# Yang Yang

List of Publications by Year
in descending order



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|---|---|---|---|
| 58 papers | 3,893 citations | 331670 21 h-index | 161849 54 g-index |
| 58 all docs | 58 docs citations | 58 times ranked | 3234 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | High-entropy alloy: challenges and prospects. Materials Today, 2016, 19, 349-362. | 14.2 | 1,698 |
| 2 | Relative effects of enthalpy and entropy on the phase stability of equiatomic high-entropy alloys. Acta Materialia, 2013, 61, 2628-2638. | 7.9 | 1,004 |
| 3 | Adiabatic shear band on the titanium side in the Ti/mild steel explosive cladding interface. Acta Materialia, 1996, 44, 561-565. | 7.9 | 86 |
| 4 | Microstructural characterization and evolution mechanism of adiabatic shear band in a near beta-Ti alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2787-2794. | 5.6 | 79 |
| 5 | Observation of the microstructure in the adiabatic shear band of 7075 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3529-3535. | 5.6 | 72 |
| 6 | Dynamic recrystallization in adiabatic shear band in Î±-titanium. Materials Letters, 2006, 60, 2198-2202. | 2.6 | 64 |
| 7 | Microstructure evolution within adiabatic shear band in peak aged ZK60 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 711, 317-324. | 5.6 | 52 |
| 8 | Microstructure characteristics and formation mechanism of TC17 titanium alloy induced by laser shock processing. Journal of Alloys and Compounds, 2017, 722, 509-516. | 5.5 | 48 |
| 9 | Microstructure evolution in adiabatic shear band in fine-grain-sized Tiâ€“3Alâ€“5Moâ€“4.5V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 473, 306-311. | 5.6 | 45 |
| 10 | Effects of microstructure on the adiabatic shearing behaviors of titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3130-3133. | 5.6 | 37 |
| 11 | Evolution of precipitates in ZK60 magnesium alloy during high strain rate deformation. Journal of Alloys and Compounds, 2017, 705, 566-571. | 5.5 | 35 |
| 12 | Effect of orientation on self-organization of shear bands in 7075 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2446-2453. | 5.6 | 34 |
| 13 | Effects of laser shock peening on microstructures and properties of 2195 Al-Li alloy. Journal of Alloys and Compounds, 2019, 781, 330-336. | 5.5 | 34 |
| 14 | Surface gradient microstructural characteristics and evolution mechanism of 2195 aluminum lithium alloy induced by laser shock peening. Optics and Laser Technology, 2019, 109, 1-7. | 4.6 | 33 |
| 15 | Adiabatic shear bands on the titanium side in the titanium/mild steel explosive cladding interface: Experiments, numerical simulation, and microstructure evolution. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 3131-3137. | 2.2 | 32 |
| 16 | Numerical and experimental studies of self-organization of shear bands in 7075 aluminium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 496, 291-302. | 5.6 | 29 |
| 17 | Effect of phase composition on self-organization of shear bands in Ti-1300 titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 7506-7513. | 5.6 | 27 |
| 18 | Study on the microstructural characteristics of adiabatic shear band in solid-solution treated ZK60 magnesium alloy. Materials Characterization, 2019, 156, 109840. | 4.4 | 24 |

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|---|---|---|---|
| 19 | Effects of the phase content on dynamic damage evolution in Fe50Mn30Co10Cr10 high entropy alloy. Journal of Alloys and Compounds, 2021, 851, 156883. | 5.5 | 24 |
| 20 | Spall behaviors of high purity copper under sweeping detonation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 636-645. | 5.6 | 23 |
| 21 | Thermodynamics-kinetics of twinning/martensitic transformation in Fe50Mn30Co10Cr10 high-entropy alloy during adiabatic shearing. Scripta Materialia, 2020, 181, 115-120. | 5.2 | 22 |
| 22 | Damage and fracture mechanism of aluminium alloy thick-walled cylinder under external explosive loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 490, 378-384. | 5.6 | 21 |
| 23 | Diffusive transformation at high strain rate: On instantaneous dissolution of precipitates in aluminum alloy during adiabatic shear deformation. Journal of Materials Research, 2016, 31, 1220-1228. | 2.6 | 21 |
| 24 | Self-organization of adiabatic shear bands in ZK60 Magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 655, 321-330. | 5.6 | 21 |
| 25 | An examination of adiabatic shearing behavior in ZK60 alloy with different states of heat treatment. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 685, 57-64. | 5.6 | 20 |
| 26 | Effects of pre-notches on the self-organization behaviors of shear bands in aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5084-5091. | 5.6 | 19 |
| 27 | Effect of heat treatment on adiabatic shear susceptibility in ZK60 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 664, 146-154. | 5.6 | 18 |
| 28 | Effect of Strain on Microstructure Evolution of 1Cr18Ni9Ti Stainless Steel During Adiabatic Shearing. Journal of Materials Engineering and Performance, 2016, 25, 29-37. | 2.5 | 17 |
| 29 | Adiabatic shear bands in Î±-titanium tube under external explosive loading. Journal of Materials Science, 2007, 42, 8101-8105. | 3.7 | 15 |
| 30 | Microstructure evolution of 2195 Alâ€“Li alloy subjected to high-strain-rate deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 606, 299-303. | 5.6 | 15 |
| 31 | Effects of the phase interface on initial spallation damage nucleation and evolution in dual phase titanium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 731, 385-393. | 5.6 | 15 |
| 32 | Multidimensional Study on Spall Behavior of High-Purity Copper Under Sliding Detonation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4070-4077. | 2.2 | 14 |
| 33 | X-ray quantitative analysis on spallation response in high purity copper under sweeping detonation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 667, 54-60. | 5.6 | 14 |
| 34 | Effects of microstructure on the evolution of dynamic damage of Fe50Mn30Co10Cr10 high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 802, 140440. | 5.6 | 14 |
| 35 | Effects of different aging statuses and strain rate on the adiabatic shear susceptibility of 2195 aluminumâ€“lithium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 546, 279-283. | 5.6 | 13 |
| 36 | Effect of strain rate on microstructural evolution and thermal stability of 1050 commercial pure aluminum. Transactions of Nonferrous Metals Society of China, 2018, 28, 1-8. | 4.2 | 13 |

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|---|---|---|---|
| 37 | Adiabatic Shear Susceptibility of Fe50Mn30Co10Cr10 High-Entropy Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1771-1780. | 2.2 | 13 |
| 38 | Thermal stability of microstructures induced by laser shock peening in TC17 titanium alloy. Journal of Alloys and Compounds, 2018, 767, 253-258. | 5.5 | 12 |
| 39 | Effects of the phase interface on spallation damage nucleation and evolution in multiphase alloy. Journal of Alloys and Compounds, 2018, 740, 321-329. | 5.5 | 11 |
| 40 | Effect of the grain boundary character distribution on the self-organization of adiabatic shear bands in 1Cr18Ni9Ti austenitic stainless steel. Journal of Materials Science, 2019, 54, 7256-7270. | 3.7 | 11 |
| 41 | Study on the characteristics and thermal stability of nanostructures in adiabatic shear band of 2195 Alâ€“Li alloy. Applied Physics A: Materials Science and Processing, 2015, 121, 1277-1284. | 2.3 | 10 |
| 42 | The void nucleation mechanism within lead phase during spallation of leaded brass. Philosophical Magazine, 2018, 98, 1975-1990. | 1.6 | 10 |
| 43 | 3-D characterization of incipient spallation response in cylindrical copper under sweeping detonation. Journal of Materials Research, 2017, 32, 1499-1505. | 2.6 | 9 |
| 44 | Effects of the Phase Interface on Spallation Damage Nucleation and Evolution in Dualâ€Phase Steel. Steel Research International, 2020, 91, 1900583. | 1.8 | 8 |
| 45 | Microstructure Evolution of 1050 Commercial Purity Aluminum Processed by High-Strain-Rate Deformation. Journal of Materials Engineering and Performance, 2015, 24, 4307-4312. | 2.5 | 6 |
| 46 | Effect of Grain Boundary Character Distribution on the Adiabatic Shear Susceptibility. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5589-5597. | 2.2 | 6 |
| 47 | The characteristics of void distribution in spalled high purity copper cylinder under sweeping detonation. Philosophical Magazine, 2018, 98, 752-765. | 1.6 | 6 |
| 48 | Effect of laser shock peening and annealing temperatures on stability of AA2195 alloy near-surface microstructure. Optics and Laser Technology, 2019, 119, 105569. | 4.6 | 6 |
| 49 | The Characteristic and Thermodynamics/Kinetics of Martensitic Transformation in Fe<sub>50</sub>Mn<sub>30</sub>Co<sub>10</sub>Cr<sub>10</sub> Highâ€Entropy Alloy during Deformation/Heat Treatment. Advanced Engineering Materials, 2020, 22, 1900868. | 3.5 | 6 |
| 50 | Effect of Grain Size on Adiabatic Shear Susceptibility of Copper. Journal of Materials Engineering and Performance, 2021, 30, 2798-2805. | 2.5 | 6 |
| 51 | Two optimized post-heat treatments to achieve high-performance 90Wâ€“7Niâ€“3Fe alloys fabricated by laser-directed energy deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 833, 142561. | 5.6 | 6 |
| 52 | Microstructural evolution and thermal stability of 1050 commercial pure aluminum processed by high-strain-rate deformation. Journal of Materials Research, 2015, 30, 3502-3509. | 2.6 | 4 |
| 53 | Effects of Dynamic Multi-directional Loading on the Microstructural Evolution and Thermal Stability of Pure Aluminum. Journal of Materials Engineering and Performance, 2016, 25, 3924-3930. | 2.5 | 4 |
| 54 | Effects of the Phase Content on Spallation Damage Behavior in Dual-Phase Steel. Journal of Materials Engineering and Performance, 2021, 30, 5614-5624. | 2.5 | 4 |

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|---|---|---|---|
| 55 | Effect of strain rate on self-organisation of adiabatic shear bands in steel. Materials Science and Technology, 2020, 36, 556-563. | 1.6 | 1 |
| 56 | Grain boundary effects on spall behavior of high purity copper cylinder under sweeping detonation. Journal of Central South University, 2022, 29, 1107-1117. | 3.0 | 1 |
| 57 | Effects of fibrous Cr phase on the adiabatic shearing anisotropic behavior of the Cu-15Cr in-situ composite. Journal of Alloys and Compounds, 2022, 916, 165409. | 5.5 | 1 |
| 58 | Multi-dimensional Effect of Heat Treatment on Microstructure and Property of Ti6Al4V Alloy Fabricated by Selective Electron Beam Melting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 0, , . | 2.2 | 0 |