

Kun-kun Deng

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2485713/publications.pdf>

Version: 2024-02-01

67
papers

2,102
citations

201674

27
h-index

254184

43
g-index

68
all docs

68
docs citations

68
times ranked

1002
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Microstructure and strengthening mechanism of bimodal size particle reinforced magnesium matrix composite. <i>Composites Part A: Applied Science and Manufacturing</i> , 2012, 43, 1280-1284. | 7.6 | 216 |
| 2 | Effect of extrusion on corrosion properties of Mg-2Ca- $\dot{\bar{t}}$ Al ($\dot{\bar{t}}$ = 0, 2, 3, 5) alloys. <i>Corrosion Science</i> , 2017, 127, 280-290. | 6.6 | 146 |
| 3 | Microstructures and mechanical properties of Mg $\dot{\bar{t}}$ Al $\dot{\bar{t}}$ Ca alloys affected by Ca/Al ratio. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 636, 279-288. | 5.6 | 100 |
| 4 | Effect of ultra-slow extrusion speed on the microstructure and mechanical properties of Mg-4Zn-0.5Ca alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 677, 367-375. | 5.6 | 87 |
| 5 | Hot deformation behavior and processing maps of fine-grained SiCp/AZ91 composite. <i>Materials & Design</i> , 2015, 67, 72-81. | 5.1 | 69 |
| 6 | High strength Mg-9Al serial alloy processed by slow extrusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 697, 211-216. | 5.6 | 69 |
| 7 | Microstructure and mechanical properties of SiCp/AZ91 composite deformed through a combination of forging and extrusion process. <i>Materials & Design</i> , 2010, 31, 3929-3932. | 5.1 | 68 |
| 8 | High strength SiCp/AZ91 composite assisted by dynamic precipitated Mg ₁₇ Al ₁₂ phase. <i>Journal of Alloys and Compounds</i> , 2018, 732, 328-335. | 5.5 | 59 |
| 9 | Recent Research on the Deformation Behavior of Particle Reinforced Magnesium Matrix Composite: A Review. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019, 32, 413-425. | 2.9 | 55 |
| 10 | Microstructure and mechanical properties of Mg-4Zn-xGd (x=0, 0.5, 1, 2) alloys. <i>Journal of Magnesium and Alloys</i> , 2020, 8, 441-451. | 11.9 | 53 |
| 11 | Microstructure and mechanical properties of SiCp/Mg $\dot{\bar{t}}$ Al $\dot{\bar{t}}$ Zn composites containing Mg ₁₇ Al ₁₂ phases processed by low-speed extrusion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 610, 243-249. | 5.6 | 48 |
| 12 | Microstructures, tensile properties and work hardening behavior of SiCp/Mg-Zn-Ca composites. <i>Journal of Alloys and Compounds</i> , 2017, 695, 2215-2223. | 5.5 | 48 |
| 13 | Microstructure, mechanical properties and corrosion properties of Mg-4Zn-xNi alloys for degradable fracturing ball applications. <i>Journal of Alloys and Compounds</i> , 2019, 787, 1290-1300. | 5.5 | 48 |
| 14 | Effects of bimodal size SiC particles on the microstructure evolution and fracture mechanism of AZ91 matrix at room temperature. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 553, 74-79. | 5.6 | 43 |
| 15 | Competition behavior of the strengthening effects in as-extruded AZ91 matrix: Influence of pre-existed Mg ₁₇ Al ₁₂ phase. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 656, 102-110. | 5.6 | 43 |
| 16 | Microstructure and corrosion properties of Mg-4Zn-2Gd-0.5Ca alloy influenced by multidirectional forging. <i>Journal of Alloys and Compounds</i> , 2019, 770, 1208-1220. | 5.5 | 43 |
| 17 | Effects of volume ratio on the microstructure and mechanical properties of particle reinforced magnesium matrix composite. <i>Materials & Design</i> , 2014, 63, 672-677. | 5.1 | 42 |
| 18 | Microstructure and mechanical properties of Mg-4Zn-0.5Ca alloy fabricated by the combination of forging, homogenization and extrusion process. <i>Journal of Alloys and Compounds</i> , 2017, 720, 196-206. | 5.5 | 39 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Microstructure and elevated tensile properties of submicron SiCp/AZ91 magnesium matrix composite. <i>Materials & Design</i> , 2012, 38, 110-114. | 5.1 | 37 |
| 20 | Effect of Ca addition on the microstructure and tensile properties of Mg-4.0Zn-2.0Gd alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 609, 1-6. | 5.6 | 37 |
| 21 | Characterization and strengthening mechanism of SiC nanoparticles reinforced magnesium matrix composite fabricated by ultrasonic vibration assisted squeeze casting. <i>Journal of Materials Research</i> , 2017, 32, 2609-2620. | 2.6 | 37 |
| 22 | Effect of duty cycle on preparation and corrosion behavior of electrodeposited calcium phosphate coatings on AZ91. <i>Applied Surface Science</i> , 2017, 426, 418-426. | 6.1 | 35 |
| 23 | High temperature damping behavior of as-deformed Mg matrix influenced by micron and submicron SiCp. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 624, 62-70. | 5.6 | 31 |
| 24 | Work hardening and softening behavior of pure Mg influenced by Zn addition investigated via in-situ neutron diffraction. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 772, 138827. | 5.6 | 31 |
| 25 | Degradation behavior of Mg-4Zn-2Ni alloy with high strength and high degradation rate. <i>Materials Chemistry and Physics</i> , 2020, 249, 123131. | 4.0 | 30 |
| 26 | Microstructure and mechanical behavior of Mg-5Zn matrix influenced by particle deformation zone. <i>Journal of Materials Science and Technology</i> , 2021, 60, 8-20. | 10.7 | 30 |
| 27 | Aging behavior of AZ91 matrix influenced by 5 μ m SiCp: Investigation on the microstructure and mechanical properties. <i>Journal of Alloys and Compounds</i> , 2017, 727, 1263-1272. | 5.5 | 28 |
| 28 | Microstructure evolution mechanism of micron particle reinforced magnesium matrix composite at room temperature. <i>Materials Chemistry and Physics</i> , 2012, 134, 581-584. | 4.0 | 27 |
| 29 | Unique corrosion resistance of ultrahigh pressure Mg-25Al binary alloys. <i>Corrosion Science</i> , 2018, 143, 229-239. | 6.6 | 25 |
| 30 | Hot deformation behavior and dynamic recrystallization mechanism of an Mg-5wt.%Zn alloy with trace SiCp addition. <i>Journal of Materials Research and Technology</i> , 2021, 10, 422-437. | 5.8 | 24 |
| 31 | High strength TiCp/Mg-Zn-Ca magnesium matrix nanocomposites with improved formability at low temperature. <i>Journal of Alloys and Compounds</i> , 2019, 792, 267-278. | 5.5 | 23 |
| 32 | Microstructure and mechanical properties of Al/Mg/Al composite sheets containing trapezoidal shaped intermediate layer. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 811, 140989. | 5.6 | 23 |
| 33 | Microstructure and tensile properties of magnesium matrix nanocomposite reinforced by high mass fraction of nano-sized particles including TiC and MgZn ₂ . <i>Journal of Alloys and Compounds</i> , 2020, 819, 153348. | 5.5 | 22 |
| 34 | The effect of Zn/Ca ratio on the microstructure, texture and mechanical properties of dilute Mg-Zn-Ca-Mn alloys that exhibit superior strength. <i>Journal of Materials Science</i> , 2020, 55, 3588-3604. | 3.7 | 22 |
| 35 | Dynamic Recrystallization Behavior of Bimodal Size SiCp-Reinforced Mg Matrix Composite during Hot Deformation. <i>Acta Metallurgica Sinica (English Letters)</i> , 2016, 29, 527-537. | 2.9 | 19 |
| 36 | Microstructure, and Mechanical and Wear Properties of Grp/AZ91 Magnesium Matrix Composites. <i>Materials</i> , 2019, 12, 1190. | 2.9 | 19 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Analysis of hot deformation behavior and microstructure evolution of as-cast SiC nanoparticles reinforced magnesium matrix composite. <i>Journal of Materials Research</i> , 2016, 31, 3437-3447. | 2.6 | 18 |
| 38 | Microstructures and mechanical properties of SiCp/Mg-xAl-2Ca composites collectively influenced by SiCp and Al content. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 725, 510-521. | 5.6 | 18 |
| 39 | Work hardening and softening behavior of Mg-Zn-Ca alloy influenced by deformable Ti particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 833, 142336. | 5.6 | 18 |
| 40 | High temperature damping behavior controlled by submicron SiCp in bimodal size particle reinforced magnesium matrix composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 668, 55-58. | 5.6 | 17 |
| 41 | Synergistic effects of hybrid (SiC+TiC) nanoparticles and dynamic precipitates in the design of a high-strength magnesium matrix nanocomposite. <i>Materials Chemistry and Physics</i> , 2021, 259, 124048. | 4.0 | 17 |
| 42 | Microstructure stability of as-extruded bimodal size SiCp/AZ91 composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 615, 489-496. | 5.6 | 15 |
| 43 | In vitro biodegradability of Mg-2Gd-xZn alloys with different Zn contents and solution treatments. <i>Rare Metals</i> , 2019, 38, 620-628. | 7.1 | 15 |
| 44 | Effect of Extrusion Temperature on the Microstructure and Mechanical Properties of Mg-5Al-2Ca Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2015, 28, 1015-1023. | 2.9 | 14 |
| 45 | Development of Mg-Zn-Y-Ca alloys containing icosahedral quasicrystal phase through trace addition of Y. <i>Journal of Materials Research</i> , 2018, 33, 2806-2816. | 2.6 | 14 |
| 46 | Improved tensile properties of low-temperature and low-speed extruded Mg-4Al-(4.8-11)Ca-0.6Mn alloys. <i>Journal of Materials Research and Technology</i> , 2020, 9, 11717-11730. | 5.8 | 14 |
| 47 | Microstructure and mechanical properties of TiC nanoparticle-reinforced Mg-Zn-Ca matrix nanocomposites processed by combining multidirectional forging and extrusion. <i>Transactions of Nonferrous Metals Society of China</i> , 2020, 30, 2394-2412. | 4.2 | 13 |
| 48 | Microstructure, Tensile Properties and Work Hardening Behavior of an Extruded Mg-Zn-Ca-Mn Magnesium Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 922-936. | 2.9 | 13 |
| 49 | Effect of SiC Nanoparticles on Hot Deformation Behavior and Processing Maps of Magnesium Alloy AZ91. <i>Nanomaterials</i> , 2018, 8, 82. | 4.1 | 12 |
| 50 | Microstructure and Corrosion Behavior of the As-Extruded Mg-4Zn-2Gd-0.5Ca Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2020, 33, 362-374. | 2.9 | 12 |
| 51 | Hot tensile behavior and deformation mechanism of Mg-5Al-2Ca alloy influenced by SiC particles. <i>Mechanics of Materials</i> , 2020, 150, 103599. | 3.2 | 12 |
| 52 | Effect of extrusion speed on mixed grain microstructure and tensile properties of a Mg-2.9Zn-1.1Ca-0.5Mn nanocomposite reinforced by a low mass fraction of TiCp. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 796, 140223. | 5.6 | 11 |
| 53 | Hot Deformation Behavior and Processing Maps of SiC Nanoparticles and Second Phase Synergistically Reinforced Magnesium Matrix Composites. <i>Nanomaterials</i> , 2019, 9, 57. | 4.1 | 10 |
| 54 | Fabrication, microstructure and mechanical properties of the as-rolled ZW31/PMMCs laminate. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 761, 138043. | 5.6 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Corrosion Resistance of AZ91Mg Alloy Modified by High-Current Pulsed Electron Beam. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019, 32, 218-226. | 2.9 | 8 |
| 56 | Microstructure and mechanical properties of SiCp/AZ91 composite processed with extrusion and EPT. <i>Materials Science and Technology</i> , 2021, 37, 269-279. | 1.6 | 8 |
| 57 | Effect of hot extrusion on the microstructure and mechanical properties of SiCNWs/Mg-2Zn-0.1Y composite. <i>Materials Characterization</i> , 2022, 189, 111970. | 4.4 | 8 |
| 58 | The corrosion properties of AZ91 alloy improved by the addition of trace submicron SiCp. <i>Materials Chemistry and Physics</i> , 2022, 286, 126143. | 4.0 | 7 |
| 59 | Unique strengthening mechanisms of ultrahigh pressure Mg alloys. <i>Bioactive Materials</i> , 2018, 3, 250-254. | 15.6 | 6 |
| 60 | Development of SiC Nanoparticles and Second Phases Synergistically Reinforced Mg-Based Composites Processed by Multi-Pass Forging with Varying Temperatures. <i>Materials</i> , 2018, 11, 126. | 2.9 | 6 |
| 61 | Significant Influence of Minor SiCp on Microstructure and Mechanical Properties of Pure Mg. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 1356-1365. | 2.5 | 6 |
| 62 | Effect of Interface on Mechanical Properties of Ti/Al/Mg/Al/Ti Laminated Composites. <i>Materials Research</i> , 2020, 23, . | 1.3 | 6 |
| 63 | Effect of Interface on the Deep Drawability of Ti/Al Multilayered Composites. <i>Metals</i> , 2021, 11, 795. | 2.3 | 5 |
| 64 | Dynamic mechanical properties and constitutive relationship of particle-reinforced AZ91D composites. <i>Journal of Alloys and Compounds</i> , 2018, 767, 210-214. | 5.5 | 4 |
| 65 | Synergistic Enhancement of the Strength-Ductility for Stir Casting SiCp/2024Al Composites by Two-Step Deformation. <i>Metals and Materials International</i> , 2021, 27, 5450-5461. | 3.4 | 4 |
| 66 | Flow stress and deformation behavior of fine-grained Mg matrix influenced by bimodal size SiCp. <i>Journal of Materials Research</i> , 2018, 33, 1723-1732. | 2.6 | 3 |
| 67 | Improved workability of an Mg-5 wt.%Zn alloy by the addition of trace SiCp. <i>Materials Today Communications</i> , 2020, 25, 101474. | 1.9 | 2 |