

# Luca Lutterotti

## 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.

88

papers

5,771

citations

28

h-index

75

g-index

94

ext. papers

6,501

ext. citations

3.1

avg, IF

5.86

L-index

#	Paper	IF	Citations
88	Powder diffraction. <i>Nature Reviews Methods Primers</i> , <b>2021</b> , 1,		2
87	Combined XRD-XRF cluster analysis for automatic chemical and crystallographic surface mappings. <i>Powder Diffraction</i> , <b>2019</b> , 34, S36-S41	1.8	0
86	Crystallography Open Database: History, Development, and Perspectives <b>2019</b> , 1-39		1
85	Full-profile search-match by the Rietveld method. <i>Journal of Applied Crystallography</i> , <b>2019</b> , 52, 587-598	3.8	21
84	Raman Open Database: first interconnected Raman-X-ray diffraction open-access resource for material identification. <i>Journal of Applied Crystallography</i> , <b>2019</b> , 52, 618-625	3.8	18
83	Mineralogical investigations using XRD, XRF, and Raman spectroscopy in a combined approach. <i>Journal of Raman Spectroscopy</i> , <b>2018</b> , 49, 1023-1030	2.3	15
82	Particle anisotropy and crystalline phase transition in one-pot synthesis of nano-zirconia: a causal relationship. <i>CrystEngComm</i> , <b>2018</b> , 20, 879-888	3.3	5
81	Characterization of nanograined powder samples using the Rietveld method applied to electron diffraction ring patterns. <i>Powder Diffraction</i> , <b>2017</b> , 32, S63-S68	1.8	5
80	Combining XRD and XRF analysis in one Rietveld-like fitting. <i>Powder Diffraction</i> , <b>2017</b> , 32, S225-S230	1.8	23
79	Preferred Orientation Contribution to the Anisotropic Normal State Resistivity in Superconducting Melt-Cast Processed Bi <sub>1.8</sub> Br <sub>0.2</sub> TaCuO <sub>8</sub> . <i>Materials</i> , <b>2017</b> , 10,	3.5	4
78	Wear debris from brake system materials: A multi-analytical characterization approach. <i>Tribology International</i> , <b>2016</b> , 94, 249-259	4.9	31
77	Structural and morphological phase control by supersonic beams on titanyl phthalocyanine: An investigation on the growth. <i>Organic Electronics</i> , <b>2016</b> , 32, 15-20	3.5	3
76	Combined X-ray diffraction and fluorescence analysis in the cultural heritage field. <i>Microchemical Journal</i> , <b>2016</b> , 126, 423-430	4.8	14
75	Structural analysis of strained LaVO <sub>3</sub> thin films. <i>Journal of Physics Condensed Matter</i> , <b>2015</b> , 27, 175001	1.8	9
74	Study of annealing-induced interdiffusion in In <sub>2</sub> O <sub>3</sub> /Ag/In <sub>2</sub> O <sub>3</sub> structures by a combined X-ray reflectivity and grazing incidence X-ray fluorescence analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , <b>2015</b> , 113, 132-137	3.1	10
73	Quantitative 3D microstructural analysis of naturally deformed amphibolite from the Southern Alps (Italy): microstructures, CPO and seismic anisotropy from a fossil extensional margin. <i>Geological Society Special Publication</i> , <b>2015</b> , 409, 201-222	1.7	6
72	Quantitative Texture Analysis of Spark Plasma Textured n-Bi <sub>2</sub> Te <sub>3</sub> . <i>Journal of the American Ceramic Society</i> , <b>2014</b> , 97, 2038-2045	3.8	35

71	Rietveld texture analysis from synchrotron diffraction images. II. Complex multiphase materials and diamond anvil cell experiments. <i>Powder Diffraction</i> , <b>2014</b> , 29, 220-232	1.8	72
70	Textured Al-doped ZnO ceramics with isotropic grains. <i>Journal of the European Ceramic Society</i> , <b>2014</b> , 34, 4247-4256	6	21
69	Rietveld texture analysis from synchrotron diffraction images. I. Calibration and basic analysis. <i>Powder Diffraction</i> , <b>2014</b> , 29, 76-84	1.8	89
68	Materials and technological aspects of gilded buckles from a North Eastern Medieval Italian context. <i>Applied Physics A: Materials Science and Processing</i> , <b>2013</b> , 113, 1101-1108	2.6	5
67	The correlation between gate dielectric, film growth, and charge transport in organic thin film transistors: the case of vacuum-sublimed tetracene thin films. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 967-976	7.1	19
66	Advances in exploiting preferred orientation in the structure analysis of polycrystalline materials. <i>Journal of Applied Crystallography</i> , <b>2013</b> , 46, 173-180	3.8	11
65	Growth and texture of spark plasma sintered Al <sub>2</sub> O <sub>3</sub> ceramics: A combined analysis of X-rays and electron back scatter diffraction. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 153510	2.5	15
64	Quantitative Phase Analysis: Method Developments. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , <b>2012</b> , 233-242	0.2	1
63	Crystallography Open Database (COD): an open-access collection of crystal structures and platform for world-wide collaboration. <i>Nucleic Acids Research</i> , <b>2012</b> , 40, D420-7	20.1	572
62	Modeling Solidification Microstructures of Steel Round Billets Obtained by Continuous Casting. <i>ISIJ International</i> , <b>2011</b> , 51, 1448-1453	1.7	19
61	Ambipolar organic thin film transistors based on a soluble pentacene derivative. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 023304	3.4	11
60	Characterization of Microstructure and Crystallographic Texture of Silicate and Phyllosilicate Ceramics. <i>Advances in Science and Technology</i> , <b>2010</b> , 68, 13-22	0.1	1
59	Brittle plus plastic deformation of gypsum aggregates experimentally deformed in torsion to high strains: quantitative microstructural and texture analysis from optical and diffraction data. <i>Geological Society Special Publication</i> , <b>2010</b> , 332, 79-98	1.7	3
58	Rietveld texture analysis from TOF neutron diffraction data. <i>Powder Diffraction</i> , <b>2010</b> , 25, 283-296	1.8	140
57	Texture analysis of a turbostratically disordered Ca-montmorillonite. <i>American Mineralogist</i> , <b>2010</b> , 95, 98-103	2.9	50
56	Total pattern fitting for the combined size-strain-stress-texture determination in thin film diffraction. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2010</b> , 268, 334-340	1.2	705
55	Voyaging around nacre with the X-ray shuttle: From bio-mineralisation to prosthetics via mollusc phylogeny. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 528, 37-51	5.3	18
54	ReX: a computer program for structural analysis using powder diffraction data. <i>Journal of Applied Crystallography</i> , <b>2009</b> , 42, 538-539	3.8	43

53	Preferred orientation of ettringite in concrete fractures. <i>Journal of Applied Crystallography</i> , <b>2009</b> , 42, 429-432	3.8	9
52	Crystallography Open Database - an open-access collection of crystal structures. <i>Journal of Applied Crystallography</i> , <b>2009</b> , 42, 726-729	3.8	801
51	X-ray textural and microstructural characterisations by using the Combined Analysis Approach for the optical optimisation of micro- and nano-structured thin films. <i>Thin Solid Films</i> , <b>2009</b> , 517, 6264-6270	2.2	14
50	In situ observation of texture evolution during $\beta$ and $\beta'$ phase transformations in titanium alloys investigated by neutron diffraction. <i>Acta Materialia</i> , <b>2007</b> , 55, 5718-5727	8.4	145
49	Rietveld texture analysis by neutron diffraction of highly absorbing materials. <i>Powder Diffraction</i> , <b>2006</b> , 21, 114-117	1.8	2
48	Synthesis, Characterization and Photocatalytic Activity of TiO <sub>2</sub> Powders Prepared Under Different Gelling and Pressure Conditions. <i>Journal of Sol-Gel Science and Technology</i> , <b>2005</b> , 33, 201-213	2.3	15
47	Texture analysis from synchrotron diffraction images with the Rietveld method: dinosaur tendon and salmon scale. <i>Journal of Synchrotron Radiation</i> , <b>2005</b> , 12, 354-60	2.4	88
46	Quantitative Rietveld texture analysis of zirconium from single synchrotron diffraction images. <i>Journal of Applied Crystallography</i> , <b>2005</b> , 38, 377-380	3.8	78
45	Quantitative texture analysis with the HIPPO neutron TOF diffractometer. <i>Journal of Applied Crystallography</i> , <b>2005</b> , 38, 462-475	3.8	93
44	Quantitative Texture Analysis with the HIPPO TOF Diffractometer. <i>Materials Science Forum</i> , <b>2005</b> , 495-497, 113-118	0.4	2
43	Modified thick thermal barrier coatings: microstructural characterization. <i>Journal of the European Ceramic Society</i> , <b>2004</b> , 24, 2247-2258	6	48
42	Texture, residual stress and structural analysis of thin films using a combined X-ray analysis. <i>Thin Solid Films</i> , <b>2004</b> , 450, 34-41	2.2	334
41	Texture measurements using the new neutron diffractometer HIPPO and their analysis using the Rietveld method. <i>Powder Diffraction</i> , <b>2004</b> , 19, 65-68	1.8	104
40	Pyrolysis pathway of sol-gel derived organic/inorganic hybrid nanocomposites. <i>Journal of Non-Crystalline Solids</i> , <b>2003</b> , 322, 22-28	3.9	8
39	Reaction sintering of Fe-Al-Si alloys. <i>Journal of Phase Equilibria and Diffusion</i> , <b>2002</b> , 23, 72-78		2
38	Quantitative texture analysis of glaucophanite deformed under eclogite facies conditions (Sesia-Lanzo Zone, Western Alps): comparison between X-ray and neutron diffraction analysis. <i>Geological Society Special Publication</i> , <b>2002</b> , 200, 239-253	1.7	13
37	X-Ray Combined QTA Using a CPS Applied to a Ferroelectric Ultrastructure. <i>Materials Science Forum</i> , <b>2002</b> , 408-412, 113-118	0.4	21
36	Combined X-ray Texture-Structure-Microstructure Analysis Applied to Ferroelectric Ultrastructures: A Case Study on Pb <sub>0.76</sub> Ca <sub>0.24</sub> TiO <sub>3</sub> . <i>Ferroelectrics</i> , <b>2002</b> , 267, 323-328	0.6	15

35	Rietveld Texture and Stress Analysis of Thin Films by X-Ray Diffraction. <i>Materials Science Forum</i> , <b>2002</b> , 408-412, 1603-1608	0.4	18
34	Rietveld texture analysis of Dabie Shan eclogite from TOF neutron diffraction spectra. <i>Journal of Applied Crystallography</i> , <b>2001</b> , 34, 442-453	3.8	42
33	Sol-Gel Synthesis and Characterisation of TiO <sub>2</sub> -Anatase Powders Containing Nanometric Platinum Particles Employed as Catalysts for 4-Nitrophenol Photodegradation. <i>Journal of Sol-Gel Science and Technology</i> , <b>2000</b> , 18, 29-59	2.3	40
32	Microstructural Characterisation of Amorphous and Nanocrystalline Structures Through Diffraction Methods. <i>Materials Science Forum</i> , <b>2000</b> , 343-346, 657-664	0.4	10
31	Reaction-sintering of intermetallic alloys of the Ni <sub>3</sub> AlMo system. <i>Intermetallics</i> , <b>2000</b> , 8, 279-286	3.5	4
30	Structural, mechanical and magnetic properties of nanostructured FeAl alloys during disordering and thermal recovery. <i>Scripta Materialia</i> , <b>1999</b> , 11, 689-695		21
29	Microstructure and hardness of a nanostructured Fe-40Al at% alloy. <i>Scripta Materialia</i> , <b>1999</b> , 12, 801-806		10
28	Microstructural and kinetic aspects of the transformations induced in a FeAl alloy by ball-milling and thermal treatments. <i>Acta Materialia</i> , <b>1998</b> , 46, 3305-3316	8.4	78
27	X-ray diffraction characterization of heavily deformed metallic specimens. <i>Acta Materialia</i> , <b>1998</b> , 46, 10181-10268	11.0	268
26	Quantitative Analysis of Silicate Glass in Ceramic Materials by the Rietveld Method. <i>Materials Science Forum</i> , <b>1998</b> , 278-281, 87-92	0.4	164
25	Avoiding Surface and Absorption Effects in XRD Quantitative Phase Analysis. <i>Materials Science Forum</i> , <b>1998</b> , 278-281, 69-74	0.4	1
24	Microstructural Characterisation of Metastable Structures in Intermetallic Compounds. <i>Materials Science Forum</i> , <b>1998</b> , 269-272, 373-378	0.4	3
23	Magnetic and X-Ray Diffraction Investigations of the Reordering of a Ball Milled Fe-40Al at% Alloy. <i>Materials Science Forum</i> , <b>1998</b> , 269-272, 637-642	0.4	5
22	Advances in Texture Analysis from Diffraction Spectra. <i>Journal of Applied Crystallography</i> , <b>1997</b> , 30, 31-43	3.8	102
21	On the measure of order in alloys. <i>Progress in Materials Science</i> , <b>1997</b> , 42, 125-133	42.2	2
20	New Opportunities in the Texture and Stress Field by the Whole Pattern Analysis. <i>Materials Science Forum</i> , <b>1996</b> , 228-231, 83-88	0.4	6
19	Diffraction Methods for the Characterisation of Defects in Intermetallic Compounds. <i>Materials Science Forum</i> , <b>1996</b> , 228-231, 551-556	0.4	13
18	Rietveld Refinement Using Debye-Scherrer Film Techniques. <i>Materials Science Forum</i> , <b>1996</b> , 228-231, 29-34	0.4	2

17	Kinetics of Reordering in A Nanograined FeAl Alloy. <i>Materials Science Forum</i> , <b>1996</b> , 235-238, 415-420	0.4	11
16	Thermoanalytical Characterization of a Nanograined Fe-40Al Alloy. <i>Materials Science Forum</i> , <b>1996</b> , 225-227, 395-400	0.4	5
15	Defect Structures in Ball-Milled Intermetallic Powders. <i>Materials Science Forum</i> , <b>1995</b> , 179-181, 59-64	0.4	2
14	Thermal Behaviour of Monoclinic Zirconia at Low Temperature by XRPD Full Pattern Analysis. <i>Materials Science Forum</i> , <b>1994</b> , 166-169, 495-500	0.4	1
13	Texture Characterisation of a Porphyroblastic Pyrope. <i>Materials Science Forum</i> , <b>1994</b> , 166-169, 731-736	0.4	
12	Texture Analysis from Diffraction Spectra. <i>Materials Science Forum</i> , <b>1994</b> , 157-162, 473-480	0.4	55
11	Method for the simultaneous determination of anisotropic residual stresses and texture by x-ray diffraction. <i>Journal of Applied Physics</i> , <b>1994</b> , 76, 7246-7255	2.5	278
10	Characterization of epitaxial SrTiO <sub>3</sub> /YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> layers deposited on (001) MgO by laser ablation. <i>Journal of Materials Research</i> , <b>1993</b> , 8, 2780-2784	2.5	11
9	Application of the Rietveld Method to Phase Analysis of Multilayered Systems. <i>Materials Science Forum</i> , <b>1993</b> , 133-136, 57-62	0.4	5
8	Microstructural characterization of plasma-sprayed zirconia thermal barrier coatings by X-ray diffraction full pattern analysis. <i>Surface and Coatings Technology</i> , <b>1993</b> , 61, 52-59	4.4	32
7	Thermal analysis of plasma-sprayed thermal barrier coatings. <i>Thermochimica Acta</i> , <b>1993</b> , 227, 9-18	2.9	4
6	XRD characterization of multilayered systems. <i>Thin Solid Films</i> , <b>1993</b> , 236, 130-134	2.2	18
5	Thermal Stresses in Bi-Coated Structures. <i>Journal of Engineering Mechanics - ASCE</i> , <b>1992</b> , 118, 1928-1938	2.4	8
4	Thermal Expansion Anisotropy of Ceria-Stabilized Tetragonal Zirconia. <i>Journal of the American Ceramic Society</i> , <b>1992</b> , 75, 2828-2832	3.8	28
3	LSI- a computer program for simultaneous refinement of material structure and microstructure. <i>Journal of Applied Crystallography</i> , <b>1992</b> , 25, 459-462	3.8	206
2	Influence of Crystallite Size and Microstrain on Structure Refinement. <i>Materials Science Forum</i> , <b>1991</b> , 79-82, 233-238	0.4	8
1	Simultaneous structure and size/strain refinement by the Rietveld method. <i>Journal of Applied Crystallography</i> , <b>1990</b> , 23, 246-252	3.8	521