Volume 66 Number 1 2023 Pages 1–107

PHYSICS-USPEKHI

English edition of *Uspekhi Fizicheskikh Nauk* January 2023 Volume 193 Number 1

Russian original reference Usp. Fiz. Nauk Vol. **193**, pages English translation reference Phys. Usp. Vol. **66**, pages

Contents

| 11 | For 105 years we have been highlighting advances in physics To the readers of the journal "Uspekhi Fizicheskikh Nauk" ("Physics – Uspekhi") | 1 |
|----|---|----|
| | REVIEWS OF TOPICAL PROBLEMS | |
| 2 | Migration processes in the Solar System and their role in the evolution of the Earth and planets M Ya Marov, S I Ipatov | 2 |
| 33 | Physics of severe plastic deformation A M Glezer, R V Sundeev, A V Shalimova, L S Metlov | 32 |
| 53 | Quantum turbulence in superfluid helium | 59 |

| Russian original reference Usp. Fiz. Nauk Vol. 193 , pages | Contents continued | English translation reference Phys. Usp. Vol. 66 , pages |
|--|---|---|
| | METHODOLOGICAL NOTES | |
| 96 | Plasmon-polariton at the interface of a uniaxial crystal and a metal: real dispersion equation and its analysis V I Alshits, V N Lyubimov | 90 |
| | PERSONALIA | |
| 111 | Yurii Yur'evich Balega (on his 70th birthday) D V Bisikalo, G G Valyavin, V V Vlasyuk, L M Zelenyi, N R Ikhsanov, O I Korablev, K A Postnov, I I Romanyuk, O V Rudenko, E E Filippova, A M Cherepashchuk, B M Shustov | 103 |
| | PHYSICS NEWS | |
| 110 | Physics news on the Internet | 106 |

Yu N Eroshenko