# Julia K Morgan

List of Publications by Year
in descending order



| 60 | 2,148 | 236925 25 | 233421 45 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 63 | 63 | 63 | 1618 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Numerical simulations of granular shear zones using the distinct element method: 1. Shear zone kinematics and the micromechanics of localization. Journal of Geophysical Research, 1999, 104, 2703-2719. | 3.3 | 225 |
| 2 | New insights into deformation and fluid flow processes in the Nankai Trough accretionary prism: Results of Ocean Drilling Program Leg 190. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a. | 2.5 | 189 |
| 3 | Numerical simulations of granular shear zones using the distinct element method: 2. Effects of particle size distribution and interparticle friction on mechanical behavior. Journal of Geophysical Research, 1999, 104, 2721-2732. | 3.3 | 154 |
| 4 | Overthrusting and sediment accretion along Kilauea's mobile south flank, Hawaii: Evidence for volcanic spreading from marine seismic reflection data. Geology, 2000, 28, 667. | 4.4 | 96 |
| 5 | Slow slip source characterized by lithological and geometric heterogeneity. Science Advances, 2020, 6, eaay3314. | 10.3 | 95 |
| 6 | Olympus Mons aureole deposits: New evidence for a flank failure origin. Journal of Geophysical Research, 2004, 109, . | 3.3 | 93 |
| 7 | Slope failure and volcanic spreading along the submarine south flank of Kilauea volcano, Hawaii. Journal of Geophysical Research, 2003, 108, . | 3.3 | 83 |
| 8 | Volcanic spreading and lateral variations in the structure of Olympus Mons, Mars. Geology, 2009, 37, 139-142. | 4.4 | 79 |
| 9 | Influence of normal stress and grain shape on granular friction: Results of discrete element simulations. Journal of Geophysical Research, 2004, 109, . | 3.3 | 76 |
| 10 | Fault-controlled hydration of the upper mantle during continentalÂrifting. Nature Geoscience, 2016, 9, 384-388. | 12.9 | 75 |
| 11 | Controls on the size and geometry of landslides: Insights from discrete element numerical simulations. Geomorphology, 2014, 220, 104-113. | 2.6 | 67 |
| 12 | DÃ©collement processes at the Nankai accretionary margin, southeast Japan: Propagation, deformation, and dewatering. Journal of Geophysical Research, 1995, 100, 15221-15231. | 3.3 | 51 |
| 13 | Effects of cohesion on the structural and mechanical evolution of fold and thrust belts and contractional wedges: Discrete element simulations. Journal of Geophysical Research: Solid Earth, 2015, 120, 3870-3896. | 3.4 | 50 |
| 14 | Discrete element simulations of gravitational volcanic deformation: 1. Deformation structures and geometries. Journal of Geophysical Research, 2005, 110, . | 3.3 | 47 |
| 15 | Particle Dynamics Simulations of Rate- and State-dependent Frictional Sliding of Granular Fault Gouge. Pure and Applied Geophysics, 2004, 161, 1877. | 1.9 | 46 |
| 16 | Consolidation state and strength of underthrust sediments and evolution of the dÃ©collement at the Nankai accretionary margin: Results of uniaxial reconsolidation experiments. Journal of Geophysical Research, 2004, 109, . | 3.3 | 45 |
| 17 | Influence of mechanical stratigraphy and initial stress state on the formation of two fault propagation folds. Journal of Structural Geology, 2005, 27, 1954-1972. | 2.3 | 43 |
| 18 | Galicia Bank oceanâ€“continent transition zone: New seismic reflection constraints. Earth and Planetary Science Letters, 2015, 413, 197-207. | 4.4 | 42 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Recognizing seamount-forearc collisions at accretionary margins: Insights from discrete numerical simulations. Geology, 2017, 45, 635-638. | 4.4 | 40 |
| 20 | The frictional and micromechanical effects of grain comminution in fault gouge from distinct element simulations. Journal of Geophysical Research, 2006, 111, n/a-n/a. | 3.3 | 37 |
| 21 | Overview of continuum and particle dynamics methods for mechanical modeling of contractional geologic structures. Journal of Structural Geology, 2014, 59, 19-36. | 2.3 | 37 |
| 22 | Seismic stratigraphy of the Frontal Hawaiian Moat: implications for sedimentary processes at the leading edge of an oceanic hotspot trace. Marine Geology, 2002, 184, 143-162. | 2.1 | 36 |
| 23 | Fault gouge evolution and its dependence on normal stress and rock strengthâ€"Results of discrete element simulations: Gouge zone properties. Journal of Geophysical Research, 2007, 112, . | 3.3 | 32 |
| 24 | Volcanoâ€tectonic implications of 3â€Đ velocity structures derived from joint active and passive source tomography of the island of Hawaii. Journal of Geophysical Research, 2009, 114, . | 3.3 | 31 |
| 25 | Volcanic spreading on Mauna Loa volcano, Hawaii: Evidence from accretion, alteration, and exhumation of volcaniclastic sediments. Geology, 2003, 31, 411. | 4.4 | 29 |
| 26 | The estimation of diffuse strains in the toe of the western Nankai accretionary prism: A kinematic solution. Journal of Geophysical Research, 1994, 99, 7019. | 3.3 | 26 |
| 27 | Discrete element simulations of gravitational volcanic deformation: 2. Mechanical analysis. Journal of Geophysical Research, 2005, 110, . | 3.3 | 23 |
| 28 | Insights to slip behavior on rough faults using discrete element modeling. Geophysical Research Letters, 2012, 39, . | 4.0 | 23 |
| 29 | Volcanotectonic interactions between Mauna Loa and Kilauea: Insights from 2-D discrete element simulations. Journal of Volcanology and Geothermal Research, 2006, 151, 109-131. | 2.1 | 20 |
| 30 | Submarine landslides and volcanic features on Kohala and Mauna Kea volcanoes and the Hana Ridge, Hawaii. Geophysical Monograph Series, 2002, , 11-28. | 0.1 | 18 |
| 31 | Lithospheric flexure and volcano basal boundary conditions: keys to the structural evolution of large volcanic edifices on the terrestrial planets. Geological Society Special Publication, 2015, 401, 219-237. | 1.3 | 18 |
| 32 | Mauna Loa's submarine western flank: Landsliding, deep volcanic spreading, and hydrothermal alteration. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a. | 2.5 | 17 |
| 33 | Fault gouge evolution and its dependence on normal stress and rock strengthâ€"Results of discrete element simulations: Gouge zone micromechanics. Journal of Geophysical Research, 2008, 113, . | 3.3 | 15 |
| 34 | Basal Accretion Along the South Central Chilean Margin and Its Relationship to Great Earthquakes. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019861. | 3.4 | 14 |
| 35 | Comparative FEM and DEM modeling of basement-involved thrust structures, with application to Sheep Mountain, Greybull area, Wyoming. Tectonophysics, 2013, 608, 408-417. | 2.2 | 12 |
| 36 | Precursory Stress Changes and Fault Dilation Lead to Fault Rupture: Insights From Discrete Element Simulations. Geophysical Research Letters, 2019, 46, 3180-3188. | 4.0 | 12 |

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|---|---|---|---|
| 37 | Internal structure of Puna Ridge: evolution of the submarine East Rift Zone of Kilauea Volcano, HawaiÂÌ€i. Journal of Volcanology and Geothermal Research, 2004, 129, 237-259. | 2.1 | 11 |
| 38 | Microscale Characterization of Fracture Growth and Associated Energy in Granite and Sandstone Analogs: Insights Using the Discrete Element Method. Journal of Geophysical Research: Solid Earth, 2019, 124, 7993-8012. | 3.4 | 11 |
| 39 | Eastern Olympus Mons Basal Scarp: Structural and mechanical evidence for largeâ€scale slope instability. Journal of Geophysical Research E: Planets, 2014, 119, 1089-1109. | 3.6 | 10 |
| 40 | Deep-sea volcaniclastic sedimentation around the southern flank of Hawaii. Geophysical Monograph Series, 2002, , 29-50. | 0.1 | 9 |
| 41 | Structural variability along the submarine south flank of Kilauea volcano, Hawai'i, from a multichannel seismic reflection survey. Geophysical Monograph Series, 2002, , 105-124. | 0.1 | 9 |
| 42 | Geometrically controlled slow slip enhanced by seismic waves: A mechanism for delayed triggering. Earth and Planetary Science Letters, 2021, 554, 116695. | 4.4 | 9 |
| 43 | Particle Dynamics Simulations of Rate- and State-dependent Frictional Sliding of Granular Fault Gouge. , 2004, , 1877-1891. | | 9 |
| 44 | Mixed Brittle and Viscous Strain Localization in Pelagic Sediments Seaward of the Hikurangi Margin, New Zealand. Tectonics, 2020, 39, e2019TC005965. | 2.8 | 8 |
| 45 | Pore Fluid Pressures and Strength Contrasts Maintain Frontal Fault Activity, Northern Hikurangi Margin, New Zealand. Geophysical Research Letters, 2020, 47, e2020GL089209. | 4.0 | 8 |
| 46 | The Role of Alongâ€Fault Dilatancy in Fault Slip Behavior. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022310. | 3.4 | 8 |
| 47 | Microstructural Evolution of Porosity and Stress During the Formation of Brittle Shear Fractures: A Discrete Element Model Study. Journal of Geophysical Research: Solid Earth, 2018, 123, 2228-2245. | 3.4 | 7 |
| 48 | Controls on Foreâ€Arc Deformation and Stress Switching After the Great 2011 Tohokuâ€Oki Earthquake From Discrete Numerical Simulations. Journal of Geophysical Research: Solid Earth, 2019, 124, 9265-9279. | 3.4 | 6 |
| 49 | An OBS Array to Investigate Offshore Seismicity during the 2018ÂKÄ«lauea Eruption. Seismological Research Letters, 2021, 92, 603-612. | 1.9 | 6 |
| 50 | Evidence of Seismic Slip on a Large Splay Fault in the Hikurangi Subduction Zone. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009638. | 2.5 | 6 |
| 51 | Seafloor overthrusting causes ductile fault deformation and fault sealing along the Northern Hikurangi Margin. Earth and Planetary Science Letters, 2022, 593, 117651. | 4.4 | 6 |
| 52 | Microfossil assemblages on Tuscaloosa Seamount and their constraints on the age of the NuÊ»uanu landslide, north of Oahu, HI. Journal of Volcanology and Geothermal Research, 2006, 151, 269-278. | 2.1 | 5 |
| 53 | Rift zone abandonment and reconfiguration in Hawaii: Mauna Loa's Ninole rift zone. Geology, 2010, 38, 471-474. | 4.4 | 5 |
| 54 | Origin and diagenetic priming of a potential slow-slip trigger zone in volcaniclastic deposits flanking a seamount on the subducting plate, Hikurangi margin, New Zealand. New Zealand Journal of Geology, and Geophysics, 2022, 65, 179-200. | 1.8 | 5 |

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|---|---|---|---|
| 55 | Asymmetric Brittle Deformation at the PÄpaku Fault, Hikurangi Subduction Margin, NZ, IODP Expedition 375. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009662. | 2.5 | 4 |
| 56 | Can Deep Learning Predict Complete Ruptures in Numerical Megathrust Faults?. Geophysical Research Letters, 2021, 48, e2021GL092607. | 4.0 | 4 |
| 57 | Kinematic constraints on porosity change in the toe of the Cascadia accretionary prism: Evidence for cementation and brittle deformation in the footwall of the frontal thrust. Journal of Geophysical Research, 1997, 102, 15367-15383. | 3.3 | 3 |
| 58 | An Improved Earthquake Catalog During the 2018 KÄ±Ì‚lauea Eruption From Combined Onshore and Offshore Seismic Arrays. Earth and Space Science, 2022, 9, . | 2.6 | 2 |
| 59 | Relationships Among Forearc Structure, Fault Slip, and Earthquake Magnitude: Numerical Simulations With Applications to the Central Chilean Margin. Geophysical Research Letters, 2021, 48, e2021GL092521. | 4.0 | 1 |
| 60 | Effects of coseismic megasplay fault activity on earthquake hazards: Insights from discrete element simulations. Journal of Structural Geology, 2022, 155, 104533. | 2.3 | 0 |