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A754 *Park S-H, Michael P, Lee JI & Lee KY*
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A944 *Sivry Y, Denaix L, Fabrègue M, Riotte J, Zouiten C, Sappin-Didier V & Dupré B*
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A1111 *Wiesenberg GLB & Schwark L*
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- 140 Comparison of the Ligand-Promoted Dissolution of Kaolinite and Goethite with Different Organic Chelators at pH 6  
A1124 *Wolff-Boenisch D & Traina S*
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- 143 Chemical Weathering of Basaltic Rocks in the Tropical Environment  
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- 144 Rates of Weathering Rind Formation from <sup>238</sup>U-<sup>234</sup>U-<sup>230</sup>Th Chronometry: Application to Basalt Weathering  
A773 *Pelt E, Chabaux F, Innocent C, Navarre-Sitchler A, Sak P & Brantley S*
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- 149 Application of *in situ* Cosmogenic Nuclide Analysis to Landform Evolution in (Palaeo)-Periglacial South-West Britain  
A368 *Hagg J, Summerfield M, Schnabel C, Phillips W & Freeman S*
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A433 *Ivy-Ochs S, Kubik P, Alfimov V & Synal H-A*
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165  $\delta^{44}\text{Ca}$  Evolution during Water-Rock Interaction in a Carbonate  
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166 Zn Isotopic Fractionation during Complexation with Organic Matter  
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- 173 Water Column Structure of the Eocene Arctic Ocean from Nd-Sr Isotope Proxies in Fossil Fish Debris  
A329 *Gleason J, Thomas D, Moore T, Blum J & Owen R*
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- 174 Diatom  $\delta^{13}\text{C}$ ,  $\delta^{15}\text{N}$ , and C/N Since the Last Glacial Maximum in the Southern Ocean: Evidence for Regional and Ecological Influences  
A436 *Jacot Des Combes H, De La Rocha CL, Esper O, Abelmann A, Gersonde R & Shemesh A*
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- 175 Seasonal Element and Sr Isotope Ratio Variations in Late Miocene Corals from Crete, Eastern Mediterranean  
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- 177 Development of Chelate Resin Column Preconcentration Method for Precise Isotope Analysis of Mo in Seawater  
A701 *Nakagawa Y, Firdaus ML, Norisuye K, Sohrin Y, Irisawa K & Hirata T*
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- 178 The Accuracy of  $\delta^{11}\text{B}$  Measurements of Foraminifera  
A *Ni Y, Foster G & Elliott T*
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- 179 Extracting Sequentially Ra, Nd, Pa, Th and U from a Unique Natural Sample, on the Same Column  
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- 180 Dissolution of Biogenic Silica in the Sediments of the Scheldt Continuum  
A824 *Rebreanu L, De Bodt C, Clip G & Chou L*
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- 181 High-Resolution Geochemistry and Lithology of Laminated Sediment in the Weddell Sea, Antarctica  
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- 182 Mississippian Microbial Carbonates: Test for the Validation as Proxy for Marine REE Geochemistry  
A853 Rosleff-Sörensen B, Aretz M & Kasper HU
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A903 Scholten J & Fietzke J
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- 184 Determination of Lead Isotopic Ratios in Ferromanganese Crust by using MC-ICP-MS and NanoSIMS  
A996 Takata Y, Tanimizu M, Takahata N, Amakawa H & Sano Y
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- 185 Stable Sulfur and Carbon Isotopes of Pore-Water and Solid-Phase Compounds in Sediments of the Chapopote Asphalt Volcano, Southern Gulf of Mexico  
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A1161 Zhang Y, Lacan F & Jeandel C
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- 189 Carbonation of Ca- and Mg-Rich Silicates: Experimental Investigations and Kinetic Modeling  
A204 Daval D, Martinez I, Goffé B & Guyot F
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- 190 Consideration of Formation Buffering Potential and Reactive Mineral Availability Pertaining to Geological Storage of Carbon Dioxide  
A255 Ellis B, Bowman K, Peters C & Buschkuehle M
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- 191 Dissolution from a CO<sub>2</sub> Lake  
A257 Enstad LI, Haugan PM & Alendal G



- 192 Passivating Layer Formation during Glauconite Dissolution: Implications for Mineral Sequestration of CO<sub>2</sub>  
A273 *Fernandez-Bastero S & Gago-Duport L*
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A393 *Hellmann R, Daval D & Tisserand D*
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A426 *Hurter S, Labregere D & Berge J*
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- 195 Upscaling Reaction Rate Laws in Geochemical Reactive Transport using Pore-Scale Network Models  
A470 *Kavetski D, Peters C, Celia M & Lindquist B*
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- 196 Reactive Transport Simulation of Mineral Trapping of CO<sub>2</sub> in Operated Geothermal Aquifers  
A529 *Kühn M & Clauser C*
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- 197 Gravitational Trapping of Carbon Dioxide in Deep Sea Sediments: A Geomechanical Analysis  
A637 *Matter J, Levine J, Goldberg D & Lackner K*
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- 198 Identification of Potential Geochemical Reactions in German Subsurface Storage Sites of CO<sub>2</sub>  
A1074 *Vosteen H-D & May F*
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- 199 Experimental Investigation of the CO<sub>2</sub> Sealing Efficiency of Cap Rocks  
A1124 *Wollenweber J, Alles S, Busch A & Krooss B*

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- 200 Organic Geochemical Assessment of the Onset of an Oceanic Anoxic Event  
A324 *Gill AS, Veld H & Behrends T*
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- 201 <sup>10</sup>Be and Clay Mineralogical Studies on Lagoonal Sediments from Kaluveli, Pondicherry, India: Significance to Paleoclimate  
A765 *Pattanaik JK & Balakrishnan S*
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- 202 Peat Deposits from Central Europe to the East European Plains Investigated by Uranium-Series Dating  
A935 *Sierralta M & Frechen M*
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A936 *Siklosy Z, Demeny A, Vennemann TW, Hegner E, Kramers J & Leel-Ossy S*

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- 205 Dolomite Nucleation on Extracellular Polymeric Substances  
A108 Bontognali T, Vasconcelos C, Warthmann R & McKenzie JA
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- 206 Genetic Considerations in Microbial Silicification  
A539 Lalonde S, Owtrim G & Konhauser K
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- 207 Reduction of Chromium(VI) by *Cellulomonas Sp.* and *Propionibacterium Sp.* in Anaerobic Soil Microcosms  
A557 Lee S-E, Konopka A & Chon H-T
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- 208 Low Temperature Nucleation of Ferric Arsenate using Microorganisms  
A567 Lewis R, Monhemius J & Plant J
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- 209 Role of Bacteria on Uranium Migration in a Calcareous Peatland  
A788 Phrommavanh V, Klein J, Descostes M, Beaucaire C, Gaudet J-P, Prestel E, Dubow M & Laporte E
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- 210 Structural Chemistry of Cation-Doped Bacteriogenic UO<sub>2</sub>  
A902 Schofield E, Sharp J, Veeramani H, Bernier-Latmani R & Bargar J
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- 211 Experimental Growth of Biofilms for Studies on the Impact of Microbes on Transport Processes in Groundwater Systems  
A1077 Wagner D, Bateman K, Coombs P, Harrison H, Milodowski AE & West J

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- 212 Sulfide Oxidation, Acidification and Deoxygenation by Reaction of Resuspended Sulfidic Benthic Sediments  
A301 Fyfe D, Bush R, Burton E & Sullivan L
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- 213 Diel Biogeochemistry of the Rio Agrio, Argentina  
A755 Parker S, Gammons C & Pedrozo F
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- 214 Anaerobic Nitrate-Dependent Oxidation of Pyrite Mediated by *Thiobacillus denitrificans*  
A1032 Torrento C, Southam G, Urmeneta J, Cama J & Soler A

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- 215 Formation of Biomineralized Stalks by a Marine Iron-Oxidizing Bacterium  
A158 Chan C, Emerson D, Fakra S & Edwards K
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- 216 Particularities of Mn(II) Uptake by Living and Dead *Shewanella putrefaciens*  
A174 Chubar N, Behrends T & Van Cappellen P
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- 217 Biogenic Mineral Dissolution and Transformation of Arsenopyrite  
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A194 Crosby H, Roden E, Johnson C & Beard B
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- 219 Non-Conservative Behaviour of Molybdenum in Coastal Waters  
A215 Dellwig O, Beck M, Lemke A, Lunau M, Kolditz K, Schnetger B & Brumsack H-J
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- 220 An Innovative Tool for *in situ* Monitoring of Fe and Associated Trace Metal Mobilization in Soils  
A265 Fakih M, Davranche M, Dia A, Petitjean P, Châtellier X & Gruau G
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- 221 Influence of Organics on Microbial Reductive Dissolution of Synthetic Fe-Cr Oxides  
A555 Lee S, Lee S, Chun S, Ji S & Lee S
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- 222 Influence of Transition Metal Cations on the Formation and Reactivity of Biogenic Mn Oxides  
A774 Peña J, Sposito G & Bargar JR
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- 223 Microbial Leaching of Iron from Magnetite Under Aerobic and Anaerobic Environments  
A847 Roh Y, Oh J, Suh Y & Jang HD
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## S94: Mechanisms of Growth and Dissolution of Carbonates: Applications to the Environment and Industry

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A77 *Belova D, Lakshtanov L & Stipp S*
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- 225 Durability and Degradation of Oil Well Cement Exposed to a Source of H<sub>2</sub>S and CO<sub>2</sub> Gases  
A154 *Centeno J, Ramirez A, Blanco A & Balza A*
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- 226 Multilayer Fixation of Dissolved Phosphate on Natural Calcites Derived from Sorption Experiments  
A251 *Eiche E, Berg U, Neumann T, Nüesch R & Stüben D*
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- 227 The Replacement of Gypsum by CaCO<sub>3</sub> Polymorphs: Reaction Steps and Formation of Pseudomorphs  
A274 *Fernandez-Diaz L, Pina C, Astilleros JM & Sanchez-Pastor N*
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- 228 Use of CaCO<sub>3</sub> as an Amendment to Immobilize Heavy Metals from the Contaminated Farmland Soil Around Abandoned Mines  
A555 *Lee M, Kang H & Choi A*
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- 229 Is There a Reversible Step in <sup>45</sup>Ca Sorption onto Pure Calcite?  
A605 *Ly J, Tertre E, Beaucaire C & Mevellec V*
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- 230 Growth of Calcium Carbonates in Gels in the Presence of Organic and Inorganic Additives  
A654 *Merkel C, Jordan G, Pina C, Fernandez-Diaz L & Schmahl W*
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- 231 Paleo-Hydrochemical Changes of Deep Groundwater in Mizunami Area, Japan  
A676 *Mizuno T, Milodowski A & Iwatsuki T*
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- 232 Rhombohedral Calcite Precipitation from CO<sub>2</sub>-H<sub>2</sub>O-Ca(OH)<sub>2</sub> Slurry Under Supercritical and Gas CO<sub>2</sub> Media  
A682 *Montes-Hernandez G, Renard F, Charlet L & Pironon J*
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- 233 The Composition and Texture Constrains on Micro-Porosities of Dolomite Reservoirs, Tarim Basin, NW China  
A1087 *Wang X, Zhang W, Hu W & Zhang J*
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A5 *Ackermann S, Gieré R & Majzlan J*
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- 236 Study of the Copper Reactivity in Organic Soils  
A30 *Antelo J, Villaverde-Dios P, Arce F, Fiol S, López R & Gondar D*
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- 237 EXAFS and XPS Study of Arsenate Adsorption on Manganite (P-MnOOH) Surfaces  
A58 *Banerjee D, Nelson H & Persson P*
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- 238 The Role of Mn Oxides on the Geochemical Cycle of Chromium: A Field Study in New Caledonia  
A267 *Fandeur D, Juillot F, Fritsch E, Olivi L, Cognigni A, Morin G & Ambrosi J-P*
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- 239 Speciation and Long-Term Sequestering of Zn in a Naturally Enriched Soil  
A453 *Juillot F, Morin G, Benedetti M, Hazemann J-L, Proux O, Bellin S, Briois V, Brown Jr. G & Calas G*
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- 240 Solubility of Pyromorphite-Mimetite Solid Solutions at 5-65°C  
A285 *Flis J, Manecki M & Bajda T*
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- 241 Thermodynamic Modelling the Sorption of Heavy Metals and Actinides onto Clay Minerals by Gibbs Energy Minimization Approach  
A310 *Gaskova O*
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- 242 The Bicaz Lake (Romania): Hydrodynamics and Trace Element Behaviour  
A310 *Gassama N, Cocirta C & Kasper HU*
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- 243 Speciation of Arsenic in the Coprecipitated As(V)-Fe(III) Solids  
A444 *Jia Y, Xu L & Demopoulos G*
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- 244 Colloid Formation in Aerated Fe(II) Containing Water: Effect of Phosphate, Silicate and Ca on Morphology and Structure  
A456 *Kaegi R, Voegelin A, Folini D & Hug S*
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- 245 Adsorption of As in Rice Paddy Soils of West Bengal  
A519 *Kramar U, Norra S, Berner Z & Stüben D*
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- 246 Influence of Nanoscale Iron Oxyhydroxide Growth on Metal Sorption / Desorption Mechanisms  
A561 *Lentini C, Reinsch B, Gilbert B & Kim C*
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- 247 Copper Addition by Organic Matter Degradation in the Freshwater Reaches of a Turbid Estuary (Gironde Estuary, France)  
A634 *Masson M, Blanc G, Schäfer J, Parlanti E, Le Coustumer P & Dabrin A*
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- 248      Microscale Controls on Contaminants at the Hanford Site  
A646      *McKinley J, Zachara J & Heald S*
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- 249      Experimental Study of REE Behaviour during Apatite Dissolution  
            in Presence of Iron and Organic Matter  
A850      *Roncal-Herrero T, Mathieu N, Sonke J & Oelkers EH*
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- 250      Co-precipitation of Sr<sup>2+</sup> with Calcite from 5 to 40°C  
A999      *Tang J, Dietzel M & Köhler S*
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- 251      Modeling of Zn Sorption onto Clayey Sediments using a Multi-  
            Site and Multi-Component Ion-Exchange Model  
A1015      *Tertre E, Coreau N, Juery A & Beaucaire C*
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- 252      Colloid Formation in Aerated Fe(II) and As(III) Containing Water:  
            Effect of Phosphate, Silicate and Ca on Local Coordination by  
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A1071      *Voegelin A, Kägi R, Vantelon D & Hug S*
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- 253      Mechanisms of Arsenic Scavenging by Iron (Hydr)oxides in  
            Anoxic Environments  
A1089      *Wang Y, Morin G, Ona-Nguema G, Menguy N, Guyot F,  
            Hazemann J-L, Calas G & Brown Jr. GE*
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- 254      Environmental Vanadium Distribution in Soil in a V-Ti-Fe  
            Magnetite Ore Area, Panzhihua, South-West of China  
A1154      *Zeng Y, Ni S, Zhang C & Huang Y*

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- 255 The Effect of Organic Compounds on the Dissolution of Amorphous Silica-Pyrochatechol, Salicylate, Hydrogen Phthalate  
A51 *Bai S, Matsubayashi K, Okaue Y & Yokoyama T*
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- 256 Statistical Determination of Geochemical Data to Evaluate Oelberg-Basalt as a Geochemical Reference Material  
A231 *Dorndorf S, Wittenberg A, Röhling S & Gerwig G*
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- 257 Mineral-Melt Trace Element Equilibria in Plutonic Rocks Studied by Laser Ablation ICP-MS  
A415 *Horckmans K & Hertogen J*
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- 258 Voltammetric Determination of Te(IV) and Te(VI): Sorption Behaviour on Fe and Mn Oxides  
A451 *Jost CL, Koschinsky A, de Carvalho LM & do Nascimento PC*
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- 259 EarthChem – A Geochemistry Data Network  
A559 *Lehnert K, Walker D & Sarbas B*
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- 260 Trace, REE and Sr Isotopic Investigation in the Core Top Sediments from Bay of Bengal  
A73 *Begum Z & Balaram V*
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- 261 The FE-EMPA – Applications for the Sub-Micron Analysis in Geosciences  
A836 *Rhede D*
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- 262 Photoluminescence Recovery Upon Annealing of Fergusonite  
A861 *Ruschel K, Nasdala L, Gaft M, Schnier C & Schlüter J*
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- 263 New Approaches to Geochemical Exploration for Deep-Seated and Covered Mineral Deposits  
A953 *Sokolov S, Marchenko A, Shevchenko S, Makarova Y & Ilchenko V*
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- 264 EA-IRMS: Analysis of Graphites and Diamonds  
A997 *Talibova A, Dina S & Viktor P*
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- 265 Potential Problems in the Annealing of Zircon  
A1049 *Váczí T, Nasdala L, Wirth R, Wanthanachaisaeng B & Hüber T*
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A6 Adeagbo WA & Doltsinis NL
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- 267 Geo-Electric Investigation of Igbonla Geothermal Sources, South Western Nigeria  
A50 Badmus B, Ayolabi E & Adebowale A
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- 268 Statistical Evaluation of Anomalous Compositions in Fluid Geochemistry  
A128 Buccianti A, Tassi F & Vaselli O
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- 269 Sensitivity Analysis for a Multisurface Geochemical Modelling Approach  
A223 Diaz M, Apul D, Gustafsson J & Hundal L
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- 270 Comparison of Thermodynamic Data for Aqueous Species with Focus on Hyperalkaline Conditions  
A273 Fernández R, Mäder UK & Soler JM
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- 271 A Fractal Concentration-Mass Method for Geochemical Anomaly Separation in Shizhuyuan Tungsten Deposit Area  
A342 Gong Q, Deng J, Xiang Y, Wang Q & Yang L
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- 272 A Geochemical Model of Arsenic Sorption on Clay Mineral Functional Sites  
A498 Kniewald G & Fiket Z
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- 273 Solvation Processes in Steam: *ab Initio* Calculations of Ion-Solvent Structures and Clustering Equilibria  
A560 Lemke K & Seward T
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- 274 Molecular Level Simulations of the H<sub>2</sub>O, CO<sub>2</sub> and CO<sub>2</sub>-H<sub>2</sub>O Systems up to High Temperatures and Pressures  
A1164 Zhang Z & Duan Z
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- 275 Doping-Induced Structural Phenomena in Pb-Based Relaxors  
A94 Bismayer U, Mihailova B, Paulmann C, Malcherek T, Güttler B & Gospodinov M
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- 276 Synthesis, Crystal Structure and Application of Compounds with Copiapite- and Voltaitestructure  
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- 284 *In situ* X-Ray Synchrotron High-Pressure Measurements of Magnetite  
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330 Nd Model Ages (Tdm) as an Indicator of West Gondwanan Suture in Southeastern South America

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332 D<sup>13</sup>Ccarb and δ<sup>13</sup>Corg Excursions in the Post-Glacial Sinian to Early Cambrian Interval in Guizhou, South China

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336 Nd and Sr Isotopic Characteristics of NE Aegean Ophiolites, Greece

A504 *Koglin N, Reischmann T & Kostopoulos D*

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337 New Carbon Isotope Stratigraphy of an Old Section in Southwest China: Implications for Placement of PC-C Boundary on Yangtze Platform

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