

## **Curriculum vitae and Track Record**

### **PERSONAL DETAILS**

Family name, First name: Sanfilippo, Alessio

Researcher unique identifier(s): ORCID: 0000-0002-4112-3643

URL for web site: <https://unipv.unifind.cineca.it/get/person/026272>

### **EDUCATION**

2011 PhD, Earth Sciences (Petrology & Geochemistry) - Universities of Pavia,

2011 Visiting – Woods Hole Oceanographic Institution (WHOI; Ph.D. student, 2011)

2008 Laurea (B.S.+M.S.) in Geology - University of Pavia,

### **CURRENT POSITION(S)**

2021- Present Associate Professor, Petrology & Volcanology, University of Pavia, Italy

### **PREVIOUS POSITIONS**

2017–2020 — Researcher (RTD-B), Petrology & Volcanology, University of Pavia, Italy

2015–2017 — Researcher (RTD-A), Petrology, University of Pavia, Italy

2014–2015 — JSPS Postdoctoral Researcher, Kanazawa University, Japan

2013 — Associate Scientist, Woods Hole Oceanographic Institution, USA

2012–2013 — Postdoctoral Researcher, University of Pavia, Italy

### **FELLOWSHIPS AND AWARDS**

2013 Japan Society for Promotion of Science Fellowship for Foreign Researchers, Japan

2012 InterRidge Fellowship

2012 Premio Borsa di Studio all'Estero, SIMP, Italy

2011 Leopoldo and Clara Gori Foundation Fellowship, USA

### **TEACHING ACTIVITIES**

-Vulcanologia (B.S.) 2015/26, Petrogenetic processes and Evolution of the Lithosphere (M.S) 2021/23, Composizione della Litosfera, (M.S.) 2018/21, Petrology Lab (2023-2025) B.S.

### **INSTITUTIONAL RESPONSIBILITIES AND SYNERGISTIC ACTIVITIES**

2022/present Department, Commissione Paritetica Docenti-Studenti; 2017/2021 Department, Commissione Comunicazione & Piano Lauree Scientifiche. 2018-present Member of the Editor Board of Ofioliti Journal. IODP/IODP3 SEP member 2023-present. Convener/Co-convener of 2 Goldschmidt sessions and 4 national conferences. Organizer of 5 international meetings: SEP IODP 2023, #2 ECORD Magellan Workshops (2022, 2023), EMAW (2018), IODP post Exp3060 (2018) and 2 PhD schools (MEREMA 2017, 2026)

### **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

Ph. D. Supervision: S. Scarani (UniPv) • M. Lopez (co-sup UniPv) • Li Wang (co-sup CUG, Wuhan, CN), L. Maunu (co-sup UniHelsinki, FI) • C. Sani (2023, UniPv - now U Muenster) • C. Onguyele (UniPv 2024-now CNR) • G. Bonacina (UniPv 2021). Post-doc supervision: M. Bonazzi (ongoing), V. Basch (now at UniPv), C. Ferrando (now at UniGe).

### **MAIN RESEARCH PROJECTS (PI)**

-Progetto di Rilevante Interesse Nazionale, PRIN2022 (National PI A. Sanfilippo). *TRANSIENT. Time-integRated melt-depletioN SSignature in an Evolving sub-ridge maNTle* (113000 €)

-Progetto di Rilevante Interesse Nazionale, PRIN2017-KY5ZX8 (National PI M. Ligi). *Oceanic Megatransforms: a new class of grain boundaries* (127000 €)

-Progetto Nazionale Ricerche Antartide, PNRA16-002 (National PI L. Gasperini). *An intra-oceanic rift along the western Antartic-Pacific plate boundary: geophysical and petrological constraints* (6000 €)

-Improving Source Rock evaluation using Inorganic Geochemistry funded by Eni Spa. (100000 €)

-Contributo Spedizione Oceanografica IODP Exp 360 funded by University of Pavia (15000 €)

## SCIENTIFIC CRUISES

IODP Expedition 402 Tyrrhenian Continent-Ocean Transition (February-April 2024)  
YK23-05S (04/2023) Parece Vela oceanic core complexes, R/V Yokosuka  
AS Vavilov 53 (9-10/2021), Charlie-Gibbs and Bight FZ (co-chief scientist). R/V Vavilov  
AN Strakhov 50 (9-10/2020), Charlie-Gibbs FZ (co-chief scientist). R/V Strakhov  
AN Strakhov 45 (10-11/2019), Doldrums FZ (co-chief scientist). R/V Strakhov  
Shikoku Basin oceanic core complex and petit spot, Leg2 (04/2018), R/V Yokosuka  
Shikoku Basin oceanic core complex and petit spot, Leg1 (Luglio 2018). R/V Hakuho Maru  
IODP Expedition 360 (12/2015-02/2016), Southwest Indian Ridge, R/V Joides Resolution  
KN210-05 (05-06/2013) Central Atlantic (16.5°N), R/V Knorr  
YK11-08 (10/2011) Philippine Sea, R/V Yokosuka

## PEER RECOGNITION

During PhD and postdoctoral studies I received several recognitions and awards that supported the continuation of my studies in USA and Japan. (-) Based on the results of my master thesis and PhD studies, I received the Leopoldo and Clara Gori Fellowships (2011) that allowed me to work as a visiting PhD student at WHOI. This fellowship is provided by two outstanding students of any field of geosciences, oceanography or biology to pursue research at WHOI. (-) In the following year (2012), I was awarded with the InterRidge Fellowship (2012), which is yearly granted to an early-career research to conduct MOR-related research. (-) In the same year (2012), I also received *Premio Borsa di Studio all'Estero* of SIMP, which allowed me to spend additional 4 months at WHOI as visiting postdoc. (-) In 2013, I was awarded a JSPS Postdoctoral Fellowship for foreign students, a prestigious fellowship to work as postdoc in Japan. I selected Kanazawa University, and at JAMSTEC. Since then, I am fellow of the Japan Society for Promotion of Science.

During my research activity at UniPv I have held leadership and service roles within the international geoscience community, including a leading role in IODP-related activities. (-) I am currently an Editor of *Ophioliti* (since 2013), and part of the leading committee of the GLOM, an Italian group supporting research activities of early career scientists in the field of ophiolites and oceanic lithosphere. in sharing. (-) I have been elected as panelist of IODP Scientific Evaluation Panel (2023–), for which I am following the transition into the new program. (-) From 2018 I served as PhD committee member in Italian Universities (Milan, Parma, Modena & Reggio Emilia, Florence) and abroad (Bretagne Occidentale; Montpellier, Bergen). (-) I gave invited, or keynote talks at national (5 talks at SGI, SIMP) and international conference (Goldschmidt conference 2019, 2020, 2022; SEG 2018) and > 20 invited seminars in national and international universities (including WHOI, JAMSTEC, IPGP, Münster, Frankfurt, Nancy). (-) I was invited to participate to 10 oceanographic expeditions on 6 research vessels operating in 8 different study areas. I was co-chief in two joint Italy-Russia expeditions in the Atlantic (see above). (-) Presently, I am co-PI of the expedition proposal “*RIANA, Ridge Activity in the North Atlantic*” under evaluation to the Oceanographic French Fleet

## ADDITIONAL INFORMATION: Other contributions to the research community

Since my first IODP expedition in 2015, I worked to the development of the future IODP program, opening the participation to early career scientists and having a leading role for the hard-rock community. Since 2019, I am principal lead proponent of IODP 971Full2 “Kane OCC; drilling the lower crust and mantle at the slow spreading MAR”, which is at the facility board to be scheduled in the next future. I am also co-lead proponent of IODP-941-full “The nature of the Back-Arc basin lower crust and upper mantle at the Godzilla Megamullion” (PI Y.Ohara), scheduled as alternate expedition in 2026. As SEP member, in 2022, I organized the MagellanPlus workshop “Investigating the Oceanic Life Cycle of Tectonic Plates with MSP Drilling” (Plymouth, UK) to discuss the future of IODP3. We successfully collected the interest of early-career scientists from the hard rock community forming focused subgroups. As result, I led another MagellanPlus workshop “MAREXKUS, MAntle Remelting and hydrothermal chemical EXchange at Knipovich Ultraslow Spreading ridge”(2023), where I further broaden the IODP community. A IODP3 SPARC proposal will be soon sent by some participants of these meetings as result of my effort. Finally, I am very committed to create a positive and inclusive working environment in the geoscience community. I follow the activities of the university’s Guarantee Committee, including the annual participation to the UNESCO day Women in Science, I take part of the department activities to promote inclusivity and I have been always dedicated to allowing my student to participate to oceanographic expeditions and study periods abroad, sustained by research fundings or ERASMUS\_Plus programs.

## LIST OF PUBLICATIONS

1. **Sanfilippo A.**, M. Ligi, R. Avanzinelli, V. Basch, A. Bragagni, A. Decarlis, H. Guillou, S. Nomade, N. Rasul, L. Vigliotti, S. Conticelli (2025). Magmatic underplating and crustal intrusions accommodate extension during Red Sea continental rifting. *Nature Communication*, DOI:10.1038/s41561-024-01532-z
2. **Sanfilippo A.**, Pandey A., Akizawa N., and the IODP Expedition 402 science party (2025). Heterogeneous Earth's mantle drilled at an embryonic ocean. *Nature Communication*, DOI:10.1038/s41467-025-57121-0
3. \***Basch, V., Sanfilippo, A.**, Genske, F., Böhnke, M., Zanetti, A., Stracke, A. Inefficient melt mixing below a fast-spreading ridge revealed by Hess Deep lower gabbros (ODP Leg 147 and IODP Expedition 345) (2025). *Science Advances*
4. Hong, D. X., Liu, C. Z., Lin, H. L., & **Sanfilippo, A.** (2025). Near-infrared spectral characterization of the abyssal serpentinites and its implications for Martian exploration. *Lithos*, 508, 108077
5. **Sanfilippo A.**, Stracke A., Genske F., Scarani S., Cuffaro M., Basch V., Borghini G., Brunelli D., Ferrando C., Peyve A., Ligi M. (2024). Upwelling of depleted mantle under Iceland. *Nature Geoscience*, DOI:10.1038/s41561-024-01532-z
6. \***Sani, C., Sanfilippo, A.**, Skolotnev, S., Ligi, M., Genske, F., & Stracke, A. (2024). Sampling Earth's mantle at intra-transform spreading ridges. *Geochimica et Cosmochimica Acta*, 374, 156-172.
7. \***Basch, V., Sanfilippo, A.**, Snow, J. E., Loocke, M., & Zanetti, A. (2024). Accretion of the lower oceanic crust at fast-spreading ridges: Insights from Hess Deep (East Pacific Rise, IODP Expedition 345). *Journal of Petrology*, 65(6), ega048.
8. **Sanfilippo A.**, Stracke A., Genske F., Scarani S., Cuffaro M., Basch V., Borghini G., Brunelli D., Ferrando C., Peyve A., Ligi M. (2024). Upwelling of depleted mantle under Iceland. *Nature Geoscience*, DOI:10.1038/s41561-024-01532-z
9. \***Bonazzi, M.**, Ogunyele, A., Giovanardi T., Mazzucchelli M., Decarlis, A., **Sanfilippo A.**, Zanetti (2024). Triassic–Jurassic alkaline magmatism in the Ivrea-Verbano Zone, Southern Alps: A zircon perspective on mantle sources and geodynamic significance. *Lithos*, 490-491
10. \***Ogunyele A., Sanfilippo A.**, Salters, V., Bonazzi M., Zanetti A. (2024). Accretion of “young” Phanerozoic subcontinental lithospheric mantle triggered by back-arc extension—the case of the Ivrea-Verbano Zone *Scientific Reports* 14, 1
11. **Sanfilippo A.**, Bonazzi M., Cai Y., Rasul N., Vigliotti L., Ligi M. (2024). The role of the Nubian-Arabian shield mantle in the Cenozoic magmatism of western Arabia: new constraints from radiogenic isotopes and olivine geochemistry, *in Rifting and Sediments in the Red Sea and Arabian Gulf Region*, Francis and Taylor
12. Ogunyele A., Bonazzi M., Giovanardi, T., Mazzucchelli, M., Salters V.J.M., Decarlis A., **Sanfilippo A.**, Zanetti A. (2024), Transition from orogenic-like to anorogenic magmatism in the Southern Alps during the Early Mesozoic: Evidence from elemental and Nd-Sr-Hf-Pb isotope geochemistry of alkali-rich dykes from the Finero Phlogopite Peridotite, Ivrea–Verbano Zone, *Gondwana Research*, 129, 201–219.
13. **Sanfilippo, A.**, Liu, C. Z., Salters, V., Mosconi, A., Zanetti, A., & Tribuzio, R. (2023). Preserved Nd-Hf-Os isotope variability in replacive channels from the Lanzo ophiolite: Traces of incomplete melt aggregation in the shallow mantle. *Chemical Geology*, 121779.
14. \***Ferrando C.**, Borghini, G., Sani C., Genske F., Ligi M., Stracke A., **Sanfilippo A.** (2023). Deep segregation and crystallization of ultra-depleted melts in the sub-ridge mantle *Chemical Geology*, 121840.
15. \***Sani, C., Sanfilippo, A.**, Peyve, A., Genske, F., & Stracke, A., (2023). Earth mantle's isotopic record of progressive chemical depletion. *AGU Advances* 4 (2), e2022AV000792.
16. \***Bonazzi, M.**, Bonacina, G., Massara, E. P., Piva, A., Scotti, P., Viaggi, P., & **Sanfilippo, A.** (2024). Reconstructing redox variations in a young, expanding ocean basin (Cretaceous Central Atlantic). *Cretaceous Research*, 153, 105681.
17. \***Basch V.**, Ferrando C., **Sanfilippo A.** (2023). A frozen oceanic crystal mush. *Terra Nova*, 00, 1–8. <https://doi.org/10.1111/ter.12655>
18. Skolotnev, S., **Sanfilippo, A.**, Peyve, A., Palmiotto, C., Ivanenko, A., Cuffaro, M., ... & Ligi, M. (2023). Crustal accretion along the northern Mid-Atlantic Ridge (52°-57°N): preliminary results from Expedition V53 of R/V Akademik Sergey Vavilov. *Ophioliti*, 48(1), 13-30
19. Vezzola, M., Tosi, S., Doria, E., Bonazzi, M., Alvaro, M., & **Sanfilippo, A.** (2023). Interaction between a Martian Regolith Simulant and Fungal Organic Acids in the Biomining Perspective. *Journal of Fungi*, 9(10), 976.

20. **Sanfilippo, A.**, Borghini, G., Guarnieri, L., Nakamura, E., Piccardo, G. B., Vannucci, R., & Zanetti, A. (2022). A 400 Ma-long Nd-Hf isotopic evolution of melt-modified garnet-pyroxenites in an ancient subcontinental lithosphere (Lanzo North ophiolite, Western Alps). *Chemical Geology*, 588, 120643
21. \***Basch, V.**, **Sanfilippo, A.**, Skolotnev, S. G., Ferrando, C., Muccini, F., Palmiotto, C., Peyve A.A., Ermolaev, Okina O.I & M Ligi (2022). Genesis of Oceanic Oxide Gabbros and Gabbro-norites During Reactive Melt Migration at Transform Walls (Doldrums Megatransform System; 7–8° N Mid-Atlantic Ridge). *Journal of Petrology*, 63(9), egac086.
22. \***Basch, V.**, **Sanfilippo, A.**, Vigliotti, L., Langone, A., Rasul, N., Khorsheed, M., ... & Ligi, M. (2022). Crustal contamination and hybridization of an embryonic oceanic crust during the Red Sea rifting (Tihama Asir igneous complex, Saudi Arabia). *Journal of Petrology* egac005.
23. \***Ferrando, C.**, Tribuzio, R., Lissenberg, C. J., France, L., MacLeod, C. J., Basch, V., Vilneuve J., Deloule E. & **Sanfilippo, A.** (2022). Brown amphibole as tracer of tectono-magmatic evolution of the Atlantis Bank Oceanic Core Complex (IODP Hole U1473A). *Journal of Petrology*, 63(9).
24. Skolotnev, S. G., Peyve, A. A., **Sanfilippo, A.**, Ivanenko, A. N., Ligi, M., Veklich, I. A., & Cuffaro, M. (2022, May). Peculiarities of the Tectonomagmatic Processes in the Interaction Area between the Icelandic Plume and the Bight Transform Fault (North Atlantic). *Doklady Earth Sciences*, 504(1), 233-239.
25. Skolotnev, S. G., Peyve, A. A., **Sanfilippo, A.**, Ivanenko, A. N., Ligi, M., Veklich, I. A., ... & Cuffaro, M. (2022). Geological-Geophysical Investigations in the North Atlantic during Cruise 53 of the R/V Akademik Sergey Vavilov. *Oceanology*, 62(4), 575-577
26. Skolotnev S.G., Peyve A.A., **Sanfilippo, A.**, Sokolov S. Yu, Petracchini, L., Dobrolyubova K.O., Nestola, Y., Ivanenko, A.N., Basch, V., Pertsev, AN, Sani C., Brusilovskiy, Yu V., Ferrando, C., Veklich, IA, Bich, V., Sholukhov, KN., Razumovskii, AA, Dobrolyubov, VN. (2022). Geological and Geophysical Studies of the Double Transform Fault Charlie Gibbs (North Atlantic) during Cruise 50 of R/V Akademik Nikolaj Strakhov. *Oceanology*, 62(5), 724-726
27. Skolotnev, S. G., Peyve, A. A., Ivanenko, A. N., Dobrolyubova, K. O., **Sanfilippo, A.**, Ligi, M., ... & Yakovenko, E. S. (2022). New Data on the Geological Structure of the Eastern Flank of the Charlie Gibbs Fracture Zone (North Atlantic). *Doklady Earth Sciences*. 504(2), 333-337.
28. Rampone, E., and \***Sanfilippo, A.** (2021) The heterogeneous Tethyan oceanic lithosphere of the Alpine Ophiolites. In: *Shedding new Light on the European Alps* edited Anders McCarthy and Othmar Müntener, *Elements: An International Magazine of Mineralogy, Geochemistry, and Petrology*
29. **Sanfilippo, A.**, Sani, C., Rasul, N., Stewart, I., Vigliotti, L., Widinly, N., Osemi, A., Ligi, M. (2021). Hidden but Ubiquitous: The Pre-Rift Continental Mantle in the Red Sea Region, *Frontiers in Earth Science*, 666
30. Sen, A., Snow, J. E., Ohara, Y., Hirauchi, K., Kouketsu, Y., **Sanfilippo, A.**, V. Basch, Y. Harigane, M. Fujii, K. Okino, & Akizawa, N. (2021). Melting and Evolution of Amphibole-Rich Back-Arc Abyssal Peridotites at the Mado Megamullion, Shikoku Basin. *Geochemistry, Geophysics, Geosystems*, 22(12), e2021GC010013.
31. Akizawa, N., Ohara, Y., Okino, K., Ishizuka, O., Yamashita, H., Machida, S., **Sanfilippo A.**, ... Hirata, T. (2021). Geochemical characteristics of back-arc basin lower crust and upper mantle at final spreading stage of Shikoku Basin: an example of Mado Megamullion. *Progress in Earth and Planetary Science*, 8(1), 1-24.
32. Boulanger, M; France, L; Ferrando, C; Ildefonse, Benoit; Ghosh, B; **Sanfilippo, A**; Liu, C-Z; Morishita, T; Koepke, J; Bruguier, O (2021). Magma-Mush Interactions in the Lower Oceanic Crust: Insights From Atlantis Bank Layered Series (Southwest Indian Ridge). *Journal of Geophysical Research: Solid Earth*, 126, 9, e2021JB022331.
33. Casini, L., Maino, M., **Sanfilippo, A.**, Ildefonse, B., Dick, HJB. (2021). High-Temperature Strain Localization and the Nucleation of Oceanic Core Complexes (16.5° N, Mid-Atlantic Ridge). *Journal of Geophysical Research: Solid Earth*, 126, 9, e2021JB022215.
34. \***Ferrando, C**; Basch, V, Ildefonse, B, Deans, J., **Sanfilippo, A**; Barou, F., France, L. (2021). Role of compaction in melt extraction and accumulation at a slow spreading center: Microstructures of olivine gabbros from the Atlantis Bank (IODP Hole U1473A, SWIR)", *Tectonophysics*, 815, 229001
35. **Sanfilippo, A.**, Salters, V., Sokolov, S.Y., Peyve, A.A., Stracke, A. (2021). Ancient, refractory asthenosphere revealed by mantle re-melting in the Arctic Mid-Atlantic Ridge. *Earth and Planetary Science Letters*, 566, 116981.
36. Skolotnev, S., **Sanfilippo, A.**, Peyve, A., Nestola, Y., Sokolov, S., Petracchini, L., ... & Ligi, M. (2021). Seafloor Spreading and Tectonics at the Charlie Gibbs Transform System (52-53°N, Mid Atlantic Ridge): Preliminary Results from R/V AN Strakhov Expedition S50. *Ophioliti*, 46(1).

37. \***Ferrando C.**, France, L., Basch, V., **Sanfilippo, A.**, Tribuzio, R., Boulanger M., (2021). Grain size variations record segregation of residual melts in Skow Spreading Oceanic Crust (atlantis Bank, 57°E, Southwest Indian Ridge). *Journal of Geophysical Research: Solid Earth* 126 (4), e2020JB020997
38. Renna, M.R., Armandola, S., Becker, H., **Sanfilippo, A.**, Tribuzio, R., Wang, Z. (2021). Fractionation of highly siderophile and chalcogen elements in the lower oceanic crust: Insights from the troctolites of the Alpine-Apennine Jurassic ophiolites. *Lithos*, doi.org/10.1016/j.lithos.2020.105873.
39. \***Bonacina, G.**, **Sanfilippo, A.**, Zana, S., Bosino, A., Previde Massara, E., Viaggi, P., Scotti P. Gallicchio, S., Sabato, L. (2020). Geochemical evidence for local variability in redox and depositional conditions in a deep-water Bonarelli Equivalent section from Southern Thetys (Fontana Valloneto Section, Southern Italy, Ophioliti. DOI:10.4454/ofioliti.v46i1.537
40. **Sanfilippo, A.**, MacLeod, C.J., Tribuzio, R., Lissenberg, C.J, Zanetti, A. (2020). Early-Stage Melt-Rock Reaction in a Cooling Crystal Mush Beneath a Slow-Spreading Mid-Ocean Ridge (IODP Hole U1473A, Atlantis Bank, Southwest Indian Ridge). *Frontiers in Earth Science*, vol. 8, ISSN: 2296-6463, doi: 10.3389/feart.2020.579138
41. \***Sani, C.**, **Sanfilippo, A.**, Ferrando, C., Peyve, A., Skolotnev, S., Muccini, F., Zanetti, A., Basch, V., Palmiotto, C., Bonatti, E., Ligi, M. (2020). Ultra-depleted melt refertilization of mantle peridotites in a large intra-transform domain (Doldrums Fracture Zone; 7–8° N, Mid Atlantic Ridge). *Lithos*, 374, 105698.
42. \***Basch, V.**, **Sanfilippo, A.**, Sani, C., Ohara, Y., Snow, J., Ishizuka, O., Harigane, Y., Michibayashi, K., Sen, A., Akizawa, N., Okino, K., Fujii, M., Yamashita, H. (2020). Crustal Accretion in a Slow Spreading Back-Arc Basin: Insights From the Mado Megamullion Oceanic Core Complex in the Shikoku Basin. *Geochemistry, Geophysics, Geosystems*, vol. 21, ISSN: 1525-2027, doi: 10.1029/2020GC009199
43. Brunelli D., **Sanfilippo A.**, Bonatti E., Skolotnev S., Escartin J., Ligi M., Ballabio G., Cipriani A. (2020). Origin of oceanic ferrodiorites by injection of nelsonitic melts in gabbros at the Vema Lithospheric Section, Mid Atlantic Ridge. *Lithos*, vol. 368-369, ISSN: 0024-4937, doi: 10.1016/j.lithos.2020.105589
44. Skolotnev S., **Sanfilippo A.**, Peyve A.A., Muccini F., Sokolov S.Y., Sani C., Dobroliubova K., Ferrando C., Chamov N., Palmiotto C., Pertsev A., Bonatti E., Cuffaro M., Gryaznova A., Sholukhov K.N., Bich A.M., Ligi M., (2020). Large-scale structure of the Doldrums multi-fault transform system (7-8°N Equatorial Atlantic): Preliminary results from the 45th Expedition of the R/V A. N. Strakhov. *Ophioliti*
45. Skolotnev S., **Sanfilippo A.**, Peyve A.A., Muccini F., Sokolov S.Y., Sani C., Dobroliubova K., Ferrando C., Chamov N., Palmiotto C., Pertsev A., Bonatti E., Cuffaro M., Gryaznova A., Sholukhov K.N., Bich A.M., Ligi M (2020). New Data on the Structure of the Megatransform System of the Doldrums (Central Atlantic). *Doklady Earth Sciences*, 491,,131-134
46. Ivanova, S. Skolotnev, DG Borisov, AN Demidov, AS Bich, FN Gippius, AS Gryaznova, KO Dobroliubova, TF Zinger, DM Korshunov, OV Levchenko, VV Mashura, Filippo Muccini, NV Nemchenko, Alexander A Peyve, AN Pertsev, K Sani, **A. Sanfilippo**, NV Simagin, S Yu Sokolov, C Ferrando, NP Chamov, IB Shakhovskoy, KN Sholukhov (2020). Multidisciplinary Investigation of the Transform Fault Zones Doldrums and Vema during Cruise 45 of the R/V “Akademik Nikolaj Strakhov”, *Oceanology*, 60, 3, 424-426.
47. Dick, H.J.B., MacLeod, C.J., Blum, P., Abe, N., Blackman, D.K., Bowles, J.A., Cheadle, M.J., Cho, K., Ciążela, J., Deans, J.R., Edgcomb, V.P., Ferrando, C., France, L., Ghosh, B., Ildefonse, B., John, B., Kendrick, M.A., Koepke, J.H., Leong, J.A.M., Liu, C., Ma, Q., Morishita, T., Morris, A., Natland, J.H., Nozaka, T., Pluemper, O., **Sanfilippo, A.**, Sylvan, J.B., Tivey, M.A., Tribuzio, R. & Viegas, G., (2019). Dynamic accretion beneath a slow spreading ridge segment: IODP Hole U1473A and the Atlantis Bank Oceanic Core Complex. *J. Geophys. Res. Solid Earth*.
48. **Sanfilippo A.**, Salters VJM, Tribuzio R., Zanetti A. (2019). Role of ancient, ultra-depleted mantle in Mid-Ocean-Ridge magmatism. *Earth and Planetary Science Letters*, 511: 89–98
49. \***Berno D.**, **Sanfilippo A.**, Zanetti A., Tribuzio R. (2019). Reactive melt migration controls the trace element budget of the lower oceanic crust: insights from the troctolite-olivine gabbro association of the Pineto Ophiolite (Corsica, France). *Ophioliti*, 2019, 44 (2), 71-82
50. **Sanfilippo A.**, Cai Y., Gouveia Jácome A.P., Ligi M. (2019). Geochemistry of the Lunayyir and Khaybar volcanic fields (Saudi Arabia): Insights into the origin of the Cenozoic Arabian volcanism. *The Geological Settings of the Red Sea; Rasul, N., Stewart, I., (Eds.) Elsevier*
51. Nguyen D., Morishita T., Soda Y., Tamura A., Ghosh B., Harigane Y., France L., Liu CZ, Natland J., **Sanfilippo A.**, MacLeod C., Blum P., Dick H.J.B. (2018). Occurrence of Felsic Rocks in Oceanic Gabbros from IODP Hole U1473A: Implications for Evolved Melt Migration in the Lower Oceanic Crust. *Minerals*, 8: 583; <https://doi.org/10.3390/min8120583>
52. Renna M.R., Tribuzio R., **Sanfilippo A.**, Thirlwall M. (2018). Role of melting process and melt–rock reaction in the formation of Jurassic MORB-type basalts (Alpine ophiolites). *Contributions to Mineralogy and Petrology* 173 (4), 31

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