

Literaturverzeichnis

- Adams CJ, Campbell HJ, Griffin WL (2005) Isotopic microanalysis of seawater strontium in biogenic calcite to assess subsequent rehomogenisation during metamorphism. *Chemical Geology* 220: 67-82
- Altherr R, Schliestedt M, Okrusch M, Seidel E, Kreuzer H, Harre W, Lenz H, Wendt I, Wagner GA (1979) Geochronology of High-Pressure Rocks on Sifnos (Cyclades, Greece). *Contributions to Mineralogy and Petrology* 70: 245-255
- Andriessen PAM (1991) K-Ar and Rb-Sr age determinations on micas of impure marbles of Naxos, Greece: The influence of metamorphic fluids and lithology on the blocking temperature. *Schweizer Mineralogische und Petrographische Mitteilungen* 71: 89-99
- Avigad D, Garfunkel Z (1991) Uplift and exhumation of high-pressure metamorphic terrains: the example of the Cycladic blueschist belt (Aegean Sea). *Tectonophysics* 188: 357-372
- Avigad D, Baer G, Heimann A (1998) Block rotations and continental extension in the central Aegean Sea: Paleomagnetic and structural evidence from Tinos and Mykonos (Cyclades, Greece). *Earth and Planetary Science Letters* 157: 23-40
- Baxter EF, DePaolo (2000) Field Measurement of Slow Metamorphic Reaction Rates at Temperatures of 500° to 600°C. *Science* 288: 1411-1414
- Baxter EF, Ague JJ, DePaolo DJ (2002) Prograde temperature-time evolution in the Barrovian type-locality constrained by Sm/Nd garnet ages from Glen Clova, Scotland. *Journal of Geological Society London* 159: 81-82
- Baxter EF, DePaolo DJ (2004) Can metamorphic reactions proceed faster than bulk strain? *Contributions to Mineralogy and Petrology* 146: 657-670
- Bickle MJ, Baker J (1990a) Advective-diffusive transport of isotopic fronts: an example from Naxos, Greece. *Earth and Planetary Science Letters* 97: 78-93
- Bickle MJ, Baker J (1990b) Migration of reaction and isotopic fronts in infiltration zones: assessments of fluid flux in metamorphic terrains. *Earth and Planetary Science Letters* 98: 1-13
- Bickle MJ, Chapman HJ (1990) Strontium and oxygen isotope decoupling in the Hercynian Trois Seigneurs Massif, Pyrenees: evidence for fluid circulation in a brittle regime. *Contributions to Mineralogy and Petrology* 104: 332-347
- Blanckenburg F v, Villa IM, Baur H, Morteani G, Steiger RH (1989) Time calibration of a PT-path from the Western Tauern Window, Eastern Alps: the problem of closure temperatures. *Contributions to Mineralogy and Petrology* 101: 1-11
- Bröcker M (1990) Blueschist-to-greenschist transition in metabasites from Tinos Island, Cyclades, Greece: Compositional control or fluid infiltration? *Lithos* 25: 25-39
- Bröcker M, Kreuzer H, Matthews A, Okrusch M (1993) $^{40}\text{Ar}/^{39}\text{Ar}$ and oxygen isotope studies of polymetamorphism from Tinos Island, Cycladic blueschist Belt, Greece. *Journal of Metamorphic Geology* 11: 223-240
- Bröcker M, Franz L (1998) Rb-Sr isotope studies on Tinos Island (Cyclades, Greece) additional time constraints for metamorphism, extent of infiltration-controlled overprinting and deformational activity. *Geological Magazine* 135: 369-382
- Bröcker M, Franz L (2003) P-T conditions and timing of metamorphism at the base of the Cycladic Blueschist Unit, Greece: the Panormos Window on Tinos re-visited. *Geophysical Research Abstracts* 5: 04110

- Bröcker M, Kreuzer H, Matthews A, Okrusch M (1993) $^{40}\text{Ar}/^{39}\text{Ar}$ and oxygen isotope studies of polymetamorphism from Tinos Island, Cycladic blueschist Belt, Greece. *Journal of Metamorphic Geology* 11: 223-240
- Bröcker M, Franz L (1998) Rb-Sr isotope studies on Tinos Island (Cyclades, Greece) additional time constraints for metamorphism, extent of infiltration-controlled overprinting and deformational activity. *Geological Magazine* 135: 369-382
- Burke WH, Denison RE, Hetherington EA, Koepnick RB, Nelson HF, Otto JB (1982) Variations of seawater $^{87}\text{Sr}/^{86}\text{Sr}$ throughout Phanerozoic time. *Geology* 10: 516-519.
- Burkhard M (1993) Calcite twins, their geometry, appearance and significance as stress-strain markers and indicators of tectonic regime: a review. *Journal of Structural Geology* 15: 351-368
- Castro A, Fernanández C, El-Hmidi H, El-Biad M, Díaz M, de la Rosa F, Stuart (1999) Age constraints to the relationships between magmatism, metamorphism and tectonism in the Aracena metamorphic belt, southern Spain. *International Journal of Earth Sciences* 88: 26-37
- Chen CH, DePaolo DJ, Lan CY (1996) Rb-Sr microchrons in the Manaslu granite: implications for Himalayan thermochronology. *Earth and Planetary Science Letters* 143: 125-135
- Christensen JN, Halliday AN, Lee DC, Hall CM (1995) In situ Sr isotope analysis by laser ablation. *Earth and Planetary Science Letters* 136: 79-85
- Christensen JN, Selverstone J, Rosenfeld JL, DePaolo DJ (1994) Correlation by Rb-Sr geochronology of garnet growth history from different structural levels within the Tauern Window, eastern Alps. *Contributions to Mineralogy and Petrology* 118: 1-12
- Cliff RA (1985) Isotopic dating in metamorphic belts. *Journal of the Geological Society, London* 140: 795-607
- Cliff RA, Meffan-Main S (2003) Evidence from Rb-Sr microsampling geochronology for the timing of Alpine deformation in the Sonnblick Dome, SE Tauern Window, Austria. aus: Linking the Isotopic Record with Petrology and Textures. Geological Society, London, Special Publications 220 93-117
- Davidson J, Tepley III F, Palacz Z, Meffan-Main S (2001) Magma recharge, contamination and residence times revealed by in situ laser ablation isotopic analysis of feldspar in volcanic rocks. *Earth and Planetary Science Letters* 184: 427-442
- Del Moro A, Puxeddu M, Radicati do Broculo F, Villa IM (1982) Rb-Sr and K-Ar ages on minerals at temperatures at 300-400°C from deep wells in the Larderello geothermal field (Italy). *Contributions to Mineralogy and Petrology* 81: 340-349
- DePaolo DJ (1987) Correlating rocks with strontium isotopes. *Geotimes* (Dec.) 16-18
- DePaolo DJ, Getty SR (1996) Models of isotopic exchange in reactive fluid-rock systems: Implications for geochronology in metamorphic rocks. *Geochimica et Cosmochimica Acta* 60 (20): 3933-3947
- Di Vincenzo G, Ghiribelli B, Giorgetti G, Palmeri R (2001) Evidence of close link between petrology and isotope records: constraints from SEM, EMP, TEM and in situ $^{40}\text{Ar}/^{39}\text{Ar}$ laser analyses on multiple generations of white micas (Lateman Range, Antarctica). *Earth and Planetary Science Letters* 192: 389-405.
- Dodson MH (1979) Theory of cooling ages. In Jäger E, Hunziker JC: *Lectures in isotope geology*. Springer, Berlin Heidelberg New York: 194-202
- Dubois R, Bignot D (1979) Presence d'un "hard ground" nummulitique de la série crétacée d'Almyropotamus (Eubée méridionale, Grèce). *C.R. Acad. Sci. Paris* 289: 993-995

- Evans BW (1990) Phase relations of epidote-blueschists. *Lithos* 25: 3-23
- Freeman SR, Inger S, Butler RWH, Cliff RA (1997) Dating deformation using Rb-Sr in white mica: Greenschist facies deformation ages from the Entrelor shear zone, Italian Alps. *Tectonics* 16: 57-76
- Freeman SR, Butler RWH, Cliff RA, Rex DC (1998) Direct dating of mylonite evolution: a multidisciplinary geochronological study from the Moin Thrust Zone, NW Scotland. *Journal of the Geological Society London* 155: 745-758
- Inger S, Cliff RA (1994) Timing of metamorphism in the Tauern Window, Eastern Alps: Rb-Sr ages and fabric formation. *Journal of Metamorphic Geology* 12: 695-707
- Gautier P, Brun J-P, Moriceau R; Sokoutis D, Martinod J, Jolivet L (1999) Timing, kinematics and cause of Aegean extension: a scenario based on a comparison with simple analogue experiments. *Tectonophysics* 315: 31-72
- Graham CM, Valley JW, Eiler JM, Wada H (1998) Timescales and mechanism of fluid infiltration in a marble: an ion microprobe study. *Contributions to Mineralogy and Petrology* 132: 371-389
- Hinsbergen DJJ van, Zachariasse WJ, Wortel MJR, Meulekamp JE (2005) Underthrusting and exhumation: A comparison between the External Hellenides and the „hot“ Cycladic and „cold“ South Aegean core complex (Greece). *Tectonic* 24: TC 2011
- Jakobshagen V (1986) Geologie von Griechenland. Gebrüder Bornträger, Berlin: 363 pp
- Katsikatos G, Migiro G, Trianaphylis N, Mettos A (1986) Geological structure of internal Hellenides. *Geological and Geophysical Research I.G.M.E. (ed)* Athens, 191-12
- Katzir Y, Avigad D, Matthew A, Garfunkel Z, Evans BW (2000) Origin, HP/LT metamorphism and cooling of ophiolitic melanges in southern Evia (NW Cyclades), Greece. *Journal of Metamorphic Geology* 18: 699-718
- Klein-Helmkamp U, Reinecke T, Stöckhert B (1995) The aragonite-calcite transition in LT-HP metamorphic carbonatic rocks from S-Evia, Greece: the microstructural and compositional record. *Bochumer Geologische und Geotektonische Arbeiten* 44: 78-83
- Klein-Helmkamp U (1996) Metamorphose und Exhumierung der niedrigtemperierten Hochdruckmetamorphe der Styra-Ochi-Einheit in Süd-Euböa; Attisch-Kykladisches Kristallin, Griechenland. Dissertation Ruhr-Universität Bochum
- Kramar N, Cosca MA, Hunziker JC (2001) Heterogeneous $^{40}\text{Ar}^*$ distributions in naturally deformed muscovite: in situ UV-laser ablation evidence for microstructurally controlled intragrain diffusion. *Earth and Planetary Science Letters* 192: 377-388
- Lagos M, Münter C, Tomaschek F, Ballhaus C, Scherer EE (2003) The age of oceanic crust and of HP/LT-metamorphism on Syros (Cyclades, Greece) based on Ku-Hf geochronology and geochemistry. *Geophysical Research Abstracts* 5: 12851
- Lips ALW, White SH, Wijbrans JR (1998) $^{40}\text{Ar}/^{39}\text{Ar}$ laserprobe direct dating of discrete deformational events: a continuous record of early Alpine tectonics in the Pelagonian Zone, NW Aegean area, Greece. *Tectonophysics* 298: 133-153
- Lips ALW, White SH, Wijbrans JR (2000) Middle-Late Apine thermotectonic evolution of the southern Rhodope Massife, Greece. *Geodinamica Acta* 13: 281-292
- Lister GS, Banga G, Feenstra A (1984) Metamorphis core complexes of Cordilleran type in the Cyclades, Aegean Sea, Greece. *Geology* 12: 221-225

- Ludwig KR (2000) User's manual for Isoplot/Ex version 2.2: a geochronological toolkit for Microsoft Excel. Berkeley Geochronology Center Special publication No: 1a, Berkeley, California.
- Ludwig KR (2005) Isoplot/Ex version 3.0 Berkeley Geochronology Center Special publication, Berkeley, California.
- Maluski H, Vergely P, Bavay D, Bavay P, Katsikatos G (1981) $^{39}\text{Ar}/^{40}\text{Ar}$ dating of glaucophanes and phengites in Southern Euboea (Greece) geodynamic implications. Bull. Soc. géol. France 7: 5, 469-476
- Maluski H, Bonneau M, Kienast J-R (1987) Dating the metamorphic events in the Cycladic area: $^{39}\text{Ar}/^{40}\text{Ar}$ data from metamorphic rocks of the island of Syros (Greece). Bull. Soc. géol. France 5: 833-842
- Massone HJ, Schreyer W (1987) Phengite geobarometry based on the limiting assemblage with K-feldspar, phlogopite, and quartz. Contributions to Mineralogy and Petrology 96: 212 - 224
- Meffan-Main S, Cliff RA (1997) Sr isotope exchange on sub-millimeter scale and the implications for Rb-Sr dating of basement gneisses. Seventh annual V.M. Goldschmidt Conference
- Meffan-Main S, Cliff RA, Barnicoat AC, Lombardo B, Compagnoni R (2004) A Tertiary age for Alpine high-pressure metamorphism in the Gran Paradiso massif, Western Alps: a Rb-Sr mircosampling study. Journal of metamorphic Geology 22: 267 - 281
- Meijer PTh, Wortel MJR (1997) Present-day dynamics of the Aegean region: A model analysis of the horizontal pattern of stress and deformation. Tectonics 16: 879-895
- Möller A, O'Brien P, Kennedy A, Kröner A (2003) Linking growth episodes of zircon and metamorphic textures to zircon chemistry: an example from ultrahigh-temperature granulites of Rogaland (SW Norway). aus: Linking the Isotopic Record with Petrology and Textures. Geological Society, London, Special Publications 220: 65-81
- Mulch A, Cosca MA, Handy MR (2002) In-situ UV-laser $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology of a micaceous mylonite: an example of defect-enhanced argon loss. Contributions to Mineralogy and Petrology 142: 738-752
- Mulch A, Cosca MA (2004) Recrystallization or cooling ages: in situ UV-laser $^{40}\text{Ar}/^{39}\text{Ar}$ geochonology of muscovite in mylonitic rocks. Journal of the Geological Society London 161: 573 - 582
- Mulch A, Cosca MA, Andresen A, Fiebig J (2005) Time scales of deformation and exhumation in extentional detachment systems determined by high-spatial resolution in situ UV-laser $^{40}\text{Ar}/^{39}\text{Ar}$ dating. Earth and Planetary Science Letters 233: 375 - 390
- Müller W, Dallmeyer RD, Neubauer F, Thöni M (1999) Deformation-induced restting of Rb/Sr and $^{40}\text{Ar}/^{39}\text{Ar}$ mineral systems in a low-grade, polymetamorphic terrane (Eastern Alps, Austria). Journal of the Geological Society London 156: 261-278
- Müller W, Aerden D, Halliday AN (2000a) Isotopic Dating of Strain Fringe Increments: Duration and Rates of Deformation in Shear Zones. Sciences 288: 2195-2197
- Müller W, Mancktelow NS, Meier M (2000b) Rb-Sr microchrons of kinematic mica in mylonites: an example from the DAV fault of the Eastern Alps. Earth and Planetary Science Letters 180: 385-397
- Müller W, Kelley SP, Villa IM (2002) Dating fault-generated pseudotachylites: comparison of $^{40}\text{Ar}/^{39}\text{Ar}$ stepwise-heating, laser-ablation and Rb-Sr microsampling analyses. Contributions to Mineralogy and Petrology 144: 57-77
- Müller W (2003): Strengthening the link between geochronology, textures and petrology. Earth and Planetary Science Letters 206, 237-251

- Neumann W, Huster E (1976) Discussion of the ^{87}Rb half-life determined by absolute counting. *Earth and Planetary Science Letters* 33: 277-288
- Okrusch M, Bröcker M (1990) Eclogites associated with high-grade blueschists in the Cyclades archipelago, Greece: A review. *European Journal of Mineralogy* 2: 451-478
- O'Nions RK, Hamilton PJ, Evensen NM (1977) Variations in $^{143}\text{Nd}/^{144}\text{Nd}$ and $^{87}\text{Sr}/^{86}\text{Sr}$ Ratios in Oceanic Basalts. *Earth and Planetary Science Letters* 34: 13-22
- Passchier CW, Trouw RAJ (1996): *Microtectonics*. Springer-Verlag Berlin Heidelberg
- Putlitz B, Cosca MA, Schumacher J, Bussy F (2003) In situ $^{40}\text{Ar}/^{39}\text{Ar}$ dating of high-pressure rocks from Syros and Sifnos islands (Cyclades – Greece). *Geophysical Research Abstracts* 5: 09953
- Putlitz B, Cosca MA, Schumacher JC (2005) Prograde mica $^{40}\text{Ar}/^{39}\text{Ar}$ growth ages recorded in high pressure rocks (Syros, Cyclades, Greece). *Chemical Geology* 214: 79- 98
- Ring U, Laws S, Bernet M (1999) Structural analysis of a core complex nappe sequence and late-orogenic basins from the Aegean Island of Samos, Greece. *Journal of Structural Geology* 21: 1575-1601
- Ring U, Layer PW, Reischmann (2001) Miocene high-pressure metamorphism in the Cyclades and Crete, Aegean Sea, Greece: Evidence for large-magnitude displacement on the Cretan detachment. *Geology* 29: 395-398
- Ring U, Reischmann T (2002) The weak and superfast Cretan detachment, Greece: Exhumation at subduction rates in extrusion wedges. *Journal of the Geological Society London* 159: 225-228
- Ring U, Layer PW (2003) High-pressure metamorphism in the Aegean, eastern Mediterranean: Underplating and exhumation from the Late Cretaceous until the Miocene to Recent above retreating Hellenic subduction zone. *Tectonics* 22: 1022
- Reddy SM, Potts GJ (1999) Constraining absolute deformation ages: the relationship between deformation mechanisms and isotopic systematics. *Journal of Structural Geology* 21: 1255-1265
- Reddy SM, Wheeler J, Butler RWH, Cliff RA, Freeman S, Inger S, Pickles C, Kelley SP (2003) Kinematic reworking and exhumation within the convergent Alpine Orogen. *Tectonophysics* 365: 77-102
- Schmädicke E, Will TM (2003) Pressure-temperature evolution of blueschist facies rocks from Sifnos, Greece, and implications for the exhumation of high-pressure rocks in the Central Aegean. *Journal of Metamorphic Geology* 21: 799-811
- Seidel E, Kreuzer H, Harre W (1982) A Late Oligocene/ Early Miocene high pressure belt in the External Hellenides. *Geologisches Jahrbuch, Reihe E*, 23: 165-206
- Shaked J, Avigad D, Garfunkel Z (2000) Alpine high-pressure metamorphism at the Almyropotamos window (southern Evia, Greece). *Geological Magazine* 137: 367-380
- Sherlock S, Kelley S, Inger S, Harris N, Okay A (1999) $^{40}\text{Ar}-^{39}\text{Ar}$ and Rb-Sr geochronology of high-pressure metamorphism and exhumation history of the Tavşanlı Zone, NW Turkey. *Contributions to Mineralogy and Petrology* 137, 46-58
- Sie SH, Niklaus TR, Suter GF (1997) Microbeam AMS: prospects of new geological applications. *Nuclear Instruments and Methods in Physics Research B* 123:112-121
- Sie SH, Sims DA, Niklaus TR, Bruhn F, SuterG, Cripps G (1999) In situ microanalysis for trace element and isotopic data by AMS. *Instruments and Methods in Physics Research B* 158:201-208

- Stöckhert B, Gerya TV (2005) Pre-collisional high pressure metamorphism and nappe tectonics at active continental margins: a numerical simulation. *Terra nova* 17: 102-110
- Thompson SN, Stöckhert B, Brix, MA (1999) Miocene high-pressure metamorphic rocks of Crete, Greece: Rapid exhumation by buoyant escape. in: Exhumation processes: Normal Faulting, Ductile Flow and Erosion, Special Publications of the Geological Society London 154: 87-108
- Tremba EL, Faure G, Katsikatos GC, Summerson CH (1975) Strontium isotope composition in the Thetys Sea. Euboea, Greece. *Chemical Geology* 16: 109-120
- Vance D, Harris N (1999) Timing of prograde metamorphism in the Zanskar Himalaya. *Geology* 27: 395-398
- Veizer J (1989) Strontium isotopes in seawater through time. *Annual Reviews of Earth and Planetary Science Letters* 17: 141 - 167
- Veizer J, Compson W (1974) $^{87}\text{Sr}/^{86}\text{Sr}$ composition of seawater in the Phanerozoic. *Geochimica et Cosmochimica Acta* 38: 1461-1484
- Villa, IM (1997) Isotopic closure. *Terra Nova* 10: 42-47
- Waight T, Baker J, Willigers B (2002) Rb isotope dilution analyses by MC-ICPMS using Zr to correct for mass fractionation; towards improved Rb-Sr geochronology. *Chemical Geology* 186: 99-116
- White WM, Dupre B (1986) Sediment subduction and magma genesis in the Lesser Antilles: isotopic and trace element constraints. *Journal of Geophysical Research* 91: 5927-5941
- Wijbrans JR, McDougall I (1986) $^{40}\text{Ar}/^{39}\text{Ar}$ dating of white micas from an Alpine high-pressure metamorphic belt on Naxos (Greece): the resetting of the argon isotopic system. *Contributions to Mineralogy and Petrology* 93: 187-194
- Wijbrans JR, Schliestedt M York D (1990) Single grain argon laserprobe dating of phengites from the blueschist to greenschist transition on Sifnos (Cyclades, Greece). *Contributions to Mineralogy Petrology* 104: 582-593
- Woodhead JD, Greenwood P, Harmon RS, Stoffers P (1993) Oxygen isotopes evidence for recycled crust in the source of EM-type ocean island basalts. *Nature* 362: 809-813
- Xypolias P, Kokkalas S, Skourlis K (2003) Upward extrusion and subsequent transpression as a possible mechanism for the exhumation of HP/LT rocks in Evia Island (Aegean Sea, Greece). *Journal of Geodynamics* 35: 303-332
- Zheng Y-F, Zhao Z-F, Li S-G, Gong B (2003) Oxygen isotope equilibrium between ultrahigh-pressure metamorphic minerals and its constraints on Sm-Nd and Rb-Sr chronometer. aus: Linking the Isotopic Record with Petrology and Textures. Geological Society, London, Special Publications 220: 93-117