

Yves Renard

List of Publications by Year in descending order

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331259

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docs citations

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821
citing authors

#	ARTICLE	IF	CITATIONS
1	High-order extended finite element method for cracked domains. <i>International Journal for Numerical Methods in Engineering</i> , 2005, 64, 354-381.	1.5	361
2	A New Fictitious Domain Approach Inspired by the Extended Finite Element Method. <i>SIAM Journal on Numerical Analysis</i> , 2009, 47, 1474-1499.	1.1	83
3	Crack tip enrichment in the XFEM using a cutoff function. <i>International Journal for Numerical Methods in Engineering</i> , 2008, 75, 629-646.	1.5	79
4	Hybrid finite element methods for the Signorini problem. <i>Mathematics of Computation</i> , 2003, 72, 1117-1146.	1.1	75
5	A stabilized Lagrange multiplier method for the finite element approximation of contact problems in elastostatics. <i>Numerische Mathematik</i> , 2010, 115, 101-129.	0.9	70
6	Mass redistribution method for finite element contact problems in elastodynamics. <i>European Journal of Mechanics, A/Solids</i> , 2008, 27, 918-932.	2.1	66
7	Hybrid discretization of the Signorini problem with Coulomb friction. Theoretical aspects and comparison of some numerical solvers. <i>Applied Numerical Mathematics</i> , 2006, 56, 163-192.	1.2	58
8	Symmetric and non-symmetric variants of Nitsche's method for contact problems in elasticity: theory and numerical experiments. <i>Mathematics of Computation</i> , 2014, 84, 1089-1112.	1.1	58
9	Optimal convergence analysis for the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2011, 86, 528-548.	1.5	49
10	Fixed point strategies for elastostatic frictional contact problems. <i>Mathematical Methods in the Applied Sciences</i> , 2008, 31, 415-441.	1.2	41
11	Generalized Newton's methods for the approximation and resolution of frictional contact problems in elasticity. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 256, 38-55.	3.4	41
12	A stabilized Lagrange multiplier method for the enriched finite-element approximation of contact problems of cracked elastic bodies. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2012, 46, 813-839.	0.8	35
13	GetFEM. <i>ACM Transactions on Mathematical Software</i> , 2021, 47, 1-31.	1.6	34
14	On the discretization of contact problems in elastodynamics. , 2006, , 31-38.		32
15	An Overview of Recent Results on Nitsche's Method for Contact Problems. <i>Lecture Notes in Computational Science and Engineering</i> , 2017, , 93-141.	0.1	32
16	An unbiased Nitsche's formulation of large deformation frictional contact and self-contact. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 325, 265-288.	3.4	31
17	A Uniqueness Criterion for the Signorini Problem with Coulomb Friction. <i>SIAM Journal on Mathematical Analysis</i> , 2006, 38, 452-467.	0.9	30
18	eXtended finite element methods for thin cracked plates with Kirchhoff's Love theory. <i>International Journal for Numerical Methods in Engineering</i> , 2010, 84, 1115-1138.	1.5	27

#	ARTICLE	IF	CITATIONS
19	The singular dynamic method for constrained second order hyperbolic equations: Application to dynamic contact problems. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 906-923.	1.1	27
20	An Improved a Priori Error Analysis for Finite Element Approximations of Signorini's Problem. <i>SIAM Journal on Numerical Analysis</i> , 2012, 50, 2400-2419.	1.1	26
21	An Error Estimate for the Signorini Problem with Coulomb Friction Approximated by Finite Elements. <i>SIAM Journal on Numerical Analysis</i> , 2007, 45, 2012-2031.	1.1	23
22	An unconstrained integral approximation of large sliding frictional contact between deformable solids. <i>Computers and Structures</i> , 2015, 153, 75-90.	2.4	23
23	An unbiased Nitsche's approximation of the frictional contact between two elastic structures. <i>Numerische Mathematik</i> , 2018, 139, 593-631.	0.9	23
24	A Nitsche finite element method for dynamic contact: 1. Space semi-discretization and time-marching schemes. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2015, 49, 481-502.	0.8	22
25	Stress intensity factors computation for bending plates with extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2012, 91, 909-928.	1.5	21
26	A non-conformal eXtended Finite Element approach: Integral matching Xfem. <i>Applied Numerical Mathematics</i> , 2011, 61, 322-343.	1.2	20
27	Residual-based a posteriori error estimation for contact problems approximated by Nitsche's method. <i>IMA Journal of Numerical Analysis</i> , 2018, 38, 921-954.	1.5	20
28	Models and simulations of dynamic frictional contact of a beam. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1999, 177, 259-272.	3.4	19
29	A quasi-optimal convergence result for fracture mechanics with XFEM. <i>Comptes Rendus Mathematique</i> , 2006, 342, 527-532.	0.1	19
30	Spider XFEM, an extended finite element variant for partially unknown crack-tip displacement. <i>European Journal of Computational Mechanics</i> , 2008, 17, 625-636.	0.6	18
31	Local uniqueness and continuation of solutions for the discrete Coulomb friction problem in elastostatics. <i>Quarterly of Applied Mathematics</i> , 2005, 63, 553-573.	0.5	16
32	A fictitious domain method for frictionless contact problems in elasticity using Nitsche's method. <i>SMAI Journal of Computational Mathematics</i> , 0, 2, 19-50.	0.0	16
33	A Nitsche finite element method for dynamic contact: 2. Stability of the schemes and numerical experiments. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2015, 49, 503-528.	0.8	15
34	The eXtended finite element method for cracked hyperelastic materials: A convergence study. <i>International Journal for Numerical Methods in Engineering</i> , 2014, 100, 222-242.	1.5	13
35	A Reduced Basis Enrichment for the eXtended Finite Element Method. <i>Mathematical Modelling of Natural Phenomena</i> , 2009, 4, 88-105.	0.9	12
36	Convergence of mass redistribution method for the one-dimensional wave equation with a unilateral constraint at the boundary. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2014, 48, 1147-1169.	0.8	12

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37	On the dynamic sliding with friction of a rigid block and of an infinite elastic slab. <i>Physics of the Earth and Planetary Interiors</i> , 1996, 96, 15-23.	0.7	11
38	Singular elastostatic fields near the notch vertex of a Mooney-Rivlin hyperelastic body. <i>International Journal of Solids and Structures</i> , 2016, 80, 532-544.	1.3	11
39	A mixed formulation for the Signorini problem in nearly incompressible elasticity. <i>Applied Numerical Mathematics</i> , 2005, 54, 1-22.	1.2	10
40	A continuation problem for computing solutions of discretised evolution problems with application to plane quasi-static contact problems with friction. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 280, 222-262.	3.4	10
41	Surface perturbation of an elastodynamic contact problem with friction. <i>European Journal of Applied Mathematics</i> , 2003, 14, 465-483.	1.4	9
42	Comparison of two approaches for the discretization of elastodynamic contact problems. <i>Comptes Rendus Mathématique</i> , 2006, 342, 791-796.	0.1	9
43	A local projection stabilization of fictitious domain method for elliptic boundary value problems. <i>Applied Numerical Mathematics</i> , 2014, 76, 60-75.	1.2	9
44	A robust finite element redistribution approach for elastodynamic contact problems. <i>Applied Numerical Mathematics</i> , 2016, 103, 48-71.	1.2	9
45	Three-dimensional singular elastostatic fields in a cracked Neo-Hookean hyperelastic solid. <i>International Journal of Engineering Science</i> , 2018, 128, 1-11.	2.7	8
46	Nitsche-Based Finite Element Method for Contact with Coulomb Friction. <i>Lecture Notes in Computational Science and Engineering</i> , 2019, , 839-847.	0.1	8
47	Frictional self-contact problem of elastic rods. <i>Journal of King Saud University - Science</i> , 2020, 32, 828-835.	1.6	8
48	Numerical convergence and stability of mixed formulation with X-FEM cut-off. <i>European Journal of Computational Mechanics</i> , 2012, 21, 160-173.	0.6	7
49	Bifurcations in piecewise-smooth steady-state problems: abstract study and application to plane contact problems with friction. <i>Computational Mechanics</i> , 2015, 56, 39-62.	2.2	7
50	A Well-Posed Semi-Discretization of Elastodynamic Contact Problems with Friction. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2011, 64, 215-238.	0.5	6
51	A stabilized Lagrange multiplier method for the enriched finite-element approximation of Tresca contact problems of cracked elastic bodies. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 270, 178-200.	3.4	6
52	Nitsche method for contact with Coulomb friction: Existence results for the static and dynamic finite element formulations. <i>Journal of Computational and Applied Mathematics</i> , 2022, 416, 114557.	1.1	6
53	Vibro-impact of a plate on rigid obstacles: existence theorem, convergence of a scheme and numerical simulations. <i>IMA Journal of Numerical Analysis</i> , 2013, 33, 261-294.	1.5	5
54	Explicit Verlet time-integration for a Nitsche-based approximation of elastodynamic contact problems. <i>Advanced Modeling and Simulation in Engineering Sciences</i> , 2018, 5, .	0.7	5

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55	A uniqueness criterion for the Signorini problem with Coulomb friction. Lecture Notes in Applied and Computational Mechanics, 2006, , 161-169.	2.0	5
56	Numerical analysis of a one-dimensional elastodynamic model of dry friction and unilateral contact. Computer Methods in Applied Mechanics and Engineering, 2001, 190, 2031-2050.	3.4	4
57	A quasi-optimal a priori error estimate for the two-dimensional Signorini problem approximated by linear finite elements. Comptes Rendus Mathematique, 2012, 350, 325-328.	0.1	3
58	The singular elastostatic fields at the notch-tip of a compressible Ciarlet-Geymonat material. Engineering Fracture Mechanics, 2018, 199, 392-409.	2.0	3
59	A weighted finite element mass redistribution method for dynamic contact problems. Journal of Computational and Applied Mathematics, 2019, 345, 338-356.	1.1	3
60	A plane strain analysis of the elastostatic fields near the notch-tip of a Blatz-Ko material. Theoretical and Applied Fracture Mechanics, 2019, 103, 102309.	2.1	3
61	Singular perturbation approach to an elastic dry friction problem with non-monotone coefficient. Quarterly of Applied Mathematics, 2000, 58, 303-324.	0.5	3
62	Study of Some Optimal XFEM Type Methods. , 2007, , 27-38.		2
63	Some improvements of Xfem for cracked domains. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2007, , 171-184.	0.1	2
64	Shape optimization of a linearly elastic rolling structure under unilateral contact using Nitsche's method and cut finite elements. Computational Mechanics, 2022, 70, 205-224.	2.2	2
65	Perturbation singulière d'un problème de frottement sec non monotone. Comptes Rendus Mathematique, 1998, 326, 131-136.	0.5	1
66	The treatment of the locking phenomenon for a general class of variational inequalities. Journal of Computational and Applied Mathematics, 2004, 170, 121-143.	1.1	1
67	A numerical approach for modelling thin cracked plates with XFEM. ESAIM: Proceedings and Surveys, 2009, 27, 240-253.	0.4	1
68	An improvement within XFEM of the bonding between the enrichment area and the classical finite elements. European Journal of Computational Mechanics, 2010, 19, 177-187.	0.6	1
69	A method of piecewise-smooth numerical branching. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2017, 97, 815-827.	0.9	1
70	Multi-Scale Asymptotic Expansion for a Small Inclusion in Elastic Media. Journal of Elasticity, 2018, 131, 207-237.	0.9	1
71	The anti-plane shear elasto-static fields near a crack terminating at an isotropic hyperelastic bi-material interface. Mathematics and Mechanics of Solids, 2019, 24, 2914-2930.	1.5	1
72	Nitsche-based models for the unilateral contact of plates. ESAIM: Mathematical Modelling and Numerical Analysis, 2021, 55, S941-S967.	0.8	1

#	ARTICLE	IF	CITATIONS
73	A energy conserving approximation for elastodynamic contact problems. , 2006, , 323-323.		1
74	Local uniqueness results for the discrete friction problem. Lecture Notes in Applied and Computational Mechanics, 2006, , 129-136.	2.0	1
75	Une méthode d'éléments finis d'ordre supérieur optimale. European Journal of Computational Mechanics, 2006, 15, 233-244.	0.6	0
76	Energy conservative finite element semi-discretization for vibro-impacts of plates on rigid obstacles. ESAIM: Mathematical Modelling and Numerical Analysis, 2016, 50, 1585-1613.	0.8	0
77	A thick-point approximation of a small body embedded in an elastic medium: justification with an asymptotic analysis. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2021, 101, e202000170.	0.9	0