Dazhi Jiang

List of Publications by Year
in descending order

50 papers	1,989 citations	236925 25 h-index	243625 44 g-index
62 all docs	62 docs citations	62 times ranked	943 citing authors

#	Article	IF	Citations
1	Destruction of the eastern North China Craton in a backarc setting: Evidence from crustal deformation kinematics. Gondwana Research, 2012, 22, 86-103.	6.0	310
2	High-strain zones: a unified model. Journal of Structural Geology, 1998, 20, 1105-1120.	2.3	148
3	Rapid change from compression to extension in the North China Craton during the Early Cretaceous: Evidence from the Yunmengshan metamorphic core complex. Tectonophysics, 2015, 656, 91-110.	2.2	106
4	Transpression (or transtension) zones of triclinic symmetry: natural example and theoretical modelling. Geological Society Special Publication, 1998, 135, 41-57.	1.3	103
5	Deformation path in high-strain zones, with reference to slip partitioning in transpressional plate-boundary regions. Journal of Structural Geology, 2001, 23, 991-1005.	2.3	81
6	An investigation of lower crustal deformation: Evidence for channel flow and its implications for tectonics and structural studies. Journal of Structural Geology, 2005, 27, 1486-1504.	2.3	77
7	Rotating garnets. Journal of Metamorphic Geology, 1999, 17, 367-378.	3.4	70
8	Kinematics of rock flow and the interpretation of geological structures, with particular reference to shear zones. Journal of Structural Geology, 1995, 17, 1249-1265.	2.3	65
9	Structural and geochronological evidence for Early Cretaceous orogen-parallel extension of the ductile lithosphere in the northern Dabie orogenic belt, East China. Journal of Structural Geology, 2011, 33, 362-380.	2.3	64
10	Vorticity determination, distribution, partitioning and the heterogeneity and non-steadiness of natural deformations. Journal of Structural Geology, 1994, 16, 121-130.	2.3	60
11	Structural geology meets micromechanics: A self-consistent model for the multiscale deformation and fabric development in Earth's ductile lithosphere. Journal of Structural Geology, 2014, 68, 247-272.	2.3	55
12	Flow variation in layered rocks subjected to bulk flow of various kinematic vorticities: theory and geological implications. Journal of Structural Geology, 1994, 16, 1159-1172.	2.3	53
13	Numerical modeling of the motion of deformable ellipsoidal objects in slow viscous flows. Journal of Structural Geology, 2007, 29, 435-452.	2.3	51
14	Evolution of the Yiwulushan metamorphic core complex from distributed to localized deformation and its tectonic implications. Tectonics, 2012, 31, .	2.8	50
15	Using along-strike variation in strain and kinematics to define the movement direction of curved transpressional shear zones: An example from northwestern Superior Province, Manitoba. Geology, 2001, 29, 767.	4.4	49
16	Numerical modeling of the motion of rigid ellipsoidal objects in slow viscous flows: A new approach. Journal of Structural Geology, 2007, 29, 189-200.	2.3	42
17	When do dragfolds not develop into sheath folds in shear zones?. Journal of Structural Geology, 1999, 21, 577-583.	2.3	38
18	A fundamental problem with the kinematic interpretation of geological structures. Journal of Structural Geology, 1999, 21, 933-937.	2.3	37

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19	A critique of vorticity analysis using rigid clasts. Journal of Structural Geology, 2011, 33, 203-219.	2.3	37
20	Sustainable transpression: An examination of strain and kinematics in deforming zones with migrating boundaries. Journal of Structural Geology, 2007, 29, 1984-2005.	2.3	36
21	Vorticity decomposition and its application to sectional flow characterization. Tectonophysics, 1999, 301, 243-259.	2.2	35
22	Reading history of folding from porphyroblasts. Journal of Structural Geology, 2001, 23, 1327-1335.	2.3	34
23	Importance of differentiating ductile slickenside striations from stretching lineations and variation of shear direction across a high-strain zone. Journal of Structural Geology, 2007, 29, 850-862.	2.3	32
24	Reference frame, angular momentum, and porphyroblast rotation. Journal of Structural Geology, 2004, 26, 2211-2224.	2.3	28
25	Viscous inclusions in anisotropic materials: Theoretical development and perspective applications. Tectonophysics, 2016, 693, 116-142.	2.2	27
26	The motion of deformable ellipsoids in power-law viscous materials: Formulation and numerical implementation of a micromechanical approach applicable to flow partitioning and heterogeneous deformation in Earthâ€™s lithosphere. Journal of Structural Geology, 2013, 50, 22-34.	2.3	26
27	Quartz Flow Law Revisited: The Significance of Pressure Dependence of the Activation Enthalpy. Journal of Geophysical Research: Solid Earth, 2019, 124, 241-256.	3.4	25
28	A micromechanical approach for simulating multiscale fabrics in largeâ€scale highâ€strain zones: Theory and application. Journal of Geophysical Research, 2012, 117, .	3.3	24
29	A general approach for modeling the motion of rigid and deformable ellipsoids in ductile flows. Computers and Geosciences, 2012, 38, 52-61.	4.2	24
30	Relationship between non-cylindrical fold geometry and the shear direction in monoclinic and triclinic shear zones. Journal of Structural Geology, 2007, 29, 1022-1033.	2.3	23
31	Forward modeling of non-steady-state deformations and the â€˜minimum strain pathâ€™: Discussion. Journal of Structural Geology, 1998, 20, 975-977.	2.3	22
32	Deformation partitioning in transpressional shear zones with an along-strike stretch component: An example from the Superior Boundary Zone, Manitoba, Canada. Journal of Structural Geology, 2011, 33, 192-202.	2.3	20
33	Interpretation of deformation fabrics of infrastructure zone rocks in the context of channel flow and other tectonic models. Geological Society Special Publication, 2006, 268, 221-235.	1.3	19
34	Flow and finite deformation of surface elements in three dimensional homogeneous progressive deformations. Tectonophysics, 2010, 487, 85-99.	2.2	19
35	Pressure variations among rheologically heterogeneous elements in Earth's lithosphere: A micromechanics investigation. Earth and Planetary Science Letters, 2018, 498, 397-407.	4.4	15
36	An optimal scheme for numerical evaluation of Eshelby tensors and its implementation in a MATLAB package for simulating the motion of viscous ellipsoids in slow flows. Computers and Geosciences, 2016, 96, 98-108.	4.2	14

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37	Kinematics of deformation constructed from deformed planar and linear elements: The method and its application. Tectonophysics, 2010, 492, 175-191.	2.2	13
38	Constrictional Strain and Linear Fabrics as a Result of Deformation Partitioning: A Multiscale Modeling Investigation and Tectonic Significance. Tectonics, 2019, 38, 2829-2849.	2.8	11
39	Deformation characteristics and formation mechanism of the Yunmengshan metamorphic core complex. Science Bulletin, 2014, 59, 2419-2438.	1.7	10
40	The formation of micafish: A modeling investigation based onÂmicromechanics. Journal of Structural Geology, 2014, 68, 300-315.	2.3	9
41	Small-scale ductile shear zones as transposed rheologically weak domains: A numerical modeling investigation and practical application. Journal of Structural Geology, 2013, 54, 184-198.	2.3	7
42	Tectonic setting of the Late Triassic magmatism in the Qinling Orogen: New constraints from the interplay between granite emplacement and shear zone deformation in the Shagou area. Geological Journal, 2017, 52, 250-271.	1.3	7
43	A Multiscale Numerical Modeling Investigation on the Significance of Flow Partitioning for the Development of Quartz câ€Axis Fabrics. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021040.	3.4	7
44	Mesozoic contractional deformation in central East Asia: Constraints from deformation and sedimentary record of the Helanshan fold and thrust belt, North China Craton. Gondwana Research, 2022, 107, 235-255.	6.0	2
45	Fracturing of garnet crystals in anisotropic metamorphic rocks during uplift: Discussion. Journal of Structural Geology, 1997, 19, 1429-1431.	2.3	1
46	Reply to the comments by Domingo Aerden on â€œReference frame, angular momentum, and porphyroblast rotationâ€• Journal of Structural Geology, 2005, 27, 1134-1137.	2.3	1
47	Kinematics and Vorticity of High-Strain Zones. GSA Today, 2003, 13, 37.	2.0	1
48	Vorticity decomposition and its application to sectional flow characterization: Reply. Tectonophysics, 2000, 327, 153-155.	2.2	0
49	Introduction to Journal of Structural Geology special issue on â€œDeformation Processes in Lithospheric High-Strain Zonesâ€• Journal of Structural Geology, 2014, 68, 245-246.	2.3	0
50	Comment on â€œPressureâ€toâ€Depth Conversion Models for Metamorphic Rocks: Derivation and Applicationsâ€•by Bauville and Yamato. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009737.	2.5	0