FOREWORD

Special section on stochastic and quantum computing

The need for efficient computing is growing rapidly in conjunction with the expansion of application areas of computer technology. As indicated by recent studies, efficient computing thanks to stochasticism is indispensable for real-world applications. Also, based on the remarkable progress of quantum devices, real parallel processing utilizing quantum mechanical properties is a promising approach to achieving ultimate efficiency.

This special section is organized to transmit the latest results related to stochastic and quantum computing. It consists of two invited papers and four peer-reviewed, regular papers from various fields, including quantum annealing, stochastic computing, quantum-dot cellular automata, and neural networks. This section is sure to provide those who study these topics with new ideas and findings.

On behalf of the editorial committee, I would like to express my sincere thanks to all authors for their contributions and to the anonymous reviewers for their hard work within a tight schedule. I would also like to thank the editorial committee members and editorial staff of NOLTA journal for their continuous support and efforts. I hope that this special section contributes to further research progress in related fields.

Shigeo Sato
Guest Editor

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