

LETTERS TO THE EDITOR

- 033001 The value of stable, comparable and standardised measurement: enabling confidence in decision making for societal challenges**
Richard J C Brown and Jan-Theodoor Janssen
- 033002 Beginning of a new phase of the dissemination of the kilogram**
S Davidson and M Stock

SPECIAL ISSUE ARTICLES

- 034001 A proposal for assessing the uncertainty in the measurement of mean nanoparticle diameter with electron microscopy**
I Lira
- 034002 Uncertainty in the mutual calibration method for the traceable thickness measurement of ultra-thin oxide films**
Seung Mi Lee, Jin Chun Woo, Tae Gun Kim and Kyung Joong Kim
- 034003 Distribution identification and information loss in a measurement uncertainty network**
Paul M Duncan and D S Whittaker
- 034004 Measurement of miscut angles in the determination of Si lattice parameters**
C P Sasso, G Mana and E Massa

PAPERS

- 035001 Evaluation of blackbody radiation shift with 2×10^{-18} uncertainty at room temperature for a transportable $^{40}\text{Ca}^+$ optical clock**
Ping Zhang, Jian Cao, Jin-bo Yuan, Dao-xin Liu, Yi Yuan, Yuan-fei Wei, Hua-lin Shu and Xue-ren Huang
- 035002 Experimental validation of theoretically predicted cut-off of $L_1-L_3M_{4,5}$ transitions at $Z = 50$ through measurements of fluorescence and Coster-Kronig yields for Sn and Sb**
Sandeep Kaur, Vibha Ayri, Anil Kumar, M Czyzycki, A G Karydas and Sanjiv Puri
- 035003 Transient heating in fixed length optical cavities for use as temperature and pressure standards**
J Ricker, K O Douglass, S Syssoev, J Stone, S Avdiaj and J H Hendricks
- 035004 Evaluation of effective area of air piston gauge with limitations in piston-cylinder dimension measurements**
Vikas N Thakur, Felix Sharipov, Yuanchao Yang, Sandeep Kumar, Jokhan Ram, Omprakash, Harish Kumar, Rina Sharma, Sanjay Yadav and Ashok Kumar
- 035005 Finite element analysis of blackbody radiation environment for an ytterbium lattice clock operated at room temperature**
Dezhi Xiong, Qiang Zhu, Jinqi Wang, Ang Zhang, Congcong Tian, Bing Wang, Lingxiang He, Zhuaxian Xiong and Baolong Lyu
- 035006 Reduction of calibration uncertainty due to mounting of three-axis accelerometers using the intrinsic properties model**
Michael Gaitan, Iris Mariela López Bautista and Jon Geist
- 035007 On the uncertainties in the realization of the kelvin based on thermodynamic temperatures of high-temperature fixed-point cells**
A D W Todd, K Anhalt, P Bloembergen, B B Khlevnoy, D H Lowe, G Machin, M Sadli, N Sasajima and P Saunders

(Continued from outside back cover)

- 035008 Realization and evaluation of the triple point of sulfur hexafluoride**
Ting Li, Jianping Sun, Hongjun Wang, Inseok Yang, Xiaopeng Hao, Jiang Pan, Jinnan Yang and Yiming Ruan
- 035009 Survey of subrange inconsistency of long-stem standard platinum resistance thermometers**
A Peruzzi, R L Rusby, J V Pearce, L Eusebio, J Bojkovski and V Žužek
- 035010 A ^{87}Sr optical lattice clock with 2.9×10^{-17} uncertainty and its absolute frequency measurement**
Yige Lin, Qiang Wang, Fei Meng, Shiyong Cao, Yuzhuo Wang, Ye Li, Zhen Sun, Bingkun Lu, Tao Yang, Baike Lin, Aimin Zhang, Fang Fang and Zhanjun Fang
- 035011 Some predictions of a validated physical model of Pt–Rh thermocouple drift above 1200 °C**
Jonathan V Pearce
- 035012 Empirical decomposition and error propagation of medium-term instabilities in half-life determinations**
S Pommé and K Pelczar
- 035013 Residual resistance ratio as indicator for the influence of impurities on fixed-point temperatures**
Bernd Fellmuth and Christof Gaiser
- 035014 A metrological approach to quantities that are counted and the unit one**
Richard J C Brown

Articles published in the *Technical Supplement*