

BENJAMIN IDINI — Publication List

1st Author

7. **Idini, B.** & Nimmo, F. (2024). Resonant stratification in Titan's global ocean. *The Planetary Science Journal*, 5(1), 15. [[10.3847/PSJ/ad11ef](https://doi.org/10.3847/PSJ/ad11ef)]
6. **Idini, B.**, Ruiz, S., Ampuero, J. P., Leyton, F., & Rivera, E. (2024). Double distance dependence in high-frequency ground motion along the plate boundary in Northern Chile. *Journal of South American Earth Sciences*, 133. [[10.1016/j.jsames.2023.104699](https://doi.org/10.1016/j.jsames.2023.104699)]
5. **Idini, B.** & Stevenson D.J. (2022). The gravitational imprint of an interior-orbital resonance in Jupiter-Io. *The Planetary Science Journal*, 3(4), 89. [[10.3847/PSJ/ac6179](https://doi.org/10.3847/PSJ/ac6179)]
4. **Idini, B.** & Stevenson D.J. (2022). The lost meaning of Jupiter's high-degree Love numbers. *The Planetary Science Journal*, 3(1), 11. [[10.3847/PSJ/ac4248](https://doi.org/10.3847/PSJ/ac4248)]
3. **Idini, B.** & Stevenson D.J. (2021). Dynamical tides in Jupiter as revealed by Juno. *The Planetary Science Journal*, 2(2), 69. [[10.3847/PSJ/abe715](https://doi.org/10.3847/PSJ/abe715)]
2. **Idini, B.** & Ampuero J.-P. (2020). Fault-zone damage promotes pulse-like rupture and back-propagating fronts via quasi-static effects. *Geophysical Research Letters*, 47(23), e2020GL090736. [[10.1029/2020GL090736](https://doi.org/10.1029/2020GL090736)]
1. **Idini, B.**, Rojas, F., Ruiz, S., & Pastén, C. (2017). Ground motion prediction equations for the Chilean subduction zone, *Bulletin of Earthquake Engineering*, 15, 5. [[10.1007/s10518-016-0050-1](https://doi.org/10.1007/s10518-016-0050-1)]

2nd+ Author

8. Park, R. S., et al., including **Idini, B.** (accepted). Io's tidal response precludes a shallow magma ocean. *Nature*.
7. Tulekeyev, A., Garaud, P., **Idini, B.**, & Fortney, J. J. (2024). Constraints on the long-term existence of dilute cores in giant planets. *The Planetary Science Journal*, 5(8), 190. [[10.3847/PSJ/ad6571](https://doi.org/10.3847/PSJ/ad6571)]
6. Flores-Cuba, J., Oral, E., **Idini, B.**, Liang, C., & Ampuero, J. P. (2024). Mechanisms and seismological signatures of rupture complexity induced by fault damage zones in fully-dynamic earthquake cycle models. *Geophysical Research Letters*, 51(11), e2024GL108792. [[10.1029/2024GL108792](https://doi.org/10.1029/2024GL108792)]
5. Howard, S., Guillot, T., Bazot, M., Miguel, Y., Stevenson, D. J., Galanti, E., Kaspi, Y., Hubbard, W.B., Militzer, B., Helled, R., Nettelmann, N., **Idini, B.**, & Bolton, S. (2023). Jupiter's interior from Juno: Equation-of-state uncertainties and dilute core extent. *Astronomy and Astrophysics*, 672. [[10.1051/0004-6361/202245625](https://doi.org/10.1051/0004-6361/202245625)]
4. Erickson, B., et al., including **Idini, B.** (2020). The community code verification exercise for simulating sequences of earthquakes and aseismic slip (SEAS). *Seismological Research Letters*, 91(2A), 874-890. [[10.1785/0220190248](https://doi.org/10.1785/0220190248)]
3. Ross, Z.E., **Idini, B.**, Jia, Z., Stephenson, O.L., Zhong, M., Wang, X., Zhan, Z., Simons, M., Fielding, E.J., Yun, S.H. and Hauksson, E. (2019). Hierarchical interlocked orthogonal faulting in the 2019 Ridgecrest earthquake sequence. *Science*, 366, 6463. [[10.1126/science.aaz0109](https://doi.org/10.1126/science.aaz0109)]
2. Gurnis, M., et al., including **Idini, B.** (2019). Incipient subduction at the contact with stretched continental crust: The Puysegur Trench. *Earth and Planetary Science Letters*, 520, 212-219. [[10.1016/j.epsl.2019.05.044](https://doi.org/10.1016/j.epsl.2019.05.044)]
1. Leyton, F., Pastén, C., Ruiz, S., **Idini, B.**, & Rojas, F. (2018). Empirical site classification of CSN network using strong-motion records. *Seismological Research Letters*, 89(2A), 512-518. [[10.1785/0220170167](https://doi.org/10.1785/0220170167)]

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Software

2. Idini, B (2023). Interiorize: Simple Models of Planetary Tides (github.com/bidini/interiorize).
1. Luo, Y., Ampuero, J. P., Galvez, P., van den Ende, M., & **Idini, B.** (2017). QDYN: a Quasi-DYNAmic earthquake simulator (v1. 1). Zenodo.(doi: 10.5281/zenodo. 322459).

Conference Presentations

14. Resonant stratification in Titan's global ocean and other large ocean worlds, AGU Fall Meeting, San Francisco, 2023 (O).
13. The Case for SmallSats: Enhancing the Uranus Mission, LPI Contributions 2808:8158, Uranus Flagship: Investigations and Instruments for Cross-Discipline Science Workshop, Pasadena CA, 2023 (P).
12. Resonant stratification in Titan and other icy satellites with global oceans, DPS-EPSC Annual Meeting, San Antonio TX, 2023 (O).
11. Future investigations of ocean dynamics in ocean worlds using orbiting spacecraft, Bay Area Planetary Science Conference, Santa Cruz CA, 2023 (O).
10. A tale of two planets: dilute cores in Jupiter and Saturn from in-situ spacecraft observations, UC Santa Cruz Postdocs Association Symposium, Santa Cruz CA, 2023 (O).
9. A tale of two planets: dilute cores in Jupiter and Saturn from in-situ spacecraft observations, UC PPFP Annual Meeting, Lake Arrowhead CA, 2023 (O).
8. The gravitational imprint of dynamical tides in Jupiter (invited), AGU Fall Meeting, Chicago IL, 2022 (O).
7. Tidal constraints on the radial extension and static stability of Jupiter's dilute core, AGU Fall Meeting, New Orleans LA, 2021 (P).
6. Dynamical tides in the Jovian System as revealed by Juno, AGU Fall Meeting, remote, 2020 (P).
5. The first three days of the 2019 Ridgecrest earthquake sequence, SCEC Annual meeting, Palm Springs CA, 2019 (P).
4. A Bayesian Image of the 2017 Kermanshah Seismic Sequence in the Northwestern Zagros, AGU Fall Meeting, Washington DC, 2018 (O).
3. Rupture Complexity Promoted by Damaged Fault Zones in Earthquake Cycle Models. In AGU Fall Meeting, New Orleans LA, 2017 (P).
2. Empirical dynamic amplification factors for sites based on seismic noise, 16th World Conference on Earthquake Engineering, Santiago, Chile, 2017 (O).
1. Ground motion prediction equations for the Chilean subduction zone, 2nd Geophysical Signatures of Earthquakes and Volcanoes - 2GSEV, Santiago, Chile, 2016 (P).