

Yuriy Stoyan

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

785
citations

393982

19
h-index

500791

28
g-index

40
all docs

40
docs citations

40
times ranked

287
citing authors

#	ARTICLE	IF	CITATIONS
1	A mathematical model and a solution method for the problem of placing various-sized circles into a strip. <i>European Journal of Operational Research</i> , 2004, 156, 590-600.	3.5	64
2	Quasi-phi-functions and optimal packing of ellipses. <i>Journal of Global Optimization</i> , 2016, 65, 283-307.	1.1	62
3	Tools of mathematical modeling of arbitrary object packing problems. <i>Annals of Operations Research</i> , 2010, 179, 343-368.	2.6	56
4	Mathematical model and method of searching for a local extremum for the non-convex oriented polygons allocation problem. <i>European Journal of Operational Research</i> , 1996, 92, 193-210.	3.5	43
5	Cutting and packing problems for irregular objects with continuous rotations: mathematical modelling and non-linear optimization. <i>Journal of the Operational Research Society</i> , 2016, 67, 786-800.	2.1	41
6	Optimized Object Packings Using Quasi-Phi-Functions. <i>Springer Optimization and Its Applications</i> , 2015, , 265-293.	0.6	35
7	Covering a compact polygonal set by identical circles. <i>Computational Optimization and Applications</i> , 2010, 46, 75-92.	0.9	30
8	Optimal clustering of a pair of irregular objects. <i>Journal of Global Optimization</i> , 2015, 61, 497-524.	1.1	30
9	Mathematical Modeling of Interactions of Primary Geometric 3D Objects. <i>Cybernetics and Systems Analysis</i> , 2005, 41, 332-342.	0.4	28
10	Phi-Functions for 2D Objects Formed by Line Segments and Circular Arcs. <i>Advances in Operations Research</i> , 2012, 2012, 1-26.	0.2	27
11	Solving an optimization packing problem of circles and non-convex polygons with rotations into a multiply connected region. <i>Journal of the Operational Research Society</i> , 2012, 63, 379-391.	2.1	26
12	Packing cylinders and rectangular parallelepipeds with distances between them into a given region. <i>European Journal of Operational Research</i> , 2009, 197, 446-455.	3.5	25
13	Packing equal circles into a circle with circular prohibited areas. <i>International Journal of Computer Mathematics</i> , 2012, 89, 1355-1369.	1.0	25
14	Covering a polygonal region by rectangles. <i>Computational Optimization and Applications</i> , 2011, 48, 675-695.	0.9	24
15	Packing unequal circles into a strip of minimal length with a jump algorithm. <i>Optimization Letters</i> , 2014, 8, 949-970.	0.9	24
16	Packing Unequal Spheres into Various Containers. <i>Cybernetics and Systems Analysis</i> , 2016, 52, 419-426.	0.4	23
17	Packing of convex polytopes into a parallelepiped. <i>Optimization</i> , 2005, 54, 215-235.	1.0	22
18	Optimized Packings in Space Engineering Applications: Part I. <i>Springer Optimization and Its Applications</i> , 2019, , 395-437.	0.6	21

#	ARTICLE	IF	CITATIONS
19	Packing congruent hyperspheres into a hypersphere. <i>Journal of Global Optimization</i> , 2012, 52, 855-868.	1.1	19
20	Optimized packing multidimensional hyperspheres: a unified approach. <i>Mathematical Biosciences and Engineering</i> , 2020, 17, 6601-6630.	1.0	19
21	Mathematical modeling of the interaction of non-oriented convex polytopes. <i>Cybernetics and Systems Analysis</i> , 2012, 48, 837-845.	0.4	17
22	Balance Layout Problems: Mathematical Modeling and Nonlinear Optimization. <i>Springer Optimization and Its Applications</i> , 2016, , 369-400.	0.6	16
23	Optimization of 3D Objects Layout into a Multiply Connected Domain with Account for Shortest Distances. <i>Cybernetics and Systems Analysis</i> , 2014, 50, 374-385.	0.4	15
24	Modeling Close Packing of 3D Objects. <i>Cybernetics and Systems Analysis</i> , 2016, 52, 296-304.	0.4	15
25	Packing identical spheres into a cylinder. <i>International Transactions in Operational Research</i> , 2010, 17, 51-70.	1.8	14
26	Packing congruent spheres into a multi-connected polyhedral domain. <i>International Transactions in Operational Research</i> , 2013, 20, 79-99.	1.8	13
27	Quadratic optimization on combinatorial sets in R^n . <i>Cybernetics and Systems Analysis</i> , 1992, 27, 561-567.	0.4	12
28	A method of optimal lattice packing of congruent oriented polygons in the plane. <i>European Journal of Operational Research</i> , 2000, 124, 204-216.	3.5	9
29	Covering a convex 3D polytope by a minimal number of congruent spheres. <i>International Journal of Computer Mathematics</i> , 2014, 91, 2010-2020.	1.0	9
30	Regular packing of congruent polygons on the rectangular sheet. <i>European Journal of Operational Research</i> , 1999, 113, 653-675.	3.5	6
31	Optimized packing unequal spheres into a multiconnected domain: mixed-integer non-linear programming approach. <i>International Journal of Computer Mathematics: Computer Systems Theory</i> , 2021, 6, 94-111.	0.7	5
32	The minimization method for some permutation functionals. <i>Information Processing Letters</i> , 1979, 8, 110-111.	0.4	4
33	Modeling of a granular medium by computer methods. <i>Soviet Mining Science</i> , 1989, 25, 101-106.	0.0	2
34	Mathematical modeling of distance constraints on two-dimensional \mathbb{H}^n -objects. <i>Cybernetics and Systems Analysis</i> , 2012, 48, 330-334.	0.4	2
35	An approach to the problems of routing optimization in the regions of intricate shape. <i>Information Processing Letters</i> , 1981, 13, 39-43.	0.4	1
36	Multistage Approach to Solving the Optimization Problem of Packing Nonconvex Polyhedra. <i>Cybernetics and Systems Analysis</i> , 2020, 56, 259-268.	0.4	1

#	ARTICLE	IF	CITATIONS
37	Rational load arrangement, in the frequency sense, on thin slabs. Soviet Applied Mechanics, 1980, 16, 229-233.	0.0	0
38	A basis of equivalence classes of paths in optimization problems. Cybernetics and Systems Analysis, 1983, 18, 459-463.	0.0	0
39	Modelling of the space of paths in problems of constructing optimal trajectories. USSR Computational Mathematics and Mathematical Physics, 1983, 23, 50-55.	0.0	0
40	Decomposition algorithm for geometric objects in 2D packing and cutting problems. Cybernetics and Systems Analysis, 2011, 47, 854-862.	0.4	0