Jesper Henri Hattel

List of Publications by Year in descending order

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212 papers

5,005 citations

94433 37 h-index 60 g-index

215 all docs

215 docs citations

215 times ranked

3310 citing authors

#	Article	IF	CITATIONS
1	Individual fibre inclination segmentation from X-ray computed tomography using principal component analysis. Journal of Composite Materials, 2022, 56, 83-98.	2.4	4
2	Elucidation of dross formation in laser powder bed fusion at down-facing surfaces: Phenomenon-oriented multiphysics simulation and experimental validation. Additive Manufacturing, 2022, 50, 102551.	3.0	6
3	Numerical investigation into laser-based powder bed fusion of cantilevers produced in 300-grade maraging steel. Additive Manufacturing, 2022, 50, 102560.	3.0	5
4	Numerical Modelling of Humidity Behaviour in the Electronics Housing. , 2022, , .		0
5	Recent trends in Xâ€rayâ€based characterization of nodular cast iron. Material Design and Processing Communications, 2021, 3, e212.	0.9	O
6	Achieving high ductility in a selectively laser melted commercial pure-titanium via in-situ grain refinement. Scripta Materialia, 2021, 191, 155-160.	5.2	65
7	Material characterization of a pultrusion specific and highly reactive polyurethane resin system: Elastic modulus, rheology, and reaction kinetics. Composites Part B: Engineering, 2021, 207, 108543.	12.0	31
8	Microstructure and Mechanical Properties of Friction Stir Welded AA6061/AA6061 + 40 vol% SiC Plates. Metals, 2021, 11, 206.	2.3	5
9	Thermo-mechanical modelling of stress relief heat treatments after laser-based powder bed fusion. Additive Manufacturing, 2021, 38, 101818.	3.0	11
10	A fundamental investigation of thermo-capillarity in laser powder bed fusion of metals and alloys. International Journal of Heat and Mass Transfer, 2021, 166, 120766.	4.8	34
11	Densification, microstructure, and mechanical properties of heat-treated MAR-M247 fabricated by Binder Jetting. Additive Manufacturing, 2021, 39, 101912.	3.0	7
12	Numerical and experimental analysis of resin-flow, heat-transfer, and cure in a resin-injection pultrusion process. Composites Part A: Applied Science and Manufacturing, 2021, 143, 106231.	7.6	22
13	Characterization of Geometry and Surface Texture of AlSi10Mg Laser Powder Bed Fusion Channels Using X-ray Computed Tomography. Applied Sciences (Switzerland), 2021, 11, 4304.	2.5	3
14	Steady-state modelling and analysis of process-induced stress and deformation in thermoset pultrusion processes. Composites Part B: Engineering, 2021, 216, 108812.	12.0	9
15	Mesoscale Process Modeling of a Thick Pultruded Composite with Variability in Fiber Volume Fraction. Materials, 2021, 14, 3763.	2.9	14
16	On the role of the powder stream on the heat and fluid flow conditions during Directed Energy Deposition of maraging steelâ€"Multiphysics modeling and experimental validation. Additive Manufacturing, 2021, 43, 102021.	3.0	21
17	Unraveling compacted graphite evolution during solidification of cast iron using in-situ synchrotron X-ray tomography. Carbon, 2021, 184, 799-810.	10.3	6
18	A review of multi-scale and multi-physics simulations of metal additive manufacturing processes with focus on modeling strategies. Additive Manufacturing, 2021, 47, 102278.	3.0	48

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19	On the drying process of molded pulp products: Experiments and numerical modelling. Drying Technology, 2020, 38, 1644-1662.	3.1	7
20	Thermo-chemical-mechanical simulation of low temperature nitriding of austenitic stainless steel; inverse modelling of surface reaction rates. Surface and Coatings Technology, 2020, 381, 125145.	4.8	11
21	Modeling the deformation of fresh porcine bellies: A quantitative comparison of different constitutive formulations. Mechanics of Materials, 2020, 150, 103597.	3.2	1
22	Realistic design of laser powder bed fusion channels. Rapid Prototyping Journal, 2020, 26, 1827-1836.	3.2	4
23	Part-scale thermo-mechanical modelling of distortions in Laser Powder Bed Fusion – Analysis of the sequential flash heating method with experimental validation. Additive Manufacturing, 2020, 36, 101508.	3.0	20
24	Investigation of the roughness variation along the length of LPBF manufactured straight channels. Nondestructive Testing and Evaluation, 2020, 35, 304-314.	2.1	9
25	Numerical and experimental analyses in composites processing: impregnation, heat transfer, resin cure and residual stresses. IOP Conference Series: Materials Science and Engineering, 2020, 942, 012003.	0.6	1
26	Numerical Investigation into the Effect of Different Parameters on the Geometrical Precision in the Laser-Based Powder Bed Fusion Process Chain. Applied Sciences (Switzerland), 2020, 10, 3414.	2.5	5
27	Permeability and compaction behaviour of air-texturised glass fibre rovings: A characterisation study. Journal of Composite Materials, 2020, 54, 4241-4252.	2.4	14
28	Numerical modeling of the mechanics of pultrusion. , 2020, , 173-195.		8
29	Thermomechanics of friction stir welding. , 2020, , 393-413.		0
30	Microstructural modelling of above \hat{l}^2 -transus heat treatment of additively manufactured Ti-6Al-4V using cellular automata. Materials Today Communications, 2020, 24, 101031.	1.9	1
31	Characterization of channels made by laser powder bed fusion and binder jetting using X-ray CT and image analysis. Additive Manufacturing, 2020, 36, 101445.	3.0	16
32	X-ray CT and image analysis methodology for local roughness characterization in cooling channels made by metal additive manufacturing. Additive Manufacturing, 2020, 32, 101032.	3.0	19
33	Distance map based micromechanical analysis of the impact of matrix heterogeneities on the yield stress of nodular cast iron. Mechanics of Materials, 2020, 148, 103414.	3.2	4
34	Keyhole-induced porosities in Laser-based Powder Bed Fusion (L-PBF) of Ti6Al4V: High-fidelity modelling and experimental validation. Additive Manufacturing, 2019, 30, 100835.	3.0	144
35	Simulation of resin-impregnation, heat-transfer and cure in a resin-injection pultrusion process. AIP Conference Proceedings, 2019 , , .	0.4	8
36	Investigation of the elastoplastic and fracture behavior of solid materials considering microstructural anisotropy: A discrete element modeling study. Computational Materials Science, 2019, 170, 109164.	3.0	5

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37	Application of a Projection Method for Simulating Flow of a Shear-Thinning Fluid. Fluids, 2019, 4, 124.	1.7	5
38	Simulation of liquid composite moulding using a finite volume scheme and the level-set method. International Journal of Multiphase Flow, 2019, 118, 183-192.	3.4	11
39	Microstructure and residual elastic strain at graphite nodules in ductile cast iron analyzed by synchrotron X-ray microdiffraction. Acta Materialia, 2019, 167, 221-230.	7.9	26
40	Impact of micro-scale residual stress on in-situ tensile testing of ductile cast iron: Digital volume correlation vs. model with fully resolved microstructure vs. periodic unit cell. Journal of the Mechanics and Physics of Solids, 2019, 125, 714-735.	4.8	25
41	Long term prediction of local climate inside an electronics enclosure. International Journal of Heat and Mass Transfer, 2019, 137, 280-291.	4.8	1
42	Multiphysics modelling of lack-of-fusion voids formation and evolution in IN718 made by multi-track/multi-layer L-PBF. International Journal of Heat and Mass Transfer, 2019, 139, 95-114.	4.8	135
43	A systematic investigation of the effects of process parameters on heat and fluid flow and metallurgical conditions during laser-based powder bed fusion of Ti6Al4V alloy. International Journal of Heat and Mass Transfer, 2019, 139, 213-230.	4.8	64
44	Experimental investigation and thermo-mechanical modelling for tool life evaluation of photopolymer additively manufactured mould inserts in different injection moulding conditions. International Journal of Advanced Manufacturing Technology, 2019, 102, 403-420.	3.0	8
45	Modeling of nanosecond pulsed laser processing of polymers in air and water. Modelling and Simulation in Materials Science and Engineering, 2018, 26, 055005.	2.0	8
46	A study of laser surface modification of polymers: A comparison in air and water. Journal of Manufacturing Processes, 2018, 32, 432-437.	5.9	12
47	Humidity build-up in electronic enclosures exposed to different geographical locations by RC modelling and reliability prediction. Microelectronics Reliability, 2018, 82, 136-146.	1.7	11
48	Numerical simulation of the planar extrudate swell of pseudoplastic and viscoelastic fluids with the streamfunction and the VOF methods. Journal of Non-Newtonian Fluid Mechanics, 2018, 252, 1-18.	2.4	39
49	A 3D numerical study of humidity evolution and condensation risk on a printed circuit board (PCB) exposed to harsh ambient conditions. Microelectronics Reliability, 2018, 83, 39-49.	1.7	3
50	Uncovering the local inelastic interactions during manufacture of ductile cast iron: How the substructure of the graphite particles can induce residual stress concentrations in the matrix. Journal of the Mechanics and Physics of Solids, 2018, 111, 333-357.	4.8	15
51	Accurate measurements in a production environment using dynamic length metrology (DLM). Procedia CIRP, 2018, 75, 343-348.	1.9	3
52	Compensation of in-line metrology of polymer parts based on 3D thermomechanical analyses. Procedia CIRP, 2018, 75, 349-354.	1.9	0
53	Thermo-fluid-metallurgical modelling of the selective laser melting process chain. Procedia CIRP, 2018, 74, 87-91.	1.9	20
54	Analysis of Local Conditions on Graphite Growth and Shape During Solidification of Ductile Cast Iron. Transactions of the Indian Institute of Metals, 2018, 71, 2699-2705.	1.5	1

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55	Experimental investigation of tensile strength of friction stir welded butt joints on PMMA. Materials Today Communications, 2018, 17, 238-245.	1.9	24
56	Inline temperature compensation for dimensional metrology of polymer parts in a production environment based on 3D thermomechanical analysis. Precision Engineering, 2018, 53, 46-53.	3.4	2
57	Multiphysics modelling of manufacturing processes: A review. Advances in Mechanical Engineering, 2018, 10, 168781401876618.	1.6	25
58	Predicting the reference length of polymer parts with micrometer uncertainty measured under non-reference conditions. Precision Engineering, 2018, 54, 344-352.	3.4	0
59	Thermomechanical Modelling of Direct-Drive Friction Welding Applying a Thermal Pseudo Mechanical Model for the Generation of Heat. Key Engineering Materials, 2018, 767, 343-350.	0.4	1
60	A robustness analysis of the bonding process of joints in wind turbine blades. International Journal of Adhesion and Adhesives, 2018, 85, 281-285.	2.9	6
61	Residual Stress in Expanded Austenite on Stainless Steel; Origin, Measurement, and Prediction. Materials Performance and Characterization, 2018, 7, 20170145.	0.3	11
62	A Review on the Mechanical Modeling of Composite Manufacturing Processes. Archives of Computational Methods in Engineering, 2017, 24, 365-395.	10.2	206
63	Selecting the optimum engineering model for the frequency response of fcc nanowire resonators. Applied Mathematical Modelling, 2017, 44, 236-245.	4.2	6
64	Drying of a tape-cast layer: Numerical investigation of influencing parameters. International Journal of Heat and Mass Transfer, 2017, 108, 2229-2238.	4.8	7
65	Laser additive manufacturing of multimaterial tool inserts: a simulation-based optimization study. Proceedings of SPIE, 2017, , .	0.8	6
66	Analysis of the equivalent indenter concept used to extract Young's modulus from a nano-indentation test: some new insights into the Oliver–Pharr method. Modelling and Simulation in Materials Science and Engineering, 2017, 25, 045004.	2.0	8
67	Mathematical modelling of moisture transport into an electronic enclosure under non-isothermal conditions. Microelectronics Reliability, 2017, 79, 526-532.	1.7	3
68	Cavity prediction in sand mould production applying the DISAMATIC process. Powder Technology, 2017, 321, 204-217.	4.2	3
69	A methodology for online visualization of the energy flow in a machine tool. CIRP Journal of Manufacturing Science and Technology, 2017, 19, 138-146.	4.5	11
70	Modelling the effect of coating on the stresses and microstructure evolution in chill casting of wind turbine main shafts. Wind Energy, 2017, 20, 1635-1643.	4.2	6
71	Multi-objective optimization of cellular scanning strategy in selective laser melting. , 2017, , .		4
72	Flow visualization and simulation of the filling process during injection molding. CIRP Journal of Manufacturing Science and Technology, 2017, 16, 12-20.	4. 5	36

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73	Thermo-Electrical Mathematical Model for Prediction of Ni-Cr Hot-Wire Temperature in Free Air and Inside Small Circular Cavities. Heat Transfer Engineering, 2017, 38, 881-891.	1.9	4
74	CFD simulation and statistical analysis of moisture transfer into an electronic enclosure. Applied Mathematical Modelling, 2017, 44, 246-260.	4.2	10
75	Hot-blade cutting of EPS foam for double-curved surfacesâ€"numerical simulation and experiments. International Journal of Advanced Manufacturing Technology, 2017, 93, 4253-4264.	3.0	4
76	A numerical investigation of the effect of ambient conditions on natural convection cooling of electronics. , $2017, , .$		0
77	Assessment of the Contour Method for 2-D Cross Sectional Residual Stress Measurements of Friction Stir Welded Parts of AA2024-T3—Numerical and Experimental Comparison. Metals, 2017, 7, 508.	2.3	5
78	A computational model for heterogeneous heating during pulsed laser irradiation of polymers doped with light-absorbing microparticles. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	9
79	Rheological Characterization of Green Sand Flow. , 2016, , .		1
80	Optimization of electronic enclosure design for thermal and moisture management using calibrated models of progressive complexity., 2016,,.		0
81	Semi-empirical prediction of moisture build-up in an electronic enclosure using analysis of variance (ANOVA)., 2016,,.		3
82	On the isotropic elastic constants of graphite nodules in ductile cast iron: Analytical and numerical micromechanical investigations. Mechanics of Materials, 2016, 96, 138-150.	3.2	28
83	A thermo-electro-mechanical simulation model for hot wire cutting of EPS foam. International Journal of Machine Tools and Manufacture, 2016, 107, 50-59.	13.4	7
84	Particle migration using local variation of the viscosity (LVOV) model in flow of a non-Newtonian fluid for ceramic tape casting. Chemical Engineering Research and Design, 2016, 109, 226-233.	5.6	17
85	Multiple crack growth prediction in AA2024-T3 friction stir welded joints, including manufacturing effects. International Journal of Fatigue, 2016, 90, 69-77.	5.7	40
86	Reducing residual stresses and deformations in selective laser melting through multi-level multi-scale optimization of cellular scanning strategy. Proceedings of SPIE, 2016, , .	0.8	3
87	Drying of a tape-cast layer: Numerical modelling of the evaporation process in a graded/layered material. International Journal of Heat and Mass Transfer, 2016, 103, 1144-1154.	4.8	12
88	Modeling the elastic behavior of ductile cast iron including anisotropy in the graphite nodules. International Journal of Solids and Structures, 2016, 100-101, 523-535.	2.7	28
89	Three-dimensional local residual stress and orientation gradients near graphite nodules in ductile cast iron. Acta Materialia, 2016, 121, 173-180.	7.9	32
90	Vortex behavior of the Oldroyd-B fluid in the 4-1 planar contraction simulated with the streamfunction–log-conformation formulation. Journal of Non-Newtonian Fluid Mechanics, 2016, 237, 1-15.	2.4	32

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91	Improvement in Surface Characterisitcs of Polymers for Subsequent Electroless Plating Using Liquid Assisted Laser Processing. Physics Procedia, 2016, 83, 211-217.	1.2	5
92	Simulating the DISAMATIC process using the discrete element method — a dynamical study of granular flow. Powder Technology, 2016, 303, 228-240.	4.2	7
93	Ceramic tape casting: A review of current methods and trends with emphasis on rheological behaviour and flow analysis. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 212, 39-61.	3.5	134
94	A micro-mechanical analysis of thermo-elastic properties and local residual stresses in ductile iron based on a new anisotropic model for the graphite nodules. Modelling and Simulation in Materials Science and Engineering, 2016, 24, 055012.	2.0	20
95	Numerical simulation of transient moisture and temperature distribution in polycarbonate and aluminum electronic enclosures. , $2016, \ldots$		1
96	Improving accuracy of overhanging structures for selective laser melting through reliability characterization of single track formation on thick powder beds. , 2016, , .		2
97	Modelling the evolution of composition-and stress-depth profiles in austenitic stainless steels during low-temperature nitriding. Modelling and Simulation in Materials Science and Engineering, 2016, 24, 025003.	2.0	28
98	Modeling coupled heat and mass transfer during drying in tape casting with a simple ceramics–water system. Drying Technology, 2016, 34, 244-253.	3.1	13
99	Analytical solution to the 1D Lemaitre's isotropic damage model and plane stress projected implicit integration procedure. Applied Mathematical Modelling, 2016, 40, 5759-5774.	4.2	2
100	An axisymmetrical non-linear finite element model for induction heating in injection molding tools. Finite Elements in Analysis and Design, 2016, 110, 1-10.	3.2	12
101	Thermo-coupled Surface Cauchy–Born theory: An engineering finite element approach to modeling of nanowire thermomechanical response. Mechanics of Materials, 2016, 94, 46-52.	3.2	11
102	Three-dimensional numerical modeling of an induction heated injection molding tool with flow visualization. International Journal of Advanced Manufacturing Technology, 2016, 85, 643-660.	3.0	26
103	Probabilistic analysis of a thermosetting pultrusion process. Science and Engineering of Composite Materials, 2016, 23, 67-76.	1.4	12
104	Numerical Modelling of Damage Evolution in Ingot Forging. Key Engineering Materials, 2015, 651-653, 237-242.	0.4	0
105	Integrated FEM-DBEM Simulation of Crack Propagation in AA2024-T3 FSW Butt Joints Considering Manufacturing Effects. Key Engineering Materials, 2015, 651-653, 877-882.	0.4	3
106	Threeâ€Dimensional Modeling of Glass Lens Molding. International Journal of Applied Glass Science, 2015, 6, 182-195.	2.0	14
107	Multiscale coupling based on quasicontinuum method in nanowires at finite temperatures. , 2015, , .		0
108	Outcomes of the DeepWind Conceptual Design. Energy Procedia, 2015, 80, 329-341.	1.8	40

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109	Modeling and simulation of the deformation process of PTFE flexible stamps for nanoimprint lithography on curved surfaces. Journal of Materials Processing Technology, 2015, 216, 418-429.	6.3	14
110	Cellwise conservative unsplit advection for the volume of fluid method. Journal of Computational Physics, 2015, 283, 582-608.	3.8	36
111	Cellular scanning strategy for selective laser melting: Generating reliable, optimized scanning paths and processing parameters. Proceedings of SPIE, 2015 , , .	0.8	3
112	Temperature Dependence and Magnetic Properties of Injection Molding Tool Materials Used in Induction Heating. IEEE Transactions on Magnetics, 2015, 51, 1-7.	2.1	9
113	Robust simulations of viscoelastic flows at high Weissenberg numbers with the streamfunction/log-conformation formulation. Journal of Non-Newtonian Fluid Mechanics, 2015, 223, 37-61.	2.4	40
114	Modelling residual stresses in friction stir welding of Al alloys—a review of possibilities and future trends. International Journal of Advanced Manufacturing Technology, 2015, 76, 1793-1805.	3.0	32
115	Mechanical Modelling of Pultrusion Process: 2D and 3D Numerical Approaches. Applied Composite Materials, 2015, 22, 99-118.	2.5	25
116	Pultrusion of a vertical axis wind turbine blade part-I: 3D thermo-chemical process simulation. International Journal of Material Forming, 2015, 8, 379-389.	2.0	21
117	Pultrusion of a vertical axis wind turbine blade part-II: combining the manufacturing process simulation with a subsequent loading scenario. International Journal of Material Forming, 2015, 8, 367-378.	2.0	15
118	Investigation of process induced warpage for pultrusion of a rectangular hollow profile. Composites Part B: Engineering, 2015, 68, 365-374.	12.0	53
119	Effect of uncertainty in processing parameters on the microstructure of single melt tracks formed by selective laser melting. , 2014 , , .		0
120	The Effect of Mandrel Configuration on the Warpage in Pultrusion of Rectangular Hollow Profiles. Key Engineering Materials, 2014, 611-612, 250-256.	0.4	1
121	Cellular Scanning Strategy for Selective Laser Melting: Capturing Thermal Trends with a Low-Fidelity, Pseudo-Analytical Model. Mathematical Problems in Engineering, 2014, 2014, 1-14.	1.1	24
122	A Two-Phase Flow Solver for Incompressible Viscous Fluids, Using a Pure Streamfunction Formulation and the Volume of Fluid Technique. Defect and Diffusion Forum, 2014, 348, 9-19.	0.4	3
123	The Effect of Product Size on the Pulling Force in Pultrusion. Key Engineering Materials, 2014, 611-612, 1763-1770.	0.4	4
124	Physical modeling and numerical simulation of V-die forging ingot with central void. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2014, 228, 2347-2356.	2.1	16
125	Multi-objective Optimization of Die Geometry in Ingot Forging. Procedia Engineering, 2014, 81, 2457-2462.	1.2	2
126	Numerical Modeling of AA2024-T3 Friction Stir Welding Process for Residual Stress Evaluation, Including Softening Effects. Key Engineering Materials, 2014, 611-612, 1675-1682.	0.4	12

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127	Numerical Model based Reliability Estimation of Selective Laser Melting Process. Physics Procedia, 2014, 56, 379-389.	1.2	29
128	Investigation of the Spring-In of a Pultruded L-Shaped Profile for Various Processing Conditions and Thicknesses. Key Engineering Materials, 2014, 611-612, 273-279.	0.4	2
129	Life cycle strain monitoring in glass fibre reinforced polymer laminates using embedded fibre Bragg grating sensors from manufacturing to failure. Journal of Composite Materials, 2014, 48, 365-381.	2.4	15
130	An evaluation of interface capturing methods in a VOF based model for multiphase flow of a non-Newtonian ceramic in tape casting. Applied Mathematical Modelling, 2014, 38, 3222-3232.	4.2	34
131	DeepWind-from Idea to 5 MW Concept. Energy Procedia, 2014, 53, 23-33.	1.8	38
132	Bingham plastic fluid flow model in tape casting of ceramics using two doctor blades – analytical approach. Materials Science and Technology, 2014, 30, 283-288.	1.6	12
133	Precision Glass Molding: Validation of an <scp>FE</scp> Model for Thermoâ€Mechanical Simulation. International Journal of Applied Glass Science, 2014, 5, 297-312.	2.0	17
134	Modelling the pultrusion process of an industrial L-shaped composite profile. Composite Structures, 2014, 118, 37-48.	5.8	62
135	Evaluation of the viscoelastic behaviour and glass/mould interface friction coefficient in the wafer based precision glass moulding. Journal of Materials Processing Technology, 2014, 214, 1427-1435.	6.3	27
136	Material characterization of a polyester resin system for the pultrusion process. Composites Part B: Engineering, 2014, 64, 194-201.	12.0	52
137	Advanced Methods and Future Perspectives. RILEM State-of-the-Art Reports, 2014, , 125-146.	0.7	0
138	<i>In situ</i> measurement using FBGs of processâ€induced strains during curing of thick glass/epoxy laminate plate: experimental results and numerical modelling. Wind Energy, 2013, 16, 1241-1257.	4.2	14
139	Thermo-Chemical Modelling Strategies for the Pultrusion Process. Applied Composite Materials, 2013, 20, 1247-1263.	2.5	39
140	Optimization of the Thermosetting Pultrusion Process by Using Hybrid and Mixed Integer Genetic Algorithms. Applied Composite Materials, 2013, 20, 449-463.	2.5	41
141	Reliability Estimation of the Pultrusion Process Using the First-Order Reliability Method (FORM). Applied Composite Materials, 2013, 20, 639-653.	2.5	48
142	Design Optimization of a 5 MW Floating Offshore Vertical-axis Wind Turbine. Energy Procedia, 2013, 35, 22-32.	1.8	62
143	Investigation on the Effect of Sulfur and Titanium on the Microstructure of Lamellar Graphite Iron. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 5134-5146.	2.2	19
144	Process induced residual stresses and distortions in pultrusion. Composites Part B: Engineering, 2013, 51, 148-161.	12.0	95

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145	The effect of hardening laws and thermal softening on modeling residual stresses in FSW of aluminum alloy 2024-T3. Journal of Materials Processing Technology, 2013, 213, 477-486.	6.3	83
146	Modeling of the interface behavior in tape casting of functionally graded ceramics for magnetic refrigeration parts. International Journal of Refrigeration, 2013, 36, 2403-2409.	3.4	6
147	Modeling the constitutive and frictional behavior of PTFE flexible stamps for nanoimprint lithography. Microelectronic Engineering, 2013, 106, 1-8.	2.4	9
148	Cellular scanning strategy for selective laser melting: evolution of optimal grid-based scanning path and parametric approach to thermal homogeneity. Proceedings of SPIE, 2013 , , .	0.8	11
149	The effect of thermal contact resistance on the thermosetting pultrusion process. Composites Part B: Engineering, 2013, 45, 995-1000.	12.0	53
150	Multi-Criteria Optimization in Friction Stir Welding Using a Thermal Model with Prescribed Material Flow. Materials and Manufacturing Processes, 2013, 28, 816-822.	4.7	17
151	Quasi-steady state power law model for flow of (La _{0·85} Sr _{0·15}) _{0·9} MnO ₃ ceramic slurry in tape casting. Materials Science and Technology, 2013, 29, 1080-1087.	1.6	19
152	Numerical Modeling of the Side Flow in Tape Casting of a Nonâ∈Newtonian Fluid. Journal of the American Ceramic Society, 2013, 96, 1414-1420.	3.8	17
153	Computational Approaches for Modeling the Multiphysics in Pultrusion Process. Advances in Mechanical Engineering, 2013, 5, 301875.	1.6	35
154	Patterns of gravity induced aggregate migration during casting of fluid concretes. Cement and Concrete Research, 2012, 42, 1571-1578.	11.0	31
155	Modelling and simulation of A segregates in steel castings using thermal criterion function Part I – Background and validation. Materials Science and Technology, 2012, 28, 872-878.	1.6	3
156	Modelling and simulation of A segregates in steel castings using thermal criterion function Part II – Optimisation of real industrial cast part. Materials Science and Technology, 2012, 28, 911-917.	1.6	2
157	1st DeepWind 5 MW Baseline design. Energy Procedia, 2012, 24, 27-35.	1.8	47
158	Elimination of Hot Tears in Steel Castings by Means of Solidification Pattern Optimization. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2012, 43, 609-626.	2.1	7
159	Flow induced particle migration in fresh concrete: Theoretical frame, numerical simulations and experimental results on model fluids. Cement and Concrete Research, 2012, 42, 633-641.	11.0	106
160	Thermal modelling of the multi-stage heating system with variable boundary conditions in the wafer based precision glass moulding process. Journal of Materials Processing Technology, 2012, 212, 1771-1779.	6.3	23
161	Higher-level innovization: A case study from Friction Stir Welding process optimization. , $2011, \ldots$		7
162	Numerical Modeling of Fluid Flow in the Tape Casting Process. , 2011, , .		6

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163	High-temperature lead-free solder alternatives. Microelectronic Engineering, 2011, 88, 981-989.	2.4	167
164	Numerical optimisation of friction stir welding: Review of future challenges. Science and Technology of Welding and Joining, 2011, 16, 318-324.	3.1	31
165	Optimization of casting process parameters for homogeneous aggregate distribution in self-compacting concrete: A feasibility study. , 2011, , .		3
166	State-of-the-Art Multi-Objective Optimisation of Manufacturing Processes Based on Thermo-Mechanical Simulations., 2011,, 71-133.		15
167	Design of lead-free candidate alloys for high-temperature soldering based on the Au–Sn system. Materials & Design, 2010, 31, 4638-4645.	5.1	84
168	A comprehensive parameter study of an active magnetic regenerator using a 2D numerical model. International Journal of Refrigeration, 2010, 33, 753-764.	3.4	46
169	Multi-objective optimization of process parameters in friction stir welding. , 2010, , .		2
170	A Casting Yield Optimization Case Study: Forging Ram. International Journal of Metalcasting, 2010, 4, 61-76.	1.9	15
171	Optimisation of process parameters in friction stir welding based on residual stress analysis: A feasibility study. Science and Technology of Welding and Joining, 2010, 15, 369-377.	3.1	45
172	A multi-objective optimization application in Friction Stir Welding: Considering thermo-mechanical aspects. , 2010, , .		11
173	The demagnetizing field of a nonuniform rectangular prism. Journal of Applied Physics, 2010, 107, .	2.5	64
174	Development of Au–Ge based candidate alloys as an alternative to high-lead content solders. Journal of Alloys and Compounds, 2010, 490, 170-179.	5 . 5	111
175	Hybrid Search for Faster Production and Safer Process Conditions in Friction Stir Welding. Lecture Notes in Computer Science, 2010, , 603-612.	1.3	10
176	Modelling Cr depletion under a growing Cr ₂ O ₃ layer on austenitic stainless steel: the influence of grain boundary diffusion. Modelling and Simulation in Materials Science and Engineering, 2009, 17, 035009.	2.0	17
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