

# eric Maire

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

286  
papers

11,354  
citations

55  
h-index

95  
g-index

297  
ext. papers

12,801  
ext. citations

4.8  
avg. IF

6.58  
L-index

#	Paper	IF	Citations
286	Detailed experimental validation and benchmarking of six models for longitudinal tensile failure of unidirectional composites. <i>Composite Structures</i> , <b>2022</b> , 279, 114828	5.3	6
285	Mechanical properties of unidirectional, porous polymer/ceramic composites for biomedical applications. <i>Open Ceramics</i> , <b>2021</b> , 8, 100195	3.3	3
284	Microstructural damage behaviour of Al foams. <i>Acta Materialia</i> , <b>2021</b> , 208, 116739	8.4	4
283	3D Anode Microbial Fuel Cell Characterization and Monitoring Coupling X-Ray Tomography and Electrochemical Impedance Spectroscopy. <i>Journal of the Electrochemical Society</i> , <b>2021</b> , 168, 054513	3.9	0
282	Tomography Imaging of Lithium Electrodeposits Using Neutron, Synchrotron X-Ray, and Laboratory X-Ray Sources: A Comparison. <i>Frontiers in Energy Research</i> , <b>2021</b> , 9,	3.8	1
281	The importance of a variable fibre packing density in modelling the tensile behaviour of single filament yarns. <i>Journal of the Textile Institute</i> , <b>2021</b> , 112, 733-741	1.5	0
280	Experimental investigation of porosities evolution in a bonded assembly by means of X-ray tomography <b>2021</b> , 97, 528-552		6
279	X-ray computed tomography. <i>Nature Reviews Methods Primers</i> , <b>2021</b> , 1,		72
278	Scale up of single-chamber microbial fuel cells with stainless steel 3D anode: Effect of electrode surface areas and electrode spacing. <i>Bioresource Technology Reports</i> , <b>2021</b> , 13, 100632	4.1	4
277	In situ observation of liquid metal dealloying and etching of porous FeCr by X-ray tomography and X-ray diffraction. <i>Materialia</i> , <b>2021</b> , 18, 101125	3.2	
276	Large scale additive manufacturing of artificial stone components using binder jetting and their X-ray microtomography investigations. <i>Open Ceramics</i> , <b>2021</b> , 7, 100162	3.3	1
275	Evolution of fibre deflection leading to kink-band formation in unidirectional glass fibre/epoxy composite under axial compression. <i>Composites Science and Technology</i> , <b>2021</b> , 213, 108929	8.6	5
274	4D in situ monitoring of the setting of $\beta$ plaster using synchrotron X-ray tomography with high spatial and temporal resolution. <i>Construction and Building Materials</i> , <b>2021</b> , 304, 124632	6.7	
273	Role of crystallographic orientation on intragranular void growth in polycrystalline FCC materials. <i>International Journal of Plasticity</i> , <b>2021</b> , 147, 103104	7.6	1
272	Multiscale Characterization of Composite Electrode Microstructures for High Density Lithium-ion Batteries Guided by the Specificities of Their Electronic and Ionic Transport Mechanisms. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 100521	3.9	10
271	Monitoring the morphological changes of Si-based electrodes by X-ray computed tomography: A 4D-multiscale approach. <i>Nano Energy</i> , <b>2020</b> , 74, 104848	17.1	14
270	Study on Cell Deformation of Low Porosity Aluminum Foams under Quasi-Static Compression by X-Ray Tomography. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 2000264	3.5	2

269	Experimental stress state-dependent void nucleation behavior for advanced high strength steels. <i>International Journal of Mechanical Sciences</i> , <b>2020</b> , 179, 105661	5.5	11
268	Quantitative analysis of flow dynamics of organic granular materials inside a versatile silo model during time-lapse X-ray tomography experiments. <i>Computers and Electronics in Agriculture</i> , <b>2020</b> , 172, 105346	6.5	2
267	On the influence of mechanical loadings on the porosities of structural epoxy adhesives joints by means of in-situ X-ray microtomography. <i>International Journal of Adhesion and Adhesives</i> , <b>2020</b> , 99, 102568	3.4	7
266	Sulfur-Based Electrode Using a Polyelectrolyte Binder Studied via Coupled in Situ Synchrotron X-ray Diffraction and Tomography. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 2422-2431	6.1	8
265	Highlighting the role of heterogeneity on the indentation hardness of foamed gypsum. <i>Journal of the European Ceramic Society</i> , <b>2020</b> , 40, 3795-3805	6	3
264	On the effect of the curing cycle on the creation of pores in structural adhesive joints by means of X-ray microtomography <b>2020</b> , 1-34		4
263	Multiscale deformation processes during cold sintering of nanovaterite compacts. <i>Acta Materialia</i> , <b>2020</b> , 189, 266-273	8.4	5
262	Fatigue performances of chemically etched thin struts built by selective electron beam melting: Experiments and predictions. <i>Materialia</i> , <b>2020</b> , 9, 100589	3.2	22
261	Corrosion resistance of porous ferritic stainless steel produced by liquid metal dealloying of Incoloy 800. <i>Corrosion Science</i> , <b>2020</b> , 166, 108468	6.8	13
260	Experimental study of the fiber orientations in single and multi-ply continuous filament yarns. <i>Journal of the Textile Institute</i> , <b>2020</b> , 111, 646-659	1.5	3
259	Micromechanical modelling of edge failure in 800MPa advanced high strength steels. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2020</b> , 137, 103855	5	2
258	A rationale for the influence of grain size on failure of magnesium alloy AZ31: An in situ X-ray microtomography study. <i>Acta Materialia</i> , <b>2020</b> , 200, 619-631	8.4	8
257	Impact of the binder nature on the morphological change of sulfur electrodes upon cycling investigated by in situ characterization methods. <i>Journal of Power Sources</i> , <b>2020</b> , 477, 228374	8.9	8
256	Micro-tensile behavior of struts extracted from an aluminum foam. <i>Materials Characterization</i> , <b>2020</b> , 166, 110456	3.9	5
255	Polymerization shrinkage of resin-based composites for dental restorations: A digital volume correlation study. <i>Dental Materials</i> , <b>2019</b> , 35, 1654-1664	5.7	5
254	Damage in a cast AlSi12Ni alloy: In situ tomography, 2D and 3D image correlation. <i>Materialia</i> , <b>2019</b> , 8, 100475	3.2	0
253	Crack nucleation and growth in $\beta$ -Titanium alloy with lamellar microstructure under uniaxial tension: 3D X-ray tomography analysis. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 747, 154-160	5.3	9
252	Fabrication and characterization of hardystonite-chitosan biocomposite scaffolds. <i>Ceramics International</i> , <b>2019</b> , 45, 8804-8814	5.1	10

251	Stochastic characterization of textile reinforcements in composites based on X-ray microtomographic scans. <i>Composite Structures</i> , <b>2019</b> , 224, 111031	5.3	2
250	Role of Hydrogen-Charging on Nucleation and Growth of Ductile Damage in Austenitic Stainless Steels. <i>Materials</i> , <b>2019</b> , 12,	3.5	2
249	Effect of surface properties of capillary structures on the thermal behaviour of a LHP flat disk-shaped evaporator. <i>International Journal of Thermal Sciences</i> , <b>2019</b> , 142, 163-175	4.1	0
248	Dynamics of the Morphological Degradation of Si-Based Anodes for Li-Ion Batteries Characterized by In Situ Synchrotron X-Ray Tomography. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1803947	21.8	43
247	Compressive deformation behavior of dendritic Mg-Ca(Mn) alloys at high temperature. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 763, 138180	5.3	7
246	Direct observation of the displacement field and microcracking in a glass by means of X-ray tomography during in situ Vickers indentation experiment. <i>Acta Materialia</i> , <b>2019</b> , 179, 424-433	8.4	9
245	Insight into the Directional Thermal Transport of Hexagonal Boron Nitride Composites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 41726-41735	9.5	18
244	Effect of build orientation on the fatigue properties of as-built Electron Beam Melted Ti-6Al-4V alloy. <i>International Journal of Fatigue</i> , <b>2019</b> , 118, 65-76	5	56
243	Compressive performance and deformation mechanism of the dynamic gas injection aluminum foams. <i>Materials Characterization</i> , <b>2019</b> , 147, 11-20	3.9	31
242	In situ characterization of Si-based anodes by coupling synchrotron X-ray tomography and diffraction. <i>Nano Energy</i> , <b>2019</b> , 56, 799-812	17.1	26
241	Climate-Dependent Heat-Triggered Opening Mechanism of Seed Pods. <i>Advanced Science</i> , <b>2018</b> , 5, 17005736	5.3	20
240	Comparison of aluminium foams prepared by different methods using X-ray tomography. <i>Materials Characterization</i> , <b>2018</b> , 138, 296-307	3.9	14
239	Enhancing the tensile properties of EBM as-built thin parts: Effect of HIP and chemical etching. <i>Materials Characterization</i> , <b>2018</b> , 143, 82-93	3.9	38
238	Thermal conductivity of highly porous metal foams: Experimental and image based finite element analysis. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 122, 1-10	4.9	24
237	Quantitative assessment of the impact of second phase particle arrangement on damage and fracture anisotropy. <i>Acta Materialia</i> , <b>2018</b> , 148, 456-466	8.4	31
236	Analysis of compaction in brittle foam with multiscale indentation tests. <i>Mechanics of Materials</i> , <b>2018</b> , 118, 22-30	3.3	6
235	A Facile and Very Effective Method to Enhance the Mechanical Strength and the Cyclability of Si-Based Electrodes for Li-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1701787	21.8	58
234	Revealing the Effect of Local Connectivity of Rigid Phases during Deformation at High Temperature of Cast AlSi12Cu4Ni(2,3)Mg Alloys. <i>Materials</i> , <b>2018</b> , 11,	3.5	9

233	Microstructure characterization by X-ray tomography and EBSD of porous FeCr produced by liquid metal dealloying. <i>Materials Characterization</i> , <b>2018</b> , 144, 166-172	3.9	13
232	Compression behavior of lattice structures produced by selective laser melting: X-ray tomography based experimental and finite element approaches. <i>Acta Materialia</i> , <b>2018</b> , 159, 395-407	8.4	91
231	Tensile rupture of medial arterial tissue studied by X-ray micro-tomography on stained samples. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2018</b> , 78, 362-368	4.1	7
230	In situ analysis of plasticity and damage nucleation in a Ti-6Al-4V alloy and laser weld. <i>Materials Characterization</i> , <b>2018</b> , 146, 81-90	3.9	10
229	Analysis of shear stress promoting void evolution behavior in an $\beta$ /Ti alloy with fully lamellar microstructure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 737, 27-39	5.3	6
228	Two-Scale Tomography Based Finite Element Modeling of Plasticity and Damage in Aluminum Foams. <i>Materials</i> , <b>2018</b> , 11,	3.5	7
227	Influence of tubificid worms on sediment structure, benthic biofilm and fauna in wetlands: A field enclosure experiment. <i>Freshwater Biology</i> , <b>2018</b> , 63, 1420-1432	3.1	8
226	Gas permeability of Ti6Al4V foams prepared via gelcasting, experiments and modelling. <i>Computational Materials Science</i> , <b>2018</b> , 152, 363-373	3.2	4
225	Ductilization of aluminium alloy 6056 by friction stir processing. <i>Acta Materialia</i> , <b>2017</b> , 130, 121-136	8.4	56
224	Two-scale study of the fracture of an aluminum foam by X-ray tomography and finite element modeling. <i>Materials and Design</i> , <b>2017</b> , 120, 117-127	8.1	27
223	Fracture behavior of robocast HA/ $\beta$ TCP scaffolds studied by X-ray tomography and finite element modeling. <i>Journal of the European Ceramic Society</i> , <b>2017</b> , 37, 1735-1745	6	20
222	Three dimensional analysis of nanoporous silicon particles for Li-ion batteries. <i>Materials Characterization</i> , <b>2017</b> , 124, 165-170	3.9	6
221	Multiscale Morphological and Electrical Characterization of Charge Transport Limitations to the Power Performance of Positive Electrode Blends for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1602239	21.8	50
220	Effect of solution heat treatment on microstructure and damage accumulation in cast Al-Cu alloys. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 697, 341-352	5.7	20
219	Cold-rolling influence on microstructure and mechanical properties of NiCr - Ag composites and porous NiCr obtained by liquid metal dealloying. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 707, 251-256	5.7	9
218	Self-diffusion of electrolyte species in model battery electrodes using Magic Angle Spinning and Pulsed Field Gradient Nuclear Magnetic Resonance. <i>Journal of Power Sources</i> , <b>2017</b> , 362, 315-322	8.9	6
217	Effect of strut orientation on the microstructure heterogeneities in AlSi10Mg lattices processed by selective laser melting. <i>Scripta Materialia</i> , <b>2017</b> , 141, 32-35	5.6	71
216	A clustering method for analysis of morphology of short natural fibers in composites based on X-ray microtomography. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 102, 184-195	8.4	13

215	Identification of the crushing behavior of brittle foam: From indentation to oedometric tests. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2017</b> , 98, 181-200	5	23
214	Multiscale morphological characterization of process induced heterogeneities in blended positive electrodes for lithium-ion batteries. <i>Journal of Materials Science</i> , <b>2017</b> , 52, 3576-3596	4.3	26
213	Interfacial stability and electrochemical behavior of Li/LiFePO <sub>4</sub> batteries using novel soft and weakly adhesive photo-ionogel electrolytes. <i>Journal of Power Sources</i> , <b>2016</b> , 330, 92-103	8.9	10
212	Imaging grain boundary grooves in hard-sphere colloidal bicrystals. <i>Physical Review E</i> , <b>2016</b> , 94, 042604	2.4	4
211	Evolution of the 3D Microstructure of a Si-Based Electrode for Li-Ion Batteries Investigated by FIB/SEM Tomography. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, A1550-A1559	3.9	21
210	Failure Mechanisms of Plasterboard in Nail Pull Test Determined by X-ray Microtomography and Digital Volume Correlation. <i>Experimental Mechanics</i> , <b>2016</b> , 56, 1427-1437	2.6	14
209	Urban pollution of sediments: Impact on the physiology and burrowing activity of tubificid worms and consequences on biogeochemical processes. <i>Science of the Total Environment</i> , <b>2016</b> , 568, 196-207	10.2	24
208	Three-dimensional investigation of grain orientation effects on void growth in commercially pure titanium. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 671, 221-232	5.3	21
207	Mechanical behaviour of a TCP ceramic with a random porosity: Study of the fracture path with X-ray tomography. <i>Journal of the European Ceramic Society</i> , <b>2016</b> , 36, 3225-3233	6	9
206	Characterization and micromechanical modelling of microstructural heterogeneity effects on ductile fracture of 6xxx aluminium alloys. <i>Acta Materialia</i> , <b>2016</b> , 103, 558-572	8.4	47
205	20 Hz X-ray tomography during an in situ tensile test. <i>International Journal of Fracture</i> , <b>2016</b> , 200, 3-12	2.3	74
204	In-situ X-ray tomographic monitoring of gypsum plaster setting. <i>Cement and Concrete Research</i> , <b>2016</b> , 82, 107-116	10.3	39
203	Homogeneous and heterogeneous rheology and flow-induced microstructures of a fresh fiber-reinforced mortar. <i>Cement and Concrete Research</i> , <b>2016</b> , 82, 130-141	10.3	10
202	In situ 3D Synchrotron Laminography Assessment of Edge Fracture in Dual-Phase Steels: Quantitative and Numerical Analysis. <i>Experimental Mechanics</i> , <b>2016</b> , 56, 177-195	2.6	16
201	CoCrMo cellular structures made by Electron Beam Melting studied by local tomography and finite element modelling. <i>Materials Characterization</i> , <b>2016</b> , 116, 48-54	3.9	15
200	In situ observation of plaster microstructure evolution during thermal loading. <i>Fire and Materials</i> , <b>2016</b> , 40, 973-984	1.8	3
199	Influence of fibre distribution and grain size on the mechanical behaviour of friction stir processed Mg composites. <i>Materials Characterization</i> , <b>2015</b> , 107, 125-133	3.9	19
198	A Multi-Scale Investigation of Pore Structure Impact on the Mobilization of Trapped Oil by Surfactant Injection. <i>Transport in Porous Media</i> , <b>2015</b> , 109, 673-692	3.1	37

197	Characterization of porosity, structure, and mechanical properties of electrospun SiOC fiber mats. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 4221-4231	4.3	22
196	Damage characterisation in aluminium matrix composites reinforced with amorphous metal inclusions. <i>Materials Science and Technology</i> , <b>2015</b> , 31, 579-586	1.5	10
195	In situ tomographic investigation of damage development in $\square 45 \square$ carbon fibre reinforced laminates. <i>Materials Science and Technology</i> , <b>2015</b> , 31, 587-593	1.5	15
194	3D composite reinforcement meso F.E. analyses based on X-ray computed tomography. <i>Composite Structures</i> , <b>2015</b> , 132, 1094-1104	5.3	100
193	Quality control tool of electrode coating for lithium-ion batteries based on X-ray radiography. <i>Journal of Power Sources</i> , <b>2015</b> , 298, 285-291	8.9	15
192	Implementation of a damage evolution law for dual-phase steels in Gurson-type models. <i>Materials and Design</i> , <b>2015</b> , 88, 1213-1222	8.1	7
191	Damage law identification from full field displacement measurement: Application to four-point bending test for plasterboard. <i>European Journal of Mechanics, A/Solids</i> , <b>2015</b> , 49, 60-66	3.7	12
190	Effect of viscosity on cavity growth in ductile damage. <i>Mechanics of Materials</i> , <b>2015</b> , 89, 169-175	3.3	1
189	Fast virtual histology using X-ray in-line phase tomography: application to the 3D anatomy of maize developing seeds. <i>Plant Methods</i> , <b>2015</b> , 11, 55	5.8	33
188	Comparison of Damage Evolution in Different Steels by Means of 3D X Ray Tomography. <i>Steel Research International</i> , <b>2015</b> , 86, 1197-1203	1.6	2
187	Strong, tough and stiff bioinspired ceramics from brittle constituents. <i>Nature Materials</i> , <b>2014</b> , 13, 508-1427	550	
186	3D morphological analysis of copper foams as current collectors for Li-ion batteries by means of X-ray tomography. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2014</b> , 187, 1-8	3.1	28
185	Grain growth and static recrystallization kinetics in Co $\square 20$ Cr $\square 15$ W $\square 10$ Ni (L-605) cobalt-base superalloy. <i>Philosophical Magazine</i> , <b>2014</b> , 94, 1992-2008	1.6	15
184	Templated Grain Growth in Macroporous Materials. <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 1736-1742	3.8	40
183	Structural characterization of solid foams. <i>Comptes Rendus Physique</i> , <b>2014</b> , 15, 674-682	1.4	6
182	Quantitative X-ray tomography. <i>International Materials Reviews</i> , <b>2014</b> , 59, 1-43	16.1	767
181	Self-assembly of faceted particles triggered by a moving ice front. <i>Langmuir</i> , <b>2014</b> , 30, 8656-63	4	55
180	Mechanical properties of crumpled aluminum foils. <i>Acta Materialia</i> , <b>2014</b> , 81, 98-110	8.4	10



179	Characterization of ductile damage for a high carbon steel using 3D X-ray micro-tomography and mechanical tests [Application to the identification of a shear modified GTN model. <i>Computational Materials Science</i> , <b>2014</b> , 84, 175-187	3.2	44
178	Application of X-ray computed micro-tomography to the study of damage and oxidation kinetics of thermostructural composites. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2014</b> , 324, 113-117	1.2	9
177	Separation of nucleation and growth of voids during tensile deformation of a dual phase steel using synchrotron microtomography. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 589, 242-251	5.3	23
176	Meso-scale FE analyses of textile composite reinforcement deformation based on X-ray computed tomography. <i>Composite Structures</i> , <b>2014</b> , 116, 165-176	5.3	109
175	Lightweight and stiff cellular ceramic structures by ice templating. <i>Journal of Materials Research</i> , <b>2014</b> , 29, 175-181	2.5	18
174	Nanovoid morphology and distribution in deformed HDPE studied by magnified synchrotron radiation holotomography. <i>Polymer</i> , <b>2014</b> , 55, 6439-6443	3.9	32
173	Digital Volume Correlation Applied to X-ray Tomography Images from Spherical Indentation Tests on Lightweight Gypsum. <i>Strain</i> , <b>2014</b> , 50, 444-453	1.7	43
172	Analysis of Composite Reinforcement at Mesoscopic Scale from X-Ray Microtomography. <i>Key Engineering Materials</i> , <b>2014</b> , 611-612, 316-323	0.4	
171	Heterogenous void growth revealed by in situ 3-D X-ray microtomography using automatic cavity tracking. <i>Acta Materialia</i> , <b>2014</b> , 63, 130-139	8.4	39
170	3D Multiscale Characterization of Silica Aerogels Composites <b>2014</b> , 29-34		
169	Three-dimensional Analysis of an In Situ Double-torsion Test by X-ray Computed Tomography and Digital Volume Correlation. <i>Experimental Mechanics</i> , <b>2013</b> , 53, 1265-1275	2.6	10
168	Local Tomography Study of the Fracture of an ERG Metal Foam. <i>Advanced Engineering Materials</i> , <b>2013</b> , 15, 767-772	3.5	14
167	Deformation Behavior and Dynamic Recrystallization of Biomedical Co-Cr-W-Ni (L-605) Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 2819-2830 <sup>2.3</sup>	2.3	40
166	In situ observation of syntactic foams under hydrostatic pressure using X-ray tomography. <i>Acta Materialia</i> , <b>2013</b> , 61, 4035-4043	8.4	27
165	Time-lapse, three-dimensional in situ imaging of ice crystal growth in a colloidal silica suspension. <i>Acta Materialia</i> , <b>2013</b> , 61, 2077-2086	8.4	63
164	Influence of the restored work-hardening rate on ductility studied by X-ray computed tomography. <i>Philosophical Magazine Letters</i> , <b>2013</b> , 93, 379-386	1	
163	Onset of void coalescence in uniaxial tension studied by continuous X-ray tomography. <i>Acta Materialia</i> , <b>2013</b> , 61, 1021-1036	8.4	43
162	Numerical investigation and experimental validation of physically based advanced GTN model for DP steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 569, 1-12	5.3	12



161	Damage evolution in TWIP and standard austenitic steel by means of 3D X ray tomography. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2013</b> , 579, 92-98	5.3	39
160	Effect of stress triaxiality on porosity evolution in notched bars: Quantitative agreement between a recent dilatational model and X-ray tomography data. <i>Mechanics Research Communications</i> , <b>2013</b> , 50, 77-82	2.2	10
159	Influence of wall roughness and packing density on stagnant zone formation during funnel flow discharge from a silo: An X-ray imaging study. <i>Chemical Engineering Science</i> , <b>2013</b> , 97, 210-224	4.4	32
158	Experimental investigation of void coalescence in a dual phase steel using X-ray tomography. <i>Acta Materialia</i> , <b>2013</b> , 61, 6821-6829	8.4	44
157	3D morphological evolution of porous titanium by x-ray micro- and nano-tomography. <i>Journal of Materials Research</i> , <b>2013</b> , 28, 2444-2452	2.5	35
156	Characterization by X-ray tomography of granulated alumina powder during in situ die compaction. <i>Materials Characterization</i> , <b>2013</b> , 81, 111-123	3.9	19
155	Modeling Grain Boundary Motion and Dynamic Recrystallization in Pure Metals. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2013</b> , 44, 5861-5875	2.3	17
154	Ductile Damage in Tension and Bending for DP980 Steel Sheets. <i>Key Engineering Materials</i> , <b>2013</b> , 554-557, 110-117	0.4	1
153	Cellular solids studied by x-ray tomography and finite element modeling – review. <i>Journal of Materials Research</i> , <b>2013</b> , 28, 2191-2201	2.5	40
152	Digital X-ray tomography Volume Correlation of Rock Wool During Compression. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2013</b> , 315-316	0.3	
151	Non-destructive 3-D reconstruction of the martensitic phase in a dual-phase steel using synchrotron holotomography. <i>Scripta Materialia</i> , <b>2012</b> , 66, 1077-1080	5.6	27
150	Resolution effect on the study of ductile damage using synchrotron X-ray tomography. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2012</b> , 284, 15-18	1.2	26
149	Analysis of the bulk solid flow during gravitational silo emptying using X-ray and ECT tomography. <i>Powder Technology</i> , <b>2012</b> , 224, 196-208	5.2	23
148	Phase contrast synchrotron microtomography: improving noninvasive investigations of fossil embryos in ovo. <i>Microscopy and Microanalysis</i> , <b>2012</b> , 18, 179-85	0.5	11
147	Effect of Multiaxial Stress State on Morphology and Spatial Distribution of Voids in Deformed Semicrystalline Polymer Assessed by X-ray Tomography. <i>Macromolecules</i> , <b>2012</b> , 45, 4658-4668	5.5	40
146	Particle redistribution and structural defect development during ice templating. <i>Acta Materialia</i> , <b>2012</b> , 60, 4594-4603	8.4	65
145	Bulk evaluation of ductile damage development using high resolution tomography and laminography. <i>Comptes Rendus Physique</i> , <b>2012</b> , 13, 328-336	1.4	12
144	Ductile damage in aluminium alloy thin sheets: Correlation between micro-tomography observations and mechanical modeling. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2012</b> , 558, 217-225	5.3	26

143	X-Ray Tomography Applied to the Characterization of Highly Porous Materials. <i>Annual Review of Materials Research</i> , <b>2012</b> , 42, 163-178	12.8	63
142	Dynamic Recrystallization of Biomedical Co-Cr-W-Ni (L-605) Alloy. <i>Materials Science Forum</i> , <b>2012</b> , 706-709, 472-477	0.4	1
141	Mechanical Properties of Monofilament Entangled Materials. <i>Advanced Engineering Materials</i> , <b>2012</b> , 14, 1128-1133	3.5	14
140	Damage in dual phase steels and its constituents studied by X-ray tomography. <i>International Journal of Fracture</i> , <b>2012</b> , 174, 217-227	2.3	17
139	Fast In Situ X-Ray Microtomography Observations of Solidification and Semisolid Deformation of Al-Cu Alloys. <i>Jom</i> , <b>2012</b> , 64, 83-88	2.1	20
138	Effect of triaxiality on void growth and coalescence in model materials investigated by X-ray tomography. <i>Acta Materialia</i> , <b>2012</b> , 60, 2829-2839	8.4	34
137	Modeling the mechanical properties of optimally processed cordierite-mullite-alumina ceramic foams by X-ray computed tomography and finite element analysis. <i>Acta Materialia</i> , <b>2012</b> , 60, 4235-4246	8.4	27
136	Ice-Templating of Alumina Suspensions: Effect of Supercooling and Crystal Growth During the Initial Freezing Regime. <i>Journal of the American Ceramic Society</i> , <b>2012</b> , 95, 799-804	3.8	28
135	Elaboration of Architected Materials by Spark Plasma Sintering. <i>Materials Science Forum</i> , <b>2012</b> , 706-709, 1885-1892	0.4	4
134	Spark plasma sintering of pure iron nanopowders by simple route. <i>Powder Metallurgy</i> , <b>2012</b> , 55, 76-79	1.9	11
133	Ultra Fast Tomography: New Developments for 4D Studies in Material Science <b>2012</b> , 203-208		1
132	Submicron Tomography Using High Energy Synchrotron Radiation. <i>Advanced Structured Materials</i> , <b>2011</b> , 151-170	0.6	2
131	Mechanical properties of Monofilament entangled materials. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2011</b> , 33-38	0.3	1
130	Damage characterization in Dual-Phase steels using X-ray tomography. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2011</b> , 11-18	0.3	5
129	Mechanical behaviors of Ti(V, Al, Sn) alloys with $\beta$ martensite microstructure. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 2684-2692	5.7	21
128	Ice shaping properties, similar to that of antifreeze proteins, of a zirconium acetate complex. <i>PLoS ONE</i> , <b>2011</b> , 6, e26474	3.7	52
127	Dynamics of the Freezing Front During the Solidification of a Colloidal Alumina Aqueous Suspension: In Situ X-Ray Radiography, Tomography, and Modeling. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 3570-3578	3.8	45
126	Investigation of spacer size effect on architecture and mechanical properties of porous titanium. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 530, 633-642	5.3	54

125	The damage process in a biomedical Co <sub>29</sub> Cr <sub>68</sub> Mo <sub>0.14</sub> N alloy analyzed by X-ray tomography and electron backscattered diffraction. <i>Scripta Materialia</i> , <b>2011</b> , 64, 367-370	5.6	21
124	Damage quantification in aluminium alloys using in situ tensile tests in X-ray tomography. <i>Engineering Fracture Mechanics</i> , <b>2011</b> , 78, 2679-2690	4.2	77
123	Microtomographic study and finite element analysis of the porosity harmfulness in a cast aluminium alloy. <i>International Journal of Fatigue</i> , <b>2011</b> , 33, 1514-1525	5	50
122	Validation of void growth models using X-ray microtomography characterization of damage in dual phase steels. <i>Acta Materialia</i> , <b>2011</b> , 59, 7564-7573	8.4	120
121	In situ observation of ductile fracture using X-ray tomography technique. <i>Acta Materialia</i> , <b>2011</b> , 59, 1995-2008	7.7	77
120	3D Characterization of the Influence of Porosity on Fatigue Properties of a Cast Al Alloy. <i>Advanced Engineering Materials</i> , <b>2011</b> , 13, 194-198	3.5	8
119	Variability in erosion rates related to the state of landscape transience in the semi-arid Chilean Andes. <i>Earth Surface Processes and Landforms</i> , <b>2011</b> , 36, 1736-1748	3.7	23
118	Quantitative estimation of volume changes of granular materials during silo flow using X-ray tomography. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2011</b> , 50, 59-67	3.7	26
117	Three-dimensional strain mapping using in situ X-ray synchrotron microtomography. <i>Journal of Strain Analysis for Engineering Design</i> , <b>2011</b> , 46, 549-561	1.3	33
116	Influence of cell aspect ratio on architecture and compressive strength of titanium foams. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 7368-7374	5.3	21
115	Room-temperature ductility of Ti <sub>60</sub> Al <sub>40</sub> V alloy with $\beta$ ? martensite microstructure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 1512-1520	5.3	88
114	X-ray tomography analysis of the mechanical behaviour of reinforcements in composites <b>2011</b> , 565-587		2
113	Investigation of Ductile Damage in DP980 Steel Sheets Using Mechanical Tests and X-ray Micro-Tomography <b>2011</b> ,		2
112	X-ray tomography analysis of the mechanical behaviour of reinforcements in composites <b>2011</b> , 579-599		
111	Understanding the mechanical behaviour of a high manganese TWIP steel by the means of in situ 3D X ray tomography. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2011</b> , 27-32	0.3	1
110	Effect of Porosity on the Fatigue Life of a Cast Al Alloy. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2011</b> , 55-61	0.3	2
109	Influence of Particle Size on Ice Nucleation and Growth During the Ice-Templating Process. <i>Journal of the American Ceramic Society</i> , <b>2010</b> , 93, 2507-2510	3.8	81
108	Microstructure-Aided Digital Volume Correlation. <i>EPJ Web of Conferences</i> , <b>2010</b> , 6, 35002	0.3	1

107	Microstructure and Mechanical Properties of $\beta$ -Martensite Type Ti-V-Al Alloy after Cold- or Hot Working Process. <i>Key Engineering Materials</i> , <b>2010</b> , 436, 171-177	0.4	3
106	Nanograined Size Pure Iron Elaborated by Means of Spark Plasma Sintering. <i>Materials Science Forum</i> , <b>2010</b> , 638-642, 1691-1696	0.4	1
105	Numerical Investigation of the Radiative Properties of Polymeric Foams from Tomographic Images. <i>Journal of Thermophysics and Heat Transfer</i> , <b>2010</b> , 24, 647-658	1.3	22
104	Iron ore sinter porosity characterisation with application of 3D X-ray tomography. <i>Ironmaking and Steelmaking</i> , <b>2010</b> , 37, 313-319	1.3	21
103	Fast in-situ X-ray micro tomography characterisation of microstructural evolution and strain-induced damage in alloys at various temperatures. <i>International Journal of Materials Research</i> , <b>2010</b> , 101, 1080-1088	0.5	14
102	Lubricated compression and X-ray microtomography to analyse the rheology of a fibre-reinforced mortar. <i>Rheologica Acta</i> , <b>2010</b> , 49, 221-235	2.3	27
101	Use of numerical simulation of woven reinforcement forming at mesoscale: Influence of transverse compression on the global response. <i>International Journal of Material Forming</i> , <b>2010</b> , 3, 699-702	2	7
100	In Situ Experiments with X ray Tomography: an Attractive Tool for Experimental Mechanics. <i>Experimental Mechanics</i> , <b>2010</b> , 50, 289-305	2.6	331
99	Characterization and modeling of void nucleation by interface decohesion in dual phase steels. <i>Scripta Materialia</i> , <b>2010</b> , 63, 973-976	5.6	107
98	Constituent Particle Break-Up During Hot Rolling of AA 5182. <i>Advanced Engineering Materials</i> , <b>2010</b> , 12, 20-29	3.5	10
97	Modelling the competition between interface debonding and particle fracture using a plastic strain dependent cohesive zone. <i>Engineering Fracture Mechanics</i> , <b>2010</b> , 77, 705-718	4.2	34
96	Mesoscopic Mechanical Analyses of Textile Composites: Validation with X-Ray Tomography. <i>Lecture Notes in Applied and Computational Mechanics</i> , <b>2010</b> , 71-78	0.3	1
95	Mechanical response and fracture dynamics of polymeric foams. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 214001	3	18
94	Simulation of Damage Percolation Within Aluminum Alloy Sheet. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , <b>2009</b> , 131,	1.8	4
93	Application of 3D X-ray tomography to investigation of structure of sinter mixture granules. <i>Ironmaking and Steelmaking</i> , <b>2009</b> , 36, 416-420	1.3	14
92	Modelling the mechanical and thermal properties of cellular materials from the knowledge of their architecture. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1188, 150		
91	A Preliminary Study on Cell Wall Architecture of Titanium Foams. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1188, 47		
90	In Situ X-Ray Microtomography Investigation of the Deformation Mechanisms of Al-Cu Alloys in the Semi-Solid State. <i>Materials Science Forum</i> , <b>2009</b> , 618-619, 275-278	0.4	1

89	Porosity analysis of long-fiber-reinforced ceramic matrix composites using X-ray tomography. <i>Scripta Materialia</i> , <b>2009</b> , 60, 388-390	5.6	32
88	In situ X-ray tomography observation of inhomogeneous deformation in semi-solid aluminium alloys. <i>Scripta Materialia</i> , <b>2009</b> , 61, 449-452	5.6	106
87	Experimental determination of the macroscopic fatigue properties of metal hollow sphere structures. <i>Materials Letters</i> , <b>2009</b> , 63, 1131-1134	3.3	21
86	Simulation and tomography analysis of textile composite reinforcement deformation at the mesoscopic scale. <i>International Journal of Material Forming</i> , <b>2009</b> , 2, 189-192	2	15
85	Metastable and unstable cellular solidification of colloidal suspensions. <i>Nature Materials</i> , <b>2009</b> , 8, 966-727		174
84	In Situ X-Ray Radiography and Tomography Observations of the Solidification of Aqueous Alumina Particle Suspensions Part I: Initial Instants. <i>Journal of the American Ceramic Society</i> , <b>2009</b> , 92, 2489-2496	3.8	92
83	In Situ X-Ray Radiography and Tomography Observations of the Solidification of Aqueous Alumina Particles Suspensions. Part II: Steady State. <i>Journal of the American Ceramic Society</i> , <b>2009</b> , 92, 2497-2503	3.8	55
82	Three-dimensional analysis of a compression test on stone wool. <i>Acta Materialia</i> , <b>2009</b> , 57, 3310-3320	8.4	43
81	Fatigue of Metal Hollow Spheres Structures. <i>Engineering Materials</i> , <b>2009</b> , 159-182	0.4	1
80	X Ray Tomography Study of Cellular Materials: Experiments and Modelling. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2009</b> , 35-42	0.3	3
79	Three-dimensional microtomographic study of Widmanstätten microstructures in an alpha/beta titanium alloy. <i>Scripta Materialia</i> , <b>2008</b> , 58, 512-515	5.6	33
78	In Situ X-Ray Tomography Studies of Microstructural Evolution Combined with 3D Modeling. <i>MRS Bulletin</i> , <b>2008</b> , 33, 611-619	3.2	39
77	A model for initiation and growth of damage in dualphase steels identified by X-ray micro-tomography. <i>Revue De Metallurgie</i> , <b>2008</b> , 105, 102-107		14
76	Simulation and tomography analysis of textile composite reinforcement deformation at the mesoscopic scale. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 2433-2440	8.6	138
75	Computational determination of the mechanical behavior of textile composite reinforcement. Validation with x-ray tomography. <i>International Journal of Material Forming</i> , <b>2008</b> , 1, 823-826	2	6
74	Quantitative Assessment of Deformation-Induced Damage in a Semisolid Aluminum Alloy via X-ray Microtomography. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2008</b> , 39, 2459-2469	2.3	30
73	Fatigue of Metal Hollow Spheres Structures. <i>Advanced Engineering Materials</i> , <b>2008</b> , 10, 179-184	3.5	20
72	Analytical Modelling of the Radiative Properties of Metallic Foams: Contribution of X-Ray Tomography. <i>Advanced Engineering Materials</i> , <b>2008</b> , 10, 352-360	3.5	66

71	Observation of void nucleation, growth and coalescence in a model metal matrix composite using X-ray tomography. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 488, 435-445	5.3	53
70	Metallic foams: Radiative properties/comparison between different models. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2008</b> , 109, 16-27	2.1	81
69	Visualization by X-ray tomography of void growth and coalescence leading to fracture in model materials. <i>Acta Materialia</i> , <b>2008</b> , 56, 2919-2928	8.4	129
68	Initiation and growth of damage in a dual-phase steel observed by X-ray microtomography. <i>Acta Materialia</i> , <b>2008</b> , 56, 4954-4964	8.4	208
67	Modeling the properties of closed-cell cellular materials from tomography images using finite shell elements. <i>Acta Materialia</i> , <b>2008</b> , 56, 5524-5534	8.4	81
66	On the influence of particle distribution and reverse loading on damage mechanisms of ductile steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 496, 223-233	5.3	21
65	Experimental study of the compression behaviour of syntactic foams by in situ X-ray tomography. <i>Acta Materialia</i> , <b>2007</b> , 55, 1667-1679	8.4	87
64	Fast X-ray tomography and acoustic emission study of damage in metals during continuous tensile tests. <i>Acta Materialia</i> , <b>2007</b> , 55, 6806-6815	8.4	69
63	Characterization of the morphology of cellular ceramics by 3D image processing of X-ray tomography. <i>Journal of the European Ceramic Society</i> , <b>2007</b> , 27, 1973-1981	6	142
62	Nanoscale zoom tomography with hard x rays using Kirkpatrick-Baez optics. <i>Applied Physics Letters</i> , <b>2007</b> , 90, 144104	3.4	161
61	Measurement of 3-D Strain Distribution by means of High-Resolution X-ray CT Image and Tracking of Microstructural Features. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , <b>2007</b> , 71, 181-186	0.4	4
60	Understanding the rapid solidification of Al-4.3Cu and Al-17Cu using X-ray tomography. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2006</b> , 37, 249-257	2.3	24
59	Advances in synchrotron radiation microtomography. <i>Scripta Materialia</i> , <b>2006</b> , 55, 41-46	5.6	146
58	Quantitative 3D characterization of intermetallic phases in an AlMg industrial alloy by X-ray microtomography. <i>Scripta Materialia</i> , <b>2006</b> , 55, 123-126	5.6	30
57	2D and 3D Visualization of Ductile Fracture. <i>Advanced Engineering Materials</i> , <b>2006</b> , 8, 469-472	3.5	29
56	Application of the Three-Dimensional Damage Percolation Model and X-Ray Tomography for Damage Evolution Prediction in Aluminium Alloys. <i>Materials Science Forum</i> , <b>2006</b> , 519-521, 1011-1016	0.4	1
55	Porosity, Damage Evolution and Fracture in Die-Cast Magnesium Alloy AM60B. <i>Advanced Materials Research</i> , <b>2006</b> , 15-17, 455-460	0.5	1
54	Damage Investigation in Aluminium Alloys by X Ray Tomography. <i>Materials Science Forum</i> , <b>2006</b> , 519-521, 821-827	0.4	1



53	Non Destructive Three Dimensional Imaging of Aluminium Alloys. <i>Materials Science Forum</i> , <b>2006</b> , 519-521, 1367-1372	0.4	1
52	X-ray tomography and three-dimensional image analysis of epoxy-glass syntactic foams. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2006</b> , 364, 69-88	3	18
51	A study of fracture of unidirectional composites using in situ high-resolution synchrotron X-ray microtomography. <i>Composites Science and Technology</i> , <b>2006</b> , 66, 1348-1353	8.6	63
50	3D quantitative image analysis of open-cell nickel foams under tension and compression loading using X-ray microtomography. <i>Philosophical Magazine</i> , <b>2005</b> , 85, 2147-2175	1.6	70
49	Damage initiation and growth in metals. Comparison between modelling and tomography experiments. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2005</b> , 53, 2411-2434	5	43
48	Relationship between internal porosity and fracture strength of die-cast magnesium AM60B alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 395, 315-322	5.3	111
47	Three dimensional imaging of damage in structural materials using high resolution micro-tomography. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2005</b> , 238, 75-82	1.2	29
46	Finite element modelling of the actual structure of cellular materials determined by X-ray tomography. <i>Acta Materialia</i> , <b>2005</b> , 53, 719-730	8.4	253
45	Mechanical Properties of AM60B Die Castings A Review of the AUTO21 Program on Magnesium Die-Casting <b>2005</b> ,		3
44	Damage studies in heterogeneous aluminium alloys using X-ray tomography. <i>Philosophical Magazine</i> , <b>2005</b> , 85, 3191-3206	1.6	16
43	X-ray tomography and finite element simulation of the indentation behavior of metal foams. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 387-389, 321-325	5.3	24
42	A 3D measurement procedure for internal local crack driving forces via synchrotron X-ray microtomography. <i>Acta Materialia</i> , <b>2004</b> , 52, 1305-1317	8.4	164
41	The effect of fibre fractures in the bridging zone of fatigue cracked TiB <sub>2</sub> Al <sub>2</sub> V/SiC fibre composites. <i>Acta Materialia</i> , <b>2004</b> , 52, 1423-1438	8.4	39
40	Influence of the thermomechanical treatment on the microplastic behaviour of a wrought AlZnMgCu alloy. <i>Acta Materialia</i> , <b>2004</b> , 52, 1653-1661	8.4	24
39	Damage initiation in model metallic materials: X-ray tomography and modelling. <i>Acta Materialia</i> , <b>2004</b> , 52, 2475-2487	8.4	116
38	On the competition between particle fracture and particle decohesion in metal matrix composites. <i>Acta Materialia</i> , <b>2004</b> , 52, 4517-4525	8.4	134
37	X-RAY TOMOGRAPHY STUDY OF ATOMIZED Al-Cu DROPLETS. <i>Canadian Metallurgical Quarterly</i> , <b>2004</b> , 43, 273-282	0.9	17
36	Assessment of the fatigue crack closure phenomenon in damage-tolerant aluminium alloy by in-situ high-resolution synchrotron X-ray microtomography. <i>Philosophical Magazine</i> , <b>2003</b> , 83, 2429-2448	1.6	95

35	Microstructural analysis of alumina chromium composites by X-ray tomography and 3-D finite element simulation of thermal stresses. <i>Scripta Materialia</i> , <b>2003</b> , 48, 1219-1224	5.6	32
34	X-ray micro-tomography an attractive characterisation technique in materials science. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2003</b> , 200, 273-286	1.2	34 <sup>0</sup>
33	Damage assessment in metallic structural materials using high resolution synchrotron X-ray tomography. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2003</b> , 200, 303-307	1.2	38
32	X-ray tomography applied to the characterization of cellular materials. Related finite element modeling problems. <i>Composites Science and Technology</i> , <b>2003</b> , 63, 2431-2443	8.6	172
31	X-ray tomographic imaging of Ti/SiC composites. <i>Journal of Microscopy</i> , <b>2003</b> , 209, 102-112	1.9	26
30	In Situ X-Ray Tomography Measurements of Deformation in Cellular Solids. <i>MRS Bulletin</i> , <b>2003</b> , 28, 284-289		27
29	SiC single fibre full-fragmentation during straining in a Ti/Al <sub>3</sub> V matrix studied by synchrotron X-rays. <i>Acta Materialia</i> , <b>2002</b> , 50, 3177-3192	8.4	36
28	Solidification Study of Aluminum Alloys using Impulse Atomization: Part I: Heat Transfer Analysis of an Atomized Droplet. <i>Canadian Metallurgical Quarterly</i> , <b>2002</b> , 41, 97-110	0.9	59
27	Solidification Study of Aluminum Alloys Using Impulse Atomization: Part ii. Effect of Cooling Rate on Microstructure. <i>Canadian Metallurgical Quarterly</i> , <b>2002</b> , 41, 193-204	0.9	31
26	Synchrotron X-ray study of micromechanics of Ti/SiCf composites with fibres containing defects introduced by laser drilling. <i>Materials Science and Technology</i> , <b>2002</b> , 18, 1497-1503	1.5	6
25	Al-ZrO <sub>2</sub> model composites elaboration by powder metallurgy. <i>Revue De Metallurgie</i> , <b>2002</b> , 99, 1043-1049		1
24	Interfacial shear strength of Ti/SiC fibre composites measured by synchrotron strain measurement. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2002</b> , 33, 1381-1385	8.4	19
23	A synchrotron X-ray study of a Ti/SiCf composite during in situ straining. <i>Acta Materialia</i> , <b>2001</b> , 49, 153-163		45
22	Characterization by X-ray computed tomography of decohesion, porosity growth and coalescence in model metal matrix composites. <i>Acta Materialia</i> , <b>2001</b> , 49, 2055-2063	8.4	145
21	Structural and transient internal friction due to thermal expansion mismatch between matrix and reinforcement in Al/SiC particulate composite. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 313, 218-226	5.3	12
20	On the Application of X-ray Microtomography in the Field of Materials Science. <i>Advanced Engineering Materials</i> , <b>2001</b> , 3, 539	3.5	226
19	Recent results on 3D characterisation of microstructure and damage of metal matrix composites and a metallic foam using X-ray tomography. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 319-321, 216-219	5.3	41
18	Experimental study of porosity and its relation to fatigue mechanisms of model Al <sub>7</sub> Mg <sub>0.3</sub> cast Al alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 316, 115-126	5.3	237

17	Development of an ultralow-light-level luminescence image analysis system for dynamic measurements of transcriptional activity in living and migrating cells. <i>Analytical Biochemistry</i> , <b>2000</b> , 280, 118-27	3.1	11
16	Processing and microstructural characterization of Al-Cu alloys produced from rapidly solidified powders. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2000</b> , 31, 249-260	2.3	14
15	Effect of particle clustering on the strengthening versus damage rivalry in particulate reinforced elastic plastic materials: A 3-D analysis from a self-consistent modelling. <i>European Journal of Mechanics, A/Solids</i> , <b>1999</b> , 18, 785-804	3.7	23
14	A model for damage in a clustered particulate composite. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1999</b> , 262, 264-270	5.3	18
13	Hard x-ray phase imaging using simple propagation of a coherent synchrotron radiation beam. <i>Journal Physics D: Applied Physics</i> , <b>1999</b> , 32, A145-A151	3	93
12	Characterization of internal damage in a MMCp using X-ray synchrotron phase contrast microtomography. <i>Acta Materialia</i> , <b>1999</b> , 47, 1613-1625	8.4	209
11	Ductilization of a powder metallurgy Al-17 wt pct Cu by means of channel-die compression and extrusion. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>1998</b> , 29, 2613-2620	2.3	6
10	The Application of Self-Consistent Approaches to Modeling Mechanical Behaviour of Heterogeneous Two Phase Solids <b>1998</b> , 153-162		
9	Role of damage on the flow and fracture of particulate reinforced alloys and metal matrix composites. <i>Acta Materialia</i> , <b>1997</b> , 45, 5261-5274	8.4	59
8	On internal damping in metal matrix composites: Role of particle-matrix interfacial region. <i>Scripta Materialia</i> , <b>1997</b> , 36, 189-193	5.6	8
7	The role of heterogeneity on the flow and fracture of two-phase materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1997</b> , 233, 145-154	5.3	40
6	Damage assessment in an Al/SiC composite during monotonic tensile tests using synchrotron X-ray microtomography. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1997</b> , 234-236, 633-635	5.3	31
5	Modelling of Damage in Particulate Metal Matrix Composites. <i>Key Engineering Materials</i> , <b>1996</b> , 127-131, 1167-1174	0.4	2
4	Experimental study of the effect of the anisotropy of orientation of the reinforcing particles on the tensile properties of aluminium matrix composites reinforced with $\alpha$ -alumina platelets. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1995</b> , 228, 107-115	5.3	11
3	Study of the damage mechanisms in an OSPREY <sup>TM</sup> Al alloy-SiCp composite by scanning electron microscope in situ tensile tests. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1995</b> , 196, 135-144	5.3	32
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