

### **Book Editing**

1. E. Zschech, C. Whelan, T. Mikolajick (Eds.)  
"Materials for Information Technology – Devices, Interconnects and Packaging"  
(508 p.)  
Springer London (2005)
2. M. Baklanov, P. S. Ho, E. Zschech (Eds.)  
"Advanced Interconnects for ULSI Technology"  
(579 p.)  
John Wiley & Sons, Chichester (2012)

### **Conference Proceedings Editing**

1. E. Zschech, K. Maex, P. S. Ho, H. Kawasaki, T. Nakamura  
"Stress-Induced Phenomena in Metallization"  
(372 p.)  
AIP Conf. Proc. 817, Melville, New York (2006)
2. S. Ogawa, P. S. Ho, E. Zschech  
"Stress-Induced Phenomena in Metallization"  
(204 p.)  
AIP Conf. Proc. 945, Melville, New York (2007)
3. P. S. Ho, E. Zschech, S. Ogawa,  
"Stress-Induced Phenomena in Metallization"  
AIP Conf. Proc., Melville, New York (2009)
4. E. Zschech, P. S. Ho, S. Ogawa  
"Stress-Induced Phenomena in Metallization"  
(257 p.)  
AIP Conf. Proc. 1300, Melville, New York (2010)
5. E. Zschech, R. Radojicic, V. Sukharev, L. Smith  
"Stress Management for 3D ICs using Through Silicon Vias"  
(173 p.)  
AIP Conf. Proc. 1378, Melville, New York (2011)
6. P. S. Ho, C. K. Hu, M. Nakamoto, S. Ogawa, V. Sukharev, L. Smith, E. Zschech  
"Stress-Induced Phenomena and Reliability in 3D Microelectronics"  
AIP Conf. Proc. 1601, Melville, New York (2014)

### **Journal Editing**

1. G. Petzow, F. Muecklich, E. Zschech (Guest Editor)  
„Focused Ion Beams for TEM Sample Preparation“  
Praktische Metallographie 40 (2003) 4

2. G. Petzow, F. Muecklich, E. Zschech (Guest Editor)  
„Focused Ion Beams for TEM Sample Preparation“  
Praktische Metallographie 41 (2004) 4
3. G. Petzow, F. Muecklich, E. Zschech (Guest Editor)  
„Focused Ion Beams for TEM Sample Preparation“  
Praktische Metallographie 42 (2005) 4
4. S. Mhaisalkar, Y. C. Yeo, N. Balasubramania, T. M. Lu, E. Zschech (Guest Editors)  
„Materials for Advanced Technologies – Silicon Microelectronics: Processing to Packaging“  
Thin Solid Films 504 (2006) 1 - 2
5. K. Maruszewski, E. Zschech (Guest Editors)  
„Synthesis and Analysis of Nanomaterials and Nanostructures“  
Mat. Sci. Poland 25 (2007) 1
6. S. E. Schulz, H. Koerner, E. Zschech (Guest Editors)  
„Materials for Advanced Metallization“  
Microelectronic Engineering 85 (2008) 10
7. E. Zschech, B. Michel (Guest Editors)  
„Materials for Information Technology“  
Advanced Engineering Materials 11 (2009) 4
8. P. S. Ho, E. Zschech, L. Smith, H. M. Tong (Guest Editors)  
"Materials, Processing and Reliability of 3D Interconnects"  
IEEE Transaction of Device, Materials and Reliability 12 (2012) 2
9. P. S. Ho, E. Zschech (Guest Editors)  
"Stress Induced Phenomena in Metallizations"  
IEEE Transaction of Device, Materials and Reliability 12 (2012) 4
10. E. Zschech (Guest Editor)  
"Nanoanalysis"  
Advanced Engineering Materials 16 (2014) 5
11. P. S. Ho, E. Zschech (Guest Editors)  
"Stress Induced Phenomena in Metallizations"  
IEEE Transaction of Device, Materials and Reliability 16 (2016) 4

### **Book (Monography)**

1. E. Zschech  
"Bondkontakte. Metallphysikalische Prozesse in mikroelektronischen Drahtbondkontakten integrierter Schaltkreise"  
(192 S.)  
Akademie-Verlag Berlin (1990)

## Book Chapters

1. E. Zschech, W. Blau  
"EXAFS Investigation of Micro-Phase Decomposition in Metal-Metalloid Glasses", in  
"Amorphous Structures - Methods and Results" (Ed. D. Schulze)  
Akademie-Verlag Berlin, pp. 179-193 (1990)
  
2. E. Zschech  
"Verbindungstechniken für elektronische Baugruppen - Grundlagen der  
Verbindungsbildung"  
pp. 153-174  
in "Baugruppenteknologie der Elektronik - Montage" (Ed. W. Scheel)  
Verlag Technik, Berlin (1. Auflage 1997, 2. Auflage 1999)  
and  
in „Electronics Assembly Technology“  
Electrochemical Publ., Port Erin (1. Auflage 2003, 2. Auflage 2004)
  
3. E. Zschech  
"Technische Zuverlässigkeit von stoffschlüssigen Verbindungen -  
Werkstoffphysikalische Prozesse"  
pp. 667-743  
in "Baugruppenteknologie der Elektronik - Montage" (Ed. W. Scheel)  
Verlag Technik, Berlin (1. Auflage 1997, 2. Auflage 1999)  
and  
in „Electronics Assembly Technology“  
Electrochemical Publ., Port Erin (1. Auflage 2003, 2. Auflage 2004)
  
4. R. Spolenak, E. Zschech  
„Interconnects for Microelectronics“  
in „Metal Based Thin Films for Electronics“ (Eds. K. Wetzig, C. M. Schneider)  
Wiley-VCH, Berlin, pp. 7-24  
(1. Auflage 2003, 2. Auflage 2005)
  
5. E. Zschech  
„Barrier and Nucleation Layers for Interconnects“  
in „Metal Based Thin Films for Electronics“ (Eds. K. Wetzig, C. M. Schneider)  
Wiley-VCH, Berlin, pp. 222-234  
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6. E. Zschech  
„Device Related Aspects for Si-Based Electronics“  
in „Metal Based Thin Films for Electronics“ (Eds. K. Wetzig, C. M. Schneider)  
Wiley-VCH, Berlin, pp. 317-321  
(1. Auflage 2003, 2. Auflage 2005)

7. H. Stegmann, H. J. Engelmann, E. Zschech  
„Transmission Electron Microscopy in Semiconductor Manufacturing“  
in „Science, Technology and Education of Microscopy: An Overview“ (Ed. A. Mendez-Vilas)  
Formatex Press, Badjoz, pp. 187-199 (2003)
8. I. Zienert, H. Prinz, H. Geisler, E. Zschech  
„Texture and Stress Study of Sub-Micron Copper Interconnect Lines using X-Ray Micro Diffraction“  
in “Materials for Information Technology – Devices, Interconnects and Packaging”  
(Eds. E. Zschech, C. Whelan, T. Mikolajick)  
Springer London, pp. 241–250 (2005)
9. M. Hecker, R. Huebner, J. Acker, V. Hoffmann, N. Mattern, R. Ecke, S. E. Schulz, H. Heuer, C. Wenzel, H. J. Engelmann, E. Zschech  
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(Eds. E. Zschech, C. Whelan, T. Mikolajick)  
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11. J. U. Knickerbocker, L. W. Kong, S. Niese, A. Diebold, E. Zschech  
„3D Interconnect Technology“  
in “Advanced Interconnects for ULSI Technology”  
(Eds. M. Baklanov, P. S. Ho, E. Zschech)  
John Wiley & Sons Chichester, pp. 437-502 (2012)

### **Publications in Peer-Reviewed Journals**

1. E. Zschech, G. Merz, W. Blau, K. Kleinstueck  
"A Simple Method for Determining the Radius of Curvature of Bent Spectrometer Crystals"  
Cryst. Techn. 15, K25-K27 (1980)
2. E. Zschech, W. Blau, B. Wehner, K. Kleinstueck, M. Dick, E. Foerster  
"A Curved-Crystal Spectrometer for Soft X-Ray Emission Study of Metals and Metallic Alloys"  
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3. E. Zschech, W. Blau, H. Vega, K. Kleinstueck, S. Mager, M. A. Kozlov, M. A. Sheromov  
"EXAFS and X-Ray Diffractational Investigation of the Heusler-Type Alloys  $\text{Co}_2\text{MnSi}$  and  $\text{Fe}_{2.4}\text{Mn}_{0.6}\text{Al}$ . Determination of the Ordering Probabilities"  
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4. W. Blau, H. Steil, E. Zschech  
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Z. f. Chemie 25, 167-169 (1985)
5. E. Zschech, W. Blau, K. Kleinstueck, H. Hermann, N. Mattern, M. A. Kozlov, M. A. Sheromov  
"Heterogeneous Structure of the Quarternary Metallic Glass  $\text{Fe}_{40}\text{Ni}_{40}\text{P}_{14}\text{B}_6$ : An EXAFS Investigation"  
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6. R. Markendorf, E. Zschech, W. Blau, K. Kleinstueck  
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phys. stat. sol. (b) 134, K121-K124 (1986)
7. E. Zschech, W. Blau  
"Metallphysikalische Strukturuntersuchungen mittels EXAFS-Spektroskopie"  
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"Structural Investigations in Metal Physics using EXAFS Spectroscopy"  
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22. E. Zschech, L. Troeger, D. Arvanitis, H. Michaelis, U. Grimm, K. Baberschke  
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23. H. Bohmeier, H. H. Daut, E. Zschech  
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46. H. J. Engelmann, H. Saage, E. Zschech  
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47. N. Mattern, M. Hecker, D. Fischer, C. Wenzel, N. Schell, W. Matz, H. J. Engelmann, E. Zschech  
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52. H. J. Engelmann, B. Volkmann, W. Blum, E. Zschech  
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53. M. Worch, H. J. Engelmann, W. Blum, E. Zschech  
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