Vasily V Saurin

List of Publications by Year
in descending order

42	323	10	15
papers	citations	h-index	g-index

46	46	46	76
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Integro-differential approach to solving problems of linear elasticity theory. Doklady Physics, 2005, 50, 535-538.	0.7	27
2	An integrodifferential approach to modeling, control, state estimation and optimization for heat transfer systems. International Journal of Applied Mathematics and Computer Science, 2016, 26, 15-30.	1.5	26
3	The optimization of the motion of an elastic rod by the method of integro-differential relations. Journal of Computer and Systems Sciences International, 2006, 45, 217-225.	0.6	23
4	Optimal orientation of orthotropic materials for plates designed against buckling. Structural Optimization, 1995, 10, 191-196.	0.6	22
5	The Method of Integrodifferential Relations for Linear Elasticity Problems. Archive of Applied Mechanics, 2006, 76, 391-402.	2.2	22
6	Approaches to control design and optimization in heat transfer problems. Journal of Computer and Systems Sciences International, 2010, 49, 380-391.	0.6	15
7	Macro-failure criterion for the theory of laminated composite structures with free edge delaminations. Computers and Structures, 2000, 76, 195-204.	4.4	13
8	Dynamics of Solid Structures. , 2017, , .		13
9	Shape design sensitivity analysis for fracture conditions. Computers and Structures, 2000, 76, 399-405.	4.4	12
10	Modeling of controlled motions of an elastic rod by the method of integro-differential relations. Journal of Computer and Systems Sciences International, 2006, 45, 56-63.	0.6	12
11	Modeling and optimization of elastic system motions by the method of integro-differential relations. Doklady Mathematics, 2006, 73, 469-472.	0.6	12
12	Adaptive Control Strategies in Heat Transfer Problems with Parameter Uncertainties Based on a Projective Approach. , 2011, , 309-332.		9
13	Free beam oscillations. Doklady Physics, 2006, 51, 680-684.	0.7	7
14	An asymptotic approach to the problem of the free oscillations of a beam. Prikladnaya Matematika I Mekhanika, 2007, 71, 611-621.	0.4	7
15	Multivariable trajectory tracking control for a heated rod based on an integro-differential approach to control-oriented modelling. , 2016, , .		7
16	A variational formulation in fracture mechanics. International Journal of Fracture, 2008, 150, 195-211.	2.2	6
17	Modelling and analysis of the natural oscillations of a prismatic elastic beam based on a projection approach. Prikladnaya Matematika I Mekhanika, 2011, 75, 700-710.	0.4	6
18	Reliable finite-dimensional models with guaranteed approximation quality for control of distributed parameter systems. , 2012, , .		6

#	Article	IF	Citations
19	Variational approaches in the linear theory of elasticity. Doklady Physics, 2007, 52, 426-430.	0.7	5
20	Optimal Real-Time Control of Flexible Rack Feeders Using the Method of Integrodifferential Relations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1147-1152.	0.4	5
21	Variational statement of optimization problems for elastic body motions. Doklady Mathematics, 2007, 76, 629-633.	0.6	4
22	Asymptotic Approach to Free Beam Vibration Analysis. Journal of Aerospace Engineering, 2009, 22, 456-459.	1.4	4
23	Integrodifferential approaches to frequency analysis and control design for compressible fluid flow in a pipeline element. Mathematical and Computer Modelling of Dynamical Systems, 2014, 20, 504-527.	2.2	4
24	Numerical validation of order reduction techniques for finite element modeling of a flexible rack feeder system. , 2015, , .		4
25	Optimal control of a viscoelastic rack feeder based on the method of integrodifferential relations. Journal of Computer and Systems Sciences International, 2015, 54, 294-306.	0.6	4
26	Optimal multivariable flux control of heat transfer in a metal bar. , 2017, , .		4
27	The method of integrodifferential relations for analysing the natural oscillations of membranes. Prikladnaya Matematika I Mekhanika, 2009, 73, 326-335.	0.4	3
28	Design of optimal control for motions of elastic bodies: Variational approaches. Lobachevskii Journal of Mathematics, 2016, 37, 368-380.	0.9	3
29	Variational approaches to solving initial-boundary-value problems in the dynamics of linear elastic systems. Prikladnaya Matematika I Mekhanika, 2009, 73, 673-687.	0.4	2
30	An Integrodifferential Approach to Adaptive Control Design for Heat Transfer Systems with Uncertainties. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 520-525.	0.4	2
31	A Variational Approach to Modelling and Optimization in Elastic Structure Dynamics. Computational Methods in Applied Sciences (Springer), 2016, , 259-279.	0.3	2
32	Motion Analysis and Optimization for Beam Structures. , 2009, , 201-210.		2
33	Asymptotic approach to analysis of the stress-strain state of elastic bodies. Doklady Physics, 2008, 53, 644-648.	0.7	1
34	Modeling and Optimization of Control Processes for Compressible Liquid Flow in Pipeline Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 514-519.	0.4	1
35	Finite Element Approaches for Real-Time Control and Observer Design of Flexible Rack Feeder Systems. IFAC-PapersOnLine, 2015, 48, 910-915.	0.9	1
36	Optimal Design of Elastic Rod Motions Based on a Projection Approach. IFAC-PapersOnLine, 2015, 48, 772-777.	0.9	0

#	Article	IF	Citations
37	Modeling and control for motions of a structure with viscoelastic elements. , 2016, , .		0
38	A projection approach to optimization of the spatial motions for an elastic beam. , 2016, , .		0
39	Model reduction and optimal control for an electromechanical structure with viscoelastic links. Procedia Engineering, 2017, 199, 681-686.	1.2	0
40	On Control-Oriented Modeling in Heat Transfer Based on a Projection Technique and the Method of Integrodifferential Relations. , 2018, , .		0
41	Variational Approach to Static and Dynamic Elasticity Problems. , 2011, , 131-158.		0
42	From the Linear Theory of Elasticity to Bending Equations for Beams with Variable Cross-Section. Structural Integrity, 2020, , 162-163.	1.4	0