# Michael Posa

## List of Publications by Year
## in descending order

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|---|---|---|---|
| **15**<br>papers | **772**<br>citations | 1478505<br>**6**<br>h-index | 1872680<br>**6**<br>g-index |
| **15**<br>all docs | **15**<br>docs citations | **15**<br>times ranked | **600**<br>citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | A direct method for trajectory optimization of rigid bodies through contact. International Journal of Robotics Research, 2014, 33, 69-81. | 8.5 | 393 |
| 2 | Optimization and stabilization of trajectories for constrained dynamical systems. , 2016, , . | | 102 |
| 3 | An Architecture for Online Affordance-based Perception and Whole-body Planning. Journal of Field Robotics, 2015, 32, 229-254. | 6.0 | 101 |
| 4 | Balance control using center of mass height variation: Limitations imposed by unilateral contact. , 2016, , . | | 50 |
| 5 | Stability Analysis and Control of Rigid-Body Systems With Impacts and Friction. IEEE Transactions on Automatic Control, 2016, 61, 1423-1437. | 5.7 | 41 |
| 6 | Lyapunov analysis of rigid body systems with impacts and friction via sums-of-squares. , 2013, , . | | 18 |
| 7 | Impact Invariant Control with Applications to Bipedal Locomotion. , 2021, , . | | 11 |
| 8 | Validating Robotics Simulators on Real-World Impacts. IEEE Robotics and Automation Letters, 2022, 7, 6471-6478. | 5.1 | 10 |
| 9 | Modeling and Analysis of Non-Unique Behaviors in Multiple Frictional Impacts. , 0, , . | | 9 |
| 10 | Real-Time Multi-Contact Model Predictive Control via ADMM. , 2022, , . | | 8 |
| 11 | Stabilization of Complementarity Systems via Contact-Aware Controllers. IEEE Transactions on Robotics, 2022, 38, 1735-1754. | 10.3 | 7 |
| 12 | Contact-Aware Controller Design for Complementarity Systems. , 2020, , . | | 6 |
| 13 | A Quasi-static Model and Simulation Approach for Pushing, Grasping, and Jamming. Springer Proceedings in Advanced Robotics, 2020, , 491-507. | 1.3 | 6 |
| 14 | Fundamental Challenges in Deep Learning for Stiff Contact Dynamics. , 2021, , . | | 6 |
| 15 | Stability analysis of complementarity systems with neural network controllers. , 2021, , . | | 4 |