

Elias Cueto

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7668357/publications.pdf>

Version: 2024-02-01

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	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
2	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
3	PGD-Based Computational Vademecum for Efficient Design, Optimization and Control. Archives of Computational Methods in Engineering, 2013, 20, 31-59.	6.0	246
4	A Manifold Learning Approach to Data-Driven Computational Elasticity and Inelasticity. Archives of Computational Methods in Engineering, 2018, 25, 47-57.	6.0	153
5	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
6	Overview and recent advances in natural neighbour galerkin methods. Archives of Computational Methods in Engineering, 2003, 10, 307-384.	6.0	132
7	On the a priori model reduction: Overview and recent developments. Archives of Computational Methods in Engineering, 2006, 13, 91-128.	6.0	110
8	Data-driven non-linear elasticity: constitutive manifold construction and problem discretization. Computational Mechanics, 2017, 60, 813-826.	2.2	101
9	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
10	Recent advances on the use of separated representations. International Journal for Numerical Methods in Engineering, 2010, 81, 637-659.	1.5	97
11	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
12	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
13	Real-time simulation of biological soft tissues: a PGD approach. International Journal for Numerical Methods in Biomedical Engineering, 2013, 29, 586-600.	1.0	72
14	Parametric solutions involving geometry: A step towards efficient shape optimization. Computer Methods in Applied Mechanics and Engineering, 2014, 268, 178-193.	3.4	69
15	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
16	Thermodynamically consistent data-driven computational mechanics. Continuum Mechanics and Thermodynamics, 2019, 31, 239-253.	1.4	65
17	Proper generalized decomposition of multiscale models. International Journal for Numerical Methods in Engineering, 2010, 83, 1114-1132.	1.5	64
18	Real-time simulation of surgery by reduced-order modeling and XFEM techniques. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 574-588.	1.0	63

#	ARTICLE	IF	CITATIONS
19	On the employ of meshless methods in biomechanics. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 801-821.	3.4	62
20	Proper Generalized Decomposition based dynamic data driven inverse identification. Mathematics and Computers in Simulation, 2012, 82, 1677-1695.	2.4	57
21	Hybrid constitutive modeling: data-driven learning of corrections to plasticity models. International Journal of Material Forming, 2019, 12, 717-725.	0.9	56
22	Non incremental strategies based on separated representations: applications in computational rheology. Communications in Mathematical Sciences, 2010, 8, 671-695.	0.5	56
23	Model order reduction for hyperelastic materials. International Journal for Numerical Methods in Engineering, 2010, 81, 1180-1206.	1.5	55
24	Proper generalized decomposition of timeâ€multiscale models. International Journal for Numerical Methods in Engineering, 2012, 90, 569-596.	1.5	52
25	Learning Corrections for Hyperelastic Models From Data. Frontiers in Materials, 2019, 6, .	1.2	50
26	Natural element meshless simulation of flows involving short fiber suspensions. Journal of Non-Newtonian Fluid Mechanics, 2003, 115, 51-78.	1.0	49
27	Numerical integration in Natural Neighbour Galerkin methods. International Journal for Numerical Methods in Engineering, 2004, 60, 2077-2104.	1.5	49
28	A Multidimensional Data-Driven Sparse Identification Technique: The Sparse Proper Generalized Decomposition. Complexity, 2018, 2018, 1-11.	0.9	49
29	Realâ€time monitoring of thermal processes by reducedâ€order modeling. International Journal for Numerical Methods in Engineering, 2015, 102, 991-1017.	1.5	48
30	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
31	A Manifold Learning Approach for Integrated Computational Materials Engineering. Archives of Computational Methods in Engineering, 2018, 25, 59-68.	6.0	47
32	A natural element updated Lagrangian strategy for free-surface fluid dynamics. Journal of Computational Physics, 2007, 223, 127-150.	1.9	46
33	Deep learning of thermodynamics-aware reduced-order models from data. Computer Methods in Applied Mechanics and Engineering, 2021, 379, 113763.	3.4	46
34	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
35	Modelling three-dimensional piece-wise homogeneous domains using the Î±-shape-based natural element method. International Journal for Numerical Methods in Engineering, 2002, 54, 871-897.	1.5	43
36	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

#	ARTICLE	IF	CITATIONS
37	Meshless methods with application to metal forming. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 6661-6675.	3.4	40
38	Real-time direct integration of reduced solid dynamics equations. International Journal for Numerical Methods in Engineering, 2014, 99, 633-653.	1.5	40
39	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
40	Model order reduction in hyperelasticity: a proper generalized decomposition approach. International Journal for Numerical Methods in Engineering, 2013, 96, 129-149.	1.5	37
41	Volumetric locking in natural neighbour Galerkin methods. International Journal for Numerical Methods in Engineering, 2004, 61, 611-632.	1.5	36
42	kPCA-Based Parametric Solutions Within the PGD Framework. Archives of Computational Methods in Engineering, 2018, 25, 69-86.	6.0	34
43	Real time simulation for computational surgery: a review. Advanced Modeling and Simulation in Engineering Sciences, 2014, 1, 11.	0.7	33
44	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
45	A higher order method based on local maximum entropy approximation. International Journal for Numerical Methods in Engineering, 2010, 83, 741-764.	1.5	31
46	PGD-Based Modeling of Materials, Structures and Processes. ESAFORM Bookseries on Material Forming, 2014, , .	0.1	31
47	Computational Patient Avatars for Surgery Planning. Annals of Biomedical Engineering, 2016, 44, 35-45.	1.3	30
48	Reduced-order modeling of soft robots. PLoS ONE, 2018, 13, e0192052.	1.1	30
49	A natural neighbour Galerkin method with quadtree structure. International Journal for Numerical Methods in Engineering, 2005, 63, 789-812.	1.5	29
50	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
51	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
52	Learning slosh dynamics by means of data. Computational Mechanics, 2019, 64, 511-523.	2.2	27
53	Meshless methods for the simulation of material forming. International Journal of Material Forming, 2015, 8, 25-43.	0.9	26
54	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

#	ARTICLE	IF	CITATIONS
55	Digital twins that learn and correct themselves. International Journal for Numerical Methods in Engineering, 2022, 123, 3034-3044.	1.5	25
56	Structure-preserving neural networks. Journal of Computational Physics, 2021, 426, 109950.	1.9	25
57	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
58	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
59	Computational vademecums for real-time simulation of surgical cutting in haptic environments. International Journal for Numerical Methods in Engineering, 2016, 108, 1230-1247.	1.5	23
60	Data-Driven Computational Plasticity. Procedia Engineering, 2017, 207, 209-214.	1.2	23
61	A comparative study on the performance of meshless approximations and their integration. Computational Mechanics, 2011, 48, 121-137.	2.2	22
62	COUPLING FINITE ELEMENTS AND PROPER GENERALIZED DECOMPOSITIONS. International Journal for Multiscale Computational Engineering, 2011, 9, 17-33.	0.8	21
63	Higher-order natural element methods: Towards an isogeometric meshless method. International Journal for Numerical Methods in Engineering, 2008, 74, 1928-1954.	1.5	20
64	Proper Generalized Decompositions. SpringerBriefs in Applied Sciences and Technology, 2016, , .	0.2	20
65	Rheological modeling and forming process simulation of CNT nanocomposites. International Journal of Material Forming, 2010, 3, 1327-1338.	0.9	18
66	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
67	Numerical Simulation of Friction Stir Welding by Natural Element Methods. International Journal of Material Forming, 2008, 1, 1079-1082.	0.9	17
68	Improving Computational Efficiency in LCM by Using Computational Geometry and Model Reduction Techniques. Key Engineering Materials, 0, 611-612, 339-343.	0.4	17
69	An error estimator for real-time simulators based on model order reduction. Advanced Modeling and Simulation in Engineering Sciences, 2015, 2, .	0.7	17
70	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
71	Local proper generalized decomposition. International Journal for Numerical Methods in Engineering, 2017, 112, 1715-1732.	1.5	16
72	Physically sound, self-learning digital twins for sloshing fluids. PLoS ONE, 2020, 15, e0234569.	1.1	16

#	ARTICLE	IF	CITATIONS
73	Meshless Methods and Partition of Unity Finite Elements. International Journal of Forming Processes, 2005, 8, 409-427.	0.3	16
74	Numerical simulation of friction stir welding by natural element methods. International Journal of Material Forming, 2009, 2, 225-234.	0.9	14
75	Meshless methods with application to Liquid Composite Molding simulation. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2700-2709.	3.4	14
76	Reduced order modeling for physically-based augmented reality. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 53-70.	3.4	14
77	Learning stable reduced-order models for hybrid twins. Data-Centric Engineering, 2021, 2, .	1.2	13
78	Thermodynamics-informed Graph Neural Networks. IEEE Transactions on Artificial Intelligence, 2024, , 1-1.	3.4	13
79	Numerical simulation of spin coating processes involving functionalised Carbon nanotube suspensions. International Journal of Material Forming, 2008, 1, 89-99.	0.9	12
80	Coupling finite elements and reduced approximation bases. European Journal of Computational Mechanics, 2009, 18, 445-463.	0.6	12
81	<i>Vademecum</i> -based GFEM (Vâ€GFEM): optimal enrichment for transient problems. International Journal for Numerical Methods in Engineering, 2016, 108, 971-989.	1.5	12
82	Haptic simulation of tissue tearing during surgery. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2926.	1.0	12
83	Advanced separated spatial representations for hardly separable domains. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 802-819.	3.4	12
84	From linear to nonlinear PGD-based parametric structural dynamics. Comptes Rendus - Mecanique, 2019, 347, 445-454.	2.1	12
85	Learning non-Markovian physics from data. Journal of Computational Physics, 2021, 428, 109982.	1.9	12
86	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
87	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
88	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
89	An augmented reality platform for interactive aerodynamic design and analysis. International Journal for Numerical Methods in Engineering, 2019, 120, 125-138.	1.5	11
90	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

#	ARTICLE	IF	CITATIONS
91	Data-Driven GENERIC Modeling of Poroviscoelastic Materials. Entropy, 2019, 21, 1165.	1.1	11
92	Towards a pancreatic surgery simulator based on model order reduction. Advanced Modeling and Simulation in Engineering Sciences, 2015, 2, .	0.7	10
93	On the physical interpretation of fractional diffusion. Comptes Rendus - Mecanique, 2018, 346, 581-589.	2.1	10
94	Incremental dynamic mode decomposition: A reduced-model learner operating at the low-data limit. Comptes Rendus - Mecanique, 2019, 347, 780-792.	2.1	10
95	A Data-Driven Learning Method for Constitutive Modeling: Application to Vascular Hyperelastic Soft Tissues. Materials, 2020, 13, 2319.	1.3	10
96	A preliminary comparison between finite element and meshless simulations of extrusion. Journal of Materials Processing Technology, 2009, 209, 3039-3049.	3.1	9
97	Simulation of the extrusion of hollow profiles by natural element methods. International Journal of Material Forming, 2009, 2, 597-600.	0.9	9
98	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
99	Empowering Advanced Driver-Assistance Systems from Topological Data Analysis. Mathematics, 2021, 9, 634.	1.1	9
100	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
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	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
103	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
104	Real-time simulation techniques for augmented learning in science and engineering. Visual Computer, 2016, 32, 1465-1479.	2.5	8
105	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
106	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
107	Induced anisotropy in foams forming processes: modelling and simulation. Journal of Materials Processing Technology, 2004, 155-156, 1482-1488.	3.1	7
108	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

#	ARTICLE	IF	CITATIONS
109	A novel sparse reduced order formulation for modeling electromagnetic forces in electric motors. SN Applied Sciences, 2021, 3, 1.	1.5	7
110	Improved boundary tracking in meshless simulations of free-surface flows. Computational Mechanics, 2008, 42, 467-479.	2.2	6
111	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
112	Modeling nanocomposites: from rheology to forming processes simulation. International Journal of Material Forming, 2009, 2, 141-144.	0.9	5
113	Learning data-driven reduced elastic and inelastic models of spot-welded patches. Mechanics and Industry, 2021, 22, 32.	0.5	5
114	Fast Computation of Multi-Parametric Electromagnetic Fields in Synchronous Machines by Using PGD-Based Fully Separated Representations. Energies, 2021, 14, 1454.	1.6	5
115	MESHLESS STOCHASTIC SIMULATION OF MICRO-MACROKINETIC THEORY MODELS. International Journal for Multiscale Computational Engineering, 2011, 9, 1-16.	0.8	5
116	Engineering empowered by physics-based and data-driven hybrid models: A methodological overview. International Journal of Material Forming, 2022, 15, 1.	0.9	5
117	Meshless Simulation of Friction Stir Welding. AIP Conference Proceedings, 2007, , .	0.3	4
118	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
119	Separated Representations of Incremental Elastoplastic Simulations. Key Engineering Materials, 0, 651-653, 1285-1293.	0.4	4
120	Kinetic Theory Modeling and Efficient Numerical Simulation of Gene Regulatory Networks Based on Qualitative Descriptions. Entropy, 2015, 17, 1896-1915.	1.1	4
121	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
122	Wavelet-based multiscale proper generalized decomposition. Comptes Rendus - Mecanique, 2018, 346, 485-500.	2.1	4
123	Multiscale proper generalized decomposition based on the partition of unity. International Journal for Numerical Methods in Engineering, 2019, 120, 727-747.	1.5	4
124	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
125	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
126	Thermomechanical Cutting Model Discretisation. Eulerian or Lagrangian, Mesh or Meshless?. International Journal of Forming Processes, 2004, 7, 83-97.	0.3	4

#	ARTICLE	IF	CITATIONS
127	Simulation of Porthole Die Extrusion Process Comparing NEM and FEM Modelling. Key Engineering Materials, 0, 424, 97-104.	0.4	3
128	SUPG-based stabilization using a separated representations approach. International Journal of Material Forming, 2010, 3, 883-886.	0.9	3
129	Fractional modelling of functionalized CNT suspensions. Rheologica Acta, 2015, 54, 109-119.	1.1	3
130	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
131	Consistent data-driven computational mechanics. AIP Conference Proceedings, 2018, , .	0.3	3
132	Numerical simulation of spin coating processes with carbon nanotubes suspensions. International Journal of Material Forming, 2008, 1, 711-714.	0.9	2
133	A high order method using MAX-ENT approximation schemes. International Journal of Material Forming, 2009, 2, 577-580.	0.9	2
134	3D FEM-NEM Material Joining Simulation in Porthole Die Extrusion. Key Engineering Materials, 2011, 491, 151-158.	0.4	2
135	Proper Generalized Decomposition Based Dynamic Data-Driven Control of Material Forming Processes. , 2011, , .		2
136	PGD-Based Model Reduction for Surgery Simulation: Solid Dynamics and Contact Detection. Lecture Notes in Computer Science, 2014, , 193-202.	1.0	2
137	Learning Physics from Data: A Thermodynamic Interpretation. Springer Proceedings in Mathematics and Statistics, 2021, , 276-297.	0.1	2
138	Vademecums for Real-Time Computational Surgery. , 2015, , 3-12.		2
139	Natural Neighbour Strategies for the Simulation of Laser Surface Coating Processes. International Journal of Forming Processes, 2007, 10, 89-108.	0.3	2
140	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
141	$\hat{\pm}$ -NEM and model reduction. Revue Europeenne Des Elements, 2005, 14, 903-923.	0.1	1
142	Méthodes sans maillage de type éléments naturels pour la simulation des procédés de mise en forme. European Journal of Computational Mechanics, 2006, 15, 29-40.	0.6	1
143	A natural element updated Lagrangian approach for modelling fluid structure interactions. European Journal of Computational Mechanics, 2007, 16, 323-336.	0.6	1
144	Optimizing Composites Forming Processes by Applying the Proper Generalized Decomposition. , 2011, , .		1

#	ARTICLE	IF	CITATIONS
145	Real-Time Control of the Heating of an Airfoil. , 2012, , .		1
146	A natural neighbour Lagrangeâ€“Galerkin method for the simulation of Newtonian and Oldroydâ€“B free surface flows. International Journal for Numerical Methods in Fluids, 2012, 70, 860-885.	0.9	1
147	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
148	A manifold learning approach to data-driven computational materials and processes. AIP Conference Proceedings, 2017, , .	0.3	1
149	Data-driven in computational plasticity. AIP Conference Proceedings, 2018, , .	0.3	1
150	A novel sensitivity analysis on friction spot joining process performed on aluminum polycarbonate sheets by simulation. International Journal of Material Forming, 2020, 13, 737-747.	0.9	1
151	From Component Reduced Models to Reduced Modelling of Multi-Component Systems. Procedia Manufacturing, 2020, 47, 696-701.	1.9	1
152	Empowering Materials Processing and Performance from Data and AI. Materials, 2021, 14, 4409.	1.3	1
153	Space Separation. ESAFORM Bookseries on Material Forming, 2014, , 109-119.	0.1	1
154	Coupling finite elements and reduced approximation bases. European Journal of Computational Mechanics, 0, , 445-463.	0.0	1
155	Monitoring Weeder Robots and Anticipating Their Functioning by Using Advanced Topological Data Analysis. Frontiers in Artificial Intelligence, 2021, 4, 761123.	2.0	1
156	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
157	The $\hat{\pm}$ -shape Based Natural Element Method in Solid and Fluid Mechanics. , 2005, , 55-69.		0
158	A natural neighbour Galerkin method with octree structure. European Journal of Computational Mechanics, 2006, 15, 529-548.	0.6	0
159	Review on discretization techniques for complex fluid flow models: past, present and future. AIP Conference Proceedings, 2007, , .	0.3	0
160	Meshless methods with application to Resin Transfer Molding simulation. AIP Conference Proceedings, 2007, , .	0.3	0
161	New and Advanced Numerical Strategies for the Simulation of Material Forming. , 2007, , 11-22.		0
162	Towards a high-resolution numerical strategy based on separated representations. International Journal of Material Forming, 2008, 1, 1099-1102.	0.9	0

#	ARTICLE	IF	CITATIONS
163	Non-incremental strategies for simulating thermomechanical models with uncertainty. International Journal of Material Forming, 2009, 2, 563-566.	0.9	0
164	A Voronoi-Based Nodal Integrated FEM Simulation of Extrusion Process. , 2011, , .		0
165	Natural Element simulation of free-surface, newtonian and non-newtonian flows. , 2011, , .		0
166	Real Time Simulation of Non-Linear Solids by PGD Techniques. Key Engineering Materials, 2012, 504-506, 467-472.	0.4	0
167	Natural Element Simulation of Extrusion of Hollow Profiles. , 2012, , .		0
168	Real-Time Simulation for Virtual Surgery in a PGD Framework. , 2012, , .		0
169	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
170	Elastic-Plastic Reduced Order Modelling of Sheet and Profiles Bending-under-Tension. Key Engineering Materials, 2014, 611-612, 1371-1379.	0.4	0
171	Fluid-Long Fiber Interaction Based on a Second Gradient Theory. Key Engineering Materials, 2015, 651-653, 331-337.	0.4	0
172	Efficient Updated-Lagrangian Simulations in Forming Processes. Key Engineering Materials, 2015, 651-653, 1294-1300.	0.4	0
173	Local proper generalized decomposition. AIP Conference Proceedings, 2017, , .	0.3	0
174	Improving the realism of mixed reality through physical simulation. , 2018, , .		0
175	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
176	Parametric numerical solutions of additive manufacturing processes. AIP Conference Proceedings, 2019, , .	0.3	0
177	Data-driven correction of models for deformable solids. AIP Conference Proceedings, 2019, , .	0.3	0
178	Scientific Machine Learning for Coarse-Grained Constitutive Models. Procedia Manufacturing, 2020, 47, 693-695.	1.9	0
179	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
180	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

#	ARTICLE	IF	CITATIONS
181	Augmented Learning via Real-Time Simulation. ESAFORM Bookseries on Material Forming, 2014, , 205-216.	0.1	0
182	Parametric Models in Evolving Domains. ESAFORM Bookseries on Material Forming, 2014, , 91-108.	0.1	0
183	Fine Description of Materials. ESAFORM Bookseries on Material Forming, 2014, , 25-48.	0.1	0
184	PGD Based Dynamic Data Driven Application Systems. ESAFORM Bookseries on Material Forming, 2014, , 149-169.	0.1	0
185	A New Methodological Approach to Process Optimization. ESAFORM Bookseries on Material Forming, 2014, , 121-130.	0.1	0
186	Smart-GFEM for welding simulation. AIP Conference Proceedings, 2016, , .	0.3	0
187	Simulation of Forming Processes by the \hat{L}^2 -Shapes-Based Natural Element Method. , 2007, , 77-95.		0
188	New Advances in Meshless Methods: Coupling Natural Element and Moving Least Squares Techniques. , 2007, , 97-121.		0
189	Towards an Isogeometric Meshless Natural Element Method. , 2009, , 237-257.		0
190	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
191	SUPG-based Stabilization using Proper Generalized Decomposition. , 0, , .		0
192	Opportunities and Difficulties when Increasing the Dimensionality of Computational Mechanics Models. , 0, , .		0