

Adrian S Sabau

List of Publications by Year in descending order

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papers

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471509

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	Thermo-Mechanical Distortion of Tungsten-Coated Steel During High Heat Flux Testing Using Plasma Arc Lamps. <i>Fusion Science and Technology</i> , 2022, 78, 291-317.	1.1	1
2	Design optimization of an additively manufactured prototype recuperator for supercritical CO2 power cycles. <i>Energy</i> , 2022, 251, 123961.	8.8	6
3	Corrosion Behavior of Laser-Interference Structured AA2024 Coated with a Chromate-Containing Epoxy Primer. <i>Corrosion</i> , 2021, 77, 577-590.	1.1	1
4	Adhesive Bonding of Copper Prepared by Laser-Interference near the Interference Structuring Limits. <i>Materials</i> , 2021, 14, 3485.	2.9	0
5	Surface and subsurface characterization of laser-interference structured Ti6Al4V. <i>Applied Surface Science</i> , 2021, 555, 149576.	6.1	1
6	Steady-State Mechanical Analysis for Target Assembly in the Material Plasma Exposure eXperiment Facility. <i>Fusion Science and Technology</i> , 2021, 77, 594-607.	1.1	0
7	Conjugate Heat Transfer Analysis of the Supercritical CO2 Based Counter Flow Compact 3D Heat Exchangers. , 2020, , .		0
8	Laser-interference pulse number dependence of surface chemistry and sub-surface microstructure of AA2024-T3 alloy. <i>Optics and Laser Technology</i> , 2020, 131, 106457.	4.6	6
9	Heat transfer coefficients of additively manufactured tubes with internal pin fins for supercritical carbon dioxide cycle recuperators. <i>Applied Thermal Engineering</i> , 2020, 181, 116030.	6.0	20
10	Design, additive manufacturing, and performance of heat exchanger with a novel flow-path architecture. <i>Applied Thermal Engineering</i> , 2020, 180, 115775.	6.0	29
11	Columnar-to-equiaxed transition in a laser scan for metal additive manufacturing. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 861, 012007.	0.6	6
12	Fluid Dynamics Effects on Microstructure Prediction in Single-Laser Tracks for Additive Manufacturing of IN625. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2020, 51, 1263-1281.	2.1	14
13	Coating adhesion of a chromate-containing epoxy primer on Al2024-T3 surface processed by laser-interference. <i>International Journal of Adhesion and Adhesives</i> , 2020, 102, 102641.	2.9	7
14	Grain Refinement Effect on the Hot-Tearing Resistance of Higher-Temperature Al-Cu-Mn-Zr Alloys. <i>Metals</i> , 2020, 10, 430.	2.3	10
15	Evaporation due to infrared heating and natural convection. <i>Heat and Mass Transfer</i> , 2020, 56, 2585-2593.	2.1	4
16	Surface chemistry and composition-induced variation of laser interference-based surface treatment of Al alloys. <i>Applied Surface Science</i> , 2019, 489, 893-904.	6.1	9
17	A 6 MW/m ² High Heat Flux Testing Facility of Irradiated Materials Using Infrared Plasma-Arc Lamps. <i>Fusion Science and Technology</i> , 2019, 75, 690-701.	1.1	4
18	Counter cross-flow evaporator geometries for supercritical organic Rankine cycles. <i>International Journal of Heat and Mass Transfer</i> , 2019, 135, 425-435.	4.8	11

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19	Hot-Tearing Assessment of Multicomponent Nongrain-Refined Al-Cu Alloys for Permanent Mold Castings Based on Load Measurements in a Constrained Mold. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2018, 49, 1267-1287.	2.1	13
20	Novel evaporator architecture with entrance-length crossflow-paths for supercritical Organic Rankine Cycles. International Journal of Heat and Mass Transfer, 2018, 119, 208-222.	4.8	7
21	Surface morphology of Tungsten-F82H after high-heat flux testing using plasma-arc lamps. Nuclear Materials and Energy, 2018, 16, 128-132.	1.3	3
22	Entrance-length dendritic plate heat exchangers. International Journal of Heat and Mass Transfer, 2017, 114, 1350-1356.	4.8	26
23	Hot-Tearing of Multicomponent Al-Cu Alloys Based on Casting Load Measurements in a Constrained Permanent Mold. Minerals, Metals and Materials Series, 2017, , 465-473.	0.4	3
24	Author Index: CFD Modeling and Simulation in Materials Processing 2016. , 2016, , 271-273.		0
25	Novel Evaporator Geometries Based on Entrance-Length Flow-Paths for Geothermal Binary Power Plants. , 2016, , .		0
26	Arrays of flow channels with heat transfer embedded in conducting walls. International Journal of Heat and Mass Transfer, 2016, 99, 504-511.	4.8	10
27	Modeling of interdendritic porosity defects in an integrated computational materials engineering approach for metal casting. International Journal of Cast Metals Research, 2016, 29, 331-337.	1.0	2
28	Counterflow heat exchanger with core and plenums at both ends. International Journal of Heat and Mass Transfer, 2016, 99, 622-629.	4.8	17
29	Surface Characterization of Carbon Fiber Polymer Composites and Aluminum Alloys After Laser Interference Structuring. Jom, 2016, 68, 1882-1889.	1.9	7
30	Original analytical model of the hydrodynamic loads applied on the half-bridge of a circular settling tank. , 2016, , .		1
31	Evaluation of Cooling Conditions for a High Heat Flux Testing Facility Based on Plasma-Arc Lamps. Fusion Science and Technology, 2015, 68, 694-699.	1.1	1
32	Original computer method for the experimental data processing in photoelasticity. Proceedings of SPIE, 2015, , .	0.8	5
33	Modeling of Casting Defects in an Integrated Computational Materials Engineering Approach. , 2015, , 231-240.		2
34	Surface Modification of Carbon Fiber Polymer Composites after Laser Structuring. , 2015, , 297-309.		1
35	Aluminum Surface Texturing by Means of Laser Interference Metallurgy. , 2015, , 427-429.		0
36	Process Simulation Role in the Development of New Alloys Based on an Integrated Computational Materials Engineering Approach. , 2014, , .		3

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37	Facility for high-heat flux testing of irradiated fusion materials and components using infrared plasma arc lamps. <i>Physica Scripta</i> , 2014, T159, 014007.	2.5	5
38	Algorithm Development in Computational Materials Science. <i>Jom</i> , 2014, 66, 397-398.	1.9	1
39	High-Heat-Flux Testing of Irradiated Tungsten-Based Materials for Fusion Applications Using Infrared Plasma Arc Lamps. <i>Fusion Science and Technology</i> , 2014, 66, 394-404.	1.1	9
40	Analysis of composite electrolytes with sintered reinforcement structure for energy storage applications. <i>Journal of Power Sources</i> , 2013, 241, 178-185.	7.8	37
41	Mixtures of SF ₆ -CO ₂ as working fluids for geothermal power plants. <i>Applied Energy</i> , 2013, 106, 243-253.	10.1	49
42	Organic Fluids in a Supercritical Rankine Cycle for Low Temperature Power Generation. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2013, 135, .	2.3	33
43	Pressure Waves Simulation in Diesel Engine Injection System. <i>Advanced Materials Research</i> , 2013, 837, 477-482.	0.3	4
44	Transient Regimes Analysis for a Diesel Engine. <i>Advanced Materials Research</i> , 2013, 837, 471-476.	0.3	5
45	Performance of Working Fluids for Power Generation in a Supercritical Organic Rankine Cycle. , 2012, , .		2
46	Numerical Simulation of Macro-shrinkage and Micro-shrinkage in A356 Sand Mold Castings. , 2012, , 205-212.		1
47	Current Status of Ti PM: Progress, Opportunities and Challenges. <i>Key Engineering Materials</i> , 2012, 520, 1-7.	0.4	12
48	Oxide scale exfoliation and regrowth in TP347H superheater tubes. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2012, 63, 896-908.	1.5	18
49	Design of composite polymer electrolytes for Li ion batteries based on mechanical stability criteria. <i>Journal of Power Sources</i> , 2012, 201, 280-287.	7.8	64
50	Modeling of High-Pressure Fuel Injection Systems. <i>Annals of DAAAM & Proceedings</i> , 2012, , 1019-1022.	0.1	1
51	Increasing Wear Resistance of the Superficial Microalloying Layers. <i>Annals of DAAAM & Proceedings</i> , 2012, , 1015-1018.	0.1	0
52	Analytic Method to Compute the Isostatics using the Isoclinic Fringes. <i>Annals of DAAAM & Proceedings</i> , 2012, , 0493-0496.	0.1	1
53	Ideas Regarding the Modeling of the Behavior of the Sections Having a Distinct Shear Center. <i>Annals of DAAAM & Proceedings</i> , 2012, , 0489-0492.	0.1	0
54	Effective conductivity of particulate polymer composite electrolytes using random resistor network method. <i>Solid State Ionics</i> , 2011, 199-200, 44-53.	2.7	10

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55	Cold compaction study of Armstrong Process® Ti-6Al-4V powders. Powder Technology, 2011, 214, 194-199.	4.2	46
56	Advanced method for increasing the efficiency of white light quantum dot LEDs. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1980-1982.	1.8	4
57	Mixtures of CO ₂ -SF ₆ as Working Fluids for Geothermal Plants. , 2011, , .		2
58	Influence of Oxide Growth and Metal Creep on Strain Development in the Steam-Side Oxide in Boiler Tubes. Oxidation of Metals, 2010, 73, 467-492.	2.1	25
59	Transfer-matrix formalism for the calculation of optical response in multilayer systems: from coherent to incoherent interference. Optics Express, 2010, 18, 24715.	3.4	145
60	On the estimation of thermal strains developed during oxide growth. Journal of Applied Physics, 2009, 106, 023503.	2.5	20
61	The Effects of Changing Fuels on Hot Gas Path Conditions in Syngas Turbines. Journal of Engineering for Gas Turbines and Power, 2009, 131, .	1.1	5
62	Morphological evolution of oxide scales grown on ferritic steels in steam. Materials at High Temperatures, 2009, 26, 105-111.	1.0	10
63	A radiative transport model for heating paints using high density plasma arc lamps. Journal of Applied Physics, 2009, 105, 084901.	2.5	4
64	Morphological evolution of oxide scales grown on ferritic steels in steam. Materials at High Temperatures, 2009, 26, 105-111.	1.0	2
65	Alloy Shrinkage Factors for the Investment Casting of 17-4PH Stainless Steel Parts. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2008, 39, 317-330.	2.1	19
66	Characterization of spray lubricants for the high pressure die casting processes. Journal of Materials Processing Technology, 2008, 195, 267-274.	6.3	11
67	Comments on americium volatilization during fuel fabrication for fast reactors. Journal of Nuclear Materials, 2008, 376, 251-253.	2.7	2
68	Generation of nitrogen acceptors in ZnO using pulse thermal processing. Applied Physics Letters, 2008, 92, 151112.	3.3	16
69	Measurement of heat flux and heat transfer coefficient due to spray application for the die casting process. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2007, 221, 1307-1316.	2.4	6
70	Evaluation of a heat flux sensor for spray cooling for the die casting processes. Journal of Materials Processing Technology, 2007, 182, 312-318.	6.3	8
71	Process Parameters for Infrared Processing of FePt Nanoparticle Films. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 788-797.	2.2	5
72	Analysis of a Heat-Flux Differential Scanning Calorimetry Instrument. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2007, 38, 1546-1554.	2.2	1

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73	Numerical Simulations of the Effects of Changing Fuel for Turbines Fired by Natural Gas and Syngas. , 2007, , .		1
74	Modeling and processing of liquid-phase-sintered TiAl during high-density infrared processing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 1289-1299.	2.2	3
75	Alloy shrinkage factors for the investment casting process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2006, 37, 131-140.	2.1	41
76	Numerical simulation of high-density plasma-arc processing of FePt nanoparticle films. Jom, 2006, 58, 35-38.	1.9	53
77	Measurement of heat flux at metal/mould interface during casting solidification. International Journal of Cast Metals Research, 2006, 19, 188-194.	1.0	6
78	Analysis of volumetric changes through melting using a dilatometer. Journal of Thermal Analysis and Calorimetry, 2005, 82, 171-177.	3.6	9
79	Functionalization of Nanomaterials utilizing Pulse Thermal Processing. Materials Research Society Symposia Proceedings, 2004, 853, 19.	0.1	1
80	Advanced Manufacturing Technologies Utilising High Density Infrared Radiant Heating. Surface Engineering, 2004, 20, 220-228.	2.2	10
81	Predicting interdendritic cavity defects during casting solidification. Jom, 2004, 56, 54-56.	1.9	6
82	Analytical Models for the Systematic Errors of Differential Scanning Calorimetry Instruments. , 2004, , .		1
83	Material properties for predicting wax pattern dimensions in investment casting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 362, 125-134.	5.6	52
84	Microporosity prediction in aluminum alloy castings. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2002, 33, 243-255.	2.1	83
85	Comparisons of compact and classical finite difference solutions of stiff problems on nonuniform grids. Computers and Fluids, 1999, 28, 361-384.	2.5	8
86	Oscillations in high-order finite difference solutions of stiff problems on non-uniform grids. International Journal for Numerical Methods in Fluids, 1999, 30, 939-956.	1.6	7
87	Next Generation Casting Process Models - Predicting Porosity and Microstructure. , 1998, , .		0
88	Dynamics of a Gas Permeable Contact Lens During Blinking. Journal of Applied Mechanics, Transactions ASME, 1996, 63, 411-418.	2.2	7
89	Blink-Induced Motion of a Gas Permeable Contact Lens. Optometry and Vision Science, 1995, 72, 378-386.	1.2	6
90	Development of Strain in Oxides Grown in Steam Tubes. Materials Science Forum, 0, 595-598, 387-395.	0.3	24

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91	Consolidation Process in Near Net Shape Manufacturing of Armstrong CP-Ti/Ti-6Al-4V Powders. Key Engineering Materials, 0, 436, 103-111.	0.4	29
92	Progress in the U.S./Japan PHENIX Project for the Technological Assessment of Plasma Facing Components for DEMO Reactors. Fusion Science and Technology, 0, , 1-11.	1.1	2
93	Experimental and Computational Study of Bolt Load Retention Behavior of Magnesium Alloy AM60B. , 0, , 201-201.		0