

# Tatiana Romanova

## List of Publications by Year in descending order

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55  
papers

1,032  
citations

331259

21  
h-index

433756

31  
g-index

56  
all docs

56  
docs citations

56  
times ranked

363  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mathematical model and efficient algorithms for object packing problem. Computational Geometry: Theory and Applications, 2010, 43, 535-553.	0.3	118
2	Quasi-phi-functions and optimal packing of ellipses. Journal of Global Optimization, 2016, 65, 283-307.	1.1	62
3	Double jeopardy—drug and sex risks among Russian women who inject drugs: initial feasibility and efficacy results of a small randomized controlled trial. Substance Abuse Treatment, Prevention, and Policy, 2012, 7, 1.	1.0	61
4	Tools of mathematical modeling of arbitrary object packing problems. Annals of Operations Research, 2010, 179, 343-368.	2.6	56
5	Packing of concave polyhedra with continuous rotations using nonlinear optimisation. European Journal of Operational Research, 2018, 268, 37-53.	3.5	56
6	Cutting and packing problems for irregular objects with continuous rotations: mathematical modelling and non-linear optimization. Journal of the Operational Research Society, 2016, 67, 786-800.	2.1	41
7	On the global minimum in a balanced circular packing problem. Optimization Letters, 2016, 10, 1347-1360.	0.9	35
8	Optimized Object Packings Using Quasi-Phi-Functions. Springer Optimization and Its Applications, 2015, , 265-293.	0.6	35
9	Optimal layout of ellipses and its application for additive manufacturing. International Journal of Production Research, 2021, 59, 560-575.	4.9	31
10	Optimal clustering of a pair of irregular objects. Journal of Global Optimization, 2015, 61, 497-524.	1.1	30
11	Mathematical Models of Placement Optimisation: Two- and Three-Dimensional Problems and Applications. Springer Optimization and Its Applications, 2012, , 363-388.	0.6	29
12	Mathematical Modeling of Interactions of Primary Geometric 3D Objects. Cybernetics and Systems Analysis, 2005, 41, 332-342.	0.4	28
13	Packing ellipsoids in an optimized cylinder. European Journal of Operational Research, 2020, 285, 429-443.	3.5	28
14	Phi-Functions for 2D Objects Formed by Line Segments and Circular Arcs. Advances in Operations Research, 2012, 2012, 1-26.	0.2	27
15	Balance Layout Problem for 3D-Objects: Mathematical Model and Solution Methods. Cybernetics and Systems Analysis, 2015, 51, 556-565.	0.4	27
16	Optimized Filling of a Given Cuboid with Spherical Powders for Additive Manufacturing. Journal of the Operations Research Society of China, 2021, 9, 853-868.	0.9	27
17	Packing ellipses in an optimized rectangular container. Wireless Networks, 2020, 26, 4869-4879.	2.0	25
18	Covering a polygonal region by rectangles. Computational Optimization and Applications, 2011, 48, 675-695.	0.9	24

#	ARTICLE	IF	CITATIONS
19	Placement Problems for Irregular Objects: Mathematical Modeling, Optimization and Applications. Springer Optimization and Its Applications, 2017, , 521-559.	0.6	23
20	Packing ellipses in an optimized convex polygon. Journal of Global Optimization, 2019, 75, 495-522.	1.1	22
21	Optimized Packings in Space Engineering Applications: Part I. Springer Optimization and Its Applications, 2019, , 395-437.	0.6	21
22	Sparsest balanced packing of irregular 3D objects in a cylindrical container. European Journal of Operational Research, 2021, 291, 84-100.	3.5	20
23	Optimized packing multidimensional hyperspheres: a unified approach. Mathematical Biosciences and Engineering, 2020, 17, 6601-6630.	1.0	19
24	Sparsest packing of two-dimensional objects. International Journal of Production Research, 2021, 59, 3900-3915.	4.9	18
25	Cutting Irregular Objects from the Rectangular Metal Sheet. Advances in Intelligent Systems and Computing, 2020, , 150-157.	0.5	16
26	Balance Layout Problems: Mathematical Modeling and Nonlinear Optimization. Springer Optimization and Its Applications, 2016, , 369-400.	0.6	16
27	Parallel Computing Technologies for Solving Optimization Problems of Geometric Design. Cybernetics and Systems Analysis, 2019, 55, 894-904.	0.4	14
28	Packing Oblique 3D Objects. Mathematics, 2020, 8, 1130.	1.1	12
29	An Optimized Covering Spheroids by Spheres. Applied Sciences (Switzerland), 2020, 10, 1846.	1.3	10
30	Optimized Packing Clusters of Objects in a Rectangular Container. Mathematical Problems in Engineering, 2019, 2019, 1-12.	0.6	8
31	3D Irregular Packing in an Optimized Cuboid Container. IFAC-PapersOnLine, 2019, 52, 2014-2019.	0.5	8
32	Amplification of Heat Transfer by Shock Waves for Thermal Energy Method. Lecture Notes in Networks and Systems, 2021, , 577-587.	0.5	8
33	Decomposition Algorithm for Irregular Placement Problems. Advances in Intelligent Systems and Computing, 2020, , 214-221.	0.5	8
34	Circular Layout in Thermal Deburring. Advances in Intelligent Systems and Computing, 2021, , 111-120.	0.5	8
35	Construction of a $\hat{I}_1$ -function for two convex polytopes. Applicationes Mathematicae, 2002, 29, 199-218.	0.1	8
36	Optimal Packing in Additive Manufacturing. IFAC-PapersOnLine, 2019, 52, 2758-2763.	0.5	6

#	ARTICLE	IF	CITATIONS
37	Balance Layout Problem with the Optimized Distances Between Objects. EAI/Springer Innovations in Communication and Computing, 2020, , 85-93.	0.9	6
38	Lagrangian Approach to Modeling Placement Conditions in Optimized Packing Problems. Mobile Networks and Applications, 2020, 25, 2126-2133.	2.2	5
39	Packing Convex 3D Objects with Special Geometric and Balancing Conditions. Advances in Intelligent Systems and Computing, 2020, , 273-281.	0.5	5
40	Optimal Packing Problems: From Knapsack Problem to Open Dimension Problem. Advances in Intelligent Systems and Computing, 2020, , 671-678.	0.5	5
41	Sparse layout of irregular 3D clusters. Journal of the Operational Research Society, 2023, 74, 351-361.	2.1	5
42	Balanced Circular Packing Problems with Distance Constraints. Computation, 2022, 10, 113.	1.0	5
43	Optimization of packing polyhedra in spherical and cylindrical containers. Eastern-European Journal of Enterprise Technologies, 2016, 1, 39.	0.3	4
44	Interval estimation of alternatives in decision-making problems. Cybernetics and Systems Analysis, 2009, 45, 253-262.	0.4	2
45	Mathematical modeling of distance constraints on two-dimensional $\bar{H}$ -objects. Cybernetics and Systems Analysis, 2012, 48, 330-334.	0.4	2
46	Optimized Packings in Analysis of 3D Nanocomposites with Inclusion Systems. , 2020, , .		2
47	Balance Packing Problem of Cuboids in an Optimized Cylindrical Container. , 2019, , .		1
48	Modeling Nanocomposites with Ellipsoidal and Conical Inclusions by Optimized Packing. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2021, , 201-210.	0.2	1
49	Knowledge representation in an automatic programming system and solution of $E_k(R^2)$ location problems. Cybernetics and Systems Analysis, 1992, 27, 661-669.	0.4	0
50	Packing Irregular Polygons using Quasi Phi-functions. , 2020, , .		0
51	Modeling of Interaction of the n-D Spheres within Interval Spaces. Telecommunications and Radio Engineering (English Translation of Elektrosvyaz and Radiotekhnika), 2007, 66, 273-281.	0.2	0
52	Layout problems for arc objects in convex domains. Journal of Mechanical Engineering, 2016, 19, 43-60.	0.3	0
53	Optimized Layout of Spherical Objects in a Polyhedral Domain. Cybernetics and Computer Technologies, 2020, , 39-46.	0.0	0
54	Optimized Packing of Object Clusters with Balancing Conditions. EAI/Springer Innovations in Communication and Computing, 2020, , 95-108.	0.9	0

#	ARTICLE	IF	CITATIONS
55	Optimized designing spherical void structures in 3D domains. , 2022, , 331-346.		0