

Pierre Lanari

List of Publications by Year in descending order

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82
papers

2,930
citations

172386

29
h-index

182361

51
g-index

107
all docs

107
docs citations

107
times ranked

2295
citing authors

#	ARTICLE	IF	CITATIONS
1	XMapTools: A MATLAB®-based program for electron microprobe X-ray image processing and geothermobarometry. <i>Computers and Geosciences</i> , 2014, 62, 227-240.	2.0	287
2	Pressure–temperature estimates of the lizardite/antigorite transition in high pressure serpentinites. <i>Lithos</i> , 2013, 178, 197-210.	0.6	238
3	Local Bulk Composition Effects on Metamorphic Mineral Assemblages. <i>Reviews in Mineralogy and Geochemistry</i> , 2017, 83, 55-102.	2.2	137
4	A thermodynamic model for di-trioctahedral chlorite from experimental and natural data in the system MgO–FeO–Al ₂ O ₃ –SiO ₂ –H ₂ O: applications to P–T sections and geothermometry. <i>Contributions To Mineralogy and Petrology</i> , 2014, 167, 1.	1.2	134
5	Significant Ages—An Introduction to Petrochronology. <i>Reviews in Mineralogy and Geochemistry</i> , 2017, 83, 1-12.	2.2	94
6	Neotethys closure history of Anatolia: insights from ⁴⁰ Ar– ³⁹ Ar geochronology and <i>P</i> – <i>T</i> estimation in high-pressure metasedimentary rocks. <i>Journal of Metamorphic Geology</i> , 2013, 31, 585-606.	1.6	91
7	Deciphering high-pressure metamorphism in collisional context using microprobe mapping methods: Application to the Stak eclogitic massif (northwest Himalaya). <i>Geology</i> , 2013, 41, 111-114.	2.0	89
8	Diachronous evolution of the alpine continental subduction wedge: Evidence from <i>P</i> – <i>T</i> estimates in the Briançonnais Zone houillère (France – Western Alps). <i>Journal of Geodynamics</i> , 2012, 56-57, 39-54.	0.7	85
9	Quantitative compositional mapping of mineral phases by electron probe micro-analyser. <i>Geological Society Special Publication</i> , 2019, 478, 39-63.	0.8	85
10	Modeling Metamorphic Rocks Using Equilibrium Thermodynamics and Internally Consistent Databases: Past Achievements, Problems and Perspectives. <i>Journal of Petrology</i> , 2019, 60, 19-56.	1.1	80
11	Trace element mapping by LA-ICP-MS: assessing geochemical mobility in garnet. <i>Contributions To Mineralogy and Petrology</i> , 2017, 172, 1.	1.2	70
12	First evidence of eclogites overprinted by ultrahigh temperature metamorphism in Everest East, Himalaya: Implications for collisional tectonics on early Earth. <i>Earth and Planetary Science Letters</i> , 2021, 558, 116760.	1.8	62
13	Late Paleozoic evolution of the South Tien Shan: Insights from <i>P</i> – <i>T</i> estimates and allanite geochronology on retrogressed eclogites (Chatkal range, Kyrgyzstan). <i>Journal of Geodynamics</i> , 2016, 96, 62-80.	0.7	58
14	Identification of growth mechanisms in metamorphic garnet by high-resolution trace element mapping with LA-ICP-TOFMS. <i>Contributions To Mineralogy and Petrology</i> , 2020, 175, 1.	1.2	57
15	Reconstruction of multiple P–T–t stages from retrogressed mafic rocks: Subduction versus collision in the Southern Brasília orogen (SE Brazil). <i>Lithos</i> , 2017, 294-295, 283-303.	0.6	56
16	Deeply subducted continental fragments – Part 1: Fracturing, dissolution–precipitation, and diffusion processes recorded by garnet textures of the central Sesia Zone (western Italian Alps). <i>Solid Earth</i> , 2018, 9, 167-189.	1.2	55
17	Exhumation of eclogite and blueschist (Cyclades, Greece): Pressure–temperature evolution determined by thermobarometry and garnet equilibrium modelling. <i>Journal of Metamorphic Geology</i> , 2018, 36, 769-798.	1.6	54
18	Deciphering temperature, pressure and oxygen-activity conditions of chlorite formation. <i>Clay Minerals</i> , 2016, 51, 615-633.	0.2	53

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19	Syn- to post-orogenic exhumation of metamorphic nappes: Structure and thermobarometry of the western Attic-Cycladic metamorphic complex (Lavrion, Greece). <i>Journal of Geodynamics</i> , 2016, 96, 174-193.	0.7	52
20	An inverse modeling approach to obtain P-T conditions of metamorphic stages involving garnet growth and resorption. <i>European Journal of Mineralogy</i> , 2017, 29, 181-199.	0.4	48
21	Permian high-temperature metamorphism in the Western Alps (NW Italy). <i>International Journal of Earth Sciences</i> , 2018, 107, 203-229.	0.9	46
22	Protracted zircon geochronological record of UHT garnet-free granulites in the Southern Brasília orogen (SE Brazil): Petrochronological constraints on magmatism and metamorphism. <i>Precambrian Research</i> , 2018, 316, 103-126.	1.2	45
23	<i>i>P-T</i> estimation of deformation in low-grade quartzfeldspar-bearing rocks using thermodynamic modelling and ⁴⁰Ar/³⁹Ar dating techniques: example of the Plan-deâ€Phasy shear zone unit (Briançonnais Zone, Western Alps). <i>Terra Nova</i>, 2014, 26, 130-138.</i>	0.9	43
24	Microstructural vs compositional preservation and pseudomorphic replacement of muscovite in deformed metapelites from the Longmen Shan (Sichuan, China). <i>Lithos</i> , 2017, 282-283, 262-280.	0.6	39
25	An Internally-Consistent Database for Oxygen Isotope Fractionation Between Minerals. <i>Journal of Petrology</i> , 2019, 60, 2101-2129.	1.1	36
26	Non-matrix-matched standardisation in LA-ICP-MS analysis: general approach, and application to allanite Th-U-Pb dating. <i>Journal of Analytical Atomic Spectrometry</i> , 2017, 32, 1359-1377.	1.6	34
27	Microstructures, mineral chemistry and geochronology of white micas along a retrograde evolution: An example from the Aar massif (Central Alps, Switzerland). <i>Tectonophysics</i> , 2017, 721, 179-195.	0.9	33
28	Metamorphic and geochronological study of the Triassic El Oro metamorphic complex, Ecuador: Implications for high-temperature metamorphism in a forearc zone. <i>Lithos</i> , 2013, 156-159, 41-68.	0.6	32
29	Deeply subducted continental fragments â€“ Part 2: Insight from petrochronology in the central Sesia Zone (western Italian Alps). <i>Solid Earth</i> , 2018, 9, 191-222.	1.2	32
30	REE and Hf distribution among mineral phases in the CVâ€“CK clan: A way to explain present-day Hf isotopic variations in chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 120, 496-513.	1.6	29
31	Total exhumation across the Beichuan fault in the Longmen Shan (eastern Tibetan plateau, China): Constraints from petrology and thermobarometry. <i>Journal of Asian Earth Sciences</i> , 2017, 140, 108-121.	1.0	28
32	Temperature micro-mapping in oscillatory-zoned chlorite: Application to study of a green-schist facies fault zone in the Pyrenean Axial Zone (Spain). <i>American Mineralogist</i> , 2015, 100, 2468-2483.	0.9	26
33	Influence of dissolution/reprecipitation reactions on metamorphic greenschist to amphibolite facies mica ⁴⁰ Ar/ ³⁹ Ar ages in the Longmen Shan (eastern Tibet). <i>Journal of Metamorphic Geology</i> , 2018, 36, 933-958.	1.6	25
34	Long-term fluid circulation in extensional faults in the central Catalan Coastal Ranges: P-T constraints from neoformed chlorite and K-white mica. <i>International Journal of Earth Sciences</i> , 2014, 103, 165-188.	0.9	24
35	Garnet Lu Hf geochronology and P-T path of the Gridino-type eclogite in the Belomorian Province, Russia. <i>Lithos</i> , 2019, 326-327, 313-326.	0.6	24
36	Microscale Mapping of Alteration Conditions and Potential Biosignatures in Basaltic-Ultramafic Rocks on Early Earth and Beyond. <i>Astrobiology</i> , 2014, 14, 216-228.	1.5	23

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37	Climate-controlled shifts in sediment provenance inferred from detrital zircon ages, western Peruvian Andes. <i>Geology</i> , 2017, 45, 59-62.	2.0	23
38	The role of the antigorite+brucite to olivine reaction in subducted serpentinites (Zermatt, Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.5	22
39	Iterative thermodynamic modellingâ€”Part 1: A theoretical scoring technique and a computer program (<sc>Bingoâ€”Antidote</sc>). <i>Journal of Metamorphic Geology</i> , 2020, 38, 527-551.	1.6	21
40	Tectonometamorphic evolution of the Atbashi highâ€”P</i> units (Kyrgyz <sc>CAOB</sc>, Tien Shan): Implications for the closure of the Turkestan Ocean and continental subductionâ€”exhumation of the South Kazakh continental margin. <i>Journal of Metamorphic Geology</i> , 2018, 36, 959-985.	1.6	20
41	Deciphering the tectono-metamorphic evolution of the Nevado-FilÃ¡bride complex (Betic Cordillera,) Tj ETQq1 1 0.784314 rgBT /Over	0.9	19
42	Magmatic flare-up causes crustal thickening at the transition from subduction to continental collision. <i>Communications Earth & Environment</i> , 2021, 2, .	2.6	19
43	Titanium isotopic compositions of bulk rocks and mineral separates from the Kos magmatic suite: Insights into fractional crystallization and magma mixing processes. <i>Chemical Geology</i> , 2021, 578, 120303.	1.4	19
44	Textural and chemical evolution of pyroxene during hydration and deformation: A consequence of retrograde metamorphism. <i>Lithos</i> , 2018, 296-299, 245-264.	0.6	18
45	Tracing fluid transfers in subduction zones: an integrated thermodynamic and <i>O fractionation modelling approach. <i>Solid Earth</i> , 2020, 11, 307-328.	1.2	18
46	Al-free di-trioctahedral substitution in chlorite and a ferri-sudoite end-member. <i>Clay Minerals</i> , 2016, 51, 675-689.	0.2	17
47	Textural-chemical changes and deformation conditions registered by phyllosilicates in a fault zone (Pic de Port Vieux thrust, Pyrenees). <i>Applied Clay Science</i> , 2017, 144, 88-103.	2.6	16
48	Petrology and geochemistry of feldspathic impactâ€”melt breccia Abar al' Uj 012, theâ€”first lunar meteorite from Saudi Arabia. <i>Meteoritics and Planetary Science</i> , 2016, 51, 1830-1848.	0.7	15
49	On the petrology of brittle precursors of shear zones â€” An expression of concomitant brittle deformation and fluidâ€”rock interactions in the â€”ductileâ€” continental crust?. <i>Journal of Metamorphic Geology</i> , 2019, 37, 1129-1149.	1.6	15
50	Pervasive Eclogitization Due to Brittle Deformation and Rehydration of Subducted Basement: Effects on Continental Recycling?. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 865-881.	1.0	14
51	Permian charnockites in the Pobeda area: Implications for Tarim mantle plume activity and HT metamorphism in the South Tien Shan range. <i>Lithos</i> , 2018, 304-307, 135-154.	0.6	14
52	Allanite Petrochronology in Fresh and Retrogressed Garnetâ€”Biotite Metapelites from the Longmen Shan (Eastern Tibet). <i>Journal of Petrology</i> , 2019, 60, 151-176.	1.1	14
53	Pervasive fluid-rock interaction in subducted oceanic crust revealed by oxygen isotope zoning in garnet. <i>Contributions To Mineralogy and Petrology</i> , 2021, 176, 1.	1.2	14
54	The evolution of the Sesia Zone (Western Alps) from Carboniferous to Cretaceous: insights from zircon and allanite geochronology. <i>Swiss Journal of Geosciences</i> , 2020, 113, 24.	0.5	12

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55	A mapping approach for the investigation of Ti-OH relationships in metamorphic garnet. Contributions To Mineralogy and Petrology, 2020, 175, 1.	1.2	12
56	Corona formation around monazite and xenotime during greenschist-facies metamorphism and deformation. European Journal of Mineralogy, 2020, 32, 521-544.	0.4	12
57	Exhumation of deep continental crust in a transpressive regime: The example of Variscan eclogites from the Aiguilles-Rouges massif (Western Alps). Journal of Metamorphic Geology, 2022, 40, 1087-1120.	1.6	12
58	Microscale chemical and physical patterns in an interface of hydrothermal dolomitization reveals the governing transport mechanisms in nature: Case of the Layens anticline, Pyrenees, France. Sedimentology, 2021, 68, 834-854.	1.6	10
59	Pressure-temperature-time evolution of subducted crust revealed by complex garnet zoning (Theodul Glacier Unit, Switzerland). Journal of Metamorphic Geology, 2022, 40, 175-206.	1.6	10
60	Fluid-rock interactions related to metamorphic reducing fluid flow in meta-sediments: example of the Pic-de-Port-Vieux thrust (Pyrenees, Spain). Contributions To Mineralogy and Petrology, 2017, 172, 1.	1.2	9
61	Lightning-induced weathering of Cascadian volcanic peaks. Earth and Planetary Science Letters, 2020, 552, 116595.	1.8	9
62	Crustal reworking and hydration: insights from element zoning and oxygen isotopes of garnet in high-pressure rocks (Sesia Zone, Western Alps). Contributions To Mineralogy and Petrology, 2020, 175, 1.	1.2	9
63	Long-lived intracontinental deformation associated with high geothermal gradients in the Serid3 Belt (Borborema Province, Brazil). Precambrian Research, 2021, 358, 106141.	1.2	9
64	Petrochronology of high-pressure granulite facies rocks from Southern Bras3lia Orogen, SE Brazil: Combining quantitative compositional mapping, single-element thermometry and geochronology. Journal of Metamorphic Geology, 2022, 40, 517-552.	1.6	9
65	Microstructural analyses of a giant quartz reef in south China reveal episodic brittle-ductile fluid transfer. Journal of Structural Geology, 2020, 130, 103911.	1.0	8
66	U-Pb geochronology of epidote by laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) as a tool for dating hydrothermal-vein formation. Geochronology, 2021, 3, 123-147.	1.0	8
67	Comment on "The Role of H ₃ O ⁺ in the Crystal Structure of Illite" By F. Nieto, M. Melini, And I. Abad. Clays and Clay Minerals, 2010, 58, 717-720.	0.6	7
68	Fluid composition changes in crystalline basement rocks from ductile to brittle regimes. Global and Planetary Change, 2018, 171, 273-292.	1.6	7
69	Pre-Alpine thermal history recorded in the continental crust from Alpine Corsica (France): evidence from zircon and allanite LA-ICP-MS dating. Swiss Journal of Geosciences, 2020, 113, .	0.5	7
70	Iterative thermodynamic modelling"Part 2: Tracing equilibrium relationships between minerals in metamorphic rocks. Journal of Metamorphic Geology, 2021, 39, 651-674.	1.6	7
71	Early Variscan I-type pluton in the pre-Alpine basement of the Western Alps: The ca. 360Ma Cogne diorite (NW-Italy). Lithos, 2012, 153, 94-107.	0.6	6
72	1. Significant Ages - An Introduction to Petrochronology. , 2017, , 1-12.		6

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73	Miocene basement exhumation in the Central Alps recorded by detrital garnet geochemistry in foreland basin deposits. <i>Solid Earth</i> , 2019, 10, 1581-1595.	1.2	6
74	Metamorphic geology: progress and perspectives. <i>Geological Society Special Publication</i> , 2019, 478, 1-12.	0.8	6
75	Possible climatic controls on the accumulation of Peru's most prominent alluvial fan: The Lima Conglomerate. <i>Earth Surface Processes and Landforms</i> , 2019, 44, 991-1003.	1.2	5
76	Deep subduction, melting, and fast cooling of metapelites from the Cima Lunga Unit, Central Alps. <i>Journal of Metamorphic Geology</i> , 2022, 40, 121-143.	1.6	5
77	3. Local Bulk Composition Effects on Metamorphic Mineral Assemblages. , 2017, , 55-102.		4
78	Zircon age of vaugnerite intrusives from the Central and Southern Vosges crystalline massif (E) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54 <i>Geologique De France</i> , 2020, 191, 26.	0.9	4
79	Kinematic, Metamorphic, and Age Constraints on the Miyar Thrust Zone: Implications for the Eohimalayan History of the High Himalayan Crystalline of NW India. <i>Tectonics</i> , 2020, 39, e2020TC006379.	1.3	4
80	Correction to: The role of the antigorite+brucite to olivine reaction in subducted serpentinites (Zermatt, Switzerland). <i>Swiss Journal of Geosciences</i> , 2020, 113, .	0.5	2
81	An inverse modeling approach to obtain P-T conditions of metamorphic stages involving garnet growth and resorption. <i>European Journal of Mineralogy</i> , 2017, , .	0.4	2
82	Composition Effects on Metamorphic Mineral Assemblages. , 2021, , 502-512.		0