Rob Govers

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1028445/publications.pdf

Version: 2024-02-01

68	4,012	172457	118850
papers	citations	29 h-index	62 g-index

96	96	96	3945
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lithosphere tearing at STEP faults: response to edges of subduction zones. Earth and Planetary Science Letters, 2005, 236, 505-523.	4.4	542
2	Shallow mantle temperatures under Europe fromPandSwave tomography. Journal of Geophysical Research, 2000, 105, 11153-11169.	3.3	485
3	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences. Marine Geology, 2014, 352, 25-58.	2.1	436
4	Evolution of the Late Miocene Mediterraneanâ€“Atlantic gateways and their impact on regional and global environmental change. Earth-Science Reviews, 2015, 150, 365-392.	9.1	171
5	Foreâ€arc motion and Cocos Ridge collision in Central America. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	155
6	Two-dimensional simulations of surface deformation caused by slab detachment. Tectonophysics, 2002, 354, 195-210.	2.2	143
7	Active deformation in eastern Indonesia and the Philippines from GPS and seismicity data. Journal of Geophysical Research, 2000, 105, 663-680.	3.3	117
8	The relative motion between Africa and Eurasia as derived from ITRF2000 and GPS data. Geophysical Research Letters, 2003, 30, .	4.0	116
9	Tectonic evolution and mantle structure of the Caribbean. Journal of Geophysical Research: Solid Earth, 2013, 118, 3019-3036.	3.4	93
10	The Ionian and Alfeoâ€“Etna fault zones: New segments of an evolving plate boundary in the central Mediterranean Sea?. Tectonophysics, 2016, 675, 69-90.	2.2	93
11	A single cause for uplift of the Central and Eastern Anatolian plateau?. Tectonophysics, 2014, 637, 116-136.	2.2	89
12	Initiation of asymmetric extension in continental lithosphere. Tectonophysics, 1993, 223, 75-96.	2.2	74
13	Regional isostatic response to Messinian Salinity Crisis events. Tectonophysics, 2009, 463, 109-129.	2.2	74
14	Subduction initiation along the inherited weakness zone at the edge of a slab: Insights from numerical models. Geophysical Journal International, 2011, 184, 991-1008.	2.4	67
15	Strain accumulation across the Carrizo segment of the San Andreas Fault, California: Impact of laterally varying crustal properties. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	65
16	Choking the Mediterranean to dehydration: The Messinian salinity crisis. Geology, 2009, 37, 167-170.	4.4	65
17	Ephemeral crustal thickening at a triple junction:The Mendocino crustal conveyor. Geology, 1999, 27, 127.	4.4	62
18	A modelling study of vertical surface displacements at convergent plate margins. Geophysical Journal International, 2001, 147, 415-427.	2.4	61

#	Article	IF	Citations
19	The Plinyâ€“Strabo trench region: A large shear zone resulting from slab tearing. Earth and Planetary Science Letters, 2013, 375, 188-195.	4.4	55
20	Signature of slab fragmentation beneath Anatolia from full-waveform tomography. Earth and Planetary Science Letters, 2016, 450, 10-19.	4.4	54
21	Postseismic GRACE and GPS observations indicate a rheology contrast above and below the Sumatra slab. Journal of Geophysical Research: Solid Earth, 2015, 120, 5343-5361.	3.4	48
22	Extension of stable continental lithosphere and the initiation of lithospheric scale faults. Tectonics, 1995, 14, 1041-1055.	2.8	47
23	On the dynamics of the Juan de Fuca plate. Earth and Planetary Science Letters, 2001, 189, 115-131.	4.4	45
24	Forces controlling the present-day state of stress in the Andes. Earth and Planetary Science Letters, 1997, 148, 157-170.	4.4	41
25	The effect of plate stresses and shallow mantle temperatures on tectonics of northwestern Europe. Global and Planetary Change, 2000, 27, 23-38.	3.5	41
26	The Geodetic Signature of the Earthquake Cycle at Subduction Zones: Model Constraints on the Deep Processes. Reviews of Geophysics, 2018, 56, 6-49.	23.0	40
27	Dynamics of continental collision: influence of the plate contact. Geophysical Journal International, 2008, 174, 1101-1120.	2.4	34
28	Continental Collision and the STEP-wise Evolution of Convergent Plate Boundaries: From Structure to Dynamics. Frontiers in Earth Sciences, 2009, , 47-59.	0.1	32
29	Numerical comparison of different convergent plate contacts: subduction channel and subduction fault. Geophysical Journal International, 2007, 171, 435-450.	2.4	31
30	Stress magnitude estimates from earthquakes in oceanic plate interiors. Journal of Geophysical Research, 1992, 97, 11749-11759.	3.3	29
31	Relating viscosities from postseismic relaxation to a realistic viscosity structure for the lithosphere. Geophysical Journal International, 2009, 176, 614-624.	2.4	29
32	On the plate boundary forces that drive and resist Baja California motion. Geology, 2009, 37, 359-362.	4.4	29
33	The role of subduction in the evolution of the Apennines foreland basin. Tectonophysics, 1998, 296, 249-268.	2.2	28
34	The Accumulation of Slip Deficit in Subduction Zones in the Absence of Mechanical Coupling: Implications for the Behavior of Megathrust Earthquakes. Journal of Geophysical Research: Solid Earth, 2018, 123, 8260-8278.	3.4	28
35	The role of passive margins on the evolution of Subductionâ€Transform Edge Propagators (STEPs). Journal of Geophysical Research: Solid Earth, 2015, 120, 7203-7230.	3.4	25
36	The role of viscous magma mush spreading in volcanic flank motion at KÄ«lauea Volcano, Hawaiâ€˜i. Journal of Geophysical Research: Solid Earth, 2013, 118, 2474-2487.	3.4	24

#	Article	IF	Citations
37	Three-dimensional thermal modeling for the Mendocino Triple Junction area. Earth and Planetary Science Letters, 1997, 148, 45-57.	4.4	23
38	Three-dimensional thermal modeling of the California upper mantle: a slab window vs. stalled slab. Earth and Planetary Science Letters, 2001, 186, 175-186.	4.4	23
39	Nature of the plate contact and subduction zones diversity. Earth and Planetary Science Letters, 2008, 271, 245-253.	4.4	23
40	Lithosphere-mantle coupling and the dynamics of the Eurasian Plate. Geophysical Journal International, 2012, 189, 1253-1276.	2.4	23
41	What drives microplate motion and deformation in the northeastern Caribbean plate boundary region?. Tectonics, 2014, 33, 850-873.	2.8	23
42	Switching between alternative responses of the lithosphere to continental collision. Geophysical Journal International, 2011, 187, 1151-1174.	2.4	22
43	Impact of rock salt creep law choice on subsidence calculations for hydrocarbon reservoirs overlain by evaporite caprocks. Journal of Geophysical Research: Solid Earth, 2016, 121, 4249-4267.	3.4	21
44	Flexure due to the Messinianâ€Pontian sea level drop in the Black Sea. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	20
45	The Caribbean plate: Pulled, pushed, or dragged?. Journal of Geophysical Research, 2010, 115, .	3.3	20
46	Lithospheric structure along the Queen Charlotte margin in western Canada: constraints from flexural modeling. Geo-Marine Letters, 1997, 17, 94-99.	1.1	19
47	Plate boundary deformation between the Pacific and North America in the Explorer region. Tectonophysics, 1998, 293, 225-238.	2.2	19
48	Pressurized groundwater outflow experiments and numerical modeling for outflow channels on Mars. Journal of Geophysical Research E: Planets, 2014, 119, 2668-2693.	3.6	19
49	Tethyan collision forces and the stress field of the Eurasian Plate. Geophysical Journal International, 2013, 195, 1-15.	2.4	18
50	Active faults in the Anatolian-Aegean plate boundary region with Nubia. Turkish Journal of Earth Sciences, 2017, 26, 30-56.	1.0	17
51	Locating Fully Locked Asperities Along the South America Subduction Megathrust: A New Physical Interseismic Inversion Approach in a Bayesian Framework. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009063.	2.5	16
52	Ground motions induced by a producing hydrocarbon reservoir that is overlain by a viscoelastic rocksalt layer: a numerical model. Geophysical Journal International, 2015, 203, 198-212.	2.4	14
53	A lithosphereâ€dynamics constraint on mantle flow: Analysis of the Eurasian plate. Geophysical Research Letters, 2010, 37, .	4.0	13
54	Development of the Eastern California Shear Zone â€" Walker Lane belt: The effects of microplate motion and pre-existing weakness in the Basin and Range. Tectonophysics, 2010, 485, 78-84.	2.2	13

#	Article	IF	Citations
55	New analogue materials for nonlinear lithosphere rheology, with an application to slab break-off. Tectonophysics, 2019, 756, 73-96.	2.2	13
56	Is uplift of volcano clusters in the Tohoku Volcanic Arc, Japan, driven by magma accumulation in hot zones? A geodynamic modeling study. Journal of Geophysical Research: Solid Earth, 2016, 121, 4780-4796.	3.4	12
57	Some remarks on the relation between vertical motions of the lithosphere during extension and the necking depth parameter inferred from kinematic modeling studies. Journal of Geophysical Research, 1999, 104, 23245-23253.	3.3	10
58	On the forces that drive and resist deformation of the south-central Mediterranean: a mechanical model study. Geophysical Journal International, 2018, 214, 876-894.	2.4	10
59	The Kefalonia Transform Fault: A STEP fault in the making. Tectonophysics, 2020, 787, 228471.	2.2	9
60	Geodynamics of collision and collapse at the Africaâ€“Arabiaâ€“Eurasia subduction zone â€“ an introduction. Geological Society Special Publication, 2009, 311, 1-7.	1.3	6
61	Stress evolution during the megathrust earthquake cycle and its role in triggering extensional deformation in subduction zones. Earth and Planetary Science Letters, 2020, 544, 116379.	4.4	4
62	Exhumation of the Coastal Metamorphic Belt Above the Subductionâ€toâ€Transform Transition, in the Southeast Caribbean Plate Corner. Tectonics, 2021, 40, e2020TC006414.	2.8	4
63	Tectonic Context and Possible Triggering of the 2019â€“2020 Puerto Rico Earthquake Sequence. Seismological Research Letters, 0, , .	1.9	4
64	Origin of circular collapsed landforms in the Chryse region of Mars. Icarus, 2016, 265, 70-78.	2.5	3
65	Dynamics of the African Plate 75ÂMa: From Plate Kinematic Reconstructions to Intraplate Paleoâ€Stresses. Tectonics, 2021, 40, e2020TC006355.	2.8	2
66	Mixing fluids and solids. Nature, 1995, 376, 645-645.	27.8	0
67	Driving Earth's surface motions. Nature, 2010, 465, 559-559.	27.8	0
68	Morphological Expressions of Crater Infill Collapse: Model Simulations of Chaotic Terrains on Mars. Geochemistry, Geophysics, Geosystems, 2017, 18, 3687-3699.	2.5	0