

# Игорь Дмитриевич Рябчиков



(6 сентября 1937 — 27 ноября 2017)

Игорь Дмитриевич Рябчиков российский учёный-геохимик, академик Российской академии наук (1992). Занимался вопросами геохимии и термодинамики магматизма, теории петрогенеза, физико-химической петрологии и генезиса полезных ископаемых.

Родился 6 сентября 1937 года в Москве, в семье специалиста по аналитической химии, члена-корреспондента АН СССР Д.И. Рябчикова.

В 1959 году окончил геологический факультет МГУ. Далее - аспирант, младший, старший научный сотрудник, зав. лабораторией, зав. отделом, заместитель директора в Институте геологии рудных месторождений, петрографии, минералогии и геохимии (с 1959 года).

В 1963 году защитил кандидатскую диссертацию по теме «Термодинамический анализ поведения малых элементов в ходе кристаллизации силикатных расплавов».

В 1973 году — докторскую диссертацию по теме «Термодинамика флюидной фазы гранитоидных магм».

Член-корреспондент АН СССР с 1984 года, академик РАН с 1992 года — Отделение наук о Земле РАН.

Специалист в области геохимии.

Профессор кафедры геохимии геологического факультета МГУ, читал курсы лекций «Геохимия мантии», «Геохимия».

Академик И.Д. Рябчиков — крупный ученый в области геохимии, физико-химической петрологии и термодинамики природных процессов. Занимался вопросами термодинамики магматизма, теории петрогенеза, физико-химической петрологии и генезиса полезных ископаемых.

Им выполнены фундаментальные исследования механизмов глобальной геохимической дифференциации мантии Земли, процессов мобилизации рудных и петрогенных компонентов коровыми и мантийными флюидами; впервые проведены экспериментальные исследования химизма мантийных флюидов; установлен механизм генерации потенциально алмазоносных магм — кимберлитов и лампроитов; создана количественная теория термодинамического анализа поведения микрокомпонентов в ходе кристаллизации и дегазации магматических расплавов.

Ученым создано новое научное направление — экспериментальное изучение коэффициентов распределения рудных элементов в магматических системах. Разработаны методы изучения термодинамики минералов переменного состава и магматических расплавов, комплекс компьютерных программ, моделирующих процессы мантийного магмообразования.

Созданы новые варианты минералогических термометров и геобарометров. Впервые вскрыты механизмы глобальной геохимической дифференциации мантии Земли, получен экспериментальный материал по коэффициентам распределения рудных металлов в магматических системах, и тем самым заложены основы физико-химического анализа потенциальной рудоносности флюидно-магматических систем.

И.Д. Рябчиков впервые провел экспериментальные исследования химизма мантийных флюидов. Его исследования позволили установить механизм генерации потенциально алмазоносных магм (кимберлитов и лампроитов).

Среди его учеников — доктора и кандидаты наук.

Им опубликовано более 300 научных статей и 8 монографий.

Член редколлегий журналов «Геохимия», «Геология рудных месторождений», «Mineralium Deposita».

Член Совета Международной программы геологической корреляции, член Совета Международной ассоциации геохимии и космохимии, член Датской королевской академии наук и литературы.

Награжден орденом «Знак Почета».

Лауреат премий им. В.И. Вернадского АН СССР, им. А.Е. Ферсмана РАН, им. Д.С. Коржинского РАН.

Основные монографии:

- Термодинамика флюидной фазы гранитоидных магм. М., 1975
- Эволюция известково-щелочных магм. М., 1983
- Коэффициенты распределения редких элементов в магматических породах. М., 1984
- Генезис коматиитов и коматиитовых базальтов. М., 1987
- Геохимическая эволюция мантии Земли. М., 1988

## **Список основных публикаций И.Д. Рябчикова**

1. Ryabchikov, ID; Kogarko, LN.  
Deep differentiation of alkali ultramafic magmas: Formation of carbonatite melts  
GEOCHEMISTRY INTERNATIONAL 54(9), 739-747 (2016)

2. Ryabchikov, ID; Kogarko, LN; Sazonov, AM; Kononkova, NN.  
Formation of gold mineralization in ultramafic alkalic magmatic complexes  
DOKLADY EARTH SCIENCES 468(2), 623-625 (2016)
3. Titkov, SV; Mineeva, RM; Ryabchikov, ID; Speransky, AV.  
Sites of the N1 Nitrogen Paramagnetic Centers in Natural Diamond Crystals:  
Dissymmetrization of the Structure as a Result of Plastic Deformation  
DOKLADY EARTH SCIENCES 468(1), 500-502 (2016)
4. Ryabchikov, ID; Kogarko, LN.  
Physicochemical parameters of deep-seated mantle plumes  
RUSSIAN GEOLOGY AND GEOPHYSICS 57(5), 687-697 (2016)
5. Kaminsky, FV; Ryabchikov, ID; Wirth, R.  
A primary natrocarbonatitic association in the Deep Earth  
MINERALOGY AND PETROLOGY 110(2-3), 387-398 (2016)
6. Ryabchikov, ID; Kogarko, LN.  
Physicochemical parameters of crystallization differentiation and Fe-Ti ore-forming processes  
in the magmatic system of the Elet'ozero massif (Northern Karelia)  
GEOCHEMISTRY INTERNATIONAL 54(3), 215-236 (2016)
7. Ryabchikov, ID; Kogarko, LN.  
Oxygen potential of the Elet'ozero magmatic system as a criterion of the ore potential for  
titanomagnetite-ilmenite raw material  
DOKLADY EARTH SCIENCES 463(1), 680-683 (2015)
8. Kaminsky, FV; Ryabchikov, ID; McCammon, CA; Longo, M; Abakumov, AM; Turner, S;  
Heidari, H.  
Oxidation potential in the Earth's lower mantle as recorded by ferropericase inclusions in  
diamond  
EARTH AND PLANETARY SCIENCE LETTERS 417, 49-56 (2015)
9. Titkov, SV; Mineeva, RM; Zudina, NN; Sergeev, AM; Ryabchikov, ID; Shiryayev, AA;  
Speransky, AV; Zhikhareva, VP.  
The luminescent nature of orange coloration in natural diamonds: optical and EPR study  
PHYSICS AND CHEMISTRY OF MINERALS 42(2), 131-141 (2015)
10. Kaminsky, FV; McCammon, C; Ryabchikov, ID.  
Oxidation potential in the Earth's lower mantle as recorded from ferropericase inclusions in  
diamond  
Contrib Mineral Petrol , (2015)
11. Ryabchikov, I.D.; Kogarko, L..  
Regime of volatiles in graphite-bearing carbonatites  
CEJG-D-14-00057 , (2015)
12. Ryabchikov, ID; Kaminsky, FV.  
Physicochemical Parameters of the Material of Mantle Plumes: Evidence from the  
Thermodynamic Analysis of Mineral Inclusions In Sublithospheric Diamond  
GEOCHEMISTRY INTERNATIONAL 52(11), 903-911 (2014) Ryabchikov, ID; Kaminsky, FV.

The composition of the lower mantle: Evidence from mineral inclusions in diamonds  
DOKLADY EARTH SCIENCES 453(2), 1246-1249 (2013)

13. Ryabchikov, ID; Kogarko, LN.  
FeO activity and oxygen potential in magnesian magmas  
GEOCHEMISTRY INTERNATIONAL 51(12), 949-958 (2013)
14. Kogarko, LN; Ryabchikov, ID.  
Diamond potential versus oxygen regime of carbonatites  
PETROLOGY 21(4), 316-335 (2013)
15. Ryabchikov, ID; Kaminsky, FV.  
Oxygen potential of diamond formation in the lower mantle  
GEOLOGY OF ORE DEPOSITS 55(1), 1-12 (2013)
16. Mineeva, RM; Zudina, NN; Titkov, SV; Ryabchikov, ID; Speransky, AV; Zudin, NG.  
EPR spectroscopy of cubic diamonds from placers in the north-east of the Siberian platform:  
New type of nitrogen centers  
DOKLADY EARTH SCIENCES 448(2), 243-247 (2013)
17. Ryabchikov, ID.  
Oxygen potential of high-magnesium magmas  
DOKLADY EARTH SCIENCES 448(1), 149-152 (2013)
18. Kogarko, LN; Ryabchikov, ID; Kuzmin, DV.  
High-Ba mica in olivinites of the Guli massif (Maimecha-Kotui province, Siberia)  
RUSSIAN GEOLOGY AND GEOPHYSICS 53(11), 1209-1215 (2012)
19. Ryabchikov, ID; Kogarko, LN.  
Oxygen potential and PGE geochemistry of alkaline-ultramafic complexes  
GEOLOGY OF ORE DEPOSITS 54(4), 241-253 (2012)
20. Vikent'ev, IV; Borisova, AY; Karpukhina, VS; Naumov, VB; Ryabchikov, ID.  
Direct data on the ore potential of acid magmas of the Uzel'ginskoe ore field (Southern Urals,  
Russia)  
DOKLADY EARTH SCIENCES 443(1), 401-405 (2012)
21. Andreeva, IA; Antipin, VS; Bogatkov, OA; Borisov, MV; Bortnikov, NS; Vladykin, NV; Vinograd,  
VL; Girnis, AV; Glebovitskii, VA; Danyushevsky, LV; Dobretsov, NL; Kamenetsky, VS;  
Kogarenko, LT; Kozlovskiy, AM; Korikovskiy, SP; Kotov, AB; Kopylova, MG; Kuz'min, MI;  
Laverov, NN; Letnikov, FA; Litvinovskiy, BA; Marakushev, AA; Nazarov, MA; Naumov, VB;  
Nikiforov, AV; Puchtel, IS; Pushcharovskiy, YM; Ruzhentsev, SV; Ryabchikov, ID; Samoilov,  
VS; Samsonov, AV; Simakin, AG; Sobolev, AV; Khanchuk, AI; Yushkin, NP; Yarmolyuk, VV.  
In memoriam Vyacheslav Ivanovich Kovalenko  
PETROLOGY 19(4), 325-326 (2011)
22. Ryabchikov, ID.  
Conditions of diamond formation in the Earth's lower mantle  
DOKLADY EARTH SCIENCES 438(2), 788-791 (2011)

23. Titkov, SV; Ryabchikov, ID; Pomazanskii, BS; Magazin, LO.  
Chloride microinclusions in diamonds of the Siberian platform  
DOKLADY EARTH SCIENCES 437(2), 503-506 (2011)
24. Kogarko, LN; Ryabchikov, ID; Divaev, FK; Wall, F.  
Regime of carbon compounds in carbonatites in Uzbekistan: Evidence from carbon isotopic composition and thermodynamic simulations  
GEOCHEMISTRY INTERNATIONAL 48(11), 1055-1063 (2010)
25. Laverov, NP; Bortnikov, NS; Borodin, LS; Bykhovskiy, LZ; Grichuk, DV; Kazansky, VI; Kovalenko, VI; Kuz'min, MI; Migachev, IV; Omel'yanenko, BI; Prokof'ev, VY; Ryabchikov, ID; Safonov, YG; Khanchuk, AI; Kholodov, VN; Yarmolyuk, VV; Murav'eva, IV.  
Jubilee of Academician Dmitrii Vasil'evich Rundqvist, an Eminent Scientist- Geologist  
GEOLOGY OF ORE DEPOSITS 52(5), 337-338 (2010)
26. Ryabchikov, ID; Kogarko, LN.  
Redox potential of mantle magmatic systems  
PETROLOGY 18(3), 239-251 (2010)
27. Bortnikov, NS; Borodin, LS; Bykhovskiy, LZ; Grichuk, DV; Kazansky, VI; Kovalenko, BI; Kuz'min, MI; Migachev, IF; Omel'yanenko, BI; Prokof'ev, VY; Rundqvist, DV; Ryabchikov, ID; Safonov, YG; Khanchuk, AI; Kholodov, VN; Yarmolyuk, VV; Velichkin, VI; Chernyshev, IV; Murav'eva, IV.  
Academician Nikolai Pavlovich Laverov, Eminent Scientist and Geologist Celebrates His 80th Birthday  
GEOLOGY OF ORE DEPOSITS 52(1), 1-4 (2010)
28. Ryabchikov, ID; Kogarko, LN.  
A new version of the spinel-olivine-pyroxene oxybarometer and extreme redox differentiation in magmatic systems of mantle sources  
DOKLADY EARTH SCIENCES 430(2), 248-251 (2010)
29. Ryabchikov, ID; Kogarko, LN.  
Oxygen Fugacity in the Apatite-Bearing Intrusion of the Khibina Complex  
GEOCHEMISTRY INTERNATIONAL 47(12), 1157-1169 (2009)
30. Ryabchikov, ID; Kogarko, LN.  
Redox potential of the Khibiny magmatic system and genesis of abiogenic hydrocarbons in alkaline plutons  
GEOLOGY OF ORE DEPOSITS 51(6), 425-440 (2009)
31. Ryabchikov, ID.  
Mechanisms of Diamond Formation: Reduction of Carbonates or Partial Oxidation of Hydrocarbons  
DOKLADY EARTH SCIENCES 429(1), 1346-1349 (2009)
32. Solovova, IP; Girnis, AV; Ryabchikov, ID; Kononkova, NN.  
Mechanisms of formation of barium-rich phlogopite and strontium-rich apatite during the final stages of alkaline magma evolution  
GEOCHEMISTRY INTERNATIONAL 47(6), 578-591 (2009)

33. Ryabchikov, ID.  
Volatiles in plume-related magmas (Siberian traps)  
GEOCHIMICA ET COSMOCHIMICA ACTA 73(13), A1137-A1137 (2009)
34. Ryabchikov, ID; Kogarko, LN; Solovova, IP.  
Physicochemical conditions of magma formation at the base of the Siberian plume: Insight from the investigation of melt inclusions in the meymechites and alkali picrites of the Maimecha-Kotui province  
PETROLOGY 17(3), 287-299 (2009)
35. Ryabchikov, ID; Kogarko, LN; Krivdik, SG; Ntaflos, T.  
Constraints of the formation of carbonatites in the Chernigovka Massif, Azov Region, Ukraine  
GEOLOGY OF ORE DEPOSITS 50(6), 423-432 (2008)
36. Solovova, IP; Girnis, AV; Ryabchikov, ID; Kononkova, NN.  
Origin of carbonatite magma during the evolution of ultrapotassic basite magma  
PETROLOGY 16(4), 376-394 (2008)
37. Laverov, NP; Bortnikov, NS; Rundqvist, DV; Ryabchikov, ID; Kovalenko, VI; Kazansky, VI; Safonov, YG; Yarmolyuk, VV; Omel'yanenko, BI; Sidorov, AA; Patyk-Kara, NG.  
Academician Nikolai Alekseevich Shilo (On his 95th birthday)  
GEOLOGY OF ORE DEPOSITS 50(3), 246-247 (2008)
38. Brugmann, GE; Ryabchikov, ID; Kogarko, LN.  
Os isotope geochemistry of mantle peridotites from Sal Island, Cape Verde Archipelago  
DOKLADY EARTH SCIENCES 419(1), 325-328 (2008)
39. Ryabchikov, ID.  
Potential temperature and volatile contents in mantle plume of Siberian trap province  
GEOCHIMICA ET COSMOCHIMICA ACTA 71(15), A862-A862 (2007)
40. Laverov, NP; Bortnikov, NS; Genkin, AD; Kazansky, VI; Kovalenko, VI; Omel'yanenko, BI; Rundqvist, DV; Ryabchikov, ID; Safonov, YG; Tomson, IN; Kholodov, VN; Yarmolyuk, VV; Murav'eva, IV.  
Lev Sergeevich Borodin (On his 80th birthday)  
GEOLOGY OF ORE DEPOSITS 49(2), 168-169 (2007)
41. Laverov, NP; Bortnikov, NS; Borodin, LS; Genkin, AD; Kazansky, VI; Kovalenko, VI; Omel'yanenko, BI; Rundqvist, DV; Ryabchikov, ID; Safonov, YG; Kholodov, VN; Yarmolyuk, VV; Sidorov, AA; Volkov, AV; Murav'eva, IV.  
Il'mar Nikolaevich Tomson (On his 80th birthday)  
GEOLOGY OF ORE DEPOSITS 49(2), 170-171 (2007)
42. Titkov, SV; Gorshkov, AI; Zudin, NG; Ryabchikov, ID; Magazina, LO; Sivtsov, AV.  
Microinclusions in dark gray diamond crystals of octahedral habit from Yakutian kimberlites  
GEOCHEMISTRY INTERNATIONAL 44(11), 1121-1128 (2006)
43. Nielsen, TFD; Turkov, VA; Solovova, IP; Kogarko, LN; Ryabchikov, ID.  
A Hawaiian beginning for the Iceland plume: Modelling of reconnaissance data for olivine-hosted melt inclusions in Palaeogene picrite lavas from East Greenland  
LITHOS 92(1-2), 83-104 (2006)

44. Solovova, IP; Girnis, AV; Ryabchikov, ID; Simakin, SG.  
High-temperature carbonatite melt and its interrelations with alkaline magmas of the Dunkel'dyk complex, Southeastern Pamirs  
DOKLADY EARTH SCIENCES 410(7), 1148-1151 (2006)
45. Ryabchikov, ID; Kogarko, LN.  
Magnetite compositions and oxygen fugacities of the Khibina magmatic system  
LITHOS 91(1-4), 35-45 (2006)
46. Titkov, SV; Gorshkov, AI; Solodova, YP; Ryabchikov, ID; Magazina, LO; Sivtsov, AV; Gasanov, MD; Sedova, EA; Samosorov, GG.  
Mineral microinclusions in cubic diamonds from the Yakutian deposits based on analytical electron microscopy data  
DOKLADY EARTH SCIENCES 410(7), 1106-1108 (2006)
47. Gorshkov, AI; Titkov, SV; Bao, YN; Ryabchikov, ID; Magazina, LO.  
Microinclusions in diamonds of octahedral habit from kimberlites of Shandong Province, eastern China  
GEOLOGY OF ORE DEPOSITS 48(4), 326-334 (2006)
48. Ryabchikov, ID.  
Main components of geochemical reservoirs of the silicate Earth  
GEOCHEMISTRY INTERNATIONAL 44(1), 11-18 (2006)
49. Ryabchikov, ID.  
Mantle magmas as a sensor of the composition of deep geospheres  
GEOLOGY OF ORE DEPOSITS 47(6), 455-468 (2005)
50. Girnis, AV; Ryabchikov, ID.  
Conditions and mechanisms of generation of kimberlite magmas  
GEOLOGY OF ORE DEPOSITS 47(6), 476-487 (2005)
51. Ryabchikov, ID.  
Chondritic model of the differentiated Earth  
DOKLADY EARTH SCIENCES 403(5), 760-763 (2005)
52. Buikin, AI; Trieloff, M; Ryabchikov, ID.  
Ar-40-Ar-39 dating of a phlogopite-bearing websterite: Evidence for ancient metasomatism in the subcontinental lithospheric mantle under the Arabian Shield?  
DOKLADY EARTH SCIENCES 400(1), 44-48 (2005)
53. Ryabchikov, ID; Girnis, AV.  
Genesis of low-calcium kimberlite magmas  
RUSSIAN GEOLOGY AND GEOPHYSICS 46(12), 1202-1212 (2005)
54. Kogarko, LN; Hellebrand, E; Ryabchikov, ID.  
Trace element partitioning between Rhonite and silicate melt in Cape Verde volcanics  
GEOCHEMISTRY INTERNATIONAL 43(1), 1-7 (2005)
55. Ryabchikov, ID; Kogarko, LN; Ntaflos, T.  
Juvenile flow of carbon dioxide and causes of global environmental changes at the Permian-

Triassic boundary  
DOKLADY EARTH SCIENCES 399A(9), 1320-1321 (2004)

56. Ryabchikov, ID.  
Equilibria clinopyroxene-melt and derivation of carbonatites from parent meimechites  
LITHOS 73(1-2), S94-S94 (2004)
57. Ryabchikov, ID.  
Editor's preface  
GEOCHEMISTRY INTERNATIONAL 42, S3-S4 (2004)
58. Ryabchikov, ID.  
Mechanisms and conditions of magma formation in mantle plumes  
PETROLOGY 11(6), 496-503 (2003)
59. Ryabchikov, ID.  
Fluid regime of mantle plumes  
GEOCHEMISTRY INTERNATIONAL 41(9), 838-843 (2003)
60. Laverov, NP; Rundkvist, DV; Ryabchikov, ID; Safonov, YG; Sidorov, AA; Bortnikov, NS;  
Kazansky, VI; Patyk-Kara, NG.  
Academician Nikolai Alekseevich Shilo (On his 90th birthday)  
GEOLOGY OF ORE DEPOSITS 45(3), 253-254 (2003)
61. Leost, I; Stachel, T; Brey, GP; Harris, JW; Ryabchikov, ID.  
Diamond formation and source carbonation: mineral associations in diamonds from Namibia  
CONTRIBUTIONS TO MINERALOGY AND PETROLOGY 145(1), 15-24 (2003)
62. Ryabchikov, ID; Wanke, H.  
Petrogenesis of parent magmas of SNC meteorites  
GEOCHEMISTRY INTERNATIONAL 41(4), 313-323 (2003)
63. Ryabchikov, ID.  
High NiO content in mantle-derived magmas as evidence for material transfer from the earth's  
core  
DOKLADY EARTH SCIENCES 389(3), 437-439 (2003)
64. Solovova, IP; Girnis, AV; Ryabchikov, ID; Kononkova, NN.  
Melts of the post-shield stage of Mauna Kea volcano, Hawaii: Evidence from inclusions in  
minerals of the high-Mg basalt  
GEOCHEMISTRY INTERNATIONAL 40(12), 1146-1161 (2002)
65. Bulatov, VK; Ryabchikov, ID; Brey, GP.  
Two pyroxene-garnet equilibria in the Na<sub>2</sub>O-CaO-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> system at 2-5 GPa  
pressure  
GEOCHEMISTRY INTERNATIONAL 40(10), 929-942 (2002)
66. Solovova, IP; Ryabchikov, ID; Girnis, AV; Pedersen, B; Hansteen, T.  
Reduced magmatic fluids in basalt from the island of Disko, central West Greenland  
CHEMICAL GEOLOGY 183(1-4), 365-371 (2002)



67. Gorshkov, AI; Titkov, SV; Vinokurov, SF; Ryabchikov, ID; Bao, YN; Magazina, LO; Sivtsov, AV.  
Study of a cubic diamond crystal from a placer in Northern China by analytical electron microscopy and neutron activation analysis  
GEOCHEMISTRY INTERNATIONAL 40(3), 299-305 (2002)
68. Ryabchikov, I.D.; Solovova, I.P.; Kogarko, L.N.; Brey, G.P.; Ntaflos, T.; Simakin, S.G..  
Thermodynamic parameters of generation of meimechites and alkali picrites of the Maimecha-Kotui province (from results of study of melt microinclusions).  
Geokhimiya (11), 1139 (2002)
69. Laverov, NP; Rundquist, DV; Ryabchikov, ID; Bortnikov, NS; Kazansky, VI; Tomson, IN.  
On the 80th birthday of Rauf Baratovich Baratov - Chronicle  
GEOLOGY OF ORE DEPOSITS 43(6), 506-507 (2001)
70. Ryabchikov, ID; Ntaflos, T; Buchl, A; Solovova, IP.  
Subalkaline picrobasalts and plateau basalts from the Putorana plateau (Siberian continental flood basalt province): I. Mineral compositions and geochemistry of major and trace elements  
GEOCHEMISTRY INTERNATIONAL 39(5), 415-431 (2001)
71. Ryabchikov, ID; Solovova, IP; Ntaflos, T; Buchl, A; Tikhonenkov, PI.  
Subalkaline picrobasalts and plateau basalts from the Putorana plateau (Siberian continental flood basalt province): II. Melt inclusion chemistry, composition of "primary" magmas and P-T regime at the base of the superplume  
GEOCHEMISTRY INTERNATIONAL 39(5), 432-446 (2001)
72. Ryabchikov, ID.  
Deep geospheres and ore genesis  
GEOLOGY OF ORE DEPOSITS 43(3), 173-183 (2001)
73. Wanke, H; Bruckner, J; Dreibus, G; Rieder, R; Ryabchikov, I.  
Chemical composition of rocks and soils at the Pathfinder site  
SPACE SCIENCE REVIEWS 96(1-4), 317-330 (2001)
74. Kogarko, LN; Ryabchikov, ID; Brey, GP; Santin, SF; Pacheco, H.  
Mantle rocks uplifted to crustal levels: Diffusion profiles in minerals of spinel-plagioclase lherzolites from Tallante, Spain  
GEOCHEMISTRY INTERNATIONAL 39(4), 311-326 (2001)
75. Ryabchikov, I.D..  
Deep geospheres and ore genesis  
Geol. Rudn. Mestorozhd 43, 195 (2001)
76. Gorshkov, AI; Bao, YN; Titkov, SV; Ryabchikov, ID; Magazina, LO; Sivtsov, AV.  
Composition of mineral inclusions and formation of polycrystalline diamond aggregates (Bort) from the Shengli kimberlite pipe, China  
GEOCHEMISTRY INTERNATIONAL 38(7), 698-705 (2000)
77. Wyllie, PJ; Ryabchikov, ID.  
Volatile components, magmas, and critical fluids in upwelling mantle  
JOURNAL OF PETROLOGY 41(7), 1195-1206 (2000)

78. Laverov, NP; Kazansky, VI; Borodin, LS; Bortnikov, NS; Genkin, AD; Omel'yanenko, BI; Ryabchikov, ID; Safonov, YG; Tomson, IN; Kholodov, VN; Murav'eva, IV.  
On the 70th birthday of academician Dmitry Vasil'evich Rundqvist  
GEOLOGY OF ORE DEPOSITS 42(4), 275-276 (2000)
79. Mineeva, RM; Speranskii, AV; Bao, YN; Bershov, LV; Ryabchikov, ID; Chukichev, MV.  
Diamond crystals from Peoples Republic of China: An electron spin resonance and cathodoluminescence experimental study  
GEOCHEMISTRY INTERNATIONAL 38(4), 323-330 (2000)
80. Kogarko, LN; Ryabchikov, ID.  
Geochemical evidence for meimechite magma generation in the subcontinental lithosphere of Polar Siberia  
JOURNAL OF ASIAN EARTH SCIENCES 18(2), 195-203 (2000)
81. Ryabchikov, ID.  
Sulfide phases in the Earth's mantle and the behavior of chalcophile elements  
GEOLOGY OF ORE DEPOSITS 42(2), 128-132 (2000)
82. Gorshkov, AI; Vinokurov, SF; Ryabchikov, ID; Bershov, LV; Magazina, LO; Sivtsov, AV; Solodov, DI.  
Mineralogical and geochemical features of gold-bearing carbonade from Poxoreo district, Mato-Grosso State (Brazil)  
GEOKHIMIYA (1), 3-15 (2000)
83. Rundqvist, DV; Kazansky, VI; Borodin, LS; Bortnikov, NS; Genkin, AD; Kholodov, VN; Omel'yanenko, BI; Ryabchikov, ID; Safonov, YG; Tomson, IN; Murav'eva, I.  
On the 70th birthday of academician Nikolai P. Laverov  
GEOLOGY OF ORE DEPOSITS 42(1), 1-2 (2000)
84. Ryabchikov, ID; Orlova, GP; Babanskii, AD; Magazina, LO; Tsepin, AI.  
Silver in basaltic melts: The reality of global sulfide melt flows during the late stages of the Earth's accretion  
GEOKHIMIYA (12), 1251-1255 (1999)
85. Ryabchikov, ID; Solovova, IP; Ntaflos, T; Buhl, A; Tikhonenkov, PI.  
Subalkaline picobasalts from the Putorana plateau (Eastern Siberia) - Magmagenation conditions and potential temperature of mantle plume  
DOKLADY AKADEMII NAUK 369(1), 107-110 (1999)
86. Durasova, NA; Belyaeva, VK; Kochnova, LN; Ryabchikov, ID.  
Speciation and transport properties of molybdenum in synthetic glass analogues of igneous rocks  
GEOKHIMIYA (6), 653-657 (1999)
87. Durasova, NA; Kochnova, LN; Ryabchikov, ID; Slutskii, AB.  
Experimental modeling of the copper distribution in the system olivine-hydrated basalt at high pressures  
GEOKHIMIYA (2), 215-217 (1999)

88. Gorshkov, AI; Bao, YN; Titkov, SV; Ryabchikov, ID; Magazina, LO.  
Polycrystalline diamond aggregate (bort) from the Shanly kimberlite pipe, China: Growth features, mineral inclusions, and genesis  
GEOKHIMIYA (1), 82-89 (1999)
89. Ryabchikov, I.D.; Solovova, I.P.; Ntaflos, T.; Buchl, A..  
Subalkaline picritic basalts of the Putorana plateau, eastern Siberia: conditions of magma formation and potential temperature of the mantle plume  
Dokl. Earth Sci. 369(8), 1182 (1999)
90. Ryabchikov, I.D.; Orlova, G.P.; Babanskii, A.D.; Magazina, L.O.; Tsepin, A.I..  
Chalcophile metals in the processes of the mantle magma and Earth's core formation  
Rossiskii Zhurnal Nauk o Zemle 1(6), (1999)
91. Ryabchikov, I.D..  
Fluid regime of Earth mantle  
Vestn. OGGGGN RAN (9), 141 (1999)
92. Vinokurov, SF; Gorshkov, AI; Bao, YN; Ryabchikov, ID; Bershov, LV; Lapina, MI.  
Diamonds from kimberlite diatreme 50, Liaoning province, China: Mineralogical, geochemical, and genetic characteristics  
GEOKHIMIYA (8), 759-767 (1998)
93. Solovova, IP; Ryabchikov, ID; Kogarko, LN; Kononkova, NN.  
Inclusions in minerals of the Palaborwa carbonatite complex, South Africa  
GEOKHIMIYA (5), 435-447 (1998)
94. Driebus, G.; Ryabchikov, I.; Rieder, R.; Economou, T.; Bruckner, J.; McSween Jr, M.Y.; Wanke, H..  
Relationship between rocks and soil at the Pathfinder landing site and the Martian meteorites, (1998)
95. Ryabchikov, ID.  
Global fluxes of ore metals in deep-seated processes  
GEOLOGY OF ORE DEPOSITS 39(5), 345-350 (1997)
96. Gorshkov, AI; Bao, YN; Bershov, LV; Ryabchikov, ID; Sivtsov, AV; Lapina, MI.  
Inclusions of native metals and other minerals in diamond from Kimberlite pipe 50, Liaoning, China  
GEOKHIMIYA (8), 794-804 (1997)
97. Durasova, NA; Kochnova, LN; Ryabchikov, ID; Khramov, DA.  
Tin-bearing aluminosilicate systems in high-temperature processes under variable redox conditions  
GEOKHIMIYA (7), 683-688 (1997)
98. Ryabchikov, ID.  
Composition of the Earth's upper mantle  
GEOKHIMIYA (5), 467-478 (1997)

99. Gorshkov, AI; Bao, YN; Bershov, LV; Ryabchikov, ID; Sivtsov, AV; Lapina, MI.  
Inclusions in diamond from the Liaoning deposit (China) and their genetic meaning  
GEOKHIMIYA (1), 58-65 (1997)
100. Ryabchikov, ID; Wanke, H.  
Magma generation in Martian mantle  
GEOKHIMIYA (8), 691-698 (1996)
101. Solovova, IP; Giris, AV; Ryabchikov, ID.  
Inclusions of carbonate and silicate melts in minerals of alkali basalts from the east Pamirs  
PETROLOGY 4(4), 319-341 (1996)
102. Ryabchikov, ID; Solovova, IP; Babanskii, AD; Fauzi, K.  
Fluorine mobilization and bonding at magmatic and postmagmatic stages in rare-metal  
granites: Evidence from the Homrat Akarem deposit (Egypt)  
GEOKHIMIYA (5), 391-395 (1996)
103. Ryabchikov, ID; Miller, C; Mirwald, PW.  
Composition of hydrous melts in equilibrium with quartz eclogites  
MINERALOGY AND PETROLOGY 58(1-2), 101-110 (1996)
104. Piloyan, G.O.; Ryabchikov, I.D.; Novikova, O.S..  
Coordination Modes, Spectral, Thermal and Biological Evaluation of Hetero-metal Copper  
Containing 2-thiouracil Complexes  
Nature , (1996)
105. Kogarko, LN; Ryabchikov, ID.  
Conditions of meimechite magmas formation (Polar Siberia) based on the geochemical data  
GEOKHIMIYA (12), 1699-1709 (1995)
106. GIRNIS, AV; BREY, GP; RYABCHIKOV, ID.  
ORIGIN OF GROUP 1A KIMBERLITES - FLUID-SATURATED MELTING EXPERIMENTS AT  
45-55 KBAR  
EARTH AND PLANETARY SCIENCE LETTERS 134(3-4), 283-296 (1995)
107. RYABCHIKOV, ID.  
PARAMETERS OF THE GENERATION OF ABYSSAL THOLEIITES  
GEOKHIMIYA (8), 1065-1071 (1995)
108. RYABCHIKOV, ID; ORLOVA, GP; GIRNIS, AV; MURAVITSKAYA, GN.  
EXPERIMENTAL-STUDY OF SULFIDE SULFUR SOLUBILITY IN CARBONATE-  
PHOSPHATE MELTS EQUILIBRATED WITH MANTLE PERIDOTITE AT 20 KBAR  
DOKLADY AKADEMII NAUK 341(4), 536-538 (1995)
109. Ryabchikov, ID; Ntaflos, T; Kurat, G; Kogarko, LN.  
Glass-bearing xenoliths from Cape Verde: Evidence for a hot rising mantle jet  
MINERALOGY AND PETROLOGY 55(4), 217-237 (1995)
110. Ryabchikov, I.D.; Galimov, E.M..  
Mantle metasomatism and generation of kimberlite magmas  
Main Directions in Geochemistry, 70 (1995)

111. BREY, GP; RYABCHIKOV, ID.  
CARBON-DIOXIDE IN STRONGLY SILICA UNDERSATURATED MELTS AND ORIGIN OF  
KIMBERLITE MAGMAS  
NEUES JAHRBUCH FUR MINERALOGIE-MONATSHEFTE (10), 449-463 (1994)
112. RYABCHIKOV, ID; KOGARKO, LN; NTAFLS, T; KURAT, G.  
METALLIC PHASES IN MANTLE XENOLITHS  
DOKLADY AKADEMII NAUK 338(1), 95-98 (1994)
113. RYABCHIKOV, ID.  
TRACE-ELEMENTS AS INDICATORS OF THE PROCESSES OF KIMBERLITE MELT  
GENERATION  
DOKLADY AKADEMII NAUK 337(3), 376-378 (1994)
114. Ryabchikov, ID; Kogarko, LN.  
Redox equilibria in alkaline lavas from Trindade Island, Brasil  
Int Geol Rev 36, 173 (1994)
115. Solovova, I. P.; Kogarko, L. N.; Ryabchikov, I. D.; Naumov, V. B.; Girnis, A. V.; Kononkova,  
N. N.; Venturelli, G..  
Spanish high-potassium magmas and evidence of their generation depth (as inferred from  
thermobarogeochemical data) Doklady  
Earth Science Sections 303, 100 (1994)
116. RYABCHIKOV, ID.  
NUMERICAL MODELING OF THE PARTIAL MELTING OF PERIDOTITIC MATERIAL  
GEOKHIMIYA (12), 1697-1708 (1993)
117. RYABCHIKOV, ID; HAMILTON, DL.  
NEAR-SOLIDUS MELTS IN CARBONATIZED MANTLE PERIDOTITES WITH APATITE AND  
URANINITE  
GEOKHIMIYA (8), 1151-1160 (1993)
118. SOLOVOVA, IP; FAUZI, K; BABANSKY, AD; RYABCHIKOV, ID.  
THE SOURCE OF THE ORE-FORMING FLUIDS OF FLUORITE DEPOSIT HOMR-  
AKKAREM, EGYPT, BASED ON STUDY OF THE INCLUSIONS IN MINERALS  
DOKLADY AKADEMII NAUK 330(6), 754-756 (1993)
119. RYABCHIKOV, ID; ORLOVA, GP; SENIN, VG; TRUBKIN, NV.  
PARTITIONING OF RARE-EARTH ELEMENTS BETWEEN PHOSPHATE-RICH  
CARBONATITE MELTS AND MANTLE PERIDOTITES  
MINERALOGY AND PETROLOGY 49(1-2), 1-12 (1993)
120. Bulatov, V. K.; Brey, G. P.; Ryabchikov, I. D..  
Carbonate Melts in Equilibrium with Mantle Peridotites at 50 Kbar  
Petrologiya 1(2), 189 (1993)
121. Ryabchikov, I. D.; Hamilton, D. L..  
Interaction of carbonate-phosphate melts with mantle peridotites at 20-35 kbar  
S. Afr. J. Geol 96, 143 (1993)

122. Ryabchikov, I.D..  
Fluid transport of ore metals in ultramafic mantle rocks  
Proceedings of the Eighth Quadriennial IAGOD Symposium , 425 (1993)
123. GIRNIS, AV; SADDABY, P; PLAKSENKO, AN; RYABCHIKOV, ID; ISAICHKIN, AA.  
GEOCHEMICAL FORMATION MODEL OF NORITES OF VORONEZHISKY CRYSTALLINE MASSIF  
GEOKHIMIYA (12), 1371-1384 (1992)
124. SOLOVOVA, IP; GIRNIS, AV; RYABCHIKOV, ID; DMITRIEV, YI.  
WATER FLUIDS IN MAGMATIC ROCKS OF PHILIPPINE SEA (MINERAL INCLUSIONS DATA)  
GEOKHIMIYA (11), 1464-1472 (1992)
125. SOLOVOVA, IP; GIRNIS, AV; NAUMOV, VB; RUSINOV, VL; KOVALENKER, VA;  
RYABCHIKOV, ID.  
THE 1ST FINDING OF THE HIGHLY DENSE AND MAINLY WATER FLUID IN ANDESITE MINERALS  
DOKLADY AKADEMII NAUK 324(4), 861-865 (1992)
126. GIRNIS, AV; SOLOVOVA, IP; RYABCHIKOV, ID; GUZHOVA, AV.  
CONDITIONS OF FORMATION OF THE PRAIRIE CREEK PRIMARY LAMPROITIC MAGMAS - HIGH-PRESSURE EXPERIMENTAL-DATA  
GEOKHIMIYA (9), 1317-1326 (1991)
127. GIRNIS, AV; PLAKSENKO, AN; RYABCHIKOV, ID; SUDDABY, P.  
GEOCHEMICAL-PECULIARITIES OF ULTRAMAFIC XENOLITHS FROM NORITIC INTRUSIONS OF VORONEZH CRYSTALLINE MASSIF  
GEOKHIMIYA (4), 451-460 (1991)
128. RYABCHIKOV, ID; EDGAR, AD; WYLLIE, PJ.  
PARTIAL MELTING IN THE SYSTEM CARBONATE PHOSPHATE PERIDOTITE AT 30 KBAR  
GEOKHIMIYA (2), 163-168 (1991)
129. BREY, GP; KOGARKO, LN; RYABCHIKOV, ID.  
CARBON-DIOXIDE IN KIMBERLITIC MELTS  
NEUES JAHRBUCH FUR MINERALOGIE-MONATSHEFTE (4), 159-168 (1991)
130. DUBROVINSKII, LS; PILOYAN, GO; RYABCHIKOV, ID.  
THE STISHOVITE SiO<sub>2</sub> (TYPE-PbCl<sub>2</sub>) PHASE-EQUILIBRIUM AND ITS THERMODYNAMIC PROPERTIES  
DOKLADY AKADEMII NAUK SSSR 316(6), 1465-1468 (1991)
131. Ryabchikov, I. D.; Solovova, I. P.; Girnis, A. V.; Ganeev, I. I.; Kogarko, L. N.; Naumov, V. B..  
Conditions of Generation and Crystallization of High-Potassium Magmas  
Lamproites , 218 (1991)
132. Brey, G.P.; Kogarko, L.; Ryabchikov, I..  
Carbon dioxide in kimberlitic melts  
N. Jb. Miner. Mh. H 4, 159 (1991)

133. Girnits, A.V.; Plaksenko, A.N.; Ryabchikov, I.D.; Saddeby, P..  
Geochemical features of ultramafic xenoliths from norite intrusions, Voronezh crystalline massif  
Geokhimiya 4, 451 (1991)
134. Ryabchikov, ID; Orlova, GP; Senin, VG; Trubkin, NV.  
Interphase distribution of rare earth elements during partial melting in the system peridotite-  
carbonate-phosphate  
Geologiya Rudnykh Mestorozhdeniy 3, 78 (1991)
135. GHIRNIS, AV; RYABCHIKOV, ID; SUDDABY, P; KULIKOV, VS; KULIKOVA, VV.  
EVOLUTION OF THE PRECAMBRIAN MANTLE - INTERPRETATION OF SM-ND OF  
KOMATIITES OF EASTERN KARELIA  
GEOKHIMIYA (10), 1391-1399 (1990)
136. DURASOVA, NA; KHODYREV, OY; SLUTSKY, AB; BARSUKOV, VL; RYABCHIKOV, ID;  
KHRAMOV, DA; IGNATENKO, KI; KORZHANOVSKAYA, VS.  
TIN IN WATER-SATURATED BASALTIC ROCK UNDER PARAMETERS OF THE MANTLE  
PROCESSES  
GEOKHIMIYA (7), 1043-1047 (1990)
137. BOGATIKOV, OA; RYABCHIKOV, ID; ANDREEVA, ED; GLADYSHEV, GD; GURBANOV,  
AG; DMITRIEV, YI; KOVALENKO, VI; KONONOVA, VA; KRASIVSKAYA, IS; REKHARSKII,  
VI; RUB, MG; SIMON, AK; FRIKHKHAR, DI; TSVETKOV, AA; SHARKOV, EV; YASHINA, RM.  
MEMORY OF BORSUK, ALEKSANDR, MIKHAYLOVICH (1931-1989)  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (4), 140-141 (1990)
138. RYABCHIKOV, ID; GANEEV, II.  
ISOMORPHOUS SUBSTITUTION OF POTASSIUM IN CLINOPYROXENES AT HIGH-  
PRESSURES  
GEOKHIMIYA (1), 3-12 (1990)
139. Ryabchikov, I.D.; Ganeev, I.I..  
Isomorphic substitution of potassium in clinopyroxene at high pressures  
Geokhimiya 1, 3 (1990)
140. GHIRNIS, AV; SOLOVOVA, IP; RYABCHIKOV, ID; KOGARKO, LN; BRAY, G.  
PHYSICO-CHEMICAL CONDITIONS OF FORMATION OF PRIOR CREEK LAMPROITES  
GEOKHIMIYA (11), 1624-1634 (1989)
141. SOLOVOVA, IP; GHIRNIS, AV; KOGARKO, LN; RYABCHIKOV, ID; NAUMOV, VB;  
GUZHOVA, AV.  
GEOCHEMICAL-PECULIARITIES OF PRIOR CREEK LAMPROITES BASED ON DATA OF  
STUDY OF MICROINCLUSIONS IN OLIVINES  
GEOKHIMIYA (10), 1449-1459 (1989)
142. GHIRNIS, AV; SUDDABY, P; RYABCHIKOV, ID; BOCHAROV, VL; PLAKSENKO, AV.  
GEOCHEMISTRY OF TRACE-ELEMENTS OF KOMATIITES OF VORONEZH CRYSTALLINE  
MASSIF  
GEOKHIMIYA (8), 1145-1152 (1989)

143. KOVALENKO, VI; RYABCHIKOV, ID; STOSCH, HG.  
GEOCHEMISTRY OF RARE-EARTH ELEMENTS IN SPINEL LHERZOLITES OF NODULES -  
PRIMITIVE MANTLE MODEL  
GEOKHIMIYA (6), 771-784 (1989)
144. RYABCHIKOV, ID; BAKER, M; WYLLIE, PJ.  
PHOSPHATE-BEARING CARBONATITE MELTS EQUILIBRATED WITH MANTLE  
LHERZOLITES AT 30-KBAR  
GEOKHIMIYA (5), 725-729 (1989)
145. TURKOV, VA; POLYAKOV, AI; KOGARKO, LN; RYABCHIKOV, ID; KOLESOV, GM;  
SHUBINA, NA; IGNATENKO, KI.  
GEOCHEMICAL-PECULIARITIES OF THE UPPER MANTLE OF THE BAIKAL RIFT-ZONE  
ACCORDING TO STUDY OF THE NODULES ON THE EXAMPLE OF UDOKAN RANGE  
GEOKHIMIYA (4), 499-507 (1989)
146. RYABCHIKOV, ID; ORLOVA, GP; KALENCHUK, GE; GANEYEV, II; UDOVKINA, NG;  
NOSIK, LP.  
INTERACTION OF SPINEL LHERZOLITE WITH H<sub>2</sub>O-CO<sub>2</sub> FLUID AT 20-KBAR AND 900-  
DEGREES-C  
GEOKHIMIYA (3), 385-392 (1989)
147. SALOVA, TP; ORLOVA, GP; KRAVCHUK, IF; EPELBAUM, MB; RYABCHIKOV, ID;  
MALININ, SD.  
ON THE PROBLEM OF EXPERIMENTAL-DETERMINATION OF MOLYBDENUM  
PARTITION-COEFFICIENTS BETWEEN SILICATE MELT AND WATER-SALT FLUID  
GEOKHIMIYA (2), 267-273 (1989)
148. RYABCHIKOV, ID; BREY, G; KOGARKO, LN; BULATOV, VK.  
PARTIAL MELTING OF CARBONATED PERIDOTITE AT 50-KBAR  
GEOKHIMIYA (1), 3-9 (1989)
149. RYABCHIKOV, ID; GANEEV, II.  
BEHAVIOR OF K AND RB UNDER THE CONDITIONS OF UPPER MANTLE AND THE ROLE  
OF FLUIDS IN THE GEOCHEMICAL DIFFERENTIATION OF SUBCRUSTAL MATERIAL  
CRYSTALLINE CRUST IN SPACE AND IN TIME: MAGMATISM , 78-85 (1989)
150. BORSUK, AM; RYABCHIKOV, ID; SOLOVOVA, IP; BABANSKY, AD.  
THE ORIGIN OF THE GRANITOIDS OF THE LATITE SERIES  
CRYSTALLINE CRUST IN SPACE AND IN TIME: MAGMATISM , 244-249 (1989)
151. Ryabchikov, I.D.; Orlova, G.P..  
Role of mantle fluids in transportation of ore components, in Rudoobrazuyushchie protsessy i  
sistemy , 25 (1989)
152. RYABCHIKOV, ID.  
CARBON-COMPOUNDS UNDER THE CONDITIONS OF THE UPPER MANTLE  
GEOKHIMIYA (11), 1539-1546 (1988)
153. RYABCHIKOV, ID; SUDDABY, P; GIRNIS, AV; KULIKOV, VS; KULIKOVA, VV;  
BOGATIKOV, OA.



TRACE-ELEMENT GEOCHEMISTRY OF ARCHEAN AND PROTEROZOIC ROCKS FROM  
EASTERN KARELIA, USSR  
LITHOS 21(3), 183-194 (1988)

154. KOGARKO, LN; RYABCHIKOV, ID.  
DIFFERENTIATION OF EARTH'S MANTLE ACCORDING TO GEOCHEMICAL DATA  
GEOKHIMIYA (2), 223-235 (1988)
155. Girnits, A.V.; Ryabchikov, I.D..  
Experimental Petrology and Genesis of Komatiites  
The Early Precambrian Komatiites and High-Magnesium Volcanics in the Baltic Shield , 162  
(1988)
156. Ryabchikov, I.D..  
Fluids in the terrestrial mantle  
Priroda (12), (1988)
157. Kovalenko, V.I.; Ryabchikov, I.D.; Antipin, V.S..  
Temperature dependence of the distribution coefficients for Sn, W, Pb and Zn in magmatic  
systems  
Geochemistry International 25, 1 (1988)
158. Ukhanov, A.V.; Ryabchikov, I.D.; Kharkiv, A.D..  
Lithospheric Mantle of Yakutia Kimberlite Province , 286 (1988)
159. KOVALENKO, VI; RYABCHIKOV, ID; ANTIPIN, VS.  
EMPIRICAL DEPENDENCIES OF PARTITION-COEFFICIENTS OF TIN, TUNGSTEN, LEAD  
AND ZINC BETWEEN MINERALS AND MELTS ON TEMPERATURE IN MAGMATIC  
SYSTEMS  
GEOKHIMIYA (6), 755-765 (1987)
160. KOVALENKO, VI; SOLOVOVA, IP; RYABCHIKOV, ID; IONOV, DA; BOGATIKOV, OA;  
NAUMOV, VB.  
FLUIDIZED CO<sub>2</sub>-SULFIDE SILICATE MEDIA AS AGENTS OF MANTLE METASOMATISM  
AND MEGACRYSTS FORMATION - EVIDENCE FROM A LARGE DRUSE IN A SPINEL  
HERZOLITE XENOLITH  
PHYSICS OF THE EARTH AND PLANETARY INTERIORS 45(3), 280-293 (1987)
161. Kogarko, L.N.; Kosztolanyi, C.H.; Ryabchikov, ID.  
Geochemistry of the reduced fluid in alkali magmas  
Geochemistry International 24, 20 (1987)
162. Ryabchikov, I. D..  
Processes of mantle magma formation  
Magmatism Evolution in the Earth's History , 349 (1987)
163. KOGARKO, LN; COSTOGLIANI, C; RYABCHIKOV, ID.  
GEOCHEMISTRY OF THE REDUCED FLUID OF ALKALINE MAGMAS  
GEOKHIMIYA (12), 1688-1695 (1986)
164. ORLOVA, GP; EVSTIGNEEVA, TL; RYABCHIKOV, ID; MURAVITSKAYA, GN.  
EXPERIMENTAL-STUDY OF BEHAVIOR OF PLATINUM AND RHODIUM IN THE

CRYSTALLIZATION PROCESS OF COPPER SULFIDES IN HYDROTHERMAL  
CONDITIONS

GEOKHIMIYA (12), 1792-1796 (1986)

165. YANSHIN, AL; SOKOLOV, BS; MENNER, VV; CHUKHROV, FV; BOGATIKOV, OA;  
ZHARIKOV, VA; IVANOV, IP; KOVALENKO, VI; KORIKOVSKII, SP; LETNIKOV, FA;  
MARAKUSHEV, AA; PERTSEV, NN; PERCHUK, LL; RYABCHIKOV, ID.  
IN MEMORY OF KORZHINSKII, DMITRII, SERGEEVICH  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (10), 150-152 (1986)
166. KOVALENKO, VI; SOLOVOVA, IP; NAUMOV, VB; RYABCHIKOV, ID; IONOV, DA;  
TSEPIN, AI.  
THE MANTLE MINERAL-FORMATION WITH PARTICIPATION OF CARBON DIOXIDE-  
SULFIDE-SILICATE FLUID  
GEOKHIMIYA (3), 289-303 (1986)
167. RYABCHIKOV, ID.  
ESTIMATIONS OF COMBINED PARTITION RATIOS FROM THE DATA ON COVARIATION  
OF ELEMENTS IN MAGMATIC ROCKS  
GEOKHIMIYA (1), 123-126 (1986)
168. Durasova, N.A.; Ryabchikov, I.D.; Barsukov, V.L..  
Redox Potential and Behavior of Tin in Magmatic Systems  
Geol. Rudn. Mestorozhd. (1), 5 (1986)
169. Ryabchikov, I. D.; Solovova, I. P.; Sobolev, N. V.; et al..  
Nitrogen in lamproitic magmas  
Dokl. Akad. Nauk SSSR 288(4), 976 (1986)
170. RYABCHIKOV, ID; UKHANOV, AV; ISHII, T.  
REDOX EQUILIBRIA IN THE ULTRAMAFIC ROCKS FROM THE UPPER MANTLE OF THE  
YAKUTIAN KIMBERLITE PROVINCE  
GEOKHIMIYA (8), 1110-1123 (1985)
171. RYABCHIKOV, ID; BARANOVA, NN; ZOTOV, AV; ORLOVA, GP.  
STABILITY OF  $Au(OH)_0$  IN SUPERCRITICAL PHASE OF WATER AND METAL-BEARING  
CAPACITY OF MAGMATIC FLUIDS BEING IN EQUILIBRIUM WITH GRANITE MAGMA  
GEOKHIMIYA (2), 267-268 (1985)
172. DURASOVA, NA; BARSUKOV, VL; RYABCHIKOV, ID; KRAVTSOVA, RP; EFIMOV, AS.  
PECULIARITIES OF TIN BEHAVIOR IN THE PROCESS OF CRYSTALLIZATION OF  
ALUMOSILICATE MELTS  
GEOKHIMIYA (3), 412-416 (1985)
173. KOVALENKO, VI; RYABCHIKOV, ID; ANTIPIN, VS.  
EMPIRICAL DEPENDENCES OF PARTITION RATIOS OF STRONTIUM AND BARIUM IN  
MAGMATIC ROCKS ON TEMPERATURE AND COMPOSITION OF MINERALS  
GEOKHIMIYA (9), 1259-1276 (1985)

174. RYABCHIKOV, ID; MACKENZIE, VS.  
JADEITE SOLUBILITY IN WATER AT 20 AND 30 KILOBARS  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (8), 125-128 (1985)
175. RYABCHIKOV, ID; SOLOVOVA, IP; BABANSKII, AD; BORSUK, AM.  
ORIGIN AND CONDITIONS OF DIFFERENTIATION OF HIGH-REDUCED ANDESITIC  
MAGMAS  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (10), 18-27 (1985)
176. RYABCHIKOV, ID; MACKENZIE, WS.  
INTERACTION OF JADEITE WITH WATER AT 20-KBAR-30-KBAR AND 650-DEGREES-C  
MINERALOGICAL MAGAZINE 49(353), 601-603 (1985)
177. Ryabchikov, I.D..  
Mobilization of Ore Metals in Silicic Magmatic System: Experimental Data  
Endogenic Ore Formation , 95 (1985)
178. Ryabchikov, I.D..  
Aqueous solutions in the upper mantle and problems of Earth degassing  
Groundwater and Lithosphere Evolution 1, 176 (1985)
179. KOVALENKO, VI; TSEPIN, AI; IONOV, DA; RIABCHIKOV, ID.  
GARNET-PYROXENE DRUSE AS AN EXAMPLE OF FLUID CRYSTALLIZATION IN THE  
MANTLE  
DOKLADY AKADEMII NAUK SSSR 280(2), 449-453 (1985)
180. Ryabchikov, I.D.; Ukhanov, A.V.; Ishii, T..  
Redox equilibria in upper mantle ultrabasites in the Yakutia kimberlite province  
Geokhimiya 23(5), 1110 (1985)
181. RYABCHIKOV, ID; SOLOVOVA, IP; DMITRIEV, YI; MURAVITSKAYA, GN.  
WATER IN THE PARENT MAGMA OF THE OCEAN FERROBASALTS  
GEOKHIMIYA (2), 209-216 (1984)
182. RYABCHIKOV, ID; BOGATIKOV, OA.  
PHYSICOCHEMICAL CONDITIONS OF GENERATION AND DIFFERENTIATION OF  
KARELIAN KOMATIITES  
GEOKHIMIYA (5), 625-638 (1984)
183. KOVALENKO, VI; ANTIPIN, VS; KOVALENKO, NI; RYABCHIKOV, ID; PETROV, LL.  
PARTITION RATIOS OF FLUORINE IN MAGMATIC ROCKS  
GEOKHIMIYA (3), 331-351 (1984)
184. DURASOVA, NA; BARSUKOV, VL; RYABCHIKOV, ID; KHRAMOV, DA; KRAVTSOVA, RP.  
VALENT STATE OF TIN IN BASALT UNDER VARIOUS OXYGEN FUGACITIES  
GEOKHIMIYA (3), 435-437 (1984)
185. RYABCHIKOV, ID; ORLOVA, GP; MINEEVA, RM; BERSHOV, LV; KORINA, EA.  
COPPER AND SILVER IN GRANITE MELT (ACCORDING TO EXPERIMENTAL-DATA)  
GEOKHIMIYA (8), 1181-1191 (1984)

186. BOGATIKOV, OA; KOVALENKO, VI; RYABCHIKOV, ID; TSVETKOV, AA.  
MAGMATISM OF A CONTINENT-OCEAN INTERMEDIATE ZONE (IN THE DEVELOPMENT  
OF ZAVARITSKII, A.N. IDEAS)  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (6), 8-27 (1984)
187. DURASOVA, NA; KHRAMOV, DA; POLOSIN, AV; BARSUKOV, VL; RYABCHIKOV, ID;  
URUSOV, VS; KRAVTSOVA, RP; IGNATENKO, KI.  
SOLUBILITY, VALENCY AND STRUCTURAL STATE OF TIN IN MAGNETITE  
GEOKHIMIYA (12), 1907-1911 (1984)
188. Antipin, V.S.; Kovalenko, V.I.; Ryabchikov, I.D..  
Trace Element Partition Coefficients in Magmatic Rocks , (1984)
189. Vatolin, N.A.; Liakishev, N.P.; Zhuchkov, V.I..  
Production and application of barium-bearing ferroalloys //  
Steel (8), 38 (1984)
190. Ryabchikov, I.D.  
Generation of primary magmas in primitive and altered mantles  
9, 184 (1984)
191. BREY, G; BRICE, WR; ELLIS, DJ; GREEN, DH; HARRIS, KL; RYABCHIKOV, ID.  
PYROXENE-CARBONATE REACTIONS IN THE UPPER MANTLE  
EARTH AND PLANETARY SCIENCE LETTERS 62(1), 63-74 (1983)
192. BARSUKOV, VL; DURASOVA, NA; RYABCHIKOV, ID; KHRAMOV, DA; KRAVTSOVA, RP.  
PECULIARITY OF TIN BEHAVIOR IN THE PROCESS OF LIQUATION OF  
ALUMINOSILICATE MELT  
GEOKHIMIYA (2), 189-192 (1983)
193. KOVALENKO, VI; RYABCHIKOV, ID; STOSCH, HG; SAHTLEBEN, T; SEK, HA.  
DISTRIBUTION OF RARE-EARTH ELEMENTS IN SPINEL LHERZOLITE FROM MONGOLIA  
GEOKHIMIYA (3), 375-381 (1983)
194. RYABCHIKOV, ID; KOVALENKO, VI; IONOV, DA; SOLOVOVA, IP.  
THERMODYNAMIC PARAMETERS OF MINERAL EQUILIBRIA IN GARNET-SPINEL  
LHERZOLITES OF MONGOLIA  
GEOKHIMIYA (7), 967-980 (1983)
195. RYABCHIKOV, ID.  
BIPYROXENE GEOTHERMOMETRY OF MANTLE LHERZOLITES ON THE BASIS OF  
ACCOUNTING FOR SURPLUS FREE-ENERGIES  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (12), 18-22 (1983)
196. BOGATIKOV, OA; BORSUK, AM; DMITRIEV, YI; KOVALENKO, VI; RYABCHIKOV, ID.  
MAGMATIC FORMATIONS IN THE LITHOSPHERE EVOLUTION  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (1), 3-16 (1983)
197. RYABCHIKOV, ID; ORLOVA, GP; KOVALENKO, VI; CHOPOROV, DJ; SOLOVOVA, IP;  
MURAVITSKAYA, GN.  
AN EXPERIMENTAL-STUDY OF INTERACTION BETWEEN FLUID AND MICACEOUS

SPINEL LHERZOLITE AT HIGH-TEMPERATURES AND PRESSURES  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (2), 38-46 (1983)

198. Orlova, G.P.; Ryabchikov, I.D.; Volchenkova, V.A..  
Partition of gold among granitic melt and fluid  
Geologiya Rudnykh Mestorozhdenii 25(3), 34 (1983)
199. Babanskii, A.D.; Ryabchikov, I.D.; Bogatkov, O.A..  
Evolution of the Alkali-Earth Magmas , (1983)
200. Kogarko, L. N;Ryabchikov, I. D..  
Phosphorus in mantle melting  
Dokl. Akad. Nauk 269(5), 1430 (1983)
201. RYABCHIKOV, ID; SCHREYER, W; ABRAHAM, K.  
COMPOSITIONS OF AQUEOUS FLUIDS IN EQUILIBRIUM WITH PYROXENES AND  
OLIVINES AT MANTLE PRESSURES AND TEMPERATURES  
CONTRIBUTIONS TO MINERALOGY AND PETROLOGY 79(1), 80-84 (1982)
202. RYABCHIKOV, ID; SCHREYER, W; ABRAHAM, K.  
THE COMPOSITION OF THE FLUIDS IN FORSTERITE-SILICA-WATER AND ZJADEITE-  
DIOPSIDE-WATER JOINS AT UPPER MANTLE PARAMETERS  
IZVESTIYA AKADEMII NAUK SSSR SERIYA GEOLOGICHESKAYA (5), 13-21 (1982)
203. RYABCHIKOV, ID; SCHREYER, W; ABRAHAM, K.  
AQUEOUS FLUIDS IN EQUILIBRIUM WITH PERIDOTITES AT MANTLE PRESSURES AND  
TEMPERATURES  
FORTSCHRITTE DER MINERALOGIE 60, 182-182 (1982)
204. RYABCHIKOV, ID; BABANSKY, AD; DMITRIEV, YI.  
GENESIS OF CALC ALKALINE MAGMAS - EXPERIMENTS WITH PARTIAL MELTING OF  
MIXED SEDIMENTS AND BASALTS FROM THE MIDDLE AMERICA TRENCH, SOUTHERN  
MEXICO TRANSECT  
INITIAL REPORTS OF THE DEEP SEA DRILLING PROJECT 66(FEB), 699-702 (1982)
205. RYABCHIKOV, ID; REKHARSKY, VI; KUDRIN, AV.  
MOBILIZATION OF MOLYBDENUM BY MAGMATIC FLUIDS IN THE PROCESS OF  
CRYSTALLIZATION OF GRANITE MELTS  
GEOKHIMIYA (8), 1243-1246 (1981)
206. RYABCHIKOV, ID; GREEN, DH; WALL, VJ; GREY, B; BREY, G.  
THE OXIDATION-STATE OF CARBON IN THE ENVIRONMENT OF THE LOW VELOCITY  
ZONE  
GEOKHIMIYA (2), 221-232 (1981)
207. RYABCHIKOV, ID; KOVALENKO, VI; DIKOV, YP; VLADYKIN, NV.  
MANTLE-DERIVED TITANIUM-BEARING MICAS - COMPOSITION, STRUCTURE,  
CONDITIONS OF FORMATION, POSSIBLE ROLE IN GENESIS OF POTASSIC ALKALINE  
MAGMAS  
GEOKHIMIYA (6), 873-888 (1981)

208. RYABCHIKOV, ID.  
MOBILIZATION OF ORE METALS BY SUPERCRITICAL FLUIDS FROM CRYSTALLIZING  
MAGMAS  
PHYSICS AND CHEMISTRY OF THE EARTH 13-4, 529-536 (1981)
209. RYABCHIKOV, ID; SOLOVOVA, IP; BABANSKY, AD.  
STUDY OF MELT INCLUSIONS IN SYNTHETIC-CRYSTALS  
GEOKHIMIYA (12), 1891-1893 (1981)
210. KOVALENKO, VI; ANTIPIN, VS; RYABCHIKOV, ID.  
VARIATIONS OF THE PARTITION-COEFFICIENT OF RUBIDIUM IN MAGMATIC ROCKS  
GEOKHIMIYA (7), 1017-1029 (1981)
211. Ryabchikov, I. D.; Novgorodova, M. I..  
Reduced fluids in hydrothermal ore formation  
Dokl. Akad. Nauk SSSR 258(6), 1453 (1981)
212. Brey, GP; Wall, VJ; Ryabchikov, ID; Green, DH.  
The oxidation state of carbon in the environment of the low velocity zone.  
Geokhimiya 2, 221 (1981)
213. BABANSKII, AD; SOLOVOVA, IP; RIABCHIKOV, ID; BOGATIKOV, OA.  
PARENT MAGMAS OF ALKALINE-EARTH SERIES FROM THE DATA OF MELT INCLUSION  
STUDIES  
DOKLADY AKADEMII NAUK SSSR 253(4), 945-947 (1980)
214. RYABCHIKOV, ID; BOETTCHER, AL.  
EXPERIMENTAL-EVIDENCE AT HIGH-PRESSURE FOR POTASSIC METASOMATISM IN  
THE MANTLE OF THE EARTH  
AMERICAN MINERALOGIST 65(9-10), 915-919 (1980)
215. RYABCHIKOV, ID; ORLOVA, GP; EFIMOV, AS; KALENCHUK, GE.  
COPPER IN THE SYSTEM GRANIT-FLUID  
GEOKHIMIYA (9), 1320-1326 (1980)
216. BARSUKOV, VL; RYABCHIKOV, ID.  
ON THE SOURCES OF ORE MATERIAL  
GEOKHIMIYA (10), 1439-1449 (1980)
217. RYABCHIKOV, ID.  
NOBEL SYMPOSIUM ON THE PROBLEM CHEMISTRY AND GEOCHEMISTRY OF  
SOLUTIONS UNDER HIGH-TEMPERATURES AND PRESSURES (SWEDEN, SEPTEMBER  
1979)  
GEOKHIMIYA (10), 1580-1583 (1980)
218. KOGARKO, LN; RYABCHIKOV, ID.  
VOLATILES IN MAGMATIC PROCESSES  
GEOKHIMIYA (9), 1293 (1978)

219. RYABCHIKOV, ID; DURASOVA, NA; BARSUKOV, VL; EFIMOV, AS.  
REDOX POTENTIAL AS A FACTOR OF METALLIFEROUS ABILITY OF ACID MAGMAS  
GEOKHIMIYA (6), 832 (1978)
220. Ryabchikov, ID; Green, DH.  
The role of CO<sub>2</sub> in the petrogenesis of highly potassic magmas. In: Problems of highly potassic Earth's crust and upper mantle  
Tr Inst Geol Geofiz Akad Nauk S. S. S. R. 403, 49 (1978)
221. Perchuk, L.L.; Ryabchikov, I.D..  
Phase Correspondence in Mineral Systems , (1976)
222. Ryabchikov, I. D..  
Thermodynamic of Fluid Phase of Granitoid Magmas , (1975)
223. Kogarko, L.N.; Ryabchikov, I.D.; Sorensen, H.; Sorensen, H..  
Liquid fractionation  
The Alkaline Rocks , 488 (1974)
224. PAPIN, GG; RYABCHIK.IV; DEKHAVOV, NM; SEROV, GV; MIZIN, VG.  
KINETICS OF SILICA GASIFICATION IN IDFFERENT CONDITIONS  
DOKLADY AKADEMII NAUK SSSR 196(5), 1156 (1971)
225. RYABCHIKOV, ID; KHAMILTO.DL.  
POSSIBILITY OF SEPARATION OF CONCENTRATED CHLORIDE SOLUTIONS IN  
COURSE OF ACID MAGMA CRYSTALLIZATION  
DOKLADY AKADEMII NAUK SSSR 197(4), 933 (1971)
226. Piloyan, G.; Ryabchikov, I.; Novikova, O..  
Determination of activation energies of chemical reactions by differential thermal analysis ,  
(1966)
227. Ryabchikov, I.D..  
Refinement of the Barth Feldspar Thermometer  
Collection of Papers on the Mineralogical Thermometry and Barometry , 49 (1965)
228. Ryabchikov, I. D..  
Thermodynamic Analysis of Minor Elements during the Crystallization of Silicate Melts , (1965)
229. RYABCHIKOV, ID.  
A NEW DIAGRAM FOR A BI-FELDSPATHIC THERMOMETER CONSTRUCTED WITH AID  
OF THERMODYNAMIC TREATMENT OF EXPERIMENTAL DATA  
DOKLADY AKADEMII NAUK SSSR 165(3), 672 (1965)