Marius Tucsnak

List of Publications by Citations

61 papers	1,689 citations	20 h-index	40 g-index
61 ext. papers	1,986 ext. citations	1.8 avg, IF	5.01 L-index

#	Paper	IF	Citations
61	Observation and Control for Operator Semigroups **2009**,		450
60	Global Weak Solutions for the Two-Dimensional Motion of Several Rigid Bodies in an Incompressible Viscous Fluid. *Archive for Rational Mechanics and Analysis*, **2002**, 161, 113-147	2.3	120
59	Stabilization of second order evolution equations by a class of unbounded feedbacks. *ESAIM - Control, Optimisation and Calculus of Variations*, **2001**, 6, 361-386	1	109
58	Stabilization of Bernoulli--Euler Beams by Means of a Pointwise Feedback Force. *SIAM Journal on Control and Optimization*, **2000**, 39, 1160-1181	1.9	76
57	Global Strong Solutions for the Two-Dimensional Motion of an Infinite Cylinder in a Viscous Fluid. *Journal of Mathematical Fluid Mechanics*, **2004**, 6, 53-77	1.4	68
56	Recovering the initial state of an infinite-dimensional system using observers. *Automatica*, **2010**, 46, 1616-1625	5.7	62
55	How to get a conservative well-posed linear system out of thin air. Part I. Well-posedness and energy balance. *ESAIM - Control, Optimisation and Calculus of Variations*, **2003**, 9, 247-273	1	53
54	Well-posed systems—The LTI case and beyond. *Automatica*, **2014**, 50, 1757-1779	5.7	48
53	How to Get a Conservative Well-Posed Linear System Out of Thin Air. Part II. Controllability and Stability. *SIAM Journal on Control and Optimization*, **2003**, 42, 907-935	1.9	40
52	Single input controllability of a simplified fluid-structure interaction model. *ESAIM - Control, Optimisation and Calculus of Variations*, **2013**, 19, 20-42	1	38
51	Singular Internal Stabilization of the Wave Equation. *Journal of Differential Equations*, **1998**, 145, 184-215	2.1	33
50	Decay Rates for a Beam with Pointwise Force and Moment Feedback. *Mathematics of Control, Signals, and Systems*, **2002**, 15, 229-255	1.3	32
49	Controllability and Time Optimal Control for Low Reynolds Numbers Swimmers. *Acta Applicandae Mathematicae*, **2013**, 123, 175-200	1.1	31
48	Time optimal boundary controls for the heat equation. *Journal of Functional Analysis*, **2012**, 263, 25-49	1.4	28
47	An Initial and Boundary Value Problem Modeling of Fish-like Swimming. *Archive for Rational Mechanics and Analysis*, **2008**, 188, 429-455	2.3	28
46	Uniformly exponentially stable approximations for a class of second order evolution equations. *ESAIM - Control, Optimisation and Calculus of Variations*, **2007**, 13, 503-527	1	28
45	Simultaneous Exact Controllability and Some Applications. *SIAM Journal on Control and Optimization*, **2000**, 38, 1408-1427	1.9	27

44	A control theoretic approach to the swimming of microscopic organisms. *Quarterly of Applied Mathematics*, **2007**, 65, 405-424	0.7	26
43	On a theorem of Ingham. *Journal of Fourier Analysis and Applications*, **1997**, 3, 577-582	1.1	22
42	On the null-controllability of diffusion equations. *ESAIM - Control, Optimisation and Calculus of Variations*, **2011**, 17, 1088-1100	1	21
41	An example for the switching delay feedback stabilization of an infinite dimensional system: The boundary stabilization of a string. *Systems and Control Letters*, **2011**, 60, 226-233	2.4	20
40	Solving Inverse Source Problems Using Observability. Applications to the EulerBernoulli Plate Equation. *SIAM Journal on Control and Optimization*, **2009**, 48, 1632-1659	1.9	20
39	Regularity and Exact Controllability for a Beam with Piezoelectric Actuator. *SIAM Journal on Control and Optimization*, **1996**, 34, 922-930	1.9	20
38	An Approximation Method for Exact Controls of Vibrating Systems. *SIAM Journal on Control and Optimization*, **2011**, 49, 1283-1305	1.9	19
37	Convergence of the Lagrange--Galerkin Method for the Equations Modelling the Motion of a Fluid-Rigid System. *SIAM Journal on Numerical Analysis*, **2005**, 43, 1536-1571	2.4	19
36	Wellposedness for the NavierStokes flow in the exterior of a rotating obstacle. *Mathematical Methods in the Applied Sciences*, **2006**, 29, 595-623	2.3	18
35	A time reversal based algorithm for solving initial data inverse problems. *Discrete and Continuous Dynamical Systems - Series S*, **2011**, 4, 641-652	2.8	18
34	Energy decay estimates for the damped plate equation with a local degenerated dissipation. *Systems and Control Letters*, **2003**, 48, 191-197	2.4	17
33	Existence of solutions for the equations modeling the motion of rigid bodies in an ideal fluid. *Journal of Functional Analysis*, **2010**, 259, 2856-2885	1.4	15
32	Optimal location of the actuator for the pointwise stabilization of a string. *Comptes Rendus Mathematique*, **2000**, 330, 275-280		15
31	Maximum Principle and Bang-Bang Property of Time Optimal Controls for Schr□dinger-Type Systems. *SIAM Journal on Control and Optimization*, **2013**, 51, 4016-4038	1.9	14
30	Analysis of a system modelling the motion of a piston in a viscous gas. *Journal of Mathematical Fluid Mechanics*, **2017**, 19, 551-579	1.4	14
29	Simultaneous controllability in sharp time for two elastic strings. *ESAIM - Control, Optimisation and Calculus of Variations*, **2001**, 6, 259-273	1	14
28	Particle supported control of a fluidparticle system. *Journal Des Mathematiques Pures Et Appliquees*, **2015**, 104, 311-353	1.7	13
27	Controllability and positivity constraints in population dynamics with age structuring and diffusion. *Journal Des Mathematiques Pures Et Appliquees*, **2019**, 129, 153-179	1.7	12

26	Weak Solutions for the Motion of a Self-propelled Deformable Structure in a Viscous Incompressible Fluid. *Acta Applicandae Mathematicae*, **2011**, 116, 329-352	1.1	10
25	Stabilization of a fluid–rigid body system. *Journal of Differential Equations*, **2015**, 259, 6459-6493	2.1	9
24	Perturbations of Time Optimal Control Problems for a Class of Abstract Parabolic Systems. *SIAM Journal on Control and Optimization*, **2016**, 54, 2965-2991	1.9	9
23	On conditions for asymptotic stability of dissipative infinite-dimensional systems with intermittent damping. *Journal of Differential Equations*, **2012**, 252, 5569-5593	2.1	8
22	Analysis of the adiabatic piston problem via methods of continuum mechanics. *Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire*, **2018**, 35, 1377-1408	1.6	7
21	Analysis of a Simplified Model of Rigid Structure Floating in a Viscous Fluid. *Journal of Nonlinear Science*, **2019**, 29, 1975-2020	2.8	6
20	From exact observability to identification of singular sources. *Mathematics of Control, Signals, and Systems*, **2015**, 27, 1-21	1.3	6
19	Stabilizability properties of a linearized water waves system. *Systems and Control Letters*, **2020**, 139, 104672	2.4	6
18	Finite dimensional approximations for a class of infinite dimensional time optimal control problems. *International Journal of Control*, **2019**, 92, 132-144	1.5	6
17	Mathematical analysis of the motion of a rigid body in a compressible Navier–Stokes–Fourier fluid. *Mathematische Nachrichten*, **2019**, 292, 1972-2017	0.8	5
16	Controllability with Positivity Constraints of the Lotka--McKendrick System. *SIAM Journal on Control and Optimization*, **2018**, 56, 723-750	1.9	4
15	Local exact controllability for Berger plate equation. *Mathematics of Control, Signals, and Systems*, **2009**, 21, 93-110	1.3	4
14	Convergence of the Lagrange–Galerkin method for a fluid–rigid system. *Comptes Rendus Mathematique*, **2004**, 339, 59-64	0.4	4
13	Well-Posedness and input-output stability for a system modelling rigid structures floating in a viscous fluid. *IFAC-PapersOnLine*, **2020**, 53, 7491-7496	0.7	3
12	Detectability and state estimation for linear age-structured population diffusion models. *ESAIM: Mathematical Modelling and Numerical Analysis*, **2016**, 50, 1731-1761	1.8	3
11	The piston problem in a port-Hamiltonian formalism. *IFAC-PapersOnLine*, **2015**, 48, 212-216	0.7	2
10	Non-linear damping for scattering-passive systems in the Maxwell class. *IFAC-PapersOnLine*, **2020**, 53, 7458-7465	0.7	2
9	Some new applications of Russell's principle to infinite dimensional vibrating systems. *Annual Reviews in Control*, **2017**, 44, 184-198	10.3	1

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8	Numerical approximation of some time optimal control problems **2015**,		1
7	Numerical aspects and controllability of a one dimensional fluid-structure model. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2013**, 46, 19-24		1
6	An optimal control approach to ciliary locomotion. *Mathematical Control and Related Fields*, **2016**, 6, 293-334	1.3	1
5	Strong stabilization of small water waves in a pool. *IFAC-PapersOnLine*, **2021**, 54, 378-383	0.7	1
4	Asymptotic behaviour of a system modelling rigid structures floating in a viscous fluid. *IFAC-PapersOnLine*, **2021**, 54, 205-212	0.7	1
3	Abstract nonlinear control systems **2021**,		1
2	A class of incrementally scattering-passive nonlinear systems. *Automatica*, **2022**, 142, 110369	5.7	0
1	Large time behaviour for the motion of a solid in a viscous incompressible fluid. *Mathematische Annalen*,1	1	