

Laurent About

List of Publications by Year in descending order

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Version: 2024-02-01

63
papers

1,635
citations

361413

20
h-index

289244

40
g-index

66
all docs

66
docs citations

66
times ranked

1390
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | A Fast Electrical Resistivity-Based Algorithm to Measure and Visualize Two-Phase Swirling Flows. <i>Sensors</i> , 2022, 22, 1834. | 3.8 | 4 |
| 2 | A Review on Fast Tomographic Imaging Techniques and Their Potential Application in Industrial Process Control. <i>Sensors</i> , 2022, 22, 2309. | 3.8 | 14 |
| 3 | Towards Tomography-Based Real-Time Control of Multiphase Flows: A Proof of Concept in Inline Fluid Separation. <i>Sensors</i> , 2022, 22, 4443. | 3.8 | 2 |
| 4 | An Edge Detection Method Based on Local Gradient Estimation: Application to High-Temperature Metallic Droplet Images. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6976. | 2.5 | 3 |
| 5 | Electrical Resistance Tomography for Control Applications: Quantitative Study of the Gas-Liquid Distribution inside A Cyclone. <i>Sensors</i> , 2020, 20, 6069. | 3.8 | 8 |
| 6 | On the Use of a Rotatable ECT Sensor to Investigate Dense Phase Flow: A Feasibility Study. <i>Sensors</i> , 2020, 20, 4854. | 3.8 | 15 |
| 7 | Controlled Inline Fluid Separation Based on Smart Process Tomography Sensors. <i>Chemie-Ingenieur-Technik</i> , 2020, 92, 554-563. | 0.8 | 10 |
| 8 | 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> , 2020, 172, 105346. | 7.7 | 4 |
| 9 | Multichannel Capacitive Imaging of Gas Vortex in Swirling Two-Phase Flows Using Parametric Reconstruction. <i>IEEE Access</i> , 2020, 8, 69557-69565. | 4.2 | 5 |
| 10 | Control of a Gas-Liquid Inline Swirl Separator Based on Tomographic Measurements. <i>IFAC-PapersOnLine</i> , 2020, 53, 11483-11490. | 0.9 | 6 |
| 11 | Stagnant Zone Segmentation with U-Net. , 2019, , . | | 1 |
| 12 | A new data-processing approach to study particle motion using ultrafast X-ray tomography scanner: case study of gravitational mass flow. <i>Experiments in Fluids</i> , 2018, 59, 1. | 2.4 | 8 |
| 13 | Study of granular flow in silo based on electrical capacitance tomography and optical imaging. <i>Flow Measurement and Instrumentation</i> , 2018, 62, 186-195. | 2.0 | 16 |
| 14 | Use of radiography images and gray level co-occurrence matrix to investigate gravitational granular flow. <i>MATEC Web of Conferences</i> , 2018, 219, 03014. | 0.2 | 1 |
| 15 | An algorithm to generate high dense packing of particles with various shapes. <i>MATEC Web of Conferences</i> , 2018, 219, 05004. | 0.2 | 2 |
| 16 | Local concentration changes in eccentric and concentric silo discharging modes using X-ray tomography. , 2018, , . | | 0 |
| 17 | Selection of material for X-ray tomography analysis and DEM simulations: comparison between granular materials of biological and non-biological origins. <i>Granular Matter</i> , 2018, 20, 1. | 2.2 | 44 |
| 18 | Investigating local orientation methods to segment microstructure with 3D solid texture. <i>IET Image Processing</i> , 2018, 12, 1265-1272. | 2.5 | 2 |

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|----|---|-----|-----------|
| 19 | Brainstorming Sessions â€œ Towards Improving Effectiveness and Assessment of Ideas Generation. Advances in Intelligent Systems and Computing, 2018, , 128-137. | 0.6 | 2 |
| 20 | Study of Flow Behavior of Granular Material Inside Cylindrical Silo Using Ultrafast X-Ray Imaging Technique. Image Processing & Communications, 2017, 22, 49-56. | 0.3 | 0 |
| 21 | STUDY OF DEGRADATION AND GRANULAR FLOW PROCESSES USING X-RAY IMAGING. Informatyka Automatyka Pomiary W Gospodarce I Ochronie Åšrodowiska, 2017, 7, 5-10. | 0.4 | 0 |
| 22 | K-MEANS CLUSTERING IN TEXTURED IMAGE: EXAMPLE OF LAMELLAR MICROSTRUCTURE IN TITANIUM ALLOYS. Informatyka Automatyka Pomiary W Gospodarce I Ochronie Åšrodowiska, 2017, 7, 43-46. | 0.4 | 0 |
| 23 | Sensing Mobile Device Orientation Through ECT Reconstructed Image Processing. Image Processing & Communications, 2017, 22, 5-12. | 0.3 | 0 |
| 24 | 3D Reconstruction of Funnel Flow Boundary Using Automatic Point Set Extraction. Image Processing & Communications, 2015, 20, 35-43. | 0.3 | 0 |
| 25 | OPTIMIZATION OF 3D LOCAL ORIENTATION MAP CALCULATION IN THE MATLAB FRAMEWORK. Informatyka Automatyka Pomiary W Gospodarce I Ochronie Åšrodowiska, 2015, 5, 22-24. | 0.4 | 3 |
| 26 | 3D characterization of trans- and inter-lamellar fatigue crack in ($\hat{1}\pm + \hat{1}^2$) Ti alloy. Materials Characterization, 2014, 98, 130-139. | 4.4 | 7 |
| 27 | 3D Segmentation of Funnel Flow Boundary During Silo Emptying. Image Processing & Communications, 2014, 19, 141-149. | 0.3 | 2 |
| 28 | Influence of wall roughness and packing density on stagnant zone formation during funnel flow discharge from a silo: An X-ray imaging study. Chemical Engineering Science, 2013, 97, 210-224. | 3.8 | 42 |
| 29 | Multistage Segmentation of Lamellae Colonies Based on Directional Filter Bank and PCA Analysis. Image Processing & Communications, 2012, 17, 93-102. | 0.3 | 0 |
| 30 | A New Method to Segment X-Ray Microtomography Images of Lamellar Titanium Alloy Based on Directional Filter Banks and Gray Level Gradient. Lecture Notes in Computer Science, 2012, , 105-112. | 1.3 | 1 |
| 31 | Analysis of the bulk solid flow during gravitational silo emptying using X-ray and ECT tomography. Powder Technology, 2012, 224, 196-208. | 4.2 | 32 |
| 32 | A method for the 3-D quantification of bridging ligaments during crack propagation. Scripta Materialia, 2011, 65, 131-134. | 5.2 | 15 |
| 33 | Robust algorithm for tunnel closing in 3D volumetric objects based on topological characteristics of points. Pattern Recognition Letters, 2011, 32, 2231-2238. | 4.2 | 6 |
| 34 | Material Interactions in a Novel Pinless Tool Approach to Friction Stir Spot Welding Thin Aluminum Sheet. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 1266-1282. | 2.2 | 101 |
| 35 | Hole filling in 3D volumetric objects. Pattern Recognition, 2010, 43, 3548-3559. | 8.1 | 30 |
| 36 | Characterization of polycrystalline materials using synchrotron X-ray imaging and diffraction techniques. Jom, 2010, 62, 22-28. | 1.9 | 42 |

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|----|--|-----|-----------|
| 37 | Effectiveness of rotatable sensor to improve image accuracy of ECT system. Flow Measurement and Instrumentation, 2010, 21, 219-227. | 2.0 | 12 |
| 38 | 3D inspection of fabrication and degradation processes from X-ray (micro) tomography images using a hole closing algorithm. , 2010, , . | | 1 |
| 39 | Outer Surface Reconstruction for 3D Fractured Objects. Lecture Notes in Computer Science, 2010, , 57-64. | 1.3 | 1 |
| 40 | Three-dimensional characterization of fatigue cracks in Ti-6246 using X-ray tomography and electron backscatter diffraction. Acta Materialia, 2009, 57, 5834-5847. | 7.9 | 58 |
| 41 | Airway Tree Segmentation from CT Scans Using Gradient-Guided 3D Region Growing. Lecture Notes in Computer Science, 2009, , 247-254. | 1.3 | 2 |
| 42 | Geometric Approach to Hole Segmentation and Hole Closing in 3D Volumetric Objects. Lecture Notes in Computer Science, 2009, , 255-262. | 1.3 | 2 |
| 43 | Comparison of Several Centreline Extraction Algorithms for Virtual Colonoscopy. Advances in Intelligent and Soft Computing, 2009, , 241-254. | 0.2 | 1 |
| 44 | Three-dimensional characterization and thermal property modelling of thermally oxidized nuclear graphite. Acta Materialia, 2008, 56, 4242-4254. | 7.9 | 24 |
| 45 | High-resolution, in-situ, tomographic observations of stress corrosion cracking. , 2008, , 439-447. | | 10 |
| 46 | Characterization of the morphology of cellular ceramics by 3D image processing of X-ray tomography. Journal of the European Ceramic Society, 2007, 27, 1973-1981. | 5.7 | 155 |
| 47 | A novel computational approach to detect isolated and continuous phase in structured materials. , 2006, , . | | 0 |
| 48 | Numerical modelling of the effects of porosity changes on the mechanical properties of nuclear graphite. Journal of Nuclear Materials, 2006, 352, 1-5. | 2.7 | 51 |
| 49 | Three dimensional observations and modelling of intergranular stress corrosion cracking in austenitic stainless steel. Journal of Nuclear Materials, 2006, 352, 62-74. | 2.7 | 108 |
| 50 | Mapping the evolution of density in 3D of thermally oxidised graphite for nuclear applications. Scripta Materialia, 2006, 54, 829-834. | 5.2 | 21 |
| 51 | Grain boundary control for improved intergranular stress corrosion cracking resistance in austenitic stainless steels: new approach. Energy Materials, 2006, 1, 98-102. | 0.1 | 5 |
| 52 | Damage Investigation in Aluminium Alloys by X Ray Tomography. Materials Science Forum, 2006, 519-521, 821-827. | 0.3 | 2 |
| 53 | X-ray microtomographic observation of intergranular stress corrosion cracking in sensitised austenitic stainless steel. Materials Science and Technology, 2006, 22, 1068-1075. | 1.6 | 91 |
| 54 | Damage initiation and growth in metals. Comparison between modelling and tomography experiments. Journal of the Mechanics and Physics of Solids, 2005, 53, 2411-2434. | 4.8 | 47 |

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|----|---|------|-----------|
| 55 | The effect of thermal oxidation on polycrystalline graphite studied by X-ray tomography. Carbon, 2005, 43, 765-774. | 10.3 | 51 |
| 56 | Local Strain Imaging during Mechanical Loading of Lamellar Microstructures in Titanium Based Alloys. Applied Mechanics and Materials, 2004, 1-2, 159-164. | 0.2 | 0 |
| 57 | Damage initiation in model metallic materials: X-ray tomography and modelling. Acta Materialia, 2004, 52, 2475-2487. | 7.9 | 144 |
| 58 | On the competition between particle fracture and particle decohesion in metal matrix composites. Acta Materialia, 2004, 52, 4517-4525. | 7.9 | 161 |
| 59 | Damage assessment in metallic structural materials using high resolution synchrotron X-ray tomography. Nuclear Instruments & Methods in Physics Research B, 2003, 200, 303-307. | 1.4 | 48 |
| 60 | Al-ZrO ₂ model composites elaboration by powder metallurgy. Revue De Metallurgie, 2002, 99, 1043-1049. | 0.3 | 1 |
| 61 | Characterization by X-ray computed tomography of decohesion, porosity growth and coalescence in model metal matrix composites. Acta Materialia, 2001, 49, 2055-2063. | 7.9 | 162 |
| 62 | Recent results on 3D characterisation of microstructure and damage of metal matrix composites and a metallic foam using X-ray tomography. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 319-321, 216-219. | 5.6 | 47 |
| 63 | Comparative analysis of multitouch interactive surfaces. , 0, , . | | 0 |