

No.	Description
24	Sugimura, J. (2012) Studies on materials and tribology for hydrogen energy society, Toraiarojisuto/Journal of Japanese Society of Tribologists, 57, 808-813. DOI: 10.1007/s10765-010-0873-y
23	Murakami, Y., Kanezaki, T. and Sofronis, P. (2013) Hydrogen embrittlement of high strength steels: Determination of the threshold stress intensity for small cracks nucleating at nonmetallic inclusions, Engineering Fracture Mechanics, 97, 227-243. DOI: 10.1016/j.engfracmech.2012.10.028
22	Nibur, K.A., Somerday, B.P., Marchi, C.S., Foulk III, J.W., Dadfarnia, M. and Sofronis, P. (2013) The Relationship Between Crack-Tip Strain and Subcritical Cracking Thresholds for Steels in High-Pressure Hydrogen Gas, Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 44 (1), 248-269. DOI: 10.1007/s11661-012-1400-5
21	Wu, H., Hamada, S. and Noguchi, H. (2013) Fatigue strength prediction for inhomogeneous face-centered cubic metal based on Vickers hardness, International Journal of Fatigue, 48, 48-54. DOI: 10.1016/j.ijfatigue.2012.09.021
20	Tsuboi, K., Tsuchiyama, T., Takaki, S. and Tsutsumi, S. (2012) Mechanical Properties of Strength-Gradient Steel Sheets Produced by Solution Nitriding, ISIJ International, 52 (10), 1872-1878. DOI: 10.2355/isijinternational.52.1872
19	Martin, M.L., Sofronis, P., Robertson, I.M., Awane, T. and Murakami, Y. (2013) A microstructural based understanding of hydrogen-enhanced fatigue of stainless steels, International Journal of Fatigue, 57, 28-36. DOI: 10.1016/j.ijfatigue.2012.08.009
18	Fujita, S. and Murakami, Y. (2013) A New Nonmetallic Inclusion Rating Method by Positive Use of Hydrogen Embrittlement Phenomenon, Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 44A, 1-20. DOI: 10.1007/s11661-012-1376-1
17	Deutges, M., Knorr, I., Borchers, C., Volkert, C.A. and Kirchheim, R. (2013) Influence of hydrogen on the deformation morphology of vanadium (100) micropillars in the α -phase of the vanadium-hydrogen system, SCRIPTA MATERIALIA, 68, 71-74. DOI: 10.1016/j.scriptamat.2012.09.020
16	Komata, H., Yamabe, J., Fukushima, Y. and Matsuoka, S. (2012) Proposal of Rolling Contact Fatigue Crack Growth Test Using a Specimen with a Small Artificial Hole, Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 78 (793), 1250-1265. DOI: 10.1299/kikaia.78.1250
15	Yamabe, J., Matsumoto, T., Matsuoka, S. and Murakami, Y. (2012) A new mechanism in hydrogen-enhanced fatigue crack growth behavior of a 1900-MPa-class high-strength steel, INTERNATIONAL JOURNAL OF FRACTURE, 177, 141-162. DOI: 10.1007/s10704-012-9760-9
14	Tajima, N., Orita, A., Matsuo, T., Yamaguchi, Y., Yamabe, J. and Matsuoka, S. (2012) Effect of Internal Hydrogen on Tensile Properties of Iron-Based Superalloy SUH 660, Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 78 (792), 1173-1188. DOI: 10.1299/kikaia.78.1173

13	Kamimura, S., Yamada, H. and Xu, C.-N. (2012) Strong reddish-orange light emission from stress-activated $\text{Sr}^{n+1}\text{Sn}^n\text{O}_{3n+1}:\text{Sm}^{3+}$ ($n=1, 2, \text{infinity}$) with perovskite-related structures, APPLIED PHYSICS LETTERS, 101 (9), 91113. DOI: 10.1063/1.4749807
12	Zhan, T.Z., Xu, C.N., Yamada, H., Terasawa, Y., Zhang, L., Iwase, H. and Kawai, M. (2012) Beam profile indicator for swift heavy ions using phosphor afterglow, AIP ADVANCES, 2 (3), 32116. DOI: 10.1063/1.4739407
11	Kirchheim, R. (2012) Solid solution softening and hardening by mobile solute atoms with special focus on hydrogen, SCRIPTA MATERIALIA, 67, 767-770. DOI: 10.1016/j.scriptamat.2012.07.022
10	Nagao, A., Smith, C.D., Dadfarnia, M., Sofronis, P. and Robertson, I.M. (2012) The role of hydrogen in hydrogen embrittlement fracture of lath martensitic steel, ACTA MATERIALIA, 60 (13-14), 5182-5189. DOI: 10.1016/j.actamat.2012.06.040
9	Kataoka, S., Ono, H., Kwakami, K., Kubota, M. and Kondo, Y. (2012) Mechanism of Improving Fretting Fatigue Strength by Stress-Relief Groove, Journal of Solid Mechanics and Materials Engineering, 6 (6), 584-597. DOI: 10.1299/jmmp.6.584
8	Miyamoto, T., Matsuo, T., Kobayashi, N., Mukaie, Y. and Matsuoka, S. (2012) Characteristics of Fatigue Life and Fatigue Crack Growth of SCM435 Steel in High-Pressure, Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 78 (788), 531-546. DOI: 10.1299/kikaia.78.531
7	Itoga, H., Watanabe, S., Fukushima, Y., Matsuoka, S. and Murakami, Y. (2012) Fatigue Crack Growth of Aluminum Alloy A6061-T6 in High Pressure Hydrogen Gas and Failure Analysis on 35 MPa Compressed Hydrogen Tanks VH3 for Fuel Cell Vehicles, Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 78 (788), 442-457. DOI: 10.1299/kikaia.78.442
6	Martin, M.L., Somerday, B.P., Ritchie, R.O., Sofronis, P. and Robertson, I.M. (2012) Hydrogen-induced intergranular failure in nickel revisited, ACTA MATERIALIA, 60 (6-7), 2739-2745. DOI: 10.1016/j.actamat.2012.01.040
5	Martin, M.L., Somerday, B.P., Ritchie, R.O., Sofronis, P. and Robertson, I.M. (2012) Hydrogen-induced intergranular failure in nickel revisited, ACTA MATERIALIA, 60 (6-7), 2739-2745. DOI: 10.1016/j.actamat.2012.01.040
4	Onoue, K., Murakami, Y. and Sofronis, P. (2012) Japan's energy supply: Mid-to-long-term scenario - A proposal for a new energy supply system in the aftermath of the March 11 earthquake, INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, 37, 8123-8132. DOI: 10.1016/j.ijhydene.2012.02.096
3	Roiko, A. and Murakami, Y. (2012) A design approach for components in ultralong fatigue life with step loading, International Journal of Fatigue, 41, 140-149. DOI: 10.1016/j.ijfatigue.2011.12.021
2	Kataoka, S., Ono, H., Kubota, M. and Kondo, Y. (2012) Effect of Contact Conditions on Growth of Small Crack in Fretting Fatigue, Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A, 78 (785), 1-13. DOI: 10.1299/kikaia.78.1

Division: Hydrogen Materials Compatibility
Year: 2012

1	Murakami, Y. (2012) Material defects as the basis of fatigue design, International Journal of Fatigue, 41, 2-10. DOI: 10.1016/j.ijfatigue.2011.12.001
---	---