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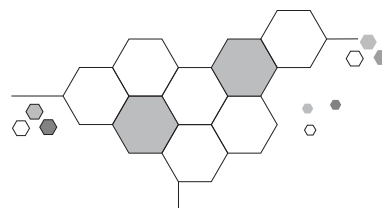


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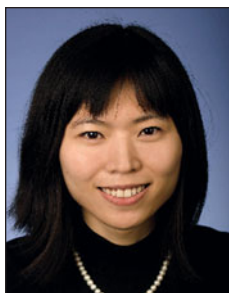
on various research and development positions, including research scientist in electronic materials. He headed materials science and adhesion efforts for bisbenzocyclobutene and SiLK dielectrics. He has published over 140 papers and holds nine US patents.



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Koyanagi has been a professor at Tohoku University since 1994. He received his PhD degree from Tohoku University in 1974 and joined Hitachi Central Research Laboratory in 1974, where he invented the three-dimensional (3D)-stacked capacitor dynamic random-access memory cell. He joined the Xerox Palo Alto Research Center in 1985 and Hiroshima University in 1988. His interests include 3D integration technology, optical interconnection, nano-CMOS

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