

Principal Prof. Vanyukov' published R&D works

Monographs

1. Vanyukov A.V., Zaitsev V.J. Slags and Mattes in Non-ferrous Metallurgy // M.: Metallurgia.-1969.-406 p.
2. Vanyukov A.V., Zaitsev V.J. Theory of Pyrometallurgical Processes // College textbook, M.: Metallurgia.-1973.-504 p.
3. Vanyukov A.V., Isakova R.A., Bystrov V.P. Thermal Dissociation of Sulphides // Alma-Ata, Nauka, 1978. - 272 p.
4. Vanyukov A.V. Integrated Treatment of Copper and Nickel Raw Material. Part 1 // Alma-Ata, Nauka, 1980. - 272 p.
5. Vanyukov A.V. Integrated Treatment of Copper and Nickel Raw Material. Almaty, 1980. P. II
6. Kunaev A.M., Kozhakhmetov S.M., Vanyukov A.V. et al. Basis of Raw Material Use in Non-ferrous Metallurgy. Almaty, 1982, Publishing House 'Nauka Kazakhstana', 391 p.
7. Vanyukov A.V., Utkin N.I. Integrated Treatment of Copper and Nickel Raw Material // College textbook, Cheliabinsk, Metallurgia, Cheliabinsk Branch.-1988.-432p.
8. Vanyukov A.V., Zaitsev V.J. Theory of Pyrometallurgical Processes. // College textbook, Second edition, enlarged and revised // M.: Metallurgia.-1993.-384p.
9. Bath Smelting / A.V. Vanyukov, V.P. Bystrov, A.D. Vaskevich et al. Under the editorship of A.V. Vanyukov.- M.: Metallurgia.-1988.-208p.

The most denoted articles

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2. Vanyukov A.V., Utkin N.I. Concerning Slag Melts' Surface Tension. Proceedings of MICMiZ (Moscow Institute of Non-Ferrous Metals & Gold named after M.I. Kalinin). 1957, No.26, P. 41-53.
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4. Vanyukov A.V., Utkin N.I. Effect of Temperature on Surface Tension of Silicate Melts. Izv. VUZov (Colleges News). Tsvetnaia Metallurgia, 1958, No.6, P. 43-48
5. Vanyukov A.V., Odinets Z.K. Ferric Sulphide Distribution between Matte and Slag. Izv. VUZov (Colleges News). Tsvetnaia Metallurgia, 1960, No.4, P.45-48.
6. Vanyukov A.V., Popkov A.N. Study of Surface Behaviour of Sulphide-Metal and Silicate Melts. Izv. VUZov (Colleges News). Tsvetnaia Metallurgia, 1961, No.4, P.63-70
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8. Vanyukov A.V., Zaitsev V.J. Study of Densities, Surface and Interphase Tensions in the Copper Matte – Silicate Melt System. Izv. VUZov (Colleges News). Tsvetnaia Metallurgia, 1962, No.4, P.80-85
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10. Vanyukov A.V et al. Concerning Certain Reasons of High Metal Losses to Slag at Lead Agglomerate Smelting. Tsvetnye Metally, 1964, No.8, P. 27-33

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13. Vanyukov A.V., Bystrov V.P., Snurnikova V.A. Phase Equilibria in Copper – Sulphur System // Tsvetnye Metally. - 1971. – No.11. - P. 11
14. Tsesarsky V.S., Zaitsev V.J., Vanyukov A.V. Magnetite Solubility in Slag Melts. Tsvetnye Metally, 1972, No.1, P. 29-31.
15. Vanyukov A.V., Kunaev A.M., Takezhanov S.T., Bystrov V.P., Kozhakhmetov S.M. et al. Furnace for Sulphide Material Continuous Bath Smelting. // Otkrytia. Izobretenia. (Discoveries. Inventions). 1975, No.22, P.82
16. Vanyukov A.V., Zaitsev V.J., Tsesarsky V.S. Metal Losses to Slags at Autogenous Smelting. // Tsvetnye Metally. 1977. No.3 P. 7-10.
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29. Vanyukov A.V., Makhov I.E., Sorokin M.L. Routs of Decreasing Non-ferrous Metals Loss to Slags in Smelting Units - M.: CNIICvetmet (Central R&D Institute of Non-ferrous Metallurgy), 1987.-56 p.
30. Kolosov A.G., Stupin A.V., Fedorov A.N., Vanyukov A.V. Ferro-silicate Slags Viscosity// Tsvetnye Metally. – 1987. – No.3, P. 44-47
31. Kirillin I.I., Zaitsev V.J., Li V.J., Grechko A.V., Meierovich E.V., Vanyukov A.V. Drop Washing of Liquid Slag // Tsvetnye Metally. – 1987. – No.3.- P. 39-43

Author's Certificates & Patents

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3. USSR A.C. No.510842. Method of Sulphide Materials Continuous Smelting. 1975. (Co-authored by Vanyukov A.V., Mechev V.V., Bystrov V.P. et al.)
4. USSR A.C. No.1307865, MKI S22V 11/02. Method of Sulphide Copper and Polymetallic Raw Material Processing. 1986. (Co-authored by Vanyukov A.V., Bystrov V.P., Bruek V.N., Tokar L.L., Zhalelev R.Z.)
5. Author's Certificate No.790800 for Invention: 'Pyrometallurgical Method of Continuous Processing of the Oxidized Non-ferrous and Ferrous Raw Materials'. Authors: Vanyukov A.V., Romenets V.A., Tulin N.A., Vegman E.F., Bystrov V.P., Vaskevich A.D., Kremnevsky S.B. Registered in the USSR State Register of Inventions, on August 21, 1980.
6. Author's Certificate No.1162228 for Invention: 'Method of Iron Ore Reduction in Liquid Slag Bath'. Authors: Romenets V.A., Vanyukov A.V., Bystrov V.P., Gursky G.L., Ryzhonkov D.I., Glovatsky A.B., Vaskevich A.D. Registered in the USSR State Register of Inventions, on February 15, 1985.
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