

# Radek Kolman

## List of Publications by Year in descending order

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36  
papers

346  
citations

840776

11  
h-index

839539

18  
g-index

37  
all docs

37  
docs citations

37  
times ranked

309  
citing authors

#	ARTICLE	IF	CITATIONS
1	Residual stress analysis of additive manufacturing of metallic parts using ultrasonic waves: State of the art review. <i>Journal of Materials Research and Technology</i> , 2020, 9, 9457-9477.	5.8	85
2	Using finite element method for the determination of elastic moduli by resonant ultrasound spectroscopy. <i>Journal of the Acoustical Society of America</i> , 2004, 116, 282-287.	1.1	44
3	Dispersion of elastic waves in the contact impact problem of a long cylinder. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 1930-1936.	2.0	21
4	Complex wavenumber Fourier analysis of the B-spline based finite element method. <i>Wave Motion</i> , 2014, 51, 348-359.	2.0	20
5	Inverse mass matrix via the method of localized lagrange multipliers. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 113, 277-295.	2.8	17
6	Temporal-spatial dispersion and stability analysis of finite element method in explicit elastodynamics. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 106, 113-128.	2.8	14
7	A method for multidimensional wave propagation analysis via componentwise partition of longitudinal and shear waves. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 95, 212-237.	2.8	13
8	Grid dispersion analysis of plane square biquadratic serendipity finite elements in transient elastodynamics. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 96, 1-28.	2.8	12
9	Isogeometric analysis of free vibration of simple shaped elastic samples. <i>Journal of the Acoustical Society of America</i> , 2015, 137, 2089-2100.	1.1	12
10	Fine tuning of optical transition energy of twisted bilayer graphene via interlayer distance modulation. <i>Physical Review B</i> , 2017, 95, .	3.2	12
11	Inverse mass matrix for isogeometric explicit transient analysis via the method of localized Lagrange multipliers. <i>International Journal for Numerical Methods in Engineering</i> , 2019, 117, 939-966.	2.8	12
12	B-spline based finite element method in one-dimensional discontinuous elastic wave propagation. <i>Applied Mathematical Modelling</i> , 2017, 46, 382-395.	4.2	11
13	Isogeometric analysis in electronic structure calculations. <i>Mathematics and Computers in Simulation</i> , 2018, 145, 125-135.	4.4	9
14	Dynamic Hardening of AISI 304 Steel at a Wide Range of Strain Rates and Its Application to Shot Peening Simulation. <i>Metals</i> , 2022, 12, 403.	2.3	8
15	Efficient implementation of an explicit partitioned shear and longitudinal wave propagation algorithm. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 107, 543-579.	2.8	7
16	Graphene under direct compression: Stress effects and interlayer coupling. <i>Physica Status Solidi (B): Basic Research</i> , 2016, 253, 2336-2341.	1.5	7
17	Convergence study of isogeometric analysis based on BÄzier extraction in electronic structure calculations. <i>Applied Mathematics and Computation</i> , 2018, 319, 138-152.	2.2	7
18	On stability and reflection transmission analysis of the bipenalty method in contact impact problems: A one-dimensional, homogeneous case study. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 113, 1607-1629.	2.8	7

#	ARTICLE	IF	CITATIONS
19	Explicit multistep time integration for discontinuous elastic stress wave propagation in heterogeneous solids. <i>International Journal for Numerical Methods in Engineering</i> , 2019, 118, 276-302.	2.8	6
20	Finite Element Computational Technology in Resonant Ultrasound Spectroscopy of Composite Materials. <i>Materials Science Forum</i> , 2005, 482, 343-346.	0.3	4
21	Full field computing for elastic pulse dispersion in inhomogeneous bars. <i>Composite Structures</i> , 2018, 204, 388-394.	5.8	4
22	Bi-penalty stabilized technique with predictor-corrector time scheme for contact-impact problems of elastic bars. <i>Mathematics and Computers in Simulation</i> , 2021, 189, 305-324.	4.4	4
23	Sample Geometry and the Brittle-Ductile Behavior of Edge Cracks in 3D Atomistic Simulations by Molecular Dynamics. <i>Solid State Phenomena</i> , 0, 258, 45-48.	0.3	2
24	The boundary integral equations method for analysis of high-frequency vibrations of an elastic layer. <i>Archive of Applied Mechanics</i> , 2017, 87, 737-750.	2.2	2
25	Partitioned formulation of contact-impact problems with stabilized contact constraints and reciprocal mass matrices. <i>International Journal for Numerical Methods in Engineering</i> , 2021, 122, 4609-4636.	2.8	2
26	A two-layer elastic strip under transverse impact loading: Analytical solution, finite element, and finite volume simulations. <i>Mathematics and Computers in Simulation</i> , 2021, 189, 126-140.	4.4	1
27	Experimental, analytical, and numerical study of transient elastic waves from a localized source in an aluminium strip. <i>Applied Acoustics</i> , 2021, 178, 107983.	3.3	1
28	AN EXPLICIT TIME SCHEME WITH LOCAL TIME STEPPING FOR ONE-DIMENSIONAL WAVE AND IMPACT PROBLEMS IN LAYERED AND FUNCTIONALLY GRADED MATERIALS. , 2017, , .		1
29	A Method for Computation of Wave Propagation in Heterogeneous Solids: Implementation and Performance. , 2013, , .		0
30	A Method for Computation of Wave Propagation in Heterogeneous Solids: Algorithm Description. , 2013, , .		0
31	A Large Deformation Frictionless Contact Treatment in NURBS-based Isogeometric Analysis. <i>Computational and Experimental Methods in Structures</i> , 2018, , 109-144.	0.3	0
32	Finite element method based computational time reversal in elastodynamics: Refocusing, reconstruction and its numerical sensitivity. <i>Mathematics and Computers in Simulation</i> , 2021, 189, 163-190.	4.4	0
33	INVERSE MASS MATRIX VIA THE METHOD OF LOCALIZED LAGRANGE MULTIPLIERS. , 2017, , .		0
34	ESTIMATION OF STABILITY LIMIT BASED ON GERSHGORIN'S THEOREM FOR EXPLICIT CONTACT-IMPACT ANALYSIS SIGNORINI PROBLEM USING BIPENALTY APPROACH. , 2017, , .		0
35	TEMPORAL-SPATIAL DISPERSION ANALYSIS OF FINITE ELEMENT METHOD IN IMPLICIT TIME INTEGRATION. , 2019, , .		0
36	BI-PENALTY STABILIZED EXPLICIT FINITE ELEMENT ALGORITHM FOR ONE-DIMENSIONAL CONTACT-IMPACT PROBLEMS. , 2019, , .		0