Richard D Ray

List of Publications by Year
in descending order

96 papers	6,483 citations	81900 39 h-index	66911 78 g-index
104 all docs	104 docs citations	104 times ranked	4202 citing authors

#	Article	IF	Citations
1	Along‐Orbit Analysis of GRACE Follow‐On Inter‐Satellite Laser Ranging Measurements for Sub‐Monthly Surface Mass Variations. Journal of Geophysical Research: Solid Earth, 2022, 127, e2021JB022983.	3.4	9
2	On the Development of SWOT In Situ Calibration/Validation for Short-Wavelength Ocean Topography. Journal of Atmospheric and Oceanic Technology, 2022, 39, 595-617.	1.3	7
3	Seasonal and Interannual Variability of Tidal Mixing Signatures in Indonesian Seas from High-Resolution Sea Surface Temperature. Remote Sensing, 2022, 14, 1934.	4.0	7
4	Accuracy assessment of global internal-tide models using satellite altimetry. Ocean Science, 2021, 17, 147-180.	3.4	28
5	Preface: Developments in the science and history of tides. Ocean Science, 2021, 17, 809-818.	3.4	3
6	The mean seasonal cycle in relative sea level from satellite altimetry and gravimetry. Journal of Geodesy, 2021, 95, 80.	3.6	9
7	The problematic Î¨1 ocean tide. Geophysical Journal International, 2021, 227, 1181-1192.	2.4	3
8	New determinations of tides on the north-western Ross Ice Shelf. Antarctic Science, 2021, 33, 89-102.	0.9	5
9	Tidal Geopotential Dependence on Earth Ellipticity and Seawater Density and Its Detection With the GRACE Follow‐On Laser Ranging Interferometer. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016774.	2.6	3
10	First global observations of third-degree ocean tides. Science Advances, 2020, 6, .	10.3	13
11	GRACE Follow‐On Laser Ranging Interferometer Measurements Uniquely Distinguish Short‐Wavelength Gravitational Perturbations. Geophysical Research Letters, 2020, 47, e2020GL089445.	4.0	32
12	Daily harmonics of ionospheric total electron content from satellite altimetry. Journal of Atmospheric and Solar-Terrestrial Physics, 2020, 209, 105423.	1.6	9
13	Tidally Driven Interannual Variation in Extreme Sea Level Frequencies in the Gulf of Maine. Journal of Geophysical Research: Oceans, 2020, 125, e2020JC016291.	2.6	20
14	Understanding of Contemporary Regional Sea‐Level Change and the Implications for the Future. Reviews of Geophysics, 2020, 58, e2019RG000672.	23.0	74
15	Towards Comprehensive Observing and Modeling Systems for Monitoring and Predicting Regional to Coastal Sea Level. Frontiers in Marine Science, 2019, 6, .	2.5	51
16	The Semiannual and 4.4‐Year Modulations of Extreme High Tides. Journal of Geophysical Research: Oceans, 2019, 124, 5907-5922.	2.6	21
17	Nineteenth‐Century Tides in the Gulf of Maine and Implications for Secular Trends. Journal of Geophysical Research: Oceans, 2019, 124, 7046-7067.	2.6	29
18	A fortnightly atmospheric ‘tide’ at Bali caused by oceanic tidal mixing in Lombok Strait. Geoscience Letters, 2019, 6, .	3.3	5

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19	Forcing Factors Affecting Sea Level Changes at the Coast. Surveys in Geophysics, 2019, 40, 1351-1397.	4.6	165
20	Sea Level Rise in the Samoan Islands Escalated by Viscoelastic Relaxation After the 2009 Samoaâ€Tonga Earthquake. Journal of Geophysical Research: Solid Earth, 2019, 124, 4142-4156.	3.4	31
21	Tests of ocean-tide models by analysis of satellite-to-satellite range measurements: an update. Geophysical Journal International, 2019, 217, 1174-1178.	2.4	13
22	Future Nuisance Flooding in Norfolk, VA, From Astronomical Tides and Annual to Decadal Internal Climate Variability. Geophysical Research Letters, 2018, 45, 12,432.	4.0	26
23	Aliased Tidal Variability in Mesoscale Sea Level Anomaly Maps. Journal of Atmospheric and Oceanic Technology, 2018, 35, 2421-2435.	1.3	17
24	On Tidal Inference in the Diurnal Band. Journal of Atmospheric and Oceanic Technology, 2017, 34, 437-446.	1.3	17
25	Using an altimeter-derived internal tide model to remove tides from in situ data. Geophysical Research Letters, 2017, 44, 4241-4245.	4.0	17
26	A 10-Year Comparison of Water Levels Measured with a Geodetic GPS Receiver versus a Conventional Tide Gauge. Journal of Atmospheric and Oceanic Technology, 2017, 34, 295-307.	1.3	108
27	On the â€œCalâ€Modeâ€•Correction to TOPEX Satellite Altimetry and Its Effect on the Global Mean Sea Level Time Series. Journal of Geophysical Research: Oceans, 2017, 122, 8371-8384.	2.6	72
28	Tidal Prediction. Journal of Marine Research, 2017, 75, 189-237.	0.3	34
29	Tides and Satellite Altimetry. , 2017, , 427-458.		12
30	On Measurements of the Tide at Churchill, Hudson Bay. Atmosphere - Ocean, 2016, 54, 108-116.	1.6	10
31	Tidal mixing signatures in the Indonesian seas from highâ€resolution sea surface temperature data. Geophysical Research Letters, 2016, 43, 8115-8123.	4.0	43
32	Future nuisance flooding at Boston caused by astronomical tides alone. Earth's Future, 2016, 4, 578-587.	6.3	76
33	M2 Internal Tides and Their Observed Wavenumber Spectra from Satellite Altimetry. Journal of Physical Oceanography, 2016, 46, 3-22.	1.7	101
34	Surface Pressure Tide Climatologies Deduced from a Quality-Controlled Network of Barometric Observations*. Monthly Weather Review, 2014, 142, 4872-4889.	1.4	25
35	Accuracy assessment of global barotropic ocean tide models. Reviews of Geophysics, 2014, 52, 243-282.	23.0	338
36	Long-period tidal variations in the length of day. Journal of Geophysical Research: Solid Earth, 2014, 119, 1498-1509.	3.4	41

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37	Consideration of tidal variations in the geocenter on satellite altimeter observations of ocean tides. Geophysical Research Letters, 2014, 41, 2454-2459.	4.0	13
38	Reply to comments by S. R. Dickman on â€˜Fortnightly Earth rotation, ocean tides and mantle anelasticityâ€™. Geophysical Journal International, 2013, 192, 1055-1058.	2.4	0
39	Precise comparisons of bottomâ€pressure and altimetric ocean tides. Journal of Geophysical Research: Oceans, 2013, 118, 4570-4584.	2.6	131
40	Calibration of Ocean Wave Measurements by the TOPEX, Jason-1, and Jason-2 Satellites. Marine Geodesy, 2012, 35, 238-257.	2.0	20
41	Fortnightly Earth rotation, ocean tides and mantle anelasticity. Geophysical Journal International, 2012, 189, 400-413.	2.4	30
42	Tide Predictions in Shelf and Coastal Waters: Status and Prospects. , 2011, , 191-216.		50
43	One centimeter-level observations of diurnal ocean tides from global monthly mean time-variable gravity fields. Journal of Geodesy, 2010, 84, 715-729.	3.6	12
44	Bottom pressure tides along a line in the southeast Atlantic Ocean and comparisons with satellite altimetry. Ocean Dynamics, 2010, 60, 1167-1176.	2.2	34
45	Vertical crustal motion derived from satellite altimetry and tide gauges, and comparisons with DORIS measurements. Advances in Space Research, 2010, 45, 1510-1522.	2.6	43
46	Assimilation of altimetry data for nonlinear shallow-water tides: Quarter-diurnal tides of the Northwest European Shelf. Continental Shelf Research, 2010, 30, 668-679.	1.8	111
47	Assessment of the Jason-2 Extension to the TOPEX/Poseidon, Jason-1 Sea-Surface Height Time Series for Global Mean Sea Level Monitoring. Marine Geodesy, 2010, 33, 447-471.	2.0	74
48	Secular changes in the solar semidiurnal tide of the western North Atlantic Ocean. Geophysical Research Letters, 2009, 36, .	4.0	62
49	Assimilation of GRACE tide solutions into a numerical hydrodynamic inverse model. Geophysical Research Letters, 2009, 36, .	4.0	18
50	Qualitative comparisons of global ocean tide models by analysis of intersatellite ranging data. Journal of Geophysical Research, 2009, 114, .	3.3	29
51	A preliminary tidal analysis of ICESat laser altimetry: Southern Ross Ice Shelf. Geophysical Research Letters, 2008, 35, .	4.0	16
52	Decadal Climate Variability: Is There a Tidal Connection?. Journal of Climate, 2007, 20, 3542-3560.	3.2	46
53	Ocean tidal solutions in Antarctica from GRACE interâ€satellite tracking data. Geophysical Research Letters, 2007, 34, .	4.0	25
54	Propagation of the overtide M₄ through the deep Atlantic Ocean. Geophysical Research Letters, 2007, 34, .	4.0	33

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55	Times of peak astronomical tides. Geophysical Journal International, 2007, 168, 999-1004.	2.4	22
56	Tidal analysis experiments with sun-synchronous satellite altimeter data. Journal of Geodesy, 2007, 81, 247-257.	3.6	3
57	Secular changes of the M tide in the Gulf of Maine. Continental Shelf Research, 2006, 26, 422-427.	1.8	90
58	Tide model errors and GRACE gravimetry: towards a more realistic assessment. Geophysical Journal International, 2006, 167, 1055-1059.	2.4	97
59	Constraints on mantle anelasticity from geodetic observations, and implications for theJ2anomaly. Geophysical Journal International, 2006, 165, 3-16.	2.4	74
60	Mapping nonlinear shallow-water tides: a look at the past and future. Ocean Dynamics, 2006, 56, 416-429.	2.2	35
61	Terdiurnal Surface-Pressure Oscillations over the Continental United States. Monthly Weather Review, 2005, 133, 2526-2534.	1.4	10
62	A Brief Overview of Tides in the Indonesian Seas. Oceanography, 2005, 18, 74-79.	1.0	75
63	Numerical modeling of the global semidiurnal tide in the present day and in the last glacial maximum. Journal of Geophysical Research, 2004, 109, .	3.3	240
64	The Global S₁Tide. Journal of Physical Oceanography, 2004, 34, 1922-1935.	1.7	70
65	Tidal Models in a New Era of Satellite Gravimetry. Space Science Reviews, 2003, 108, 271-282.	8.1	55
66	Semi-diurnal and diurnal tidal dissipation from TOPEX/Poseidon altimetry. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	203
67	Simultaneous Ocean Wave Measurements by the Jason and Topex Satellites, with Buoy and Model Comparisons Special Issue: Jason-1 Calibration/Validation. Marine Geodesy, 2003, 26, 367-382.	2.0	26
68	Deviation of Long-Period Tides from Equilibrium: Kinematics and Geostrophy. Journal of Physical Oceanography, 2003, 33, 822-839.	1.7	50
69	Barometric tides from ECMWF operational analyses. Annales Geophysicae, 2003, 21, 1897-1910.	1.6	166
70	Is asteroid 951 Gaspra in a resonant obliquity state with its spin increasing due to YORP?. Journal of Geophysical Research, 2002, 107, 3-1.	3.3	11
71	Atmospheric pressure corrections in geodesy and oceanography: A strategy for handling air tides. Geophysical Research Letters, 2002, 29, 6-1-6-4.	4.0	55
72	Short-arc analysis of intersatellite tracking data in a gravity mapping mission. Journal of Geodesy, 2002, 76, 307-316.	3.6	57

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73	Error spectrum for the global M2ocean tide. Geophysical Research Letters, 2001, 28, 21-24.	4.0	29
74	Estimates of internal tide energy fluxes from Topex/Poseidon Altimetry: Central North Pacific. Geophysical Research Letters, 2001, 28, 1259-1262.	4.0	108
75	Estimates of M2tidal energy dissipation from TOPEX/Poseidon altimeter data. Journal of Geophysical Research, 2001, 106, 22475-22502.	3.3	359
76	Resonant Third-Degree Diurnal Tides in the Seas off Western Europe. Journal of Physical Oceanography, 2001, 31, 3581-3586.	1.7	10
77	Constraints on energy dissipation in the Earth's body tide from satellite tracking and altimetry. Geophysical Journal International, 2001, 144, 471-480.	2.4	99
78	Comparisons of global analyses and station observations of the S2 barometric tide. Journal of Atmospheric and Solar-Terrestrial Physics, 2001, 63, 1085-1097.	1.6	22
79	Inversion of oceanic tidal currents from measured elevations. Journal of Marine Systems, 2001, 28, 1-18.	2.1	31
80	Significant dissipation of tidal energy in the deep ocean inferred from satellite altimeter data. Nature, 2000, 405, 775-778.	27.8	688
81	Lunar orbital evolution: A synthesis of recent results. Geophysical Research Letters, 1999, 26, 3045-3048.	4.0	103
82	Diurnal oscillations in atmospheric pressure at twenty-five small oceanic islands. Geophysical Research Letters, 1998, 25, 3851-3854.	4.0	13
83	Spectral analysis of highly aliased sea-level signals. Journal of Geophysical Research, 1998, 103, 24991-25003.	3.3	32
84	Accuracy assessment of recent ocean tide models. Journal of Geophysical Research, 1997, 102, 25173-25194.	3.3	255
85	The flux of tidal energy across latitude 60Â°S. Geophysical Research Letters, 1997, 24, 543-546.	4.0	7
86	Surface manifestation of internal tides in the deep ocean: observations from altimetry and island gauges. Progress in Oceanography, 1997, 40, 135-162.	3.2	240
87	Surface manifestation of internal tides generated near Hawaii. Geophysical Research Letters, 1996, 23, 2101-2104.	4.0	261
88	Algorithm 741: least-squares solution of a linear, bordered, block-diagonal system of equations. ACM Transactions on Mathematical Software, 1995, 21, 20-25.	2.9	0
89	Geometrical determination of the Love Numberh2at four tidal frequencies. Geophysical Research Letters, 1995, 22, 2175-2178.	4.0	12
90	A preliminary tidal analysis of TOPEX/POSEIDON altimetry. Journal of Geophysical Research, 1994, 99, 24799.	3.3	176

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91	Satellite altimeter observations of the Mf and Mm ocean tides, with simultaneous orbit corrections. Geophysical Monograph Series, 1994, , 69-78.	0.1	12
92	Energetics of global ocean tides from Geosat altimetry. Journal of Geophysical Research, 1991, 96, 16897-16912.	3.3	145
93	On the Sea-State Bias of the Geosat Altimeter. Journal of Atmospheric and Oceanic Technology, 1991, 8, 397-408.	1.3	21
94	Observations of the Mf ocean tide from Geosat altimetry. Geophysical Research Letters, 1990, 17, 619-622.	4.0	21
95	Oceanic tides from Geosat altimetry. Journal of Geophysical Research, 1990, 95, 3069-3090.	3.3	241
96	New estimates of oceanic tidal energy dissipation from satellite altimetry. Geophysical Research Letters, 1989, 16, 73-76.	4.0	29