Yehuda Bock

List of Publications by Citations

113 papers	7,987 citations	50 h-index	88 g-index
119 ext. papers	8,922 ext. citations	7.3 avg, IF	5.8 L-index

#	Paper	IF	Citations
113	Error analysis of continuous GPS position time series. *Journal of Geophysical Research*, **2004**, 109,		427
112	Anatomy of apparent seasonal variations from GPS-derived site position time series. *Journal of Geophysical Research*, **2002**, 107, ETG 9-1-ETG 9-16		427
111	Frictional afterslip following the 2005 Nias-Simeulue earthquake, Sumatra. *Science*, **2006**, 312, 1921-6	33.3	357
110	Coseismic Slip and Afterslip of the Great Mw 9.15 Sumatra-Andaman Earthquake of 2004. *Bulletin of the Seismological Society of America*, **2007**, 97, S152-S173	2.3	349
109	Southern California permanent GPS geodetic array: Error analysis of daily position estimates and site velocities. *Journal of Geophysical Research*, **1997**, 102, 18035-18055		344
108	Plate-boundary deformation associated with the great Sumatra-Andaman earthquake. *Nature*, **2006** , 440, 46-51	50.4	326
107	Deformation and slip along the Sunda megathrust in the great 2005 Nias-Simeulue earthquake. *Science*, **2006**, 311, 1897-901	33.3	245
106	Partial rupture of a locked patch of the Sumatra megathrust during the 2007 earthquake sequence. *Nature*, **2008**, 456, 631-5	50.4	244
105	Slip pulse and resonance of the Kathmandu basin during the 2015 Gorkha earthquake, Nepal. *Science*, **2015**, 349, 1091-5	33.3	229
104	Space geodetic measurement of crustal deformation in central and southern California, 1984–1992. *Journal of Geophysical Research*, **1993**, 98, 21677-21712		216
103	Spatiotemporal filtering using principal component analysis and Karhunen-Loeve expansion approaches for regional GPS network analysis. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a		179
102	Crustal motion in Indonesia from Global Positioning System measurements. *Journal of Geophysical Research*, **2003**, 108,		176
101	Instantaneous geodetic positioning at medium distances with the Global Positioning System. *Journal of Geophysical Research*, **2000**, 105, 28223-28253		163
100	Real-Time Strong-Motion Broadband Displacements from Collocated GPS and Accelerometers. *Bulletin of the Seismological Society of America*, **2011**, 101, 2904-2925	2.3	149
99	Postseismic deformation following the Landers earthquake, California, 28 June 1992. *Bulletin of the Seismological Society of America*, **1994**, 84, 780-791	2.3	141
98	Postseismic deformation due to the Mw 6.0 2004 Parkfield earthquake: Stress-driven creep on a fault with spatially variable rate-and-state friction parameters. *Journal of Geophysical Research*, **2009**, 114,		137
97	Triple-frequency GPS precise point positioning with rapid ambiguity resolution. *Journal of Geodesy*, **2013**, 87, 449-460	4.5	122

96	GPS measurements of current crustal movements along the Dead Sea Fault. *Journal of Geophysical Research*, **2004**, 109,		117
95	Instantaneous global plate motion model from 12 years of continuous GPS observations. *Journal of Geophysical Research*, **2004**, 109,		114
94	Detection of arbitrarily large dynamic ground motions with a dense high-rate GPS network. *Geophysical Research Letters*, **2004**, 31, n/a-n/a	4.9	112
93	Rapid resolution of crustal motion at short ranges with the global positioning system. *Journal of Geophysical Research*, **1992**, 97, 3261-3269		111
92	Physical applications of GPS geodesy: a review. *Reports on Progress in Physics*, **2016**, 79, 106801	14.4	101
91	First geodetic measurement of convergence across the Java Trench. *Geophysical Research Letters*, **1994**, 21, 2135-2138	4.9	98
90	A new seismogeodetic approach applied to GPS and accelerometer observations of the 2012 Brawley seismic swarm: Implications for earthquake early warning. *Geochemistry, Geophysics, Geosystems*, **2013**, 14, 2124-2142	3.6	97
89	Southern California Permanent GPS Geodetic Array: Continuous measurements of regional crustal deformation between the 1992 Landers and 1994 Northridge earthquakes. *Journal of Geophysical Research*, **1997**, 102, 18013-18033		95
88	Detection of crustal deformation from the Landers earthquake sequence using continuous geodetic measurements. *Nature*, **1993**, 361, 337-340	50.4	93
87	Real-time inversion of GPS data for finite fault modeling and rapid hazard assessment. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	92
86	Instantaneous geodetic positioning with 10–50 Hz GPS measurements: Noise characteristics and implications for monitoring networks. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a		89
85	A unified scheme for processing GPS dual-band phase observations. *Bulletin Geodesique*, **1988**, 62, 142-160		85
84	Earthquake magnitude calculation without saturation from the scaling of peak ground displacement. *Geophysical Research Letters*, **2015**, 42, 5197-5205	4.9	84
83	Real-time centroid moment tensor determination for large earthquakes from local and regional displacement records. *Geophysical Journal International*, **2012**, 188, 703-718	2.6	82
82	Seismic wave observations with the Global Positioning System. *Journal of Geophysical Research*, **2001**, 106, 21897-21916		80
81	Satellite interferometric observations of displacements associated with seasonal groundwater in the Los Angeles basin. *Journal of Geophysical Research*, **2002**, 107, ETG 8-1-ETG 8-15		79
80	High-rate real-time GPS network at Parkfield: Utility for detecting fault slip and seismic displacements. *Geophysical Research Letters*, **2004**, 31,	4.9	78
79	Accretion of the southern Banda arc to the Australian plate margin determined by Global Positioning System measurements. *Tectonics*, **1996**, 15, 288-295	4.3	78

78	Demonstration of Earthquake Early Warning Using Total Displacement Waveforms from Real-time GPS Networks. *Seismological Research Letters*, **2009**, 80, 772-782	3	76
77	Co-seismic displacements of the 1992 landers earthquake sequence. *Bulletin of the Seismological Society of America*, **1994**, 84, 625-645	2.3	75
76	Kinematic earthquake source inversion and tsunami runup prediction with regional geophysical data. *Journal of Geophysical Research: Solid Earth*, **2015**, 120, 3324-3349	3.6	72
75	GPS measurements of crustal deformation within the Pacific-Australia plate boundary zone in Irian Jaya, Indonesia. *Tectonophysics*, **1994**, 237, 141-153	3.1	69
74	Near-field tsunami models with rapid earthquake source inversions from land- and ocean-based observations: The potential for forecast and warning. *Journal of Geophysical Research: Solid Earth*, **2013**, 118, 5939-5955	3.6	67
73	GPS meteorology: Reducing systematic errors in geodetic estimates for zenith delay. *Geophysical Research Letters*, **1998**, 25, 3583-3586	4.9	66
72	On robust and reliable automated baseline corrections for strong motion seismology. *Journal of Geophysical Research: Solid Earth*, **2013**, 118, 1177-1187	3.6	64
71	Localized and distributed creep along the southern San Andreas Fault. *Journal of Geophysical Research: Solid Earth*, **2014**, 119, 7909-7922	3.6	63
70	Earthquake magnitude scaling using seismogeodetic data. *Geophysical Research Letters*, **2013**, 40, 6089-6094	4.9	62
69	Crustal deformation along the Dead Sea Transform and the Carmel Fault inferred from 12 years of GPS measurements. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		56
68	Space geodetic observation of expansion of the San Gabriel Valley, California, aquifer system, during heavy rainfall in winter 20042005. *Journal of Geophysical Research*, **2007**, 112,		54
67	Observation and modeling of thermoelastic strain in Southern California Integrated GPS Network daily position time series. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a		52
66	Local tsunami warnings: Perspectives from recent large events. *Geophysical Research Letters*, **2016**, 43, 1109-1117	4.9	52
65	Geodetic observations of an earthquake cycle at the Sumatra subduction zone: Role of interseismic strain segmentation. *Journal of Geophysical Research*, **2010**, 115,		51
64	Escape tectonics in the Los Angeles metropolitan region and implications for seismic risk. *Nature*, **1998**, 394, 356-360	50.4	51
63	The shallow plumbing system of Stromboli Island as imaged from 1 Hz instantaneous GPS positions. *Geophysical Research Letters*, **2004**, 31,	4.9	50
62	Rapid modeling of the 2011 Mw 9.0 Tohoku-oki earthquake with seismogeodesy. *Geophysical Research Letters*, **2013**, 40, 2963-2968	4.9	48
61	Rapid rotations about a vertical axis in a collisional setting revealed by the Palu Fault, Sulawesi, Indonesia. *Geophysical Research Letters*, **1999**, 26, 2677-2680	4.9	47

60	Interseismic Strain Localization in the San Jacinto Fault Zone. *Pure and Applied Geophysics*, **2014**, 171, 2937-2954	2.2	46
59	Recent subsidence of the Venice Lagoon from continuous GPS and interferometric synthetic aperture radar. *Geochemistry, Geophysics, Geosystems*, **2012**, 13, n/a-n/a	3.6	43
58	Seismicity and deformation associated with ice-shelf rift propagation. *Journal of Glaciology*, **2007**, 53, 523-536	3.4	43
57	Near real-time radar interferometry of the Mw 7.1 Hector Mine Earthquake. *Geophysical Research Letters*, **2000**, 27, 3101-3104	4.9	40
56	GLONASS fractional-cycle bias estimation across inhomogeneous receivers for PPP ambiguity resolution. *Journal of Geodesy*, **2016**, 90, 379-396	4.5	39
55	Seismogeodesy of the 2014 Mw6.1 Napa earthquake, California: Rapid response and modeling of fast rupture on a dipping strike-slip fault. *Journal of Geophysical Research: Solid Earth*, **2015**, 120, 5013-5033	3.6	39
54	A Global Database of Strong-Motion Displacement GNSS Recordings and an Example Application to PGD Scaling. *Seismological Research Letters*, **2019**, 90, 271-279	3	36
53	A demonstration of 1□ parts in 107 accuracy using GPS. *Bulletin Geodesique*, **1986**, 60, 241-254		35
52	Diffuse interseismic deformation across the Pacific□North America plate boundary. *Geology*, **2007**, 35, 311	5	33
51	Migration of seismicity and earthquake interactions monitored by GPS in SE Asia triple junction: Sulawesi, Indonesia. *Journal of Geophysical Research*, **2002**, 107, ETG 7-1-ETG 7-11		33
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49	Rising of the lowest place on Earth due to Dead Sea water-level drop: Evidence from SAR interferometry and GPS. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		29
48	Creep along the Imperial Fault, southern California, from GPS measurements. *Journal of Geophysical Research*, **2002**, 107, ETG 12-1-ETG 12-13		29
47	Integrated satellite interferometry in Southern California. *Eos*, **1997**, 78, 293	1.5	26
46	Seismogeodesy Using GPS and Low-Cost MEMS Accelerometers: Perspectives for Earthquake Early Warning and Rapid Response. *Bulletin of the Seismological Society of America*, **2016**, 106, 2469-2489	2.3	25
45	Load Response on a Large Suspension Bridge during the NYC Marathon Revealed by GPS and Accelerometers. *Seismological Research Letters*, **2008**, 79, 12-19	3	24
44	Modulation of the earthquake cycle at the southern San Andreas fault by lake loading. *Journal of Geophysical Research*, **2007**, 112,		24
43	Geodetic detection of active faults in S. California. *Geophysical Research Letters*, **2001**, 28, 2321-2324	4.9	24

42	Direct estimation of absolute precipitable water in oceanic regions by GPS tracking of a coastal buoy. *Geophysical Research Letters*, **2001**, 28, 3701-3704	4.9	24
41	Geodetic investigation into the deformation of the Salton Trough. *Journal of Geophysical Research: Solid Earth*, **2013**, 118, 5030-5039	3.6	21
40	Recovering coseismic point ground tilts from collocated high-rate GPS and accelerometers. *Geophysical Research Letters*, **2013**, 40, 5095-5100	4.9	21
39	Estimating wet delays using numerical weather analyses and predictions. *Radio Science*, **1996**, 31, 477-487	1.4	21
38	Surface deformation associated with fractures near the 2019 Ridgecrest earthquake sequence. *Science*, **2020**, 370, 605-608	33.3	21
37	Current plate motion across the Dead Sea Fault from three years of continuous GPS monitoring. *Geophysical Research Letters*, **2002**, 29, 42-1-42-4	4.9	20
36	Geodetic accuracy of the Macrometer model V-1000. *Bulletin Geodesique*, **1984**, 58, 211-221		19
35	High rate GPS data on active volcanoes: an application to the 2005–2006 Mt. Augustine (Alaska, USA) eruption. *Terra Nova*, **2008**, 20, 134-140	3	18
34	Guadalupe Island, Mexico as a new constraint for Pacific plate motion. *Geophysical Research Letters*, **2003**, 30,	4.9	16
33	Tsunami Scenarios Based on Interseismic Models Along the Nankai Trough, Japan, From Seafloor and Onshore Geodesy. *Journal of Geophysical Research: Solid Earth*, **2018**, 123, 2448-2461	3.6	15
32	Transient Deformation in California From Two Decades of GPS Displacements: Implications for a Three-Dimensional Kinematic Reference Frame. *Journal of Geophysical Research: Solid Earth*, **2019**, 124, 12189-12223	3.6	15
31	Self-contained local broadband seismogeodetic early warning system: Detection and location. *Journal of Geophysical Research: Solid Earth*, **2017**, 122, 3197-3220	3.6	14
30	Geodetic Observations of Weak Determinism in Rupture Evolution of Large Earthquakes. *Journal of Geophysical Research: Solid Earth*, **2018**, 123, 9950-9962	3.6	14
29	Single-station automated detection of transient deformation in GPS time series with the relative strength index: A case study of Cascadian slow slip. *Journal of Geophysical Research: Solid Earth*, **2016**, 121, 9077-9094	3.6	13
28	Regional Global Navigation Satellite System Networks for Crustal Deformation Monitoring. *Seismological Research Letters*, **2019**, 91, 552-572	3	13
27	Estimating crustal deformations from a combination of baseline measurements and geophysical models. *Bulletin Geodesique*, **1983**, 57, 294-311		13
26	Calibrating interferometric synthetic aperture radar (InSAR) images with regional GPS network atmosphere models. *Geophysical Journal International*, **2015**, 202, 2106-2119	2.6	12
25	Predominant period and equivalent viscous damping ratio identification for a full-scale building shake table test. *Earthquake Engineering and Structural Dynamics*, **2017**, 46, 2459-2477	4	11

24	SOPAC Web site (http://sopac.ucsd.edu). *GPS Solutions*, **2004**, 8, 272-277	4.4	11
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22	Coevolving early afterslip and aftershock signatures of a San Andreas fault rupture. *Science Advances*, **2021**, 7,	14.3	8
21	Seismogeodetic P-wave Amplitude: No Evidence for Strong Determinism. *Geophysical Research Letters*, **2019**, 46, 11118-11126	4.9	7
20	Evidence for Block Rotations and Basal Shear in the World's Fastest Slipping Continental Shear Zone in Nw New Guinea. *Geodynamic Series*, **2013**, 87-99		7
19	Twenty-Two Years of Combined GPS Products for Geophysical Applications and a Decade of Seismogeodesy. *International Association of Geodesy Symposia*, **2016**, 49-54	0.8	7
18	Dynamic Mapping of the Movement of Landfalling Atmospheric Rivers Over Southern California With GPS Data. *Geophysical Research Letters*, **2019**, 46, 3551-3559	4.9	5
17	Statistical Approaches to Detecting Transient Signals in GPS: Results from the 2009-2011 Transient Detection Exercise. *Seismological Research Letters*, **2013**, 84, 444-454	3	5
16	Methodology and Validation of UAV-Based Video Analysis Approach for Tracking Earthquake-Induced Building Displacements. *Journal of Computing in Civil Engineering*, **2020**, 34, 04020045	5	5
15	Architecture, performance, and scalability of a real-time global positioning system data grid. *Physics of the Earth and Planetary Interiors*, **2007**, 163, 347-359	2.3	4
14	Integrated Sentinel-1 InSAR and GNSS Time-Series Along the San Andreas Fault System. *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2021JB022579	3.6	4
13	Analysis of streaming GPS measurements of surface displacement through a web services environment **2007**,		3
12	Software tools for accessing the GPS Seamless Archive. *GPS Solutions*, **2004**, 7, 271-276	4.4	3
11	Annual cycle in flow of Ross Ice Shelf, Antarctica: contribution of variable basal melting. *Journal of Glaciology*, **2020**, 66, 861-875	3.4	3
10	Reply to comment by P. Teatini et al. on Recent subsidence of the Venice Lagoon from continuous GPS and interferometric synthetic aperture radar *Geochemistry, Geophysics, Geosystems*, **2012**, 13, n/a-n/a	2.6	2
9	Modeling and On-the-Fly Solutions for Solid Earth Sciences: Web Services and Data Portal for Earthquake Early Warning System **2008**,		2
8	Defining the Coseismic Phase of the Crustal Deformation Cycle With Seismogeodesy. *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2021JB022002	3.6	2
7	Simultaneous Orbit and Network Adjustment in Tennessee. *Journal of Surveying Engineering, - ASCE* , **1989**, 115, 34-45	1.3	1

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5	Error analysis of continuous GPS position time series **2004**, 109,		1
4	One Year of Daily Satellite Orbit and Polar Motion Estimation for Near Real Time Crustal Deformation Monitoring. *Symposium - International Astronomical Union*, **1993**, 156, 279-284		
3	Seeing California move with global positioning satellites. *Eos*, **1994**, 75, 251	1.5	
2	GLOBAL POSITIONING SYSTEM: AN OVERVIEW. *Terra Nova*, **1992**, 4, 519-523	3	
1	GNSS Geodesy in Geophysics, Natural Hazards, Climate, and the Environment **2020**, 741-820		