Elias Cueto

List of Publications by Year
in descending order

192 papers	4,791 citations	87723 38 h-index	114278 63 g-index
198 all docs	198 docs citations	198 times ranked	1950 citing authors

#	Article	IF	Citations
1	Thermodynamics-informed Graph Neural Networks. IEEE Transactions on Artificial Intelligence, 2024, , 1-1.	3.4	13
2	Digital twins that learn and correct themselves. International Journal for Numerical Methods in Engineering, 2022, 123, 3034-3044.	1.5	25
3	MORPH-DSLAM: Model Order Reduction for Physics-Based Deformable SLAM. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2022, 44, 7764-7777.	9.7	2
4	Engineering empowered by physics-based and data-driven hybrid models: A methodological overview. International Journal of Material Forming, 2022, 15, 1.	0.9	5
5	Crossing Scales: Data-Driven Determination of the Micro-scale Behavior of Polymers From Non-homogeneous Tests at the Continuum-Scale. Frontiers in Materials, 2022, 9, .	1.2	1
6	Spurious-free interpolations for non-intrusive PGD-based parametric solutions: Application to composites forming processes. International Journal of Material Forming, 2021, 14, 83-95.	0.9	8
7	From ROM of Electrochemistry to AI-Based Battery Digital and Hybrid Twin. Archives of Computational Methods in Engineering, 2021, 28, 979-1015.	6.0	41
8	Learning non-Markovian physics from data. Journal of Computational Physics, 2021, 428, 109982.	1.9	12
9	Structure-preserving neural networks. Journal of Computational Physics, 2021, 426, 109950.	1.9	25
10	Learning Physics from Data: A Thermodynamic Interpretation. Springer Proceedings in Mathematics and Statistics, 2021, , 276-297.	0.1	2
11	Learning data-driven reduced elastic and inelastic models of spot-welded patches. Mechanics and Industry, 2021, 22, 32.	0.5	5
12	A novel sparse reduced order formulation for modeling electromagnetic forces in electric motors. SN Applied Sciences, 2021, 3, 1.	1.5	7
13	Fast Computation of Multi-Parametric Electromagnetic Fields in Synchronous Machines by Using PGD-Based Fully Separated Representations. Energies, 2021, 14, 1454.	1.6	5
14	Empowering Advanced Driver-Assistance Systems from Topological Data Analysis. Mathematics, 2021, 9, 634.	1.1	9
15	Deep learning of thermodynamics-aware reduced-order models from data. Computer Methods in Applied Mechanics and Engineering, 2021, 379, 113763.	3.4	46
16	Empowering Materials Processing and Performance from Data and AI. Materials, 2021, 14, 4409.	1.3	1
17	Learning stable reduced-order models for hybrid twins. Data-Centric Engineering, 2021, 2, .	1.2	13
18	A separated representation involving multiple time scales within the Proper Generalized Decomposition framework. Advanced Modeling and Simulation in Engineering Sciences, 2021, 8, .	0.7	6

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19	Monitoring Weeder Robots and Anticipating Their Functioning by Using Advanced Topological Data Analysis. Frontiers in Artificial Intelligence, 2021, 4, 761123.	2.0	1
20	Virtual, Digital and Hybrid Twins: A New Paradigm in Data-Based Engineering and Engineered Data. Archives of Computational Methods in Engineering, 2020, 27, 105-134.	6.0	142
21	A novel sensitivity analysis on friction spot joining process performed on aluminumpolycarbonate sheets by simulation. International Journal of Material Forming, 2020, 13, 737-747.	0.9	1
22	Real‐time interaction of virtual and physical objects in mixed reality applications. International Journal for Numerical Methods in Engineering, 2020, 121, 3849-3868.	1.5	8
23	On the effective conductivity and the apparent viscosity of a thin rough polymer interface using PGD‐based separated representations. International Journal for Numerical Methods in Engineering, 2020, 121, 5256-5274.	1.5	4
24	Physically sound, self-learning digital twins for sloshing fluids. PLoS ONE, 2020, 15, e0234569.	1.1	16
25	Scientific Machine Learning for Coarse-Grained Constitutive Models. Procedia Manufacturing, 2020, 47, 693-695.	1.9	0
26	From Component Reduced Models to Reduced Modelling of Multi-Component Systems. Procedia Manufacturing, 2020, 47, 696-701.	1.9	1
27	A Data-Driven Learning Method for Constitutive Modeling: Application to Vascular Hyperelastic Soft Tissues. Materials, 2020, 13, 2319.	1.3	10
28	Nonlinear Regression Operating on Microstructures Described from Topological Data Analysis for the Real-Time Prediction of Effective Properties. Materials, 2020, 13, 2335.	1.3	12
29	Thermodynamically consistent data-driven computational mechanics. Continuum Mechanics and Thermodynamics, 2019, 31, 239-253.	1.4	65
30	Parametric numerical solutions of additive manufacturing processes. AIP Conference Proceedings, 2019, , .	0.3	0
31	Data-driven correction of models for deformable solids. AIP Conference Proceedings, 2019, , .	0.3	0
32	Learning Corrections for Hyperelastic Models From Data. Frontiers in Materials, 2019, 6, .	1.2	50
33	Advanced separated spatial representations for hardly separable domains. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 802-819.	3.4	12
34	Multiscale proper generalized decomposition based on the partition of unity. International Journal for Numerical Methods in Engineering, 2019, 120, 727-747.	1.5	4
35	A local multiple proper generalized decomposition based on the partition of unity. International Journal for Numerical Methods in Engineering, 2019, 120, 139-152.	1.5	4
36	An augmented reality platform for interactive aerodynamic design and analysis. International Journal for Numerical Methods in Engineering, 2019, 120, 125-138.	1.5	11

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37	Learning slosh dynamics by means of data. Computational Mechanics, 2019, 64, 511-523.	2.2	27
38	Some applications of compressed sensing in computational mechanics: model order reduction, manifold learning, data-driven applications and nonlinear dimensionality reduction. Computational Mechanics, 2019, 64, 1259-1271.	2.2	11
39	From linear to nonlinear PGD-based parametric structural dynamics. Comptes Rendus - Mecanique, 2019, 347, 445-454.	2.1	12
40	Data-Driven GENERIC Modeling of Poroviscoelastic Materials. Entropy, 2019, 21, 1165.	1.1	11
41	Incremental dynamic mode decomposition: A reduced-model learner operating at the low-data limit. Comptes Rendus - Mecanique, 2019, 347, 780-792.	2.1	10
42	Hybrid constitutive modeling: data-driven learning of corrections to plasticity models. International Journal of Material Forming, 2019, 12, 717-725.	0.9	56
43	A Manifold Learning Approach for Integrated Computational Materials Engineering. Archives of Computational Methods in Engineering, 2018, 25, 59-68.	6.0	47
44	kPCA-Based Parametric Solutions Within the PGD Framework. Archives of Computational Methods in Engineering, 2018, 25, 69-86.	6.0	34
45	On the physical interpretation of fractional diffusion. Comptes Rendus - Mecanique, 2018, 346, 581-589.	2.1	10
46	A Manifold Learning Approach to Data-Driven Computational Elasticity and Inelasticity. Archives of Computational Methods in Engineering, 2018, 25, 47-57.	6.0	153
47	Haptic simulation of tissue tearing during surgery. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2926.	1.0	12
48	A Multidimensional Data-Driven Sparse Identification Technique: The Sparse Proper Generalized Decomposition. Complexity, 2018, 2018, 1-11.	0.9	49
49	Improving the realism of mixed reality through physical simulation. , 2018, , .		0
50	Model and system learners, optimal process constructors and kinetic theory-based goal-oriented design: A new paradigm in materials and processes informatics. AIP Conference Proceedings, 2018, , .	0.3	0
51	Consistent data-driven computational mechanics. AIP Conference Proceedings, 2018, , .	0.3	3
52	Reduced order modeling for physically-based augmented reality. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 53-70.	3.4	14
53	Wavelet-based multiscale proper generalized decomposition. Comptes Rendus - Mecanique, 2018, 346, 485-500.	2.1	4
54	Data-driven in computational plasticity. AIP Conference Proceedings, 2018, , .	0.3	1

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55	Reduced-order modeling of soft robots. PLoS ONE, 2018, 13, e0192052.	1.1	30
56	Local proper generalized decomposition. International Journal for Numerical Methods in Engineering, 2017, 112, 1715-1732.	1.5	16
57	Model order reduction for real-time data assimilation through Extended Kalman Filters. Computer Methods in Applied Mechanics and Engineering, 2017, 326, 679-693.	3.4	24
58	Data-driven non-linear elasticity: constitutive manifold construction and problem discretization. Computational Mechanics, 2017, 60, 813-826.	2.2	101
59	A manifold learning approach to data-driven computational materials and processes. AIP Conference Proceedings, 2017, , .	0.3	1
60	A physically-based fractional diffusion model for semi-dilute suspensions of rods in a Newtonian fluid. Applied Mathematical Modelling, 2017, 51, 58-67.	2.2	7
61	Data-Driven Computational Plasticity. Procedia Engineering, 2017, 207, 209-214.	1.2	23
62	Local proper generalized decomposition. AIP Conference Proceedings, 2017, , .	0.3	0
63	<i>Vademecum</i>â€based GFEM (Vâ€GFEM): optimal enrichment for transient problems. International Journal for Numerical Methods in Engineering, 2016, 108, 971-989.	1.5	12
64	Computational vademecums for realâ€time simulation of surgical cutting in haptic environments. International Journal for Numerical Methods in Engineering, 2016, 108, 1230-1247.	1.5	23
65	On the use of model order reduction for simulating automated fibre placement processes. Advanced Modeling and Simulation in Engineering Sciences, 2016, 3, .	0.7	16
66	Proper Generalized Decompositions. SpringerBriefs in Applied Sciences and Technology, 2016, , .	0.2	20
67	In-plane/out-of-plane separated representations of updated Lagrangian descriptions of viscoplastic flow models in plate domains. Comptes Rendus - Mecanique, 2016, 344, 225-235.	2.1	3
68	Real-time simulation techniques for augmented learning in science and engineering. Visual Computer, 2016, 32, 1465-1479.	2.5	8
69	Computational Patient Avatars for Surgery Planning. Annals of Biomedical Engineering, 2016, 44, 35-45.	1.3	30
70	Smart-GFEM for welding simulation. AIP Conference Proceedings, 2016, , .	0.3	0
71	Fluid-Long Fiber Interaction Based on a Second Gradient Theory. Key Engineering Materials, 2015, 651-653, 331-337.	0.4	0
72	Effect of the separated approximation of input data in the accuracy of the resulting PGD solution. Advanced Modeling and Simulation in Engineering Sciences, 2015, 2, .	0.7	9

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73	Towards a pancreatic surgery simulator based on model order reduction. Advanced Modeling and Simulation in Engineering Sciences, 2015, 2, .	0.7	10
74	An error estimator for real-time simulators based on model order reduction. Advanced Modeling and Simulation in Engineering Sciences, 2015, 2, .	0.7	17
75	A Second-Gradient Theory of Dilute Suspensions of Flexible Rods in a Newtonian Fluid. Archives of Computational Methods in Engineering, 2015, 22, 511-527.	6.0	18
76	Kinetic Theory Modeling and Efficient Numerical Simulation of Gene Regulatory Networks Based on Qualitative Descriptions. Entropy, 2015, 17, 1896-1915.	1.1	4
77	Fast and reliable gate arrangement pre-design of resin infusion processes. Composites Part A: Applied Science and Manufacturing, 2015, 77, 285-292.	3.8	11
78	Computational vademecums for the real-time simulation of haptic collision between nonlinear solids. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 210-223.	3.4	24
79	Fractional modelling of functionalized CNT suspensions. Rheologica Acta, 2015, 54, 109-119.	1.1	3
80	Realâ€time monitoring of thermal processes by reducedâ€order modeling. International Journal for Numerical Methods in Engineering, 2015, 102, 991-1017.	1.5	48
81	Efficient Stabilization of Advection Terms Involved in Separated Representations of Boltzmann and Fokker-Planck Equations. Communications in Computational Physics, 2015, 17, 975-1006.	0.7	4
82	Efficient Updated-Lagrangian Simulations in Forming Processes. Key Engineering Materials, 2015, 651-653, 1294-1300.	0.4	0
83	Meshless methods for the simulation of material forming. International Journal of Material Forming, 2015, 8, 25-43.	0.9	26
84	Vademecums for Real-Time Computational Surgery. , 2015, , 3-12.		2
85	PGD-Based Model Reduction for Surgery Simulation: Solid Dynamics and Contact Detection. Lecture Notes in Computer Science, 2014, , 193-202.	1.0	2
86	A Computational Approach Based on Flow Front Shape Dynamic Behavior for the Process Characterization during Filling in Liquid Resin Infusion. Key Engineering Materials, 2014, 611-612, 265-272.	0.4	1
87	Elastic-Plastic Reduced Order Modelling of Sheet and Profiles Bending-under-Tension. Key Engineering Materials, 2014, 611-612, 1371-1379.	0.4	0
88	First Steps towards Parametric Modeling of FSW Processes by Using Advanced Separated Representations: Numerical Techniques. Key Engineering Materials, 2014, 611-612, 513-520.	0.4	4
89	Parametric solutions involving geometry: A step towards efficient shape optimization. Computer Methods in Applied Mechanics and Engineering, 2014, 268, 178-193.	3.4	69
90	Realâ€time direct integration of reduced solid dynamics equations. International Journal for Numerical Methods in Engineering, 2014, 99, 633-653.	1.5	40

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91	Real-time in silico experiments on gene regulatory networks and surgery simulation on handheld devices. Journal of Computational Surgery, 2014, 1, 1.	0.6	8
92	Real time simulation for computational surgery: a review. Advanced Modeling and Simulation in Engineering Sciences, 2014, 1, 11.	0.7	33
93	PGD-Based Modeling of Materials, Structures and Processes. ESAFORM Bookseries on Material Forming, 2014, , .	0.1	31
94	Space Separation. ESAFORM Bookseries on Material Forming, 2014, , 109-119.	0.1	1
95	Augmented Learning via Real-Time Simulation. ESAFORM Bookseries on Material Forming, 2014, , 205-216.	0.1	0
96	Parametric Models in Evolving Domains. ESAFORM Bookseries on Material Forming, 2014, , 91-108.	0.1	0
97	Fine Description of Materials. ESAFORM Bookseries on Material Forming, 2014, , 25-48.	0.1	0
98	PGD Based Dynamic Data Driven Application Systems. ESAFORM Bookseries on Material Forming, 2014, , 149-169.	0.1	0
99	A New Methodological Approach to Process Optimization. ESAFORM Bookseries on Material Forming, 2014, , 121-130.	0.1	0
100	PGD-Based Computational Vademecum for Efficient Design, Optimization and Control. Archives of Computational Methods in Engineering, 2013, 20, 31-59.	6.0	246
101	NEM-FEM comparison on porthole die extrusion of AA-6082. Journal of Mechanical Science and Technology, 2013, 27, 1089-1095.	0.7	8
102	Model order reduction in hyperelasticity: a proper generalized decomposition approach. International Journal for Numerical Methods in Engineering, 2013, 96, 129-149.	1.5	37
103	Streamline upwind/Petrovâ€"Galerkinâ€"based stabilization of proper generalized decompositions for highâ€"dimensional advectionâ€"diffusion equations. International Journal for Numerical Methods in Engineering, 2013, 94, 1216-1232.	1.5	11
104	Nonincremental proper generalized decomposition solution of parametric uncoupled models defined in evolving domains. International Journal for Numerical Methods in Engineering, 2013, 93, 887-904.	1.5	8
105	Realâ€"time simulation of biological soft tissues: a PGD approach. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 586-600.	1.0	72
106	Real Time Simulation of Non-Linear Solids by PGD Techniques. Key Engineering Materials, 2012, 504-506, 467-472.	0.4	0
107	Natural Element Simulation of Extrusion of Hollow Profiles. , 2012, , .		0
108	Real-Time Control of the Heating of an Airfoil. , 2012, , .		1

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109	Real-Time Simulation for Virtual Surgery in a PGD Framework. , 2012, , .		0
110	A natural neighbour Lagrange–Galerkin method for the simulation of Newtonian and Oldroyd–B free surface flows. International Journal for Numerical Methods in Fluids, 2012, 70, 860-885.	0.9	1
111	Real–time simulation of surgery by reduced–order modeling and X–FEM techniques. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 574-588.	1.0	63
112	Reduction of the chemical master equation for gene regulatory networks using proper generalized decompositions. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 960-973.	1.0	32
113	Proper Generalized Decomposition based dynamic data-driven control of thermal processes. Computer Methods in Applied Mechanics and Engineering, 2012, 213-216, 29-41.	3.4	90
114	Accounting for large deformations in real-time simulations of soft tissues based on reduced-order models. Computer Methods and Programs in Biomedicine, 2012, 105, 1-12.	2.6	65
115	Proper Generalized Decomposition based dynamic data driven inverse identification. Mathematics and Computers in Simulation, 2012, 82, 1677-1695.	2.4	57
116	Proper generalized decomposition of time–multiscale models. International Journal for Numerical Methods in Engineering, 2012, 90, 569-596.	1.5	52
117	Methodological approach to efficient modeling and optimization of thermal processes taking place in a die: Application to pultrusion. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1169-1178.	3.8	45
118	A comparative study on the performance of meshless approximations and their integration. Computational Mechanics, 2011, 48, 121-137.	2.2	22
119	A Short Review on Model Order Reduction Based on Proper Generalized Decomposition. Archives of Computational Methods in Engineering, 2011, 18, 395-404.	6.0	460
120	Optimizing Composites Forming Processes by Applying the Proper Generalized Decomposition. , 2011, , .		1
121	3D FEM-NEM Material Joining Simulation in Porthole Die Extrusion. Key Engineering Materials, 2011, 491, 151-158.	0.4	2
122	A Voronoi-Based Nodal Integrated FEM Simulation of Extrusion Process. , 2011, , .		0
123	Proper Generalized Decomposition Based Dynamic Data-Driven Control of Material Forming Processes. , 2011, , .		2
124	Natural Element simulation of free-surface, newtonian and non-newtonian flows. , 2011, , .		0
125	MESHLESS STOCHASTIC SIMULATION OF MICRO-MACROKINETIC THEORY MODELS. International Journal for Multiscale Computational Engineering, 2011, 9, 1-16.	0.8	5
126	COUPLING FINITE ELEMENTS AND PROPER GENERALIZED DECOMPOSITIONS. International Journal for Multiscale Computational Engineering, 2011, 9, 17-33.	0.8	21

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127	SPECIAL ISSUE Recent Advances in the Multiscale Modeling and Simulation of Complex Fluids. International Journal for Multiscale Computational Engineering, 2011, 9, vii-viii.	0.8	0
128	Recent advances on the use of separated representations. International Journal for Numerical Methods in Engineering, 2010, 81, 637-659.	1.5	97
129	On the use of proper generalized decompositions for solving the multidimensional chemical master equation. European Journal of Computational Mechanics, 2010, 19, 53-64.	0.6	29
130	Rheological modeling and forming process simulation of CNT nanocomposites. International Journal of Material Forming, 2010, 3, 1327-1338.	0.9	18
131	SUPG-based stabilization using a separated representations approach. International Journal of Material Forming, 2010, 3, 883-886.	0.9	3
132	Recent Advances and New Challenges in the Use of the Proper Generalized Decomposition for Solving Multidimensional Models. Archives of Computational Methods in Engineering, 2010, 17, 327-350.	6.0	301
133	Model order reduction for hyperelastic materials. International Journal for Numerical Methods in Engineering, 2010, 81, 1180-1206.	1.5	55
134	Proper generalized decomposition of multiscale models. International Journal for Numerical Methods in Engineering, 2010, 83, 1114-1132.	1.5	64
135	A higher order method based on local maximum entropy approximation. International Journal for Numerical Methods in Engineering, 2010, 83, 741-764.	1.5	31
136	Non incremental strategies based on separated representations: applications in computational rheology. Communications in Mathematical Sciences, 2010, 8, 671-695.	0.5	56
137	Coupling finite elements and reduced approximation bases. European Journal of Computational Mechanics, 2009, 18, 445-463.	0.6	12
138	A preliminary comparison between finite element and meshless simulations of extrusion. Journal of Materials Processing Technology, 2009, 209, 3039-3049.	3.1	9
139	Numerical simulation of friction stir welding by natural element methods. International Journal of Material Forming, 2009, 2, 225-234.	0.9	14
140	Non-incremental strategies for simulating thermomechanical models with uncertainty. International Journal of Material Forming, 2009, 2, 563-566.	0.9	0
141	Modeling nanocomposites: from rheology to forming processes simulation. International Journal of Material Forming, 2009, 2, 141-144.	0.9	5
142	Simulation of the extrusion of hollowprofiles by natural element methods. International Journal of Material Forming, 2009, 2, 597-600.	0.9	9
143	A high order method using MAX-ENT approximation schemes. International Journal of Material Forming, 2009, 2, 577-580.	0.9	2
144	Meshless methods with application to Liquid Composite Molding simulation. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2700-2709.	3.4	14

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145	Towards an Isogeometric Meshless Natural Element Method. , 2009, , 237-257.		0
146	Numerical Simulation of Friction Stir Welding by Natural Element Methods. International Journal of Material Forming, 2008, 1, 1079-1082.	0.9	17
147	Towards a high-resolution numerical strategy based on separated representations. International Journal of Material Forming, 2008, 1, 1099-1102.	0.9	0
148	Numerical simulation of spin coating processes with carbon nanotubes suspensions. International Journal of Material Forming, 2008, 1, 711-714.	0.9	2
149	Numerical simulation of spin coating processes involving functionalised Carbon nanotube suspensions. International Journal of Material Forming, 2008, 1, 89-99.	0.9	12
150	Improved boundary tracking in meshless simulations of free-surface flows. Computational Mechanics, 2008, 42, 467-479.	2.2	6
151	Higherâ€order natural element methods: Towards an isogeometric meshless method. International Journal for Numerical Methods in Engineering, 2008, 74, 1928-1954.	1.5	20
152	Real-time deformable models of non-linear tissues by model reduction techniques. Computer Methods and Programs in Biomedicine, 2008, 91, 223-231.	2.6	98
153	On the Application of Model Reduction Techniques to Real-Time Simulation of Non-linear tissues. Lecture Notes in Computer Science, 2008, , 11-18.	1.0	0
154	Review on discretization techniques for complex fluid flow models: past, present and future. AIP Conference Proceedings, 2007, , .	0.3	0
155	Meshless methods with application to Resin Transfer Molding simulation. AIP Conference Proceedings, 2007, , .	0.3	0
156	Meshless Simulation of Friction Stir Welding. AIP Conference Proceedings, 2007, , .	0.3	4
157	A natural element updated Lagrangian approach for modelling fluid structure interactions. European Journal of Computational Mechanics, 2007, 16, 323-336.	0.6	1
158	New and Advanced Numerical Strategies for the Simulation of Material Forming. , 2007, , 11-22.		0
159	A study on the performance of natural neighbour-based Galerkin methods. International Journal for Numerical Methods in Engineering, 2007, 71, 1436-1465.	1.5	25
160	A natural element updated Lagrangian strategy for free-surface fluid dynamics. Journal of Computational Physics, 2007, 223, 127-150.	1.9	46
161	Natural Neighbour Strategies for the Simulation of Laser Surface Coating Processes. International Journal of Forming Processes, 2007, 10, 89-108.	0.3	2
162	Accounting for weak discontinuities and moving boundaries in the context of the Natural Element Method and model reduction techniques. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2007, , 37-55.	0.1	0

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163	Simulation of Forming Processes by the Î±-Shapes-Based Natural Element Method. , 2007, , 77-95.		0
164	New Advances in Meshless Methods: Coupling Natural Element and Moving Least Squares Techniques. , 2007, , 97-121.		0
165	MÃ©thodes sans maillage de type elements naturels pour la simulation des procÃ©dÃ©s de mise en forme. European Journal of Computational Mechanics, 2006, 15, 29-40.	0.6	1
166	Meshless methods with application to metal forming. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 6661-6675.	3.4	40
167	Three-dimensional simulation of aluminium extrusion by the Î±-shape based natural element method. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 4269-4286.	3.4	47
168	Recent advances in the meshless simulation of aluminium extrusion and other related forming processes. Archives of Computational Methods in Engineering, 2006, 13, 3-43.	6.0	8
169	On thea priori model reduction: Overview and recent developments. Archives of Computational Methods in Engineering, 2006, 13, 91-128.	6.0	110
170	A natural neighbour Galerkin method with octree structure. European Journal of Computational Mechanics, 2006, 15, 529-548.	0.6	0
171	The Î±-shape Based Natural Element Method in Solid and Fluid Mechanics. , 2005, , 55-69.		0
172	Î±-NEM and model reduction. Revue Europeenne Des Elements, 2005, 14, 903-923.	0.1	1
173	On the employ of meshless methods in biomechanics. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 801-821.	3.4	62
174	A natural neighbour Galerkin method with quadtree structure. International Journal for Numerical Methods in Engineering, 2005, 63, 789-812.	1.5	29
175	Meshless Methods and Partition of Unity Finite Elements. International Journal of Forming Processes, 2005, 8, 409-427.	0.3	16
176	Updated Lagrangian free surface flow simulations with natural neighbour Galerkin methods. International Journal for Numerical Methods in Engineering, 2004, 60, 2105-2129.	1.5	38
177	Numerical integration in Natural Neighbour Galerkin methods. International Journal for Numerical Methods in Engineering, 2004, 60, 2077-2104.	1.5	49
178	Volumetric locking in natural neighbour Galerkin methods. International Journal for Numerical Methods in Engineering, 2004, 61, 611-632.	1.5	36
179	Induced anisotropy in foams forming processes: modelling and simulation. Journal of Materials Processing Technology, 2004, 155-156, 1482-1488.	3.1	7
180	Thermomechanical Cutting Model Discretisation. Eulerian or Lagrangian, Mesh or Meshless?. International Journal of Forming Processes, 2004, 7, 83-97.	0.3	4

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181	Overview and recent advances in natural neighbour galerkin methods. Archives of Computational Methods in Engineering, 2003, 10, 307-384.	6.0	132
182	On the imposition of essential boundary conditions in natural neighbour Galerkin methods. Communications in Numerical Methods in Engineering, 2003, 19, 361-376.	1.3	27
183	Natural element meshless simulation of flows involving short fiber suspensions. Journal of Non-Newtonian Fluid Mechanics, 2003, 115, 51-78.	1.0	49
184	Modelling three-dimensional piece-wise homogeneous domains using theÎ±-shape-based natural element method. International Journal for Numerical Methods in Engineering, 2002, 54, 871-897.	1.5	43
185	Imposing essential boundary conditions in the natural element method by means of density-scaled?-shapes. International Journal for Numerical Methods in Engineering, 2000, 49, 519-546.	1.5	96
186	Simulation of Porthole Die Extrusion Process Comparing NEM and FEM Modelling. Key Engineering Materials, 0, 424, 97-104.	0.4	3
187	Towards Online Control of Forming Processes Involving Residual Stresses: Defining Multi-Parametric <i>Computational vademecums</i>. Key Engineering Materials, 0, 554-557, 699-705.	0.4	0
188	Improving Computational Efficiency in LCM by Using Computational Geometry and Model Reduction Techniques. Key Engineering Materials, 0, 611-612, 339-343.	0.4	17
189	Separated Representations of Incremental Elastoplastic Simulations. Key Engineering Materials, 0, 651-653, 1285-1293.	0.4	4
190	Coupling finite elements and reduced approximation bases. European Journal of Computational Mechanics, 0, , 445-463.	0.0	1
191	SUPG-based Stabilization using Proper Generalized Decomposition. , 0, , .		0
192	Opportunities and Difficulties when Increasing the Dimensionality of Computational Mechanics Models. , 0, , .		0