Tomasz Blaszczyk

List of Publications by Year
in descending order

29 papers	483 citations	758635 12 h-index	713013 21 g-index
29 all docs	29 docs citations	29 times ranked	348 citing authors

#	Article	IF	Citations
1	The Motion of a Bead Sliding on a Wire in Fractional Sense. Acta Physica Polonica A, 2017, 131, 1561-1564.	0.2	69
2	Fractional Euler–Bernoulli beams: Theory, numerical study and experimental validation. European Journal of Mechanics, A/Solids, 2015, 54, 243-251.	2.1	66
3	Modeling the transition between stable and unstable operation while emptying a silo. Granular Matter, 2011, 13, 429-438.	1.1	45
4	Numerical solution of fractional Sturm-Liouville equation in integral form. Fractional Calculus and Applied Analysis, 2014, 17, 307-320.	1.2	39
5	Numerical solution of fractional oscillator equation. Applied Mathematics and Computation, 2011, 218, 2480-2488.	1.4	37
6	The fractional Sturm–Liouville problem–Numerical approximation and application in fractional diffusion. Journal of Computational and Applied Mathematics, 2017, 317, 573-588.	1.1	27
7	Fractional oscillator equation – Transformation into integral equation and numerical solution. Applied Mathematics and Computation, 2015, 257, 428-435.	1.4	24
8	Exact and numerical solutions of the fractional Sturm–Liouville problem. Fractional Calculus and Applied Analysis, 2018, 21, 45-71.	1.2	19
9	Numerical Solution of Euler-Lagrange Equation with Caputo Derivatives. Advances in Applied Mathematics and Mechanics, 2017, 9, 173-185.	0.7	18
10	Analytical and numerical solution of the fractional Euler–Bernoulli beam equation. Journal of Mechanics of Materials and Structures, 2017, 12, 23-34.	0.4	16
11	Fractional oscillator equation: analytical solution and algorithm for its approximate computation. JVC/Journal of Vibration and Control, 2016, 22, 2045-2052.	1.5	15
12	Numerical solution of non-homogenous fractional oscillator equation in integral form. Journal of Theoretical and Applied Mechanics, 0, , 959.	0.2	15
13	On selected aspects of space-fractional continuum mechanics model approximation. International Journal of Mechanical Sciences, 2020, 167, 105287.	3.6	13
14	Modelling and analysis of heat transfer through 1D complex granular system. Granular Matter, 2014, 16, 687-694.	1.1	12
15	Numerical solution of composite left and right fractional Caputo derivative models for granular heat flow. Mechanics Research Communications, 2013, 48, 42-45.	1.0	10
16	Exact and Numerical Solution of the Fractional Sturm–Liouville Problem with Neumann Boundary Conditions. Entropy, 2022, 24, 143.	1.1	8
17	Approximation and application of the Riesz-Caputo fractional derivative of variable order with fixed memory. Meccanica, 2022, 57, 861-870.	1.2	7
18	The multiple composition of the left and right fractional Riemann-Liouville integrals - analytical and numerical calculations. Filomat, 2017, 31, 6087-6099.	0.2	7

#	Article	IF	Citations
19	Numerical algorithms for approximation of fractional integral operators based on quadratic interpolation. Mathematical Methods in the Applied Sciences, 2018, 41, 3345-3355.	1.2	5
20	Numerical Study for Fractional Euler-Lagrange Equations of a Harmonic Oscillator on a Moving Platform. Acta Physica Polonica A, 2016, 130, 688-691.	0.2	5
21	Transformation of the second order boundary value problem into integral form - different approaches and a numerical solution. Journal of Applied Mathematics and Computational Mechanics, 2015, 14, 103-108.	0.3	5
22	An exact solution of fractional Euler-Bernoulli equation for a beam with fixed-supported and fixed-free ends. Applied Mathematics and Computation, 2021, 396, 125932.	1.4	4
23	An approximation of the fractional integrals using quadratic interpolation. Journal of Applied Mathematics and Computational Mechanics, 2014, 13, 13-18.	0.3	4
24	An Exact Solution of the Second-Order Differential Equation with the Fractional/Generalised Boundary Conditions. Advances in Mathematical Physics, 2018, 2018, 1-9.	0.4	3
25	On numerical approximation of the Riesz–Caputo operator with the fixed/short memory length. Journal of King Saud University - Science, 2021, 33, 101220.	1.6	3
26	An approximation of the analytical solution of the fractional Euler-Lagrange equation. Journal of Applied Mathematics and Computational Mechanics, 2013, 12, 23-30.	0.3	3
27	Designing of Dynamic Spectrum Shifting in Terms of Non-Local Space-Fractional Mechanics. Energies, 2021, 14, 506.	1.6	2
28	Application of the Rayleigh-Ritz method to solve a class of fractional variational problem. , 2015, , .		1
29	The Sturm-Liouville eigenvalue problem - a numerical solution using the Control Volume Method. Journal of Applied Mathematics and Computational Mechanics, 2016, 15, 127-136.	0.3	1