

MING TANG

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EXPERIENCE

PROFESSOR , PEKING UNIVERSITY	2023 TO PRESENT
ASSOCIATE PROFESSOR , PEKING UNIVERSITY	2022-8 TO 2023-1
ASSISTANT PROFESSOR , PEKING UNIVERSITY	2019-12 TO 2022-7
POST-DOC , RICE UNIVERSITY Advisor: Cin-Ty A. Lee	2016-10 TO 2019-12
POST-DOC , UNIVERSITY OF MARYLAND, COLLEGE PARK Supervisors: Roberta L. Rudnick, William F. McDonough	2016-6 TO 2016-9

EDUCATION

Ph.D. , UNIVERSITY OF MARYLAND, COLLEGE PARK Supervisors: William F. McDonough, Roberta L. Rudnick	2016-5
B.S. , NANJING UNIVERSITY	2011-6

GRANTS

NATIONAL NATURAL SCIENCE FOUNDATION OF CHINA (42125302) Geochemical processes in continent evolution, 2022-2026, PI
NATIONAL TALENT PROGRAM (2021002979) 2021-2024, PI
NATIONAL NATURAL SCIENCE FOUNDATION OF CHINA (42073026) Endogenic oxidation during continental crust formation and its impact on early Earth surface environment, 2021-2024, PI
PEKING UNIVERSITY START-UP FUND (7101302669) 2021, PI
NATIONAL SCIENCE FOUNDATION, USA (EAR-1850832) Synmagmatic crustal thickening and the importance of garnet fractionation in making continental crust, 2019-2021, co-I
NATIONAL NATURAL SCIENCE FOUNDATION OF CHINA (41888101) Co-evolution of the continents and monsoon system, 2019-2023, participant

AWARDS

Shen-Su Sun Award	2024
F.G. Houtermans Award (EAG)	2023
National Science Fund for Distinguished Young Scholars (highly prestigious in China, < 8% approval rate)	2021
AGU Hisashi Kuno Award (first Chinese awardee)	2021
Xplorer Prize (a non-governmental and public interest award for scientists and technicians aged 45 or below)	2021
GAO SHAN Early Career Scientist Award	2019
Charles A. Caramello Distinguished Dissertation Award	2017
Ann G. Wylie Dissertation Fellowship	2015

PROFESSIONAL MEMBERSHIPS

- American Geophysical Union (AGU)
- Geological Society of America (GSA)
- Geochemical Society (GS)

PROFESSIONAL SERVICES

Earth and Planetary Science Letter, editorial board	2023
Acta Petrologica Sinica, editorial board	2023
Goldschmidt Meeting, session convener	2021
China Youth Forum for Geosciences, session convener	2021
China Society for Mineralogy Petrology and Geochemistry, fall meeting session convener	2021
National Science Review, editorial group member	2021
Goldschmidt Meeting, session convener	2020
Goldschmidt Meeting, session convener	2019

SELECTED PUBLICATIONS

- Guo, Z., **Tang, M.**, Jiang, H., Zheng, X. (2026). A Mesozoic high-elevation plateau in eastern North China? Evidence from detrital zircons. *Geochimica et Cosmochimica Acta*. (**STUDENT PAPER**)
- Wang, J., **Tang, M.**, Chen, H., Wang, X.-L., Wu, B. (2026). Sulfur contents in zircon-hosted and separated apatite in Archean TTGs: implications for the redox state of Archean felsic magmas. *Geochimica et Cosmochimica Acta*. (**STUDENT PAPER**)
- Li, R., **Tang, M.**, Wang, J. (2025). A lower mantle origin for the young mare basalts returned by Chang'e-5? *Earth and Planetary Science Letters* 671, 119650. (**STUDENT PAPER**)
- **Tang, M.**, Chen, H., Lee, C.-T., Cao, W. (2024). Subaerial crust emergence hindered by phase-driven lower crust densification on early Earth. *Science Advances*, 10, adq1952.
- **Tang, M.**, Guo, Z., Cao, W., Chu, X. (2024). Revisiting zircon Eu anomaly as a proxy for crustal thickness: A case study of the Sierra Nevada Batholith. *Earth and Planetary Science Letters*, 643, 118897.
- **Tang, M.**, Chen, H., Song, S.-G., Sun, G.-Z., Wang, C. (2024). Zircon Eu/Eu* in Archean TTGs with implications for the role of endogenic oxidation in Archean crustal differentiation. *Geochimica et Cosmochimica Acta*, 378, 259-269.
- **Tang, M.**, Wang, J., Lee, C.-T. (2024). Reevaluating the oxidation effect of garnet crystallization. *Lithos*, 470-471, 107537.
- Chen, H., Tang, M., Wu, S.-T., Liu, X. (2024). Determination of ultra-trace rare earth elements in olivine by laser ablation-sector field-inductively coupled plasma-mass spectrometry. *Journal of Analytical Atomic Spectrometry*, 39, 1571. (**STUDENT PAPER**)
- Liu X., **Tang, M.**, Cao, W., Ji, W., Chen, H. (2024). Sluggish rise of the western Gangdese mountains after India-Eurasia collision. *Lithos*, 478-479, 107640. (**STUDENT PAPER**)
- **Tang, M.**, Liu, X.-Y., Chen, K. (2023). High Mg# of the continental crust explained by calc-alkaline differentiation. *National Science Review*, 10, nwac258.
- Chen, H., Tang, M., Song, S.-G. (2023). Catastrophic craton destruction via wholesale lithosphere delamination. *Geology*, 51, 460-464. (**STUDENT PAPER**)
- Du, D.-H., Tang, M., Li, W., Kay, S.M., Wang, X.-L. (2022). What drives Fe depletion in calc-alkaline magma differentiation: Insights from Fe isotopes. *Geology*, 50, 552-556.
- **Tang, M.**, Chu, X., Hao, J.-H., Shen, B. (2021). Orogenic quiescence in Earth's middle age. *Science*, 371, 728-731.
- **Tang, M.**, Ji, W.-Q., Chu, X., Wu, A., Chen, C. (2021). Reconstructing crustal thickness evolution from europium anomalies in detrital zircons. *Geology*, 49, 76-80.
- Li, J.-Y., Tang, M., Lee, C.T.A., Wang, X.-L., Gu, Z.D., Xia, X.P., Wang, D., Du, D.H. and Li, L.S. (2021). Rapid endogenic rock recycling in magmatic arcs. *Nature Communications*, 12(1), 1-7.
- Sun, G., Liu, S., Cawood, P., Tang, M., Hunen, J., Gao, L., Hu, Y., Hu, F. (2021). Thermal state and evolving geodynamic regimes of the Meso- to Neoproterozoic North China Craton. *Nature Communications*, 12: 3888.
- **Tang, M.** (2020). Composition of the Earth's Crust, in *Reference Module in Earth Systems and Environmental Sciences*, Elsevier.
- Marschall, H., **Tang, M.**, (2020). High-Temperature Processes: Is it Time for Lithium Isotopes? *Elements*, 16(4), 247-252.
- Tang, M., Lee, C.-T., Ji, W.-Q., Wang, R., Costin, G. (2020). Crustal thickening and endogenic oxidation of magmatic sulfur. *Science Advances*, 6, eaba6342.
- Tang, M., Lee, C.-T., Rudnick, R., Condie, K. (2020). Rapid mantle convection drove massive crustal thickening in the late Archean. *Geochimica et Cosmochimica Acta*, 278, 6-15.
- Lee, C.-T., **Tang, M.** (2020). How to make porphyry copper deposits. *Earth and Planetary Science Letters*, 529, 115868.
- **Tang, M.**, Lee, C.-T., Costin, G., Höfer, H. (2019). Recycling reduced iron at the base of magmatic orogens. *Earth and Planetary Science Letters*, 528, 115827.
- **Tang, M.**, Lee, C.-T., Chen, K., Erdman, M., Costin, G., Jiang, H. (2019). Nb/Ta systematics in arc magma differentiation and the role of arclogites in continent formation. *Nature Communications*, 10, 235.
- **Tang, M.**, Erdman, M., Eldridge, G., Lee, C.-T. (2018). The redox 'filter' beneath magmatic orogens and the formation of continental crust. *Science Advances*, 4, eaar4444.
- **Tang, M.**, Rudnick, L.R., McDonough, F.W., Bose, M., Goreva, Y. (2017). Multi-mode Li diffusion in natural zircons: evidence for diffusion in the presence of step-function concentration boundaries. *Earth and Planetary Science Letters*, 474, 110-119.
- **Tang, M.**, McDonough, F.W., Ash, R. (2017). Europium and strontium anomalies in the MORB source mantle. *Geochimica et Cosmochimica Acta*, 197, 132-141.
- **Tang, M.**, Chen, K., Rudnick, L.R. (2016). Archean upper crust transition from mafic to felsic marks the onset of plate tectonics. *Science*, 351(6271), 372-375.
- **Tang, M.**, Arevalo, R. Jr., Goreva, Y., McDonough, F.W. (2015). Elemental fractionation during condensation of plasma plumes generated by laser ablation: a ToF-SIMS study of condensate blankets. *Journal of Analytical Atomic Spectrometry*, 30(11), 2316-2322.
- **Tang, M.**, Rudnick, L.R., McDonough, F.W., Gaschnig, R.M., Huang, Y. (2015). Europium anomalies constrain the mass of recycled lower continental crust. *Geology*, 43(8), 703-706.
- **Tang, M.**, Rudnick, L.R., Chauvel, C. (2014). Sedimentary input to the source of Martinique lavas: a Li perspective. *Geochimica et Cosmochimica Acta*, 144, 43-58.
- **Tang, M.**, Wang, X. L., Shu, X. J., Wang, D., Yang, T., Gopon, P. (2014). Hafnium isotopic heterogeneity in zircons from granitic rocks: Geochemical evaluation and modeling of 'zircon effect' in crustal anatexis. *Earth and Planetary Science Letters*, 389, 188-199.