

Jordan Yankov Hristov

List of Publications by Year in descending order

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106
papers

2,163
citations

236925

25
h-index

276875

41
g-index

110
all docs

110
docs citations

110
times ranked

1034
citing authors

#	ARTICLE	IF	CITATIONS
1	On the Diffusion with Decaying Time-Dependent Diffusivity: Formulations and Approximate Solutions Pertinent to Diffusion in Concretes. <i>Studies in Systems, Decision and Control</i> , 2022, , 1-44.	1.0	0
2	Benefits from the use of wire-coil inserts in water transitional and low turbulent flow: The influence of the wire-coil pitch. <i>Thermal Science</i> , 2022, 26, 3597-3604.	1.1	0
3	Prony's series and modern fractional calculus. , 2022, , 187-200.		3
4	Integral-balance method with transmuted profiles: Concept, examples, and emerging problems. <i>Journal of Computational and Applied Mathematics</i> , 2022, 416, 114547.	2.0	1
5	Semi-derivative integral method to transient heat conduction: Time-dependent (power-law) temperature boundary conditions. <i>Thermal Science</i> , 2021, 25, 3557-3568.	1.1	2
6	Response to "Comments on "New insight into the definitions of the Bejan number". <i>International Communications in Heat and Mass Transfer</i> , 2021, 124, 105277.	5.6	0
7	Critical review of the definitions of the Bejan number - first law of thermodynamics. <i>International Communications in Heat and Mass Transfer</i> , 2021, 124, 105113.	5.6	6
8	Magnetic field diffusion in ferromagnetic materials: fractional calculus approaches. <i>International Journal of Optimization and Control: Theories and Applications</i> , 2021, 11, 1-15.	1.7	4
9	Semi-derivative integral method to transient heat conduction time-dependent heat flux boundary conditions. <i>Thermal Science</i> , 2021, 25, 303-308.	1.1	0
10	On the $p(x)$ approximation in the non-isothermal reaction kinetics by a generalized exponential integral the concept. <i>Thermal Science</i> , 2021, 25, 321-326.	1.1	1
11	The Craft of Fractional Modelling in Science and Engineering: II and III. <i>Fractal and Fractional</i> , 2021, 5, 281.	3.3	1
12	Editorial: Fractional differential and integral operators with non-singular and non-local kernel with application to nonlinear dynamical systems. <i>Chaos, Solitons and Fractals</i> , 2020, 132, 109493.	5.1	21
13	New insight into the definitions of the Bejan number. <i>International Communications in Heat and Mass Transfer</i> , 2020, 116, 104637.	5.6	6
14	Non-linear heat conduction with ramped surface heating ramp surface heating and approximate solution. <i>Thermal Science</i> , 2020, 24, 377-389.	1.1	6
15	Effects of different fuel supply types on combustion characteristics behind group of V-gutter flame holders: Experimental and numerical study. <i>Thermal Science</i> , 2020, 24, 379-391.	1.1	4
16	Preface on "New trends of numerical and analytical methods". <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2020, 13, 1-10.	1.1	0
17	Non-linear heat conduction with ramped surface heating ramp surface heating and approximate solution. <i>Thermal Science</i> , 2020, 24, 377-389.	1.1	0
18	A new closed-form approximate solution to diffusion with quadratic Fujita's non-linearity: the case of diffusion controlled sorption kinetics relevant to rectangular adsorption isotherms. <i>Heat and Mass Transfer</i> , 2019, 55, 261-279.	2.1	3

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19	Linear viscoelastic responses and constitutive equations in terms of fractional operators with non-singular kernels. <i>European Physical Journal Plus</i> , 2019, 134, 1.	2.6	38
20	Response functions in linear viscoelastic constitutive equations and related fractional operators. <i>Mathematical Modelling of Natural Phenomena</i> , 2019, 14, 305.	2.4	54
21	On the Atangana-Baleanu Derivative and Its Relation to the Fading Memory Concept: The Diffusion Equation Formulation. <i>Studies in Systems, Decision and Control</i> , 2019, , 175-193.	1.0	25
22	Bio-Heat Models Revisited: Concepts, Derivations, Nondimensionalization and Fractionalization Approaches. <i>Frontiers in Physics</i> , 2019, 7, .	2.1	38
23	A Transient Flow of a Non-Newtonian Fluid Modelled by a Mixed Time-Space Derivative: An Improved Integral-Balance Approach. <i>Advances in Dynamics, Patterns, Cognition</i> , 2019, , 153-174.	0.3	13
24	Fourth-order fractional diffusion model of thermal grooving: integral approach to approximate closed form solution of the Mullins model. <i>Mathematical Modelling of Natural Phenomena</i> , 2018, 13, 6.	2.4	18
25	Electrical Circuits of Non-integer Order: Introduction to an Emerging Interdisciplinary Area with Examples. <i>Lecture Notes in Electrical Engineering</i> , 2018, , 251-273.	0.4	8
26	The Craft of Fractional Modeling in Science and Engineering 2017. <i>Fractal and Fractional</i> , 2018, 2, 16.	3.3	6
27	Integral-Balance Solution to Nonlinear Subdiffusion Equation. <i>Current Developments in Mathematical Sciences</i> , 2018, , 70-105.	0.3	4
28	Derivatives with Non-Singular Kernels from the Caputo-Fabrizio Definition and Beyond: Appraising Analysis with Emphasis on Diffusion Models. <i>Current Developments in Mathematical Sciences</i> , 2018, , 269-341.	0.3	32
29	The heat radiation diffusion equation: Explicit analytical solutions by improved integral-balance method. <i>Thermal Science</i> , 2018, 22, 777-788.	1.1	15
30	Linear Viscoelastic Responses: The Prony Decomposition Naturally Leads Into the Caputo-Fabrizio Fractional Operator. <i>Frontiers in Physics</i> , 2018, 6, .	2.1	23
31	On the Integral-Balance Solvability of the Nonlinear Mullins Model. <i>Springer Proceedings in Mathematics and Statistics</i> , 2018, , 53-66.	0.2	1
32	Influence of fiberglass mesh on flammability of EPS used as insulation of buildings. <i>Thermal Science</i> , 2018, 22, 1025-1036.	1.1	0
33	Double integral-balance method to the fractional subdiffusion equation: Approximate solutions, optimization problems to be resolved and numerical simulations. <i>JVC/Journal of Vibration and Control</i> , 2017, 23, 2795-2818.	2.6	25
34	On the integral-balance approach to the transient heat conduction with linearly temperature-dependent thermal diffusivity. <i>Heat and Mass Transfer</i> , 2017, 53, 177-204.	2.1	20
35	Transient Space-fractional Diffusion with a Power-law Superdiffusivity: Approximate Integral-balance Approach. <i>Fundamenta Informaticae</i> , 2017, 151, 371-388.	0.4	9
36	Identification of the heat transfer coefficient in the two-dimensional model of binary alloy solidification. <i>Heat and Mass Transfer</i> , 2017, 53, 1657-1666.	2.1	10

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37	Space-Fractional Diffusion with a Potential Power-Law Coefficient: Transient Approximate Solution. Progress in Fractional Differentiation and Applications, 2017, 3, 19-39.	0.6	17
38	Derivation of the Fractional Dodson Equation and Beyond: Transient Diffusion With a Non-Singular Memory and Exponentially Fading-Out Diffusivity. Progress in Fractional Differentiation and Applications, 2017, 3, 255-270.	0.6	33
39	The non-linear Dodson diffusion equation: Approximate solutions and beyond with formalistic fractionalization. , 2017, 01, 1-17.		24
40	The melt/shrink effect of low density thermoplastics insulates: Cone calorimeter tests. Thermal Science, 2017, 21, 2177-2187.	1.1	1
41	An approximate solution to the transient space-fractional diffusion equation: Integral-balance approach, optimization problems and analyzes. Thermal Science, 2017, 21, 309-321.	1.1	6
42	Steady-state heat conduction in a medium with spatial non-singular fading memory: Derivation of Caputo-Fabrizio space-fractional derivative from Cattaneo concept with Jeffrey's Kernel and analytical solutions. Thermal Science, 2017, 21, 827-839.	1.1	87
43	Subdiffusion model with time-dependent diffusion coefficient: Integral-balance solution and analysis. Thermal Science, 2017, 21, 69-80.	1.1	12
44	Multiple integral-balance method: Basic idea and an example with Mullin's model of thermal grooving. Thermal Science, 2017, 21, 1555-1560.	1.1	21
45	Transient heat diffusion with a non-singular fading memory: From the Cattaneo constitutive equation with Jeffrey's Kernel to the Caputo-Fabrizio time-fractional derivative. Thermal Science, 2016, 20, 757-762.	1.1	230
46	Geological evolution of the marine selenium cycle: Insights from the bulk shale $^{82}/^{76}\text{Se}$ record and isotope mass balance modeling. Earth and Planetary Science Letters, 2016, 441, 178-187.	4.4	23
47	Special issue on advances in fractional dynamics in mechanical engineering. Advances in Mechanical Engineering, 2016, 8, 168781401665409.	1.6	3
48	Glycerol bioconversion in unconventional magnetically assisted bioreactor seeking whole cell biocatalyst (intracellular lipase) production. Chemical Engineering Research and Design, 2016, 111, 243-252.	5.6	9
49	A unified nonlinear fractional equation of the diffusion-controlled surfactant adsorption: Reappraisal and new solution of the Ward's "Tordai problem. Journal of King Saud University - Science, 2016, 28, 7-13.	3.5	10
50	Integral solutions to transient nonlinear heat (mass) diffusion with a power-law diffusivity: a semi-infinite medium with fixed boundary conditions. Heat and Mass Transfer, 2016, 52, 635-655.	2.1	33
51	Nonlinear dynamics for local fractional Burgers's equation arising in fractal flow. Nonlinear Dynamics, 2016, 84, 3-7.	5.2	70
52	An alternative integral-balance solutions to transient diffusion of heat (mass) by time-fractional semi-derivatives and semi-integrals: Fixed boundary conditions. Thermal Science, 2016, 20, 1867-1878.	1.1	2
53	Approximate Solutions to Time-fractional Models by Integral-balance Approach. , 2015, , 78-109.		12
54	An approximate analytical (integral-balance) solution to a nonlinear heat diffusion equation. Thermal Science, 2015, 19, 723-733.	1.1	26

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55	Advances on Integrodifferential Equations and Transforms. Abstract and Applied Analysis, 2015, 2015, 1-2.	0.7	1
56	Diffusion models of heat and momentum with weakly singular kernels in the fading memories: How the integral-balance method can be applied?. Thermal Science, 2015, 19, 947-957.	1.1	17
57	Modelling Fractal Waves on Shallow Water Surfaces via Local Fractional Korteweg-de Vries Equation. Abstract and Applied Analysis, 2014, 2014, 1-10.	0.7	24
58	Silver recovery from spent photographic solutions by a magnetically assisted particle bed. Chemical Engineering and Processing: Process Intensification, 2013, 71, 83-96.	3.6	17
59	Redistribution of mass from a thin interlayer between two thick dissimilar media: 1-D diffusion problem with a non-local condition. Thermal Science, 2013, 17, 651-664.	1.1	4
60	A note on the integral approach to non-linear heat conduction with Jeffrey's fading memory. Thermal Science, 2013, 17, 733-737.	1.1	16
61	Thermal impedance estimations by semi-derivatives and semi-integrals: 1-D semi-infinite cases. Thermal Science, 2013, 17, 581-589.	1.1	11
62	Lifetime of a soluble solid particle in a stagnant medium: approximate analytical modelling involving fractional (half-time) derivatives. Polish Journal of Chemical Technology, 2013, 15, 74-77.	0.5	1
63	Thermal impedance at the interface of contacting bodies: 1-D examples solved by semi-derivatives. Thermal Science, 2012, 16, 623-627.	1.1	4
64	Straightforward dimensionless experimental formulae for flash point of binary mixtures of two flammable components. Thermal Science, 2012, 16, 969-985.	1.1	2
65	The heat-balance integral: 1. How to calibrate the parabolic profile?. Comptes Rendus - Mecanique, 2012, 340, 485-492.	2.1	15
66	The heat-balance integral: 2. Parabolic profile with a variable exponent: The concept, analysis and numerical experiments. Comptes Rendus - Mecanique, 2012, 340, 493-500.	2.1	12
67	Magnetic field assisted fluidization – a unified approach. Part 9. Mechanical processing with emphasis on separations. Reviews in Chemical Engineering, 2012, 28, .	4.4	12
68	Integral-balance solution to the Stokes' first problem of a viscoelastic generalized second grade fluid. Thermal Science, 2012, 16, 395-410.	1.1	19
69	Approximate solutions to fractional subdiffusion equations. European Physical Journal: Special Topics, 2011, 193, 229-243.	2.6	68
70	Time to flashover of a vinyl based lining material: Cone calorimeter experiments. Thermal Science, 2011, 15, 785-792.	1.1	7
71	Practical data correlation of flashpoints of binary mixtures by a reciprocal function: The concept and numerical examples. Thermal Science, 2011, 15, 905-910.	1.1	9
72	Starting radial subdiffusion from a central point through a diverging medium (a sphere): Heat-balance integral method. Thermal Science, 2011, 15, 5-20.	1.1	17

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73	Magnetic field assisted fluidization â€“ a unified approach. Part 8. Mass transfer: magnetically assisted bioprocesses. Reviews in Chemical Engineering, 2010, 26, .	4.4	41
74	Heat-balance integral to fractional (half-time) heat diffusion sub-model. Thermal Science, 2010, 14, 291-316.	1.1	59
75	Magnetic Field Assisted Fluidization - A Unified Approach Part 7. Mass Transfer: Chemical reactors, basic studies and practical implementations thereof. Reviews in Chemical Engineering, 2009, 25, 1-254.	4.4	28
76	Magnetically assisted gasâ€“solid fluidization in a tapered vessel: Part I. Magnetization-LAST mode. Particuology, 2009, 7, 26-34.	3.6	17
77	Magnetically assisted gasâ€“solid fluidization in a tapered vessel: Part II. Particuology, 2009, 7, 183-192.	3.6	9
78	The heat-balance integral method by a parabolic profile with unspecified exponent: Analysis and benchmark exercises. Thermal Science, 2009, 13, 27-48.	1.1	49
79	Research note on a parabolic heat-balance integral method with unspecified exponent: An entropy generation approach in optimal profile determination. Thermal Science, 2009, 13, 49-59.	1.1	13
80	Magnetically assisted gasâ€“solid fluidization in a tapered vessel: First report with observations and dimensional analysis. Canadian Journal of Chemical Engineering, 2008, 86, 470-492.	1.7	14
81	MAGNETIC FIELD ASSISTED FLUIDIZATION â€“ A UNIFIED APPROACH Part 6. Topics of Gas-Liquid-Solid Fluidized Bed Hydrodynamics. Reviews in Chemical Engineering, 2007, 23, .	4.4	18
82	An overview of separation by magnetically stabilized beds: State-of-the-art and potential applications. Particuology: Science and Technology of Particles, 2007, 5, 11-18.	0.4	41
83	Magnetically stabilized bed dust filtersâ€”Analysis through variable length scale approach. Particuology: Science and Technology of Particles, 2007, 5, 121-129.	0.4	10
84	Magnetic field assisted fluidizationâ€”Dimensional analysis addressing the physical basis. Particuology: Science and Technology of Particles, 2007, 5, 103-110.	0.4	22
85	PHYSICAL AND MATHEMATICAL MODELS OF BIO-OIL COMBUSTION. , 2007, 17, 731-755.		5
86	An inverse Stefan problem relevant to boilover: Heat balance integral solutions and analysis. Thermal Science, 2007, 11, 141-160.	1.1	24
87	MAGNETIC FIELD ASSISTED FLUIDIZATION â€“ A UNIFIED APPROACH PART 5. A HYDRODYNAMIC TREATISE ON LIQUID-SOLID FLUIDIZED BEDS. Reviews in Chemical Engineering, 2006, 22, .	4.4	32
88	Scaling of permeabilities and friction factors of homogeneously expanding gas-solids fluidized beds: Geldartâ€™s A powders and magnetically stabilized beds. Thermal Science, 2006, 10, 19-44.	1.1	10
89	External loop airlift with magnetically controlled liquid circulation. Powder Technology, 2005, 149, 180-194.	4.2	13
90	External-loop airlift magnetically stabilized bedâ€”minimum stabilization and fluidization conditions. Particuology: Science and Technology of Particles, 2005, 3, 197-203.	0.4	4

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91	Friction factors and internal flow length scales of gas-solid magnetically stabilized beds in axial fields: Scaling and applications to bed-to-surface heat transfer. <i>Thermal Science</i> , 2005, 9, 73-98.	1.1	5
92	Accidental burning of a fuel layer on a waterbed: a scale analysis of the models predicting the pre-boilover time and tests to published data. <i>International Journal of Thermal Sciences</i> , 2004, 43, 221-239.	4.9	14
93	MAGNETIC FIELD ASSISTED FLUIDIZATION - A UNIFIED APPROACH Part 4. Moving Gas-Fluidized Beds. <i>Reviews in Chemical Engineering</i> , 2004, 20, .	4.4	14
94	MAGNETIC FIELD ASSISTED FLUIDIZATION â€œ A UNIFIED APPROACH Part 2. Solids Batch Gas-Fluidized Beds: Versions and Rheology.. <i>Reviews in Chemical Engineering</i> , 2003, 19, 1-132.	4.4	34
95	MAGNETIC FIELD ASSISTED FLUIDIZATION â€œ A UNIFIED APPROACH Part 3: Heat Transfer in Gas-Solid Fluidized Beds - a critical re-evaluation of the results. <i>Reviews in Chemical Engineering</i> , 2003, 19, .	4.4	21
96	MAGNETIC FIELD ASSISTED FLUIDIZATION â€œ A UNIFIED APPROACH Part 1. Fundamentals and relevant hydrodynamics of gas-fluidized beds (batch solids mode). <i>Reviews in Chemical Engineering</i> , 2002, 18, .	4.4	56
97	MAGNETIC FIELD EFFECT ON HEAT TRANSFER BETWEEN GAS-FLUIDIZED FERROMAGNETIC PARTICLE BEDS AND IMMERSSED SURFACES: RE-EXAMINATION OF THE RESULTS. , 2000, , .		1
98	Fluidization of ferromagnetic particles in a magnetic field Part 2: Field effects on preliminarily gas fluidized bed. <i>Powder Technology</i> , 1998, 97, 35-44.	4.2	56
99	Rheology of Magnetizable Powders Related to the Mechanics of Magnetically Stabilized Beds (gas-solid systems). , 1998, , 133-134.		0
100	Rheological behavior of fermentation broths in antibiotic industry. <i>Applied Biochemistry and Biotechnology</i> , 1997, 68, 187-206.	2.9	9
101	Fluidization of ferromagnetic particles in a magnetic field Part 1: The effect of field line orientation on bed stability. <i>Powder Technology</i> , 1996, 87, 59-66.	4.2	80
102	Performance of a magnetically stabilized bed reactor with immobilized yeast cells. <i>Applied Biochemistry and Biotechnology</i> , 1996, 59, 187-198.	2.9	49
103	Non-porous magnetic supports for cell immobilization. <i>Journal of Bioscience and Bioengineering</i> , 1991, 71, 114-117.	0.9	30
104	Fluidization of beds of ferromagnetic particles in a transverse magnetic field. <i>Powder Technology</i> , 1990, 62, 1-11.	4.2	45
105	Behaviour of fluidized beds of ferromagnetic particles in an axial magnetic field. <i>Powder Technology</i> , 1990, 61, 103-118.	4.2	58
106	On a new approach to distributions with variable transmuting parameter: The concept and examples with emerging problems. <i>Å°letiÅ°im, Sosyoloji Ve Tarih AraÅ°tırmalarÅ± Dergisi</i> , 0, , .	1.8	1