

# Jãolio C Viana

## List of Publications by Year in descending order

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133  
papers

2,773  
citations

201385

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214527

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134  
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134  
docs citations

134  
times ranked

3406  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical properties of poly( $\epsilon$ -caprolactone) and poly(lactic acid) blends. <i>Journal of Applied Polymer Science</i> , 2009, 112, 345-352.	1.3	182
2	Effect of carbon nanotube type and functionalization on the electrical, thermal, mechanical and electromechanical properties of carbon nanotube/styrene-butadiene-styrene composites for large strain sensor applications. <i>Composites Part B: Engineering</i> , 2014, 61, 136-146.	5.9	166
3	Cold Crystallization of PLLA Studied by Simultaneous SAXS and WAXS. <i>Macromolecular Materials and Engineering</i> , 2004, 289, 910-915.	1.7	121
4	Modeling and Optimization of the Injection-Molding Process: A Review. <i>Advances in Polymer Technology</i> , 2018, 37, 429-449.	0.8	99
5	The thermomechanical environment and the microstructure of an injection moulded polypropylene copolymer. <i>Polymer</i> , 2002, 43, 4185-4196.	1.8	96
6	Chemistry of solid metal-based inks and pastes for printed electronics – A review. <i>Applied Materials Today</i> , 2019, 15, 416-430.	2.3	90
7	Development of the skin layer in injection moulding: phenomenological model. <i>Polymer</i> , 2004, 45, 993-1005.	1.8	82
8	Extruded thermoplastic elastomers styrene-butadiene-styrene/carbon nanotubes composites for strain sensor applications. <i>Composites Part B: Engineering</i> , 2014, 57, 242-249.	5.9	82
9	Electro-mechanical properties of triblock copolymer styrene-butadiene-styrene/carbon nanotube composites for large deformation sensor applications. <i>Sensors and Actuators A: Physical</i> , 2013, 201, 458-467.	2.0	76
10	Full elastic constitutive relation of non-isotropic aligned-CNT/PDMS flexible nanocomposites. <i>Nanoscale</i> , 2013, 5, 4847.	2.8	67
11	Printing Technologies on Flexible Substrates for Printed Electronics. , 0, , .		66
12	Mechanical, electrical and electro-mechanical properties of thermoplastic elastomer styrene-butadiene-styrene/multiwall carbon nanotubes composites. <i>Journal of Materials Science</i> , 2013, 48, 1172-1179.	1.7	65
13	Recent Developments in the Optimization of the Bulk Heterojunction Morphology of Polymer: Fullerene Solar Cells. <i>Materials</i> , 2018, 11, 2560.	1.3	63
14	Effect of processing conditions on morphology and mechanical properties of injection-molded poly(l-lactic acid). <i>Polymer Engineering and Science</i> , 2007, 47, 1141-1147.	1.5	60
15	Dynamic mechanical behavior of starch-based scaffolds in dry and physiologically simulated conditions: Effect of porosity and pore size. <i>Acta Biomaterialia</i> , 2008, 4, 950-959.	4.1	60
16	Characterization of PET nanocomposites produced by different melt-based production methods. <i>Journal of Applied Polymer Science</i> , 2007, 106, 1659-1669.	1.3	56
17	The double porogen approach as a new technique for the fabrication of interconnected poly(L-lactic acid) scaffolds. <i>Journal of Applied Polymer Science</i> , 2007, 18, 185-193.	1.7	53
18	Bi-layered constructs based on poly(l-lactic acid) and starch for tissue engineering of osteochondral defects. <i>Materials Science and Engineering C</i> , 2008, 28, 80-86.	3.8	50

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19	Highly Sensitive Piezoresistive Graphene-Based Stretchable Composites for Sensing Applications. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 46286-46295.	4.0	50
20	Development of porous lamellar poly(l-lactic acid) scaffolds by conventional injection molding process. <i>Acta Biomaterialia</i> , 2008, 4, 887-896.	4.1	48
21	Structural interpretation of the strain-rate, temperature and morphology dependence of the yield stress of injection molded semicrystalline polymers. <i>Polymer</i> , 2005, 46, 11773-11785.	1.8	46
22	Polymeric materials for impact and energy dissipation. <i>Plastics, Rubber and Composites</i> , 2006, 35, 260-267.	0.9	45
23	Morphology and mechanical properties of injection molded poly(ethylene terephthalate). <i>Polymer Engineering and Science</i> , 2004, 44, 2174-2184.	1.5	42
24	Oriented morphology and enhanced mechanical properties of poly(l-lactic acid) from shear controlled orientation in injection molding. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 490, 81-89.	2.6	32
25	Nanocomposite Flexible Pressure Sensor for Biomedical Applications. <i>Procedia Engineering</i> , 2011, 25, 140-143.	1.2	32
26	Polymer Nanocomposite-Based Strain Sensors with Tailored Processability and Improved Device Integration. <i>ACS Applied Nano Materials</i> , 2018, 1, 3015-3025.	2.4	32
27	Title is missing!. <i>Journal of Materials Science</i> , 2001, 36, 4411-4418.	1.7	29
28	Development of polyhydroxyalkanoates/poly(lactic acid) composites reinforced with cellulosic fibers. <i>Composites Part B: Engineering</i> , 2014, 60, 603-611.	5.9	29
29	Inkjet Printed Pressure Sensing Platform for Postural Imbalance Monitoring. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2015, 64, 2813-2820.	2.4	29
30	A Review on Materials and Technologies for Organic Large-Area Electronics. <i>Advanced Materials Technologies</i> , 2021, 6, 2001016.	3.0	27
31	The thermomechanical environment and the mechanical properties of injection moldings. <i>Polymer Engineering and Science</i> , 2004, 44, 1522-1533.	1.5	26
32	Production of silver nanoparticles by green synthesis using artichoke ( <i>Cynara scolymus</i> L.) aqueous extract and measurement of their electrical conductivity. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2018, 9, 045002.	0.7	26
33	The Tensile Behaviour of an Injection-Moulded Propylene-Ethylene Copolymer: the Effect of the Local Thermomechanical Processing Conditions. <i>Polymer International</i> , 1997, 43, 159-166.	1.6	25
34	Mechanical characterization of polyhydroxyalkanoate and poly(lactic acid) blends. <i>Journal of Thermoplastic Composite Materials</i> , 2015, 28, 195-213.	2.6	24
35	Prediction of fiber orientation in a rotating compressing and expanding mold. <i>Polymer Engineering and Science</i> , 2008, 48, 1405-1413.	1.5	22
36	A Microinjected 3-Axis Thermal Accelerometer. <i>Procedia Engineering</i> , 2011, 25, 607-610.	1.2	20

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37	Using Multi-objective Evolutionary Algorithms for Optimization of the Cooling System in Polymer Injection Molding. <i>International Polymer Processing</i> , 2012, 27, 213-223.	0.3	20
38	Structure-Properties Relationships in Thermoplastic Polyurethane Elastomer Nanocomposites: Interactions between Polymer Phases and Nanofillers. <i>Macromolecular Materials and Engineering</i> , 2015, 300, 1153-1162.	1.7	20
39	Melt blending and characterization of carbon nanoparticles-filled thermoplastic polyurethane elastomers. <i>Journal of Elastomers and Plastics</i> , 2015, 47, 647-665.	0.7	20
40	Aligned carbon nanotube based sensors for strain sensing applications. <i>Sensors and Actuators A: Physical</i> , 2019, 289, 157-164.	2.0	20
41	A review on in-mold electronics technology. <i>Polymer Engineering and Science</i> , 2022, 62, 967-990.	1.5	20
42	Effects of the strain rate and temperature in stress-strain tests: study of the glass transition of a polyamide-6. <i>Polymer Testing</i> , 2001, 20, 937-943.	2.3	19
43	Using multiobjective evolutionary algorithms in the optimization of operating conditions of polymer injection molding. <i>Polymer Engineering and Science</i> , 2010, 50, 1667-1678.	1.5	19
44	Stress-strain experiments as a mechanical spectroscopic technique to characterise the glass transition dynamics in poly(ethylene terephthalate). <i>Polymer Testing</i> , 2006, 25, 953-960.	2.3	18
45	Co-injection molding of immiscible polymers: Skin-core structure and adhesion studies. <i>Polymer Engineering and Science</i> , 2011, 51, 2398-2407.	1.5	18
46	Microstructure of PP/clay Nanocomposites Produced by Shear Induced Injection Moulding. , 2012, 1, 34-43.		18
47	Toughness distribution in complex PP/nanoclay injected mouldings. <i>Composites Science and Technology</i> , 2013, 74, 28-36.	3.8	17
48	Modeling of Plasticating Injection Molding - Experimental Assessment. <i>International Polymer Processing</i> , 2014, 29, 558-569.	0.3	16
49	Prediction of the tensile impact behavior of injection molded samples from quasi-static data. <i>Polymer Engineering and Science</i> , 1999, 39, 1463-1472.	1.5	15
50	Thermal Characterization of Polyhydroxyalkanoates and Poly(lactic acid) Blends Obtained by Injection Molding. <i>Polymer-Plastics Technology and Engineering</i> , 2015, 54, 350-356.	1.9	15
51	Flexible Pressure Sensors: Modeling and Experimental Characterization. <i>Procedia Engineering</i> , 2012, 47, 1177-1180.	1.2	14
52	Fiber orientation in divergent/convergent flows in expansion and compression injection molding. <i>Polymer Composites</i> , 2006, 27, 539-551.	2.3	13
53	Carbonaceous Filler Type and Content Dependence of the Physical-Chemical and Electromechanical Properties of Thermoplastic Elastomer Polymer Composites. <i>Materials</i> , 2019, 12, 1405.	1.3	13
54	Conductive long fibre reinforced thermoplastics by using carbon nanofibres. <i>Plastics, Rubber and Composites</i> , 2006, 35, 247-252.	0.9	12

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55	Experimental characterization and computational simulations of the impact behavior of injection-molded polymers. <i>Polymer Engineering and Science</i> , 2007, 47, 337-346.	1.5	12
56	Characterization of PET Nanocomposites with Different Nanofillers. <i>Solid State Phenomena</i> , 0, 151, 113-117.	0.3	12
57	Solventless processing of conjugated polymers—A review. <i>Synthetic Metals</i> , 2014, 197, 23-33.	2.1	12
58	Analysis of the bonding process and materials optimization for mitigating the Yellow Border defect on optically bonded automotive display panels. <i>Displays</i> , 2017, 48, 21-28.	2.0	12
59	Morphology-performance relationship of polypropylene nanoclay composites processed by shear controlled injection moulding. <i>Polymer International</i> , 2013, 62, 1589-1599.	1.6	11
60	Enhanced printability of thermoplastic polyurethane substrates by silica particles surface interactions. <i>Applied Surface Science</i> , 2016, 360, 198-206.	3.1	11
61	Distributed Optical Fiber Sensors for PCB-Strain Analysis. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 8181-8188.	5.2	11
62	Novel Morphologies Produced by Active Shear Rotation during Injection Molding. <i>Macromolecular Materials and Engineering</i> , 2007, 292, 655-665.	1.7	10
63	Nanostructured Composites Based on Polyethylene-Polyamide Blends. II. Probing the Orientation in Polyethylene-Polyamide Nanocomposites and Their Precursors. <i>Journal of Macromolecular Science - Physics</i> , 2004, 43, 163-176.	0.4	9
64	Static and Dynamic Modeling of a 3-Axis Thermal Accelerometer. <i>Procedia Engineering</i> , 2012, 47, 973-976.	1.2	9
65	Effect of the impact conditions on the mechanical properties of injection-molded parts. <i>Polymer Engineering and Science</i> , 2012, 52, 1845-1853.	1.5	9
66	Solid-state structural evolution of poly(ethylene terephthalate) during step uniaxial stretching from different initial morphologies: An <i>in situ</i> wide angle x-ray scattering study. <i>Journal of Applied Polymer Science</i> , 2012, 124, 470-483.	1.3	9
67	Thermomechanical environment characterisation in injection moulding and its relation to the mechanical properties of talc-filled polypropylene. <i>Journal of Materials Science</i> , 2013, 48, 2597-2607.	1.7	9
68	Low temperature solid state processing of pure P3HT fibers. <i>AIP Advances</i> , 2013, 3, .	0.6	9
69	Using Multi-Objective Evolutionary Algorithms to Optimize Mechanical Properties of Injection Molded Parts. <i>International Polymer Processing</i> , 2005, 20, 274-285.	0.3	8
70	Structural development of poly(ethylene terephthalate) during uniaxial stretching above the glass-transition temperature: Study of the statistical influence of the stretching variables. <i>Journal of Applied Polymer Science</i> , 2011, 120, 1253-1265.	1.3	8
71	A Comparative Study between Knocked-Down Aligned Carbon Nanotubes and Buckypaper-Based Strain Sensors. <i>Materials</i> , 2019, 12, 2013.	1.3	8
72	The local thermomechanical conditions and the fracture behavior of an injection-molded poly(oxyethylene). <i>Polymer Engineering and Science</i> , 2006, 46, 181-187.	1.5	7

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73	Fiber orientation in injection molding with rotating flow. <i>Polymer Engineering and Science</i> , 2008, 48, 395-404.	1.5	7
74	Uni- and biaxial impact behavior of double-layered nanoclay-reinforced polypropylene injection moldings. <i>Polymer Engineering and Science</i> , 2013, 53, 724-733.	1.5	7
75	<i>In situ</i> WAXS/SAXS structural evolution study during uniaxial stretching of poly(ethylene) terephthalate nanocomposites. <i>Journal of Applied Polymer Science</i> , 2013, 128, 2884-2895.	1.3	7
76	Nano and Hybrid Composites Based on Poly(ethylene terephthalate): Blending and Characterization. <i>Advances in Polymer Technology</i> , 2014, 33, .	0.8	7
77	Piezo-resistive behaviour at high strain levels of PEDOT:PSS printed on a flexible polymeric substrate by a novel surface treatment. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 2563-2573.	1.1	7
78	Optimisation of the green synthesis of Cu/Cu <sub>2</sub> O particles for maximum yield production and reduced oxidation for electronic applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 263, 114807.	1.7	7
79	Thermoelectric response of a screen printed silver-nickel thermocouple. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 264, 114929.	1.7	7
80	Mold for Manipulation Microstructure Development. <i>International Polymer Processing</i> , 2005, 20, 27-34.	0.3	7
81	Structure evolution of PET under step-wise and continuous deformation modes: the effect of stress relaxation on the strain-induced morphology. <i>International Journal of Material Forming</i> , 2008, 1, 661-665.	0.9	6
82	Pressure sensing platform for health monitoring. , 2014, , .		6
83	Thiophene- and Carbazole-Substituted N-Methyl-Fulleropyrrolidine Acceptors in PffBT4T-2OD Based Solar Cells. <i>Materials</i> , 2020, 13, 1267.	1.3	6
84	Operational Load Monitoring of a Composite Panel Using Artificial Neural Networks. <i>Sensors</i> , 2020, 20, 2534.	2.1	6
85	Polypropylene/Clay Nanocomposites Produced by Shear Controlled Orientation in Injection Moulding: Deformation and Fracture Properties. <i>Strojinski Vestnik/Journal of Mechanical Engineering</i> , 2013, 59, 697-704.	0.6	5
86	Solid-state low-temperature extrusion of P3HT ribbons. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 2079-2086.	1.1	5
87	Active flow control using dense wireless sensor and actuator networks. <i>Microprocessors and Microsystems</i> , 2018, 61, 279-295.	1.8	5
88	Real Time X-Ray Scattering Studies on the Evolution of Morphology During Heating of a Shrinkable Polyethylene Film. <i>Mechanics of Time-Dependent Materials</i> , 2004, 8, 225-233.	2.3	4
89	Extensibility of the Inter-Lamellar Amorphous Layer and the Mechanical Behaviour of Polyethylene. <i>Materials Science Forum</i> , 2006, 514-516, 1186-1190.	0.3	4
90	Non-Conventional Injection Moulding of a PP/PC-ABS Blend. <i>Materials Science Forum</i> , 2006, 514-516, 858-862.	0.3	4

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91	Nanostructure Evolution during Uni-Axial Deformation of PET – A WAXS and SAXS Study Using Synchrotron Radiation. <i>Materials Science Forum</i> , 2006, 514-516, 1583-1587.	0.3	4
92	Applying flow simulations in the development process of injection moulded thermoplastic parts. <i>International Journal of Materials and Product Technology</i> , 2016, 52, 76.	0.1	4
93	Characterization of PP/TPV/MMT Ternary Nanocomposites Produced by Injection Molding. <i>Macromolecular Symposia</i> , 2017, 373, 1600153.	0.4	4
94	Mechanical properties of glass fiber reinforced polypropylene injection molded with a rotation mold. <i>Polymer Engineering and Science</i> , 2006, 46, 1598-1607.	1.5	3
95	Osteochondral Tissue Engineering Constructs with a Cartilage Part Made of Poly(L-lactic Acid) / Starch Blend and a Bioactive Poly(L-Lactic Acid) Composite Layer for Subchondral Bone. <i>Key Engineering Materials</i> , 2006, 309-311, 1109-1112.	0.4	3
96	Study on processing – microstructure – properties relationships of extruded profiles. <i>Plastics, Rubber and Composites</i> , 2006, 35, 173-180.	0.9	3
97	Thermomechanical processing environment and morphology development of a thermotropic polymer liquid crystal. <i>Journal of Applied Polymer Science</i> , 2010, 115, 2991-3004.	1.3	3
98	Flexible sensor for blood pressure measurement. , 2011, 2011, 512-5.		3
99	<i>In situ</i> WAXS/SAXS structural evolution study during uniaxial stretching of poly(ethylene terephthalate)/silica nanocomposites. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	1.3	3
100	Controlled temperature jaws to improve material characterization by uniaxial hot tensile test. <i>Polymer Testing</i> , 2006, 25, 772-781.	2.3	2
101	Manipulation of the Microstructure of Injection Moldings in a Special Mold and Their Mechanical Behavior. <i>Macromolecular Materials and Engineering</i> , 2006, 291, 1422-1435.	1.7	2
102	Influence of the Interaction Potential Parameters on the Mechanical Response of Simulated Semi-Crystalline Polymeric Materials. <i>Materials Science Forum</i> , 2006, 514-516, 810-814.	0.3	2
103	Mechanical properties of glass fibre reinforced polypropylene disks produced by rotating, expansion and compression injection moulding. <i>Journal of Materials Science</i> , 2007, 42, 5203-5216.	1.7	2
104	Impact performance prediction of injection-molded talc-filled polypropylene through thermomechanical environment assessment. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 77, 873-883.	1.5	2
105	Active flow control for aerospace operations by means of a dense wireless sensor and actuator network. , 2016, , .		2
106	Comprehensive study on the relationships between the processing, the microstructure, and mechanical properties of injection molded polypropylenes. <i>Polymer Engineering and Science</i> , 2018, 58, E215.	1.5	2
107	PffBT4T-2OD Based Solar Cells with Aryl-Substituted N-Methyl-Fulleropyrrolidine Acceptors. <i>Materials</i> , 2019, 12, 4100.	1.3	2
108	Multi-Objective Optimization of Gate Location and Processing Conditions in Injection Molding Using MOEAs: Experimental Assessment. <i>Lecture Notes in Computer Science</i> , 2015, , 373-387.	1.0	2

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109	Processing-Microstructure-Properties Relationships in Extrusion of Thermoplastics. Materials Science Forum, 2006, 514-516, 833-837.	0.3	1
110	The Thermomechanical Processing Conditions and the Mechanical Properties of Injection Molded PP/PC Blends. Materials Science Forum, 2008, 587-588, 553-557.	0.3	1
111	Development of Automotive Plastic Pillars for Preventing Occupant Injuries by Finite Element Simulations: The Role of Material Properties. Materials Science Forum, 2008, 587-588, 956-960.	0.3	1
112	Combining experimental and computed data for effective SHM of critical structural components. , 2011, , .		1
113	Mechanical Behavior of the Lamellar Structure in Semi-Crystalline Polymers. Materials Science Forum, 2012, 730-732, 1006-1011.	0.3	1
114	Design of a 3-axis thermal accelerometer using an electro-thermo-fluidic model. , 2012, , .		1
115	Improving Post-EVAR Surveillance with a Smart Stent-Graft. Lecture Notes in Computational Vision and Biomechanics, 2012, , 267-289.	0.5	1
116	A fully integrated three-axis thermal accelerometer. , 2013, , .		1
117	Structure-Properties Relationships in Processed Poly(ethylene terephthalate). Key Engineering Materials, 0, 554-557, 1757-1762.	0.4	1
118	Low cost pressure mapping platform for mobility monitoring applications. , 2013, , .		1
119	Influence of the local morphology on the surface tension of injection molded polypropylene. , 2014, , .		1
120	Magnetic Field Perturbations by Thermoelectric Effects. , 2019, , .		1
121	Green synthesis of Cu <sub>2</sub> O/Cu nanoparticles and conversion to Cu microparticles in one-bath reaction method for improved electrical conductivity. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2021, 12, 025009.	0.7	1
122	Graded Morphologies and the Performance of PffBT4T-2OD:PC71BM Devices Using Additive Choice. Nanomaterials, 2021, 11, 3367.	1.9	1
123	Optimisation of the Impact Behaviour of Injection Moulded Components Through Processing: A Case Study. , 2001, , .		0
124	Deformation of the lamellar structure in semi-crystalline polymers studied by computer simulations. E-Polymers, 2004, 4, .	1.3	0
125	Morphology and mechanical properties relationships in non-conventional melt manipulation injection moulding techniques. AIP Conference Proceedings, 2007, , .	0.3	0
126	Morphology and Mechanical Properties of Poly(Ethylene Terephthalate) Stretched Above the Glass Transition Temperature. AIP Conference Proceedings, 2007, , .	0.3	0



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127	Uniaxial Stretching above the Glass Transition Temperature of Poly(Ethylene Terephthalate) and its Effects on the Structure Development. <i>Materials Science Forum</i> , 0, 587-588, 529-533.	0.3	0
128	Effect of Clay Amounts on Morphology and Mechanical Performances in Multiscale PET Composites. , 2011, , .		0
129	The Use of Cellulosic Fibers Wastes to Increase the Mechanical Behaviour of Biodegradable Composites for Automotive Interior Parts. <i>RILEM Bookseries</i> , 2016, , 279-287.	0.2	0
130	Integrative simulation chain for improved components design: linking mould filling and structural simulations. <i>Polymer Bulletin</i> , 0, , 1.	1.7	0
131	Using Multi-objective Evolutionary Algorithms in the Optimization of Polymer Injection Molding. <i>Advances in Intelligent and Soft Computing</i> , 2009, , 357-365.	0.2	0
132	Experimental Testing and Process Parametrization. <i>Advanced Structured Materials</i> , 2020, , 237-263.	0.3	0
133	Comparison of numerical and experimental strain distributions in composite panel for aerospace applications. , 0, , .		0