

## PUBLICATIONS OF ROBERT O. RITCHIE

### Books

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2. S. D. Antolovich, R. O. Ritchie, and W. W. Gerberich, eds., *Mechanical Properties and Phase Transformations in Engineering Materials*, TMS-AIME, Warrendale, PA, 1986.
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4. R. B. Thompson, R. O. Ritchie, J. L. Bassani, and R. H. Jones, eds., *Mechanics and Physics of Crack Growth: Application to Life Prediction*, Elsevier Sequoia, The Netherlands, 1988.
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8. W. O. Soboyejo, T. S. Srivatsan, and R. O. Ritchie, eds., *Fatigue and Fracture of Ordered Intermetallic Materials II*, TMS, Warrendale, PA, 1995, 429 pp.
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12. K. Ravi-Chandar, B. L. Karihaloo, T. Kishi, R. O. Ritchie, A. T. Yokobori, Jr., and T. Yokobori, eds., *Advances in Fracture Research*, Proceedings of ICF10, Pergamon, Oxford, U.K., Dec. 2001, CD-Rom.
13. W. O. Soboyejo, J. J. Lewandowski, and R. O. Ritchie, eds., *Mechanisms and Mechanics of Fracture: The John Knott Symposium*, TMS, Warrendale, PA, 2002, 362 pp.
14. I. Milne, R. O. Ritchie, and B. Karihaloo, Editors-in-Chief., *Comprehensive Structural Integrity: Fracture of Materials from Nano to Macro*, vols. 1-10, Elsevier Science, Oxford, U.K., 2003.
15. I. Milne, R. O. Ritchie, and B. Karihaloo, eds., *Comprehensive Structural Integrity: Fracture of Materials from Nano to Macro. Vol. 1: Structural Integrity Assessment - Examples and Case Studies*, Elsevier Science, Oxford, U.K., 2003, 509 pp.
16. R. O. Ritchie, and Y. Murakami, eds., *Comprehensive Structural Integrity: Fracture of Materials from Nano to Macro. Vol. 4: Cyclic Loading and Fatigue*, Elsevier Science, Oxford, U.K., 2003, 528 pp.
17. M. A. Meyers, R. O. Ritchie, and M. Sarikaya, eds., *Nano and Microstructural Design of Advanced Materials*, Elsevier, Oxford, U.K., 2003, 303 pp.
18. A. Carpinteri, Y.-W. Mai, and R. O. Ritchie, eds., *Advances in Fracture Research*, Springer, AZ Dordrecht, The Netherlands, 2006, 262 pp.

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<sup>i</sup> Winner of the 2004 "Best Reference Work Award" by the American Society for Engineering Education.

19. J. E. Allison, J. W. Jones, J. M. Larsen and R. O. Ritchie, eds., *Very High Cycle Fatigue*, TMS, Warrendale, PA, 2007, 454 pp.

## Patents

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2. A. P. Alivisatos, P. Ercius, A. C. K. Olson, S. N. Raja, R. O. Ritchie, S. Wu and D. Zhrebetsky, "Stress Sensing Nanocomposite Useful for Detecting Incipient Cracks in Structural Mechanics to Monitoring Forces in Biological Tissues, Comprises a Polymer Film Comprising Many Aggregated Fluorescent Tetrapod nNanocrystals", *U.S. Patent No. US 2018045590-A1*, May 26, 2017.

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1. R. O. Ritchie, G. G. Garrett and J. F. Knott, "Crack Growth Monitoring: Optimisation of the Electrical Potential Technique Using an Analogue Method," *International Journal of Fracture Mechanics*, vol. 7 (4), Dec. 1971, pp. 462-467.
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23. <sup>ii</sup>R. O. Ritchie, "Near-Threshold Fatigue Crack Propagation in Ultra-High Strength Steel: Influence of Load Ratio and Cyclic Strength," *Journal of Engineering Materials and Technology*, Transactions of ASME Series H, vol. 99 (3), July 1977, pp. 195-204.
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<sup>ix</sup> Honorable Mention: 2009 American Association for the Advancement of Science *Newcombe Cleveland Prize* for the best paper in *Science*.

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