# Eugenio Carminati

List of Publications by Year
in descending order



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|---|---|---|---|
| 100 papers | 4,229 citations | 117453 34 h-index | 123241 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. | 0.9 | 355 |
| 2 | The role of slab detachment processes in the opening of the westernâ€“central Mediterranean basins: some geological and geophysical evidence. Earth and Planetary Science Letters, 1998, 160, 651-665. | 1.8 | 320 |
| 3 | Alps vs. Apennines: The paradigm of a tectonically asymmetric Earth. Earth-Science Reviews, 2012, 112, 67-96. | 4.0 | 280 |
| 4 | Subduction kinematics and dynamic constraints. Earth-Science Reviews, 2007, 83, 125-175. | 4.0 | 275 |
| 5 | Subsidence rates in the Po Plain, northern Italy: the relative impact of natural and anthropogenic causation. Engineering Geology, 2002, 66, 241-255. | 2.9 | 130 |
| 6 | Deep structure of the southern Apennines, Italy: Thin-skinned or thick-skinned?. Tectonics, 2005, 24, n/a-n/a. | 1.3 | 122 |
| 7 | Slab dip vs. lithosphere age: No direct function. Earth and Planetary Science Letters, 2005, 238, 298-310. | 1.8 | 96 |
| 8 | Apennines subduction-related subsidence of Venice (Italy). Geophysical Research Letters, 2003, 30, . | 1.5 | 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. | 1.6 | 85 |
| 10 | Role of the brittleâ€“ductile transition on fault activation. Physics of the Earth and Planetary Interiors, 2011, 184, 160-171. | 0.7 | 82 |
| 11 | The two-stage opening of the westernâ€“central Mediterranean basins: a forward modeling test to a new evolutionary model. Earth and Planetary Science Letters, 1998, 160, 667-679. | 1.8 | 81 |
| 12 | Separating natural and anthropogenic vertical movements in fast subsiding areas: The Po Plain (N.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 | 1.5 | 81 |
| 13 | Fault onâ€“off versus coseismic fluids reaction. Geoscience Frontiers, 2014, 5, 767-780. | 4.3 | 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. | 1.6 | 64 |
| 16 | Upper mantle flow in the western Mediterranean. Earth and Planetary Science Letters, 2007, 257, 200-214. | 1.8 | 64 |
| 17 | Rift asymmetry and continental uplift. Tectonics, 2003, 22, n/a-n/a. | 1.3 | 61 |
| 18 | Compactionâ€induced stress variations with depth in an active anticline: Northern Apennines, Italy. Journal of Geophysical Research, 2010, 115, . | 3.3 | 61 |

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|---|---|---|---|
| 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. | 1.6 | 56 |
| 21 | On the geodynamics of the northern Adriatic plate. Rendiconti Lincei, 2010, 21, 253-279. | 1.0 | 55 |
| 22 | Influence of glacial cycles and tectonics on natural subsidence in the Po Plain (Northern Italy): Insights from14C ages. Geochemistry, Geophysics, Geosystems, 2003, 4, . | 1.0 | 49 |
| 23 | Subsidence history from a backstripping analysis of the Permoâ€Mesozoic succession of the Central Southern Alps (Northern Italy). Basin Research, 2010, 22, 952-975. | 1.3 | 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. | 1.8 | 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. | 1.0 | 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. | 1.8 | 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. | 2.0 | 41 |
| 28 | Plio-Quaternary vertical motion of the Northern Apennines: Insights from dynamic modeling. Tectonics, 1999, 18, 703-718. | 1.3 | 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. | 0.7 | 39 |
| 30 | Slab bending, synâ€subduction normal faulting, and outâ€ofâ€sequence thrusting in the Central Apennines. Tectonics, 2014, 33, 530-551. | 1.3 | 38 |
| 31 | Fault on-off versus strain rate and earthquakes energy. Geoscience Frontiers, 2015, 6, 265-276. | 4.3 | 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. | 0.9 | 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. | 1.5 | 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. | 1.0 | 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. | 0.7 | 34 |
| 36 | Graviquakes in Italy. Tectonophysics, 2015, 656, 202-214. | 0.9 | 34 |

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| 37 | Reverse migration of seismicity on thrusts and normal faults. Earth-Science Reviews, 2004, 65, 195-222. | 4.0 | 33 |
| 38 | Thermal evolution of the Kuh-e-Asmari and Sim anticlines in the Zagros fold-and-thrust belt: Implications for hydrocarbon generation. Marine and Petroleum Geology, 2014, 57, 1-13. | 1.5 | 33 |
| 39 | Estimating original thickness and extent of the Semail Ophiolite in the eastern Oman Mountains by paleothermal indicators. Marine and Petroleum Geology, 2017, 84, 18-33. | 1.5 | 33 |
| 40 | Control of folding and faulting on fracturing in the Zagros (Iran): The Kuh-e-Sarbalesh anticline. Journal of Asian Earth Sciences, 2014, 79, 400-414. | 1.0 | 32 |
| 41 | Microstructural evidence for seismic and aseismic slips along clayâ€bearing, carbonate faults. Journal of Geophysical Research: Solid Earth, 2017, 122, 3895-3915. | 1.4 | 32 |
| 42 | Thrust kinematics and internal deformation in basement-involved fold and thrust belts: The eastern Orobic Alps case (Central Southern Alps, northern Italy). Tectonics, 1997, 16, 259-271. | 1.3 | 31 |
| 43 | Investigating fault reactivation during multiple tectonic inversions through mechanical and numerical modeling: An application to the Central-Northern Apennines of Italy. Journal of Structural Geology, 2014, 67, 167-185. | 1.0 | 31 |
| 44 | The Zagros fold-and-thrust belt in the Fars province (Iran): II. Thermal evolution. Marine and Petroleum Geology, 2018, 93, 376-390. | 1.5 | 31 |
| 45 | DÃ©collement depth versus accretionary prism dimension in the Apennines and the Barbados. Tectonics, 2003, 22, n/a-n/a. | 1.3 | 30 |
| 46 | Mesozoic Syn- and Postrifting Evolution of the Central Apennines, Italy: The Role of Triassic Evaporites. Journal of Geology, 2013, 121, 327-354. | 0.7 | 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). Tectonophysics, 2016, 671, 235-248. | 0.9 | 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. Marine and Petroleum Geology, 2018, 91, 211-224. | 1.5 | 30 |
| 49 | Control of Cambrian evaporites on fracturing in fault-related anticlines in the Zagros fold-and-thrust belt. International Journal of Earth Sciences, 2013, 102, 1237-1255. | 0.9 | 29 |
| 50 | Origin of Triassic magmatism of the Southern Alps (Italy): Constraints from geochemistry and Sr-Nd-Pb isotopic ratios. Gondwana Research, 2019, 75, 218-238. | 3.0 | 29 |
| 51 | Volume unbalance on the 2016 Amatrice - Norcia (Central Italy) seismic sequence and insights on normal fault earthquake mechanism. Scientific Reports, 2019, 9, 4250. | 1.6 | 29 |
| 52 | Dynamic modelling of stress accumulation in central Italy. Geophysical Research Letters, 1999, 26, 1945-1948. | 1.5 | 28 |
| 53 | Development of an Intrawedge Tectonic MÃ©lange by Outâ€ofâ€Sequence Thrusting, Buttressing, and Intraformational Rheological Contrast, Mt. Massico Ridge, Apennines, Italy. Tectonics, 2019, 38, 1223-1249. | 1.3 | 25 |
| 54 | Local, regional, and plate scale sources for the stress field in the Adriatic and Periadriatic region. Marine and Petroleum Geology, 2013, 42, 160-181. | 1.5 | 24 |

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| 55 | Tectonically asymmetric Earth: From net rotation to polarized westward drift of the lithosphere. Geoscience Frontiers, 2015, 6, 401-418. | 4.3 | 23 |
| 56 | Phantom plumes in Europe and the circum-Mediterranean region. , 2007, , 723-745. | | 22 |
| 57 | Cenozoic uplift of Europe. Tectonics, 2009, 28, . | 1.3 | 22 |
| 58 | Twoâ€•and threeâ€dimensional numerical simulations of the stress field at the thrust front of the Northern Apennines, Italy. Journal of Geophysical Research, 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. Journal of Structural Geology, 2016, 93, 29-50. | 1.0 | 21 |
| 60 | State of stress in slabs as a function of largeâ€scale plate kinematics. Geochemistry, Geophysics, Geosystems, 2010, 11, . | 1.0 | 20 |
| 61 | The effects of brittle-plastic transitions in basement-involved foreland belts: the Central Southern Alps case (N Italy). Tectonophysics, 1997, 280, 107-123. | 0.9 | 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). Basin Research, 2012, 24, 598-614. | 1.3 | 19 |
| 63 | Ultra-thin clay layers facilitate seismic slip in carbonate faults. Scientific Reports, 2017, 7, 664. | 1.6 | 18 |
| 64 | Tectonically controlled carbonate-seated maar-diatreme volcanoes: The case of the Volsci Volcanic Field, central Italy. Journal of Geodynamics, 2020, 139, 101763. | 0.7 | 18 |
| 65 | Tectonic Evolution of the Northern Oman Mountains, Part of the Strait of Hormuz Syntaxis: New Structural and Paleothermal Analyses and Uâ€Pb Dating of Synkinematic Calcite. Tectonics, 2020, 39, e2019TC005936. | 1.3 | 18 |
| 66 | Complex geometry and kinematics of subsidiary faults within a carbonate-hosted relay ramp. Journal of Structural Geology, 2020, 130, 103915. | 1.0 | 17 |
| 67 | Dynamic modelling of stress accumulation in Central Italy: roleÂofÂstructural heterogeneities and rheology. Geophysical Journal International, 2001, 144, 373-390. | 1.0 | 16 |
| 68 | Tectonic control on the petrophysical properties of foredeep sandstone in the Central Apennines, Italy. Journal of Geophysical Research: Solid Earth, 2014, 119, 9077-9094. | 1.4 | 16 |
| 69 | Active Foldâ€Thrust Belt to Foreland Transition in Northern Adria, Italy, Tracked by Seismic Reflection Profiles and GPS Offshore Data. Tectonics, 2020, 39, e2020TC006425. | 1.3 | 16 |
| 70 | Contribution of numeric dynamic modelling to the understanding of the seismotectonic regime of the northern Apennines. Tectonophysics, 1999, 315, 15-30. | 0.9 | 15 |
| 71 | Incremental strain analysis using two generations of syntectonic coaxial fibres: an example from the Monte Marguareis BrianÃ§onnais Cover nappe (Ligurian Alps, Italy). Journal of Structural Geology, 2001, 23, 1441-1456. | 1.0 | 15 |
| 72 | Disproving the Presence of Paleozoicâ€Triassic Metamorphic Rocks on the Island of Zannone (Central) Tj ETQq0 0 0 rgBT /Overlock 10 T<br>2020, 39, e2020TC006296. | 1.3 | 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. Marine and Petroleum Geology, 2021, 133, 105316. | 1.5 | 15 |
| 74 | Slabâ€“mantle flow interaction: influence on subduction dynamics and duration. Terra Nova, 2014, 26, 265-272. | 0.9 | 14 |
| 75 | The Central Southern Alps (N. Italy) paleoseismic zone: a comparison between field observations and predictions of fault mechanics. Tectonophysics, 2005, 401, 179-197. | 0.9 | 13 |
| 76 | A study on the effects of seismicity on subsidence in foreland basins: An application to the Venice area. Global and Planetary Change, 2007, 55, 237-250. | 1.6 | 13 |
| 77 | Lithological and structural control on fracture frequency distribution within a carbonate-hosted relay ramp. Journal of Structural Geology, 2020, 137, 104085. | 1.0 | 10 |
| 78 | Constraining the Passive to Active Margin Tectonics of the Internal Central Apennines: Insights from Biostratigraphy, Structural, and Seismic Analysis. Geosciences (Switzerland), 2021, 11, 160. | 1.0 | 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. Tectonophysics, 2021, 819, 229076. | 0.9 | 10 |
| 80 | Frictional controls on the seismogenic zone: Insights from the Apenninic basement, Central Italy. Earth and Planetary Science Letters, 2022, 583, 117444. | 1.8 | 10 |
| 81 | Neglected basement ductile deformation in balanced-section restoration: An example from the Central Southern Alps (Northern Italy). Tectonophysics, 2009, 463, 161-166. | 0.9 | 9 |
| 82 | Lithological control on multiple surface ruptures during the 2016â€“2017 Amatrice-Norcia seismic sequence. Journal of Geodynamics, 2020, 134, 101676. | 0.7 | 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). Journal of Structural Geology, 2020, 138, 104086. | 1.0 | 9 |
| 84 | North Atlantic geoid high, volcanism and glaciations. Geophysical Research Letters, 2010, 37, . | 1.5 | 8 |
| 85 | Brittle-ductile transition depth versus convergence rate in shallow crustal thrust faults: Considerations on seismogenic volume and impact on seismicity. Physics of the Earth and Planetary Interiors, 2018, 284, 72-81. | 0.7 | 8 |
| 86 | Three-dimensional numerical simulation of the interseismic and coseismic phases associated with the 6 April 2009, Mw 6.3ÂL'Aquila earthquake (Central Italy). Tectonophysics, 2021, 798, 228685. | 0.9 | 8 |
| 87 | Numerical analysis of interseismic, coseismic and post-seismic phases for normal and reverse faulting earthquakes in Italy. Geophysical Journal International, 2021, 225, 627-645. | 1.0 | 8 |
| 88 | The role of post-orogenic normal faulting in hydrocarbon migration in fold-and-thrust belts: Insights from the central Apennines, Italy. Marine and Petroleum Geology, 2022, 136, 105429. | 1.5 | 8 |
| 89 | Chemical interaction driven by deep fluids in the damage zone of a seismogenic carbonate fault. Journal of Structural Geology, 2022, 161, 104668. | 1.0 | 8 |
| 90 | The Decollement Depth of Active Thrust Faults in Italy: Implications on Potential Earthquake Magnitude. Tectonics, 2019, 38, 3990-4009. | 1.3 | 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. | 1.3 | 7 |
| 92 | Segmentation of the Apenninic Margin of the Tyrrhenian Backâ€Arc Basin Forced by the Subduction of an Inherited Transform System. Tectonics, 2021, 40, e2021TC006770. | 1.3 | 7 |
| 93 | Present-day stress field in subduction zones: Insights from 3D viscoelastic models and data. Tectonophysics, 2016, 667, 48-62. | 0.9 | 6 |
| 94 | Tyrrhenian Sea. , 2012, , 472-485. | | 5 |
| 95 | Triple folded surface morphology of Neoproterozoic rocks (Jabal Akhdar Dome, Oman Mountains) â€" Insights into buttressing effects and regional tectonics. Journal of Asian Earth Sciences, 2021, 221, 104942. | 1.0 | 3 |
| 96 | Estimation of the maximum earthquakes magnitude based on potential brittle volume and strain rate: The Italy test case. Tectonophysics, 2022, 836, 229405. | 0.9 | 3 |
| 97 | Pre-folding fracturing in a foredeep environment: insights from the Carseolani Mountains (central) Tj ETQq1 1 0.784314 rgBT /Overlock | 0.9 | 2 |
| 98 | The Geology of the Periadriatic basin and of the Adriatic Sea. Marine and Petroleum Geology, 2013, 42, 1-3. | 1.5 | 1 |
| 99 | Mediterranean Tectonics. , 2021, , 408-419. | | 0 |
| 100 | Igneous activity in central-southern Italy: Is the subduction paradigm still valid?. , 2022, , . | | 0 |