

# Eugenio Carminati

## List of Publications by Year in descending order

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100  
papers

4,229  
citations

117625

34  
h-index

123424

61  
g-index

100  
all docs

100  
docs citations

100  
times ranked

3327  
citing authors

#	ARTICLE	IF	CITATIONS
1	Geodynamic evolution of the central and western Mediterranean: Tectonics vs. igneous petrology constraints. Tectonophysics, 2012, 579, 173-192.	2.2	355
2	The role of slab detachment processes in the opening of the western-central Mediterranean basins: some geological and geophysical evidence. Earth and Planetary Science Letters, 1998, 160, 651-665.	4.4	320
3	Alps vs. Apennines: The paradigm of a tectonically asymmetric Earth. Earth-Science Reviews, 2012, 112, 67-96.	9.1	280
4	Subduction kinematics and dynamic constraints. Earth-Science Reviews, 2007, 83, 125-175.	9.1	275
5	Subsidence rates in the Po Plain, northern Italy: the relative impact of natural and anthropogenic causation. Engineering Geology, 2002, 66, 241-255.	6.3	130
6	Deep structure of the southern Apennines, Italy: Thin-skinned or thick-skinned?. Tectonics, 2005, 24, n/a-n/a.	2.8	122
7	Slab dip vs. lithosphere age: No direct function. Earth and Planetary Science Letters, 2005, 238, 298-310.	4.4	96
8	Apennines subduction-related subsidence of Venice (Italy). Geophysical Research Letters, 2003, 30, .	4.0	92
9	Jurassic rifting evolution of the Apennines and Southern Alps (Italy): Parallels and differences. Bulletin of the Geological Society of America, 2011, 123, 468-484.	3.3	85
10	Role of the brittle-ductile transition on fault activation. Physics of the Earth and Planetary Interiors, 2011, 184, 160-171.	1.9	82
11	The two-stage opening of the western-central Mediterranean basins: a forward modeling test to a new evolutionary model. Earth and Planetary Science Letters, 1998, 160, 667-679.	4.4	81
12	Separating natural and anthropogenic vertical movements in fast subsiding areas: The Po Plain (N.)	4.0	81
13	Fault on-off versus coseismic fluids reaction. Geoscience Frontiers, 2014, 5, 767-780.	8.4	69
14	Slab Retreat and Active Shortening along the Central-Northern Apennines. Frontiers in Earth Sciences, 2007, , 471-487.	0.1	67
15	The westward drift of the lithosphere: A rotational drag?. Bulletin of the Geological Society of America, 2006, 118, 199-209.	3.3	64
16	Upper mantle flow in the western Mediterranean. Earth and Planetary Science Letters, 2007, 257, 200-214.	4.4	64
17	Rift asymmetry and continental uplift. Tectonics, 2003, 22, n/a-n/a.	2.8	61
18	Compaction-induced stress variations with depth in an active anticline: Northern Apennines, Italy. Journal of Geophysical Research, 2010, 115, .	3.3	61

#	ARTICLE	IF	CITATIONS
19	Tectonics, magmatism and geodynamics of Italy: What we know and what we imagine. Journal of the Virtual Explorer, 0, 36, .	0.0	58
20	Normal fault earthquakes or graviquakes. Scientific Reports, 2015, 5, 12110.	3.3	56
21	On the geodynamics of the northern Adriatic plate. Rendiconti Lincei, 2010, 21, 253-279.	2.2	55
22	Influence of glacial cycles and tectonics on natural subsidence in the Po Plain (Northern Italy): Insights from 14C ages. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	49
23	Subsidence history from a backstripping analysis of the Permo-Mesozoic succession of the Central Southern Alps (Northern Italy). Basin Research, 2010, 22, 952-975.	2.7	43
24	Crustal-scale fluid circulation and co-seismic shallow comb-veining along the longest normal fault of the central Apennines, Italy. Earth and Planetary Science Letters, 2018, 498, 152-168.	4.4	43
25	Tectonic control on the architecture of a Miocene carbonate ramp in the Central Apennines (Italy): Insights from facies and backstripping analyses. Sedimentary Geology, 2007, 198, 233-253.	2.1	42
26	Origin and role of fluids involved in the seismic cycle of extensional faults in carbonate rocks. Earth and Planetary Science Letters, 2016, 450, 292-305.	4.4	42
27	Control of differential compaction on the geometry of sediments onlapping paleoescarpments: Insights from field geology (Central Apennines, Italy) and numerical modeling. Geology, 2005, 33, 353.	4.4	41
28	Plio-Quaternary vertical motion of the Northern Apennines: Insights from dynamic modeling. Tectonics, 1999, 18, 703-718.	2.8	40
29	Subduction-related intermediate-depth and deep seismicity in Italy: insights from thermal and rheological modelling. Physics of the Earth and Planetary Interiors, 2005, 149, 65-79.	1.9	39
30	Slab bending, syn-subduction normal faulting, and out-of-sequence thrusting in the Central Apennines. Tectonics, 2014, 33, 530-551.	2.8	38
31	Fault on-off versus strain rate and earthquakes energy. Geoscience Frontiers, 2015, 6, 265-276.	8.4	38
32	Field- to nano-scale evidence for weakening mechanisms along the fault of the 2016 Amatrice and Norcia earthquakes, Italy. Tectonophysics, 2017, 712-713, 156-169.	2.2	37
33	3D Discrete Fracture Network (DFN) models of damage zone fluid corridors within a reservoir-scale normal fault in carbonates: Multiscale approach using field data and UAV imagery. Marine and Petroleum Geology, 2021, 126, 104902.	3.3	37
34	Architecture and evolution of an extensionally-inverted thrust (Mt. Tancia Thrust, Central) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td Structural Geology, 2020, 136, 104059.	2.3	36
35	Thermal and tectonic evolution of the southern Alps (northern Italy) rifting: Coupled organic matter maturity analysis and thermokinematic modeling. AAPG Bulletin, 2010, 94, 369-397.	1.5	34
36	Graviquakes in Italy. Tectonophysics, 2015, 656, 202-214.	2.2	34

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37	Reverse migration of seismicity on thrusts and normal faults. <i>Earth-Science Reviews</i> , 2004, 65, 195-222.	9.1	33
38	Thermal evolution of the Kuh-e-Asmari and Sim anticlines in the Zagros fold-and-thrust belt: Implications for hydrocarbon generation. <i>Marine and Petroleum Geology</i> , 2014, 57, 1-13.	3.3	33
39	Estimating original thickness and extent of the Semail Ophiolite in the eastern Oman Mountains by paleothermal indicators. <i>Marine and Petroleum Geology</i> , 2017, 84, 18-33.	3.3	33
40	Control of folding and faulting on fracturing in the Zagros (Iran): The Kuh-e-Sarbalesh anticline. <i>Journal of Asian Earth Sciences</i> , 2014, 79, 400-414.	2.3	32
41	Microstructural evidence for seismic and aseismic slips along clay-bearing, carbonate faults. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 3895-3915.	3.4	32
42	Thrust kinematics and internal deformation in basement-involved fold and thrust belts: The eastern Orobic Alps case (Central Southern Alps, northern Italy). <i>Tectonics</i> , 1997, 16, 259-271.	2.8	31
43	Investigating fault reactivation during multiple tectonic inversions through mechanical and numerical modeling: An application to the Central-Northern Apennines of Italy. <i>Journal of Structural Geology</i> , 2014, 67, 167-185.	2.3	31
44	The Zagros fold-and-thrust belt in the Fars province (Iran): II. Thermal evolution. <i>Marine and Petroleum Geology</i> , 2018, 93, 376-390.	3.3	31
45	DÃ©collement depth versus accretionary prism dimension in the Apennines and the Barbados. <i>Tectonics</i> , 2003, 22, n/a-n/a.	2.8	30
46	Mesozoic Syn- and Postdrifting Evolution of the Central Apennines, Italy: The Role of Triassic Evaporites. <i>Journal of Geology</i> , 2013, 121, 327-354.	1.4	30
47	Not so simple â€œsimply-folded Zagrosâ€: The role of pre-collisional extensional faulting, salt tectonics and multi-stage thrusting in the Sarvestan transfer zone (Fars, Iran). <i>Tectonophysics</i> , 2016, 671, 235-248.	2.2	30
48	Zagros fold and thrust belt in the Fars province (Iran) I: Control of thickness/rheology of sediments and pre-thrusting tectonics on structural style and shortening. <i>Marine and Petroleum Geology</i> , 2018, 91, 211-224.	3.3	30
49	Control of Cambrian evaporites on fracturing in fault-related anticlines in the Zagros fold-and-thrust belt. <i>International Journal of Earth Sciences</i> , 2013, 102, 1237-1255.	1.8	29
50	Origin of Triassic magmatism of the Southern Alps (Italy): Constraints from geochemistry and Sr-Nd-Pb isotopic ratios. <i>Gondwana Research</i> , 2019, 75, 218-238.	6.0	29
51	Volume unbalance on the 2016 Amatrice - Norcia (Central Italy) seismic sequence and insights on normal fault earthquake mechanism. <i>Scientific Reports</i> , 2019, 9, 4250.	3.3	29
52	Dynamic modelling of stress accumulation in central Italy. <i>Geophysical Research Letters</i> , 1999, 26, 1945-1948.	4.0	28
53	Development of an Intrawedge Tectonic MÃ©lange by Outâ€¢ofâ€¢Sequence Thrusting, Buttressing, and Intraformational Rheological Contrast, Mt. Massico Ridge, Apennines, Italy. <i>Tectonics</i> , 2019, 38, 1223-1249.	2.8	25
54	Local, regional, and plate scale sources for the stress field in the Adriatic and Periadriatic region. <i>Marine and Petroleum Geology</i> , 2013, 42, 160-181.	3.3	24

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55	Tectonically asymmetric Earth: From net rotation to polarized westward drift of the lithosphere. <i>Geoscience Frontiers</i> , 2015, 6, 401-418.	8.4	23
56	Phantom plumes in Europe and the circum-Mediterranean region. , 2007, , 723-745.		22
57	Cenozoic uplift of Europe. <i>Tectonics</i> , 2009, 28, .	2.8	22
58	Two- and three-dimensional numerical simulations of the stress field at the thrust front of the Northern Apennines, Italy. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	21
59	Phyllosilicate injection along extensional carbonate-hosted faults and implications for co-seismic slip propagation: Case studies from the central Apennines, Italy. <i>Journal of Structural Geology</i> , 2016, 93, 29-50.	2.3	21
60	State of stress in slabs as a function of large-scale plate kinematics. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, .	2.5	20
61	The effects of brittle-plastic transitions in basement-involved foreland belts: the Central Southern Alps case (N Italy). <i>Tectonophysics</i> , 1997, 280, 107-123.	2.2	19
62	Differential compaction and early rock fracturing in high-relief carbonate platforms: numerical modelling of a Triassic case study (Esino Limestone, Central Southern Alps, Italy). <i>Basin Research</i> , 2012, 24, 598-614.	2.7	19
63	Ultra-thin clay layers facilitate seismic slip in carbonate faults. <i>Scientific Reports</i> , 2017, 7, 664.	3.3	18
64	Tectonically controlled carbonate-seated maar-diatreme volcanoes: The case of the Volsci Volcanic Field, central Italy. <i>Journal of Geodynamics</i> , 2020, 139, 101763.	1.6	18
65	Tectonic Evolution of the Northern Oman Mountains, Part of the Strait of Hormuz Syntaxis: New Structural and Paleothermal Analyses and U-Pb Dating of Synkinematic Calcite. <i>Tectonics</i> , 2020, 39, e2019TC005936.	2.8	18
66	Complex geometry and kinematics of subsidiary faults within a carbonate-hosted relay ramp. <i>Journal of Structural Geology</i> , 2020, 130, 103915.	2.3	17
67	Dynamic modelling of stress accumulation in Central Italy: role of structural heterogeneities and rheology. <i>Geophysical Journal International</i> , 2001, 144, 373-390.	2.4	16
68	Tectonic control on the petrophysical properties of foredeep sandstone in the Central Apennines, Italy. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 9077-9094.	3.4	16
69	Active Fold-Thrust Belt to Foreland Transition in Northern Adria, Italy, Tracked by Seismic Reflection Profiles and GPS Offshore Data. <i>Tectonics</i> , 2020, 39, e2020TC006425.	2.8	16
70	Contribution of numeric dynamic modelling to the understanding of the seismotectonic regime of the northern Apennines. <i>Tectonophysics</i> , 1999, 315, 15-30.	2.2	15
71	Incremental strain analysis using two generations of syntectonic coaxial fibres: an example from the Monte Marguareis Briançonnais Cover nappe (Ligurian Alps, Italy). <i>Journal of Structural Geology</i> , 2001, 23, 1441-1456.	2.3	15
72	Disproving the Presence of Paleozoic-Triassic Metamorphic Rocks on the Island of Zannone (Central Tj ETQq0 0 0 rgBT /Overlock 10 T 2020, 39, e2020TC006296.	2.8	15

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73	Thermal maturity of the Hawasina units and origin of the Batinah MÃlange (Oman Mountains): Insights from clay minerals. <i>Marine and Petroleum Geology</i> , 2021, 133, 105316.	3.3	15
74	Slabâ€™mantle flow interaction: influence on subduction dynamics and duration. <i>Terra Nova</i> , 2014, 26, 265-272.	2.1	14
75	The Central Southern Alps (N. Italy) paleoseismic zone: a comparison between field observations and predictions of fault mechanics. <i>Tectonophysics</i> , 2005, 401, 179-197.	2.2	13
76	A study on the effects of seismicity on subsidence in foreland basins: An application to the Venice area. <i>Global and Planetary Change</i> , 2007, 55, 237-250.	3.5	13
77	Lithological and structural control on fracture frequency distribution within a carbonate-hosted relay ramp. <i>Journal of Structural Geology</i> , 2020, 137, 104085.	2.3	10
78	Constraining the Passive to Active Margin Tectonics of the Internal Central Apennines: Insights from Biostratigraphy, Structural, and Seismic Analysis. <i>Geosciences (Switzerland)</i> , 2021, 11, 160.	2.2	10
79	U-Pb age of the 2016 Amatrice earthquake causative fault (Mt. Gorzano, Italy) and paleo-fluid circulation during seismic cycles inferred from inter- and co-seismic calcite. <i>Tectonophysics</i> , 2021, 819, 229076.	2.2	10
80	Frictional controls on the seismogenic zone: Insights from the Apenninic basement, Central Italy. <i>Earth and Planetary Science Letters</i> , 2022, 583, 117444.	4.4	10
81	Neglected basement ductile deformation in balanced-section restoration: An example from the Central Southern Alps (Northern Italy). <i>Tectonophysics</i> , 2009, 463, 161-166.	2.2	9
82	Lithological control on multiple surface ruptures during the 2016â€™2017 Amatrice-Norcia seismic sequence. <i>Journal of Geodynamics</i> , 2020, 134, 101676.	1.6	9
83	The role of trapped fluids during the development and deformation of a carbonate/shale intra-wedge tectonic mÃlange (Mt. Massico, Southern Apennines, Italy). <i>Journal of Structural Geology</i> , 2020, 138, 104086.	2.3	9
84	North Atlantic geoid high, volcanism and glaciations. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	8
85	Brittle-ductile transition depth versus convergence rate in shallow crustal thrust faults: Considerations on seismogenic volume and impact on seismicity. <i>Physics of the Earth and Planetary Interiors</i> , 2018, 284, 72-81.	1.9	8
86	Three-dimensional numerical simulation of the interseismic and coseismic phases associated with the 6 April 2009, Mw 6.3ÃAquila earthquake (Central Italy). <i>Tectonophysics</i> , 2021, 798, 228685.	2.2	8
87	Numerical analysis of interseismic, coseismic and post-seismic phases for normal and reverse faulting earthquakes in Italy. <i>Geophysical Journal International</i> , 2021, 225, 627-645.	2.4	8
88	The role of post-orogenic normal faulting in hydrocarbon migration in fold-and-thrust belts: Insights from the central Apennines, Italy. <i>Marine and Petroleum Geology</i> , 2022, 136, 105429.	3.3	8
89	Chemical interaction driven by deep fluids in the damage zone of a seismogenic carbonate fault. <i>Journal of Structural Geology</i> , 2022, 161, 104668.	2.3	8
90	The Decollement Depth of Active Thrust Faults in Italy: Implications on Potential Earthquake Magnitude. <i>Tectonics</i> , 2019, 38, 3990-4009.	2.8	7

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91	The Segmented Campo Felice Normal Faults: Seismic Potential Appraisal by Application of Empirical Relationships Between Rupture Length and Earthquake Magnitude in the Central Apennines, Italy. Tectonics, 2021, 40, e2020TC006465.	2.8	7
92	Segmentation of the Apenninic Margin of the Tyrrhenian Back-Arc Basin Forced by the Subduction of an Inherited Transform System. Tectonics, 2021, 40, e2021TC006770.	2.8	7
93	Present-day stress field in subduction zones: Insights from 3D viscoelastic models and data. Tectonophysics, 2016, 667, 48-62.	2.2	6
94	Tyrrhenian Sea. , 2012, , 472-485.		5
95	Triple folded surface morphology of Neoproterozoic rocks (Jabal Akhdar Dome, Oman Mountains) – Insights into buttressing effects and regional tectonics. Journal of Asian Earth Sciences, 2021, 221, 104942.	2.3	3
96	Estimation of the maximum earthquakes magnitude based on potential brittle volume and strain rate: The Italy test case. Tectonophysics, 2022, 836, 229405.	2.2	3
97	Pre-folding fracturing in a foredeep environment: insights from the Carseolani Mountains (central) Tj ETQq1 1 0.784314 rgBT <sub>2</sub> /Overlook	1.5	2
98	The Geology of the Periadriatic basin and of the Adriatic Sea. Marine and Petroleum Geology, 2013, 42, 1-3.	3.3	1
99	Mediterranean Tectonics. , 2021, , 408-419.		0
100	Igneous activity in central-southern Italy: Is the subduction paradigm still valid?. , 2022, , .		0