

# Chang-Soo Kim

## List of Publications by Year in descending order

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52  
papers

2,354  
citations

318942

23  
h-index

232693

48  
g-index

52  
all docs

52  
docs citations

52  
times ranked

3714  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polymer degradation and drug delivery in PLGA-based drug-polymer applications: A review of experiments and theories. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 1692-1716.	1.6	278
2	Selection of container materials for modern planar sodium sulfur (NaS) energy storage cells towards higher thermo-mechanical stability. Journal of Energy Storage, 2017, 12, 215-225.	3.9	14
3	Mechanical performance of particulate-reinforced Al metal-matrix composites (MMCs) and Al metal-matrix nano-composites (MMNCs). Journal of Materials Science, 2017, 52, 13319-13349.	1.7	134
4	Ternary Porous Cobalt Phosphoselenide Nanosheets: An Efficient Electrocatalyst for Electrocatalytic and Photoelectrochemical Water Splitting. Advanced Materials, 2017, 29, 1701589.	11.1	219
5	Uniform Surface Modification of $\text{Li}_2\text{ZnTi}_3\text{O}_8$ by Ligated $\text{Na}_2\text{MoO}_4$ To Boost Electrochemical Performance. ACS Applied Materials & Interfaces, 2017, 9, 43603-43613.	4.0	18
6	Temperature Effects on the Tensile Properties of Precipitation-Hardened Al-Mg-Cu-Si Alloys. Metals, 2016, 6, 43.	1.0	17
7	Sodium Ion Diffusion in Nasicon ( $\text{Na}_3\text{Zr}_2\text{Si}_2\text{PO}_{12}$ ) Solid Electrolytes: Effects of Excess Sodium. ACS Applied Materials & Interfaces, 2016, 8, 27814-27824.	4.0	174
8	DFT study on the water molecule adsorption and the surface dissolution behavior of Mg alloys. Materials Chemistry and Physics, 2016, 182, 347-358.	2.0	16
9	A thermo-mechanical stress prediction model for contemporary planar sodium sulfur (NaS) cells. Journal of Power Sources, 2016, 324, 665-673.	4.0	10
10	The effect of cathode felt geometries on electrochemical characteristics of sodium sulfur (NaS) cells: Planar vs. tubular. Journal of Power Sources, 2016, 325, 238-245.	4.0	19
11	Atomistic study on the interaction of nitrogen and Mg lattice and the nitride formation in nanocrystalline Mg alloys synthesized using cryomilling process. Acta Materialia, 2016, 115, 295-307.	3.8	7
12	Strengthening mechanisms of graphene- and $\text{Al}_2\text{O}_3$ -reinforced aluminum nanocomposites synthesized by room temperature milling. Materials and Design, 2016, 92, 79-87.	3.3	57
13	Multi-scale modeling of polymer-drug interactions and their impact on the structural evolutions in PLGA-tetracycline films. Polymer, 2016, 84, 121-131.	1.8	13
14	Futuristic Nanomaterials and Composites: Part II. Jom, 2016, 68, 261-264.	0.9	0
15	Diffuse Interface Methods for Modeling Drug-Eluting Stent Coatings. Annals of Biomedical Engineering, 2016, 44, 548-559.	1.3	8
16	DFT study on the adsorption and absorption behaviors of liquid nitrogen in the Mg nano alloys synthesized from powder metallurgy. Computational Materials Science, 2015, 105, 18-26.	1.4	8
17	On the superposition of strengthening mechanisms in dispersion strengthened alloys and metal-matrix nanocomposites: Considerations of stress and energy. Metals and Materials International, 2014, 20, 375-388.	1.8	41
18	Predicting tensile and compressive mechanical properties of bimodal nano-aluminum alloys. Scripta Materialia, 2014, 72-73, 13-16.	2.6	12

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19	Stress analyses for the glass joints of contemporary sodium sulfur batteries. <i>Journal of Power Sources</i> , 2014, 269, 773-782.	4.0	14
20	Impact of Brownian motion on the particle settling in molten metals. <i>Metals and Materials International</i> , 2014, 20, 747-755.	1.8	10
21	FEA Study on the Stress Distributions in the Polymer Coatings of Cardiovascular Drug-Eluting Stent Medical Devices. <i>Annals of Biomedical Engineering</i> , 2014, 42, 1952-1965.	1.3	11
22	Paper-fluidic electrochemical biosensing platform with enzyme paper and enzymeless electrodes. <i>Sensors and Actuators B: Chemical</i> , 2014, 203, 44-53.	4.0	39
23	Impact of Volume Fraction and Size of Reinforcement Particles on the Grain Size in Metal-Matrix Micro and Nanocomposites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 4055-4061.	1.1	31
24	Brownian Motion Effects on Particle Pushing and Engulfment During Solidification in Metal-Matrix Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 4635-4645.	1.1	22
25	Predicting the Effect of Pouring Temperature on the Crystallite Density, Remelting, and Crystal Growth Kinetics in the Solidification of Aluminum Alloys. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2014, 45, 1407-1417.	1.0	8
26	Effect of SiO <sub>2</sub> coating on polyethylene separator with different stretching ratios for application in lithium ion batteries. <i>Materials Chemistry and Physics</i> , 2014, 146, 545-550.	2.0	58
27	Computational and analytical prediction of the elastic modulus and yield stress in particulate-reinforced metal matrix composites. <i>Scripta Materialia</i> , 2014, 83, 45-48.	2.6	25
28	Finite element analysis study on the thermomechanical stability of thermal compression bonding (TCB) joints in tubular sodium sulfur cells. <i>Journal of Power Sources</i> , 2014, 250, 1-14.	4.0	22
29	Impact of copolymer ratio on drug distribution in styrene-isobutylene-styrene block copolymers. , 2013, 101, 1191-1199.		4
30	Prediction models for the yield strength of particle-reinforced unimodal pure magnesium (Mg) metal matrix nanocomposites (MMNCs). <i>Journal of Materials Science</i> , 2013, 48, 4191-4204.	1.7	185
31	Viscous Behavior of Alumina Rich Calcium-Silicate Based Mold Fluxes and Its Correlation to the Melt Structure. <i>ISIJ International</i> , 2013, 53, 170-176.	0.6	87
32	On the strength and strain to failure in particle-reinforced magnesium metal-matrix nanocomposites (Mg MMNCs). <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 558, 193-204.	2.6	130
33	Interfacial failure via encapsulation of external particulates in an outward-growing thermal oxide. <i>Journal of Power Sources</i> , 2011, 196, 4686-4694.	4.0	8
34	Microstructure and Elution of Tetracycline from Block Copolymer Coatings. <i>Journal of Pharmaceutical Sciences</i> , 2010, 99, 2777-2785.	1.6	20
35	The Effect of Substrate Material on Silver Nanoparticle Antimicrobial Efficacy. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 8456-8462.	0.9	9
36	Modeling solvent evaporation during the manufacture of controlled drug-release coatings and the impact on release kinetics. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 90B, 688-699.	1.6	28

#	ARTICLE	IF	CITATIONS
37	Modeling microstructure development and release kinetics in controlled drug release coatings. The mention of commercial products, their source, or their use in connection with the material reported herein is not to be construed as either an actual or implied endorsement by either the US Food and Drug Administration or the National Institute of Standards and Technology.. Journal of Pharmaceutical Sciences, 2000, 89, 169-186.	1.6	15
38	Interface Character Distributions in WC-Co Composites. Journal of the American Ceramic Society, 2008, 91, 996-1001.	1.9	69
39	Diffuse-interface theory for structure formation and release behavior in controlled drug release systems. Acta Biomaterialia, 2007, 3, 851-864.	4.1	53
40	Modeling the Influence of Orientation Texture on the Strength of WC-Co Composites. Journal of the American Ceramic Society, 2007, 90, 199-204.	1.9	23
41	Effect of annealing temperature on structural and electrical properties of tantalum nitride thin film resistors deposited on SiO <sub>2</sub> -Si substrates by dc sputtering technique. Journal of Vacuum Science & Technology B, 2006, 24, 682.	1.3	12
42	Changes in the five-parameter grain boundary character distribution in $\beta$ -brass brought about by iterative thermomechanical processing. Acta Materialia, 2006, 54, 4489-4502.	3.8	105
43	Modeling the relationship between microstructural features and the strength of WC-Co composites. International Journal of Refractory Metals and Hard Materials, 2006, 24, 89-100.	1.7	50
44	Grain boundary planes: New dimensions in the grain boundary character distribution. Scripta Materialia, 2006, 54, 1005-1009.	2.6	65
45	Effect of film thickness on the electrical properties of tantalum nitride thin films deposited on SiO <sub>2</sub> -Si substrates for I-type attenuator applications. Journal of Vacuum Science & Technology B, 2006, 24, 1398.	1.3	6
46	Shape Evolution of SrTiO <sub>3</sub> Crystals During Coarsening in a Titania-Rich Liquid. Journal of the American Ceramic Society, 2005, 88, 993-996.	1.9	15
47	Five-parameter grain boundary distribution in grain boundary engineered brass. Scripta Materialia, 2005, 52, 633-637.	2.6	84
48	Changes in the distribution of interfaces in PMN-35 mol% PT as a function of time. International Journal of Materials Research, 2005, 96, 207-210.	0.8	5
49	The influence of singular surfaces and morphological changes on coarsening. International Journal of Materials Research, 2005, 96, 191-196.	0.8	1
50	Geometric and Crystallographic Characterization of WC Surfaces and Grain Boundaries in WC-Co Composites. Journal of Materials Science, 2004, 12, 19-27.	1.2	57
51	A numerical analysis of fluid flow, heat transfer and solidification in the bending-type square billet continuous casting process. Metals and Materials International, 2002, 8, 111-117.	1.8	9
52	Water Model Study on Convection Pattern of Molten Steel Flow in Continuous Casting Tundish.. ISIJ International, 1998, 38, 843-851.	0.6	29