Michal Krizek

List of Publications by Year
in descending order

40 papers	553 citations	623734 14 h-index	642732 23 g-index
41 all docs	41 docs citations	41 times ranked	205 citing authors

#	Article	IF	Citations
1	On the Maximum Angle Condition for Linear Tetrahedral Elements. SIAM Journal on Numerical Analysis, 1992, 29, 513-520.	2.3	122
2	On the equivalence of regularity criteria for triangular and tetrahedral finite element partitions. Computers and Mathematics With Applications, 2008, 55, 2227-2233.	2.7	44
3	The maximum angle condition is not necessary for convergence of the finite element method. Numerische Mathematik, 2012, 120, 79-88.	1.9	35
4	Second-order optimality conditions for nondominated solutions of multiobjective programming with C 1,1 data. Applications of Mathematics, 2000, 45, 381-397.	0.9	33
5	Dissection of the path-simplex in <mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.co.	0.9	33
6	On a Connection of Number Theory with Graph Theory. Czechoslovak Mathematical Journal, 2004, 54, 465-485.	0.3	30
7	How to generate local refinements of unstructured tetrahedral meshes satisfying a regularity ball condition. Numerical Methods for Partial Differential Equations, 1997, 13, 201-214.	3.6	26
8	On the equivalence of ball conditions for simplicial finite elements in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mstyle mathvariant="bold"><mml:mi>R</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mi>d</mml:mi></mml:mrow></mml:msup><mml:mo>, Applied Mathematics Letters, 2009, 22, 1210-1212.	2.7	22
9	The second order optimality conditions for nonlinear mathematical programming with C 1,1 data. Applications of Mathematics, 1997, 42, 311-320.	0.9	19
10	Why has nature invented three stop codons of DNA and only one start codon?. Journal of Theoretical Biology, 2012, 304, 183-187.	1.7	18
11	There Is No Face-to-Face Partition of R5 into Acute Simplices. Discrete and Computational Geometry, 2006, 36, 381-390.	0.6	17
12	Generalization of the ZlÃ¡mal condition for simplicial finite elements in â„•d. Applications of Mathematics, 2011, 56, 417-424.	0.9	17
13	Red refinements of simplices into congruent subsimplices. Computers and Mathematics With Applications, 2014, 67, 2199-2204.	2.7	16
14	Simplicial Partitions with Applications to the Finite Element Method. Springer Monographs in Mathematics, 2020, , .	0.2	15
15	Finite element analysis of varitional crimes for a quasilinear elliptic problem in 3D. Numerische Mathematik, 2000, 84, 549-576.	1.9	14
16	Simplicial finite elements in higher dimensions. Applications of Mathematics, 2007, 52, 251-265.	0.9	14
17	Nonobtuse tetrahedral partitions. Numerical Methods for Partial Differential Equations, 2000, 16, 327-334.	3.6	9
18	The structure of digraphs associated with the congruence x k â‰¡ y (mod n). Czechoslovak Mathematical Journal, 2011, 61, 337-358.	0.3	8

#	Article	IF	Citations
19	Nonobtuse Tetrahedral Partitions that Refine Locally Towards Fichera-Like Corners. Applications of Mathematics, 2005, 50, 569-581.	0.9	7
20	On angle conditions in the finite element nethod. BoletÃn De La Sociedad EspaÃ‘ola De MatemÃ¢tica Aplicada, 2011, 56, 81-95.	0.9	7
21	On Higher Order Pyramidal Finite Elements. Advances in Applied Mathematics and Mechanics, 2011, 3, 131-140.	1.2	6
22	PARADOXES IN NUMERICAL CALCULATIONS. Neural Network World, 2016, 26, 317-330.	0.8	6
23	On Exact Results in the Finite Element Method. Applications of Mathematics, 2001, 46, 467-478.	0.9	5
24	Nonobtuse local tetrahedral refinements towards a polygonal face/interface. Applied Mathematics Letters, 2011, 24, 817-821.	2.7	5
25	On the existence of strongly regular families of triangulations for domains with a piecewise smooth boundary. Applications of Mathematics, 1999, 44, 33-42.	0.9	4
26	Local nonobtuse tetrahedral refinements around an edge. Applied Mathematics and Computation, 2013, 219, 7236-7240.	2.2	4
27	There are only two nonobtuse binary triangulations of the unit n -cube. Computational Geometry: Theory and Applications, 2013, 46, 286-297.	0.5	3
28	What is the smallest possible constant in CÃ©aâ€™s lemma?. Applications of Mathematics, 2006, 51, 129-144.	0.9	2
29	Manifestations of dark energy in the dynamics of the Solar system. Proceedings of the International Astronomical Union, 2009, 5, 410-412.	0.0	2
30	Possible distribution of mass inside a black hole. Is there any upper limit on mass density?. Astrophysics and Space Science, 2019, 364, 1.	1.4	2
31	Why Masses of Binary Black Hole Mergers Are Overestimated?. Galaxies, 2022, 10, 52.	3.0	2
32	Anthropic Principle and the Hubble-LemaÃ®tre Constant. Galaxies, 2022, 10, 71.	3.0	2
33	Tight bounds on angle sums of nonobtuse simplices. Applied Mathematics and Computation, 2015, 267, 397-408.	2.2	1
34	Factorization of cp-rank-3 completely positive matrices. Czechoslovak Mathematical Journal, 2016, 66, 955-970.	0.3	1
35	Duality of isosceles tetrahedra. Journal of Geometry, 2019, 110, 1.	0.4	1
36	Numerical Integration over Pyramids. Advances in Applied Mathematics and Mechanics, 2013, 5, 309-320.	1.2	1

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37	A Posteriori Error Estimates for Axisymmetric and Nonlinear Problems. Advances in Computational Mathematics, 2001, 15, 219-236.	1.6	0
38	Seven decades of professor Karel Segeth. Applications of Mathematics, 2013, 58, 125-128.	0.9	0
39	The uniqueness of the solution of a nonlinear heat conduction problem under HÃ¶lderâ€™s continuity condition. Applied Mathematics Letters, 2020, 103, 106214.	2.7	0
40	Relativistic perihelion shift of Mercury revisited. Astronomische Nachrichten, 0, , .	1.2	0