
| 33 | Jet injection needle-free dental anaesthesia: Initial findings. Journal of Dentistry, 2022, 122, 104165. | 1.7 | 3 |
| 34 | Application of the Thermal Fin Approximation to Modeling Voice Coil Magnetic Fields and Performance. IEEE Transactions on Magnetics, 2017, 53, 1-8. | 1.2 | 2 |
| 35 | Design optimization of a direct-drive linear actuator assistive device for stroke. , 2017, , . | | 2 |
| 36 | Design of a Linear Permanent Magnet Transverse Flux Motor for Needle-free Jet Injection. , 2019, , . | | 2 |

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|---|---|---|---|
| 37 | Controllable Jet Injection of Dental Local Anaesthetic. IEEE Journal of Translational Engineering in Health and Medicine, 2021, 9, 1-8. | 2.2 | 2 |
| 38 | Shoulder Joint Stiffness in a Functional Posture at Various Levels of Muscle Activation. IEEE Transactions on Biomedical Engineering, 2022, 69, 2192-2201. | 2.5 | 2 |
| 39 | Jet-Induced Tissue Disruption for Blood Release. IEEE Transactions on Biomedical Engineering, 2022, 69, 1850-1859. | 2.5 | 2 |
| 40 | Light source depth estimation in porcine skin using spatially resolved diffuse imaging. , 2016, 2016, 5917-5920. | | 1 |
| 41 | Design of a Portable Pulsed Power System for Needle-Free Jet Injection. , 2018, , . | | 1 |
| 42 | Laterally Dispersing Nozzles for Needle-assisted Jet Injection. , 2019, 2019, 1686-1689. | | 1 |
| 43 | System Identification to Characterise Shoulder Joint Dynamics in Two Degrees of Freedom. , 2020, 2020, 4913-4916. | | 1 |
| 44 | Ankle torque forecasting using time-delayed neural networks. , 2020, 2020, 4854-4857. | | 1 |
| 45 | High speed, spatially-resolved diffuse imaging for jet injection depth estimation. , 2018, , . | | 1 |
| 46 | Classification of diffuse light emission profiles for distinguishing skin layer penetration of a needle-free jet injection. Biomedical Optics Express, 2019, 10, 5081. | 1.5 | 1 |
| 47 | Work in Progress: The Consumer Breathalyzer as a Model Design Project in Introductory Instrumentation. , 0, , . | | 1 |
| 48 | Conducting Polymer-Based Multifunctional Materials. , 2010, , . | | 0 |
| 49 | Closed loop performance of polypyrrole linear contractile actuators. , 2010, , . | | 0 |
| 50 | Multi-component single-substrate conducting polymer actuation systems and fabrication techniques. , 2011, , . | | 0 |
| 51 | Examination of the Heat-Stress Relationship of Rat Cardiac Trabeculae using an Improved Muscle Calorimeter. Biophysical Journal, 2014, 106, 773a. | 0.2 | 0 |
| 52 | Using Optical Coherence Tomography to Measure Dynamic Changes in the Geometry of Isolated Cardiac Trabeculae during a Twitch. Biophysical Journal, 2015, 108, 294a. | 0.2 | 0 |
| 53 | Application of Linear Permanent Magnet Flux-Switching Motors to Needle-free Jet Injection. , 2019, , . | | 0 |
| 54 | Design and Optimization Strategies for Muscle-Like Direct Drive Linear Permanent Magnet Motors. , 0, , . | | 0 |

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|---|---|---|---|
| 55 | Thermopile power measurement for heat balance calorimetry. International Journal on Smart Sensing and Intelligent Systems, 2014, 7, 1-6. | 0.4 | 0 |
| 56 | Coupled electromagnetic and thermal optimisation strategies for direct-drive linear permanent magnet synchronous motors. , 2020, , . | | 0 |