## Pasquale Cavaliere

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Architectural design of advanced aluminum matrix composites: a review of recent developments. Critical Reviews in Solid State and Materials Sciences, 2024, 49, 1-71.	6.8	14
2	Investigation of hardness, wear and magnetic properties of NiCoCrFeZrx HEA prepared through mechanical alloying and spark plasma sintering. Journal of Alloys and Compounds, 2022, 892, 161924.	2.8	22
3	Microstructure dependent dislocation density evolution in micro-macro rolled Al2O3/Al laminated composite. Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 830, 142317.	2.6	25
4	Integration of Open Slag Bath Furnace with Direct Reduction Reactors for New-Generation Steelmaking. Metals, 2022, 12, 203.	1.0	14
5	Microstructural, Mechanical and Wear Behavior of HVOF and Cold-Sprayed High-Entropy Alloys (HEAs) Coatings. Journal of Thermal Spray Technology, 2022, 31, 1184-1206.	1.6	26
6	CNTs reinforced Al-based composites produced via modified flake powder metallurgy. Journal of Materials Science, 2022, 57, 2550-2566.	1.7	13
7	Effect of Processing Parameters on Strength and Corrosion Resistance of Friction Stir-Welded AA6082. Metals, 2022, 12, 192.	1.0	5
8	Crack Initiation and Growth Behavior of HVOF Stellite-6 Coatings under Bending Loading. , 2022, 1, 62-74.		1
9	Pack Siliconizing Optimization of AISI D2 Tool Steel. Silicon, 2022, 14, 10669-10679.	1.8	5
10	Growth Mechanism and Kinetics of Siliconizing of AISI D2 Tool Steel. Silicon, 2022, 14, 11395-11403.	1.8	3
11	Hydrogen Production as a Clean Energy Carrier through Heterojunction Semiconductors for Environmental Remediation. Energies, 2022, 15, 3222.	1.6	10
12	Fatigue Bending of V-Notched Cold-Sprayed FeCoCrNiMn Coatings. Metals, 2022, 12, 780.	1.0	2
13	Architecture dependent strengthening mechanisms in graphene/Al heterogeneous lamellar composites. Materials Characterization, 2022, 188, 111913.	1.9	8
14	Photocatalytic Materials Obtained from E-Waste Recycling: Review, Techniques, Critique, and Update. Journal of Manufacturing and Materials Processing, 2022, 6, 69.	1.0	4
15	A Quantitative Investigation of Dislocation Density in an Al Matrix Composite Produced by a Combination of Micro-/Macro-Rolling. Journal of Composites Science, 2022, 6, 199.	1.4	6
16	Hot deformation behaviour of bimodal sized Al <sub>2</sub> O <sub>3</sub> /Al nanocomposites fabricated by spark plasma sintering. Journal of Microscopy, 2021, 281, 28-45.	0.8	16
17	Crystal structure evolution in mehcanical alloying and spark plasma sintering of AlxCoCrCuFeNi HEAs. Powder Metallurgy, 2021, 64, 54-63.	0.9	3

18 Fatigue and Fracture of Nanostructured Materials. , 2021, , .

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19	Increasing shear strength of Au–Sn bonded joint through nano-grained interfacial reaction products. Journal of Materials Science, 2021, 56, 7050-7062.	1.7	5
20	Progress of Flake Powder Metallurgy Research. Metals, 2021, 11, 931.	1.0	19
21	Effect of Iron content on the microstructure evolution, mechanical properties and wear resistance of FeXCoCrNi high-entropy alloy ‎system produced via MA-SPS. Journal of Alloys and Compounds, 2021, 870, 159410.	2.8	32
22	Fretting Wear and Scratch Resistance of Cold-Sprayed Pure Cu and Ti. Metallography, Microstructure, and Analysis, 2021, 10, 496.	0.5	4
23	Modelling of strain rate dependent dislocation behavior of CNT/Al composites based on grain interior/grain boundary affected zone (GI/GBAZ). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 820, 141547.	2.6	26
24	Characterization of Tribological and Mechanical Properties of the Si3N4 Coating Fabricated by Duplex Surface Treatment of Pack Siliconizing and Plasma Nitriding on AISI D2 Tool Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 4753-4766.	1.1	5
25	Effects of Process Control Agent Amount, Milling Time, and Annealing Heat Treatment on the Microstructure of AlCrCuFeNi High-Entropy Alloy Synthesized through Mechanical Alloying. Metals, 2021, 11, 1493.	1.0	23
26	Effect of Bimodal Grain Structure on the Microstructural and Mechanical Evolution of Al-Mg/CNTs Composite. Metals, 2021, 11, 1524.	1.0	8
27	Wear and Fretting Behavior of Cold Sprayed IN625 Superalloy. Metals, 2021, 11, 49.	1.0	7
28	Water Electrolysis for the Production of Hydrogen to Be Employed in the Ironmaking and Steelmaking Industry. Metals, 2021, 11, 1816.	1.0	22
29	Effect of Al <sub>2</sub> O <sub>3</sub> , SiO <sub>2</sub> and carbon nanotubes on the microstructural and mechanical behavior of spark plasma sintered aluminum based nanocomposites. Particulate Science and Technology, 2020, 38, 7-14.	1.1	18
30	Nanoindentation and scratch behaviour of Ni–P electroless coatings. Tribology - Materials, Surfaces and Interfaces, 2020, 14, 22-32.	0.6	11
31	Powder Properties and Processing Conditions Affecting Cold Spray Deposition. Coatings, 2020, 10, 91.	1.2	16
32	Phase evolution in mechanical alloying and spark plasma sintering of Al <i><sub>x</sub></i> CoCrCuFeNi HEAs. Materials Science and Technology, 2020, 36, 604-614.	0.8	10
33	Friction stir spot welding of TiO2 nanoparticle-reinforced interstitial free steel. Journal of Materials Science, 2020, 55, 12458-12475.	1.7	12
34	Direct Reduced Iron: Most Efficient Technologies for Greenhouse Emissions Abatement. , 2019, , 419-484.		10
35	Clean Ironmaking and Steelmaking Processes: Efficient Technologies for Greenhouse Emissions Abatement. , 2019, , 1-37.		9

36 Sintering: Most Efficient Technologies for Greenhouse Emissions Abatement. , 2019, , 111-165.

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37	The microstructure and wear behaviour of friction stir processed AISI 430 ferritic stainless steel. Tribology - Materials, Surfaces and Interfaces, 2019, 13, 172-181.	0.6	5
38	Evaluation of aluminium/alumina/titanium composites produced by continual annealing and roll-bonding process. Materials Science and Technology, 2019, 35, 1614-1623.	0.8	1
39	Fatigue Bending Behavior of Cold-Sprayed Nickel-Based Superalloy Coatings. Journal of Thermal Spray Technology, 2019, 28, 930-938.	1.6	22
40	Hot rolling of MWCNTs reinforced Al matrix composites produced via spark plasma sintering. Advanced Composites and Hybrid Materials, 2019, 2, 549-570.	9.9	31
41	Corrosion behavior of friction stir processed AISI 430 ferritic stainless steel. Materials Research Express, 2019, 6, 086532.	0.8	6
42	Al-Based Nanocomposites Produced via Spark Plasma Sintering: Effect of Processing Route and Reinforcing Phases. , 2019, , 161-190.		6
43	Microstructural evolution and mechanical properties of AlCrFeNiCoC high entropy alloy produced via spark plasma sintering. Powder Metallurgy, 2019, 62, 61-70.	0.9	17
44	Spark Plasma Sintering: Process Fundamentals. , 2019, , 3-20.		38
45	Microstructure and Mechanical Properties of Nanostructured CoCrFeMoTi High-Entropy Alloy Fabricated by Mechanical Alloying and Spark Plasma Sintering. Journal of Materials Engineering and Performance, 2019, 28, 7710-7725.	1.2	6
46	Clean Ironmaking and Steelmaking Processes. , 2019, , .		55
47	Electron backscattered diffraction analysis of friction stir processed nanocomposites produced via spark plasma sintering. Journal of Microscopy, 2018, 271, 145-163.	0.8	10
48	Cold spray additive manufacturing and repair: Fundamentals and applications. Additive Manufacturing, 2018, 21, 628-650.	1.7	269
49	Influence of SiO2 nanoparticles on the microstructure and mechanical properties of Al matrix nanocomposites fabricated by spark plasma sintering. Composites Part B: Engineering, 2018, 146, 60-68.	5.9	51
50	Friction stir processing of spark plasma sintered aluminum matrix composites with bimodal micro- and nano-sized reinforcing Al2O3 particles. Journal of Manufacturing Processes, 2018, 32, 412-424.	2.8	37
51	Finite element analyses of pure Ni cold spray particles impact related to coating crack behaviour. Surface Engineering, 2018, 34, 361-368.	1.1	14
52	Microstructural behaviour of spark plasma sintered composites containing bimodal micro- and nano-sized Al <sub>2</sub> O <sub>3</sub> particles. Powder Metallurgy, 2018, 61, 50-63.	0.9	26
53	Microstructural and mechanical behavior of bimodal reinforced Al-based composites produced by spark plasma sintering and FSP. International Journal of Advanced Manufacturing Technology, 2018, 94, 3903-3916.	1.5	23
54	Fatigue behaviour of Inconel 625 cold spray coatings. Surface Engineering, 2018, 34, 380-391.	1.1	21

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55	Fatigue Properties and Crack Behavior of Cold Spray Coatings. , 2018, , 503-530.		1
56	Influence of zirconium addition on the microstructure, thermodynamic stability, thermal stability and mechanical properties of mechanical alloyed spark plasma sintered (MA-SPS) FeCoCrNi high entropy alloy. Powder Metallurgy, 2018, 61, 405-416.	0.9	14
57	Effect of processing parameters on the microstructural and mechanical properties of aluminum–carbon nanotube composites produced by spark plasma sintering. International Journal of Materials Research, 2018, 109, 900-909.	0.1	13
58	Effect of the equal channel angular pressing route on the microstructural and mechanical behavior of Al-5086 alloy. Materialia, 2018, 4, 310-322.	1.3	7
59	Effect of lead on the crack propagation and the mechanical properties of Brass processed by ECAP at different temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 728, 231-238.	2.6	13
60	Effect of cold-rolling on microstructure, texture and mechanical properties of an equiatomic FeCrCuMnNi high entropy alloy. Materialia, 2018, 1, 175-184.	1.3	49
61	Effect of processing parameters on microstructural and mechanical properties of aluminum–SiO2 nanocomposites produced by spark plasma sintering. International Journal of Materials Research, 2018, 109, 422-430.	0.1	10
62	Hot rolling of spark-plasma-sintered pure aluminium. Powder Metallurgy, 2018, 61, 285-292.	0.9	22
63	Nanoindentation characterization of Al-matrix nanocomposites produced via spark plasma sintering. International Journal of Materials Research, 2018, 109, 50-62.	0.1	6
64	Wear Behavior of Al-Based Nanocomposites Reinforced with Bimodal Micro- and Nano-Sized Al2O3 Particles Produced by Spark Plasma Sintering. Materials Performance and Characterization, 2018, 7, 327-350.	0.2	4
65	Carbon nanotube reinforced aluminum matrix composites produced by spark plasma sintering. Journal of Materials Science, 2017, 52, 8618-8629.	1.7	73
66	Crack Repair in Aerospace Aluminum Alloy Panels by Cold Spray. Journal of Thermal Spray Technology, 2017, 26, 661-670.	1.6	52
67	Influence of Al2O3 Nanoparticles on Microstructure and Strengthening Mechanism of Al-Based Nanocomposites Produced via Spark Plasma Sintering. Journal of Materials Engineering and Performance, 2017, 26, 2928-2936.	1.2	29
68	Microstructural and fatigue behavior of cold sprayed Ni-based superalloys coatings. Surface and Coatings Technology, 2017, 324, 390-402.	2.2	51
69	Crack Initiation and Growth Behavior of Cold-Sprayed Ni Particles on IN718 Alloy. Journal of Materials Engineering and Performance, 2017, 26, 1929-1937.	1.2	5
70	FSW of bimodal reinforced Al-based composites produced via spark plasma sintering. International Journal of Materials Research, 2017, 108, 1045-1054.	0.1	10
71	Mechanical properties of cold sprayed titanium and nickel based coatings. Surface Engineering, 2016, 32, 670-676.	1.1	7
72	Cold-Sprayed Nanostructured Pure Cobalt Coatings. Journal of Thermal Spray Technology, 2016, 25, 1168-1176.	1.6	5

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73	Crystallization Evolution of Cold-Sprayed Pure Ni Coatings. Journal of Thermal Spray Technology, 2016, 25, 1158-1167.	1.6	17
74	Fatigue behaviour of cold sprayed metals and alloys: critical review. Surface Engineering, 2016, 32, 631-640.	1.1	36
75	Multi-objective optimization of steel nitriding. Engineering Science and Technology, an International Journal, 2016, 19, 292-312.	2.0	13
76	Steel nitriding optimization through multi-objective and FEM analysis. Journal of Computational Design and Engineering, 2016, 3, 71-90.	1.5	7
77	Dioxin Emission Reduction in Electric Arc Furnaces for Steel Production. , 2016, , 215-222.		1
78	Dangerous Emissions Control and Reduction in Sinter Plants. , 2016, , 39-58.		0
79	CO2 Emission Reduction in Blast Furnaces. , 2016, , 151-171.		1
80	Mechanical properties of cold sprayed Titanium and Nickel based coatings. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 153-154.	0.2	0
81	Mechanical and Microstructural Behavior of Cold-Sprayed Titanium- and Nickel-Based Coatings. Journal of Thermal Spray Technology, 2015, 24, 1506-1512.	1.6	7
82	Cold Spray Coating Technology for Metallic Components Repairing. Decision Engineering, 2015, , 175-184.	1.5	4
83	Processing conditions affecting residual stresses and fatigue properties of cold spray deposits. International Journal of Advanced Manufacturing Technology, 2015, 81, 1857-1862.	1.5	36
84	FEM and multi-objective optimization of steel case hardening. Journal of Manufacturing Processes, 2015, 17, 9-27.	2.8	13
85	Optimization of Processing Conditions Leading to Dangerous Emissions in Steelmaking Plants. , 2015, , 93-102.		Ο
86	Optimization of Blast Furnace Productivity Coupled with <scp>CO</scp> <sub>2</sub> Emissions Reduction. Steel Research International, 2014, 85, 89-98.	1.0	15
87	Processing parameters affecting cold spay coatings performances. International Journal of Advanced Manufacturing Technology, 2014, 71, 263-277.	1.5	33
88	Mechanical and microstructural behavior of nanocomposites produced via cold spray. Composites Part B: Engineering, 2014, 67, 326-331.	5.9	28
89	Processing Conditions Affecting Grain Size and Mechanical Properties in Nanocomposites Produced via Cold Spray. Journal of Thermal Spray Technology, 2014, 23, 1089-1096.	1.6	14
90	Friction Stir Welding of Al Alloys: Analysis of Processing Parameters Affecting Mechanical Behavior. Procedia CIRP, 2013, 11, 139-144.	1.0	44

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91	Analysis of dangerous emissions and plant productivity during sintering ore operations. Ironmaking and Steelmaking, 2013, 40, 9-24.	1.1	17
92	Reducing emissions of PCDD/F in sintering plant: numerical and experimental analysis. Ironmaking and Steelmaking, 2011, 38, 422-431.	1.1	19
93	Cyclic deformation of ultra-fine and nanocrystalline metals through nanoindentation: similarities with crack propagation. Procedia Engineering, 2010, 2, 213-222.	1.2	16
94	Tribomechanisms of pure electrodeposited Ni at ultra-fine and nanoscale level. Wear, 2010, 268, 1490-1503.	1.5	9
95	2198 Al–Li plates joined by Friction Stir Welding: Mechanical and microstructural behavior. Materials & Design, 2009, 30, 3622-3631.	5.1	139
96	Mechanical properties of nanocrystalline metals and alloys studied via multi-step nanoindentation and finite element calculations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 512, 1-9.	2.6	18
97	Thermoelasticity and CCD analysis of crack propagation in AA6082 friction stir welded joints. International Journal of Fatigue, 2009, 31, 385-392.	2.8	31
98	Fatigue properties and crack behavior of ultra-fine and nanocrystalline pure metals. International Journal of Fatigue, 2009, 31, 1476-1489.	2.8	147
99	Effect of welding parameters on mechanical and microstructural properties of dissimilar AA6082–AA2024 joints produced by friction stir welding. Materials & Design, 2009, 30, 609-616.	5.1	198
100	Effect of anisotropy on fatigue properties of 2198 Al–Li plates joined by friction stir welding. Engineering Failure Analysis, 2009, 16, 1856-1865.	1.8	45
101	Modeling of the carburizing and nitriding processes. Computational Materials Science, 2009, 46, 26-35.	1.4	55
102	Numerical analysis of multipoint CDW welding process on stainless AISI304 steel bars. Computational Materials Science, 2009, 46, 1109-1118.	1.4	11
103	Effect of welding parameters on mechanical and microstructural properties of AA6082 joints produced by friction stir welding. Journal of Materials Processing Technology, 2008, 200, 364-372.	3.1	157
104	Effect of tool position on the fatigue properties of dissimilar 2024-7075 sheets joined by friction stir welding. Journal of Materials Processing Technology, 2008, 206, 249-255.	3.1	94
105	Strain rate sensitivity of ultra-fine and nanocrystaline metals and alloys. Physica B: Condensed Matter, 2008, 403, 569-575.	1.3	22
106	Thermoelasticity for the evaluation of fatigue behavior of 7005/Al2O3/10p metal matrix composite sheets joined by FSW. International Journal of Fatigue, 2008, 30, 198-206.	2.8	33
107	Effect of Sc and Zr additions on the microstructure and fatigue properties of AA6106 produced by equal-channel-angular-pressing. Materials Characterization, 2008, 59, 197-203.	1.9	40
108	Crack tip plasticity in plastically graded Ni–W electrodeposited nanocrystalline alloys. Computational Materials Science, 2008, 41, 440-449.	1.4	25

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109	Strain Rate Sensitivity and Fatigue Properties of an Al-fe Nanocrystalline Alloy Produced by Cryogenic Ball Milling. Multidiscipline Modeling in Materials and Structures, 2007, 3, 225-234.	0.6	4
110	Flow curve prediction of an Al-MMC under hot working conditions using neural networks. Computational Materials Science, 2007, 38, 722-726.	1.4	15
111	Friction stir processing of AM60B magnesium alloy sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 462, 393-397.	2.6	81
112	Friction stir processing of a Zr-modified 2014 aluminium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 462, 206-210.	2.6	27
113	Influence of shoulder geometry on microstructure and mechanical properties of friction stir welded 6082 aluminium alloy. Materials & Design, 2007, 28, 1124-1129.	5.1	248
114	Mechanical and microstructural behaviour of CMSX-4 Ni-based superalloy joined by capacitor discharge welding. Journal of Materials Processing Technology, 2007, 183, 297-300.	3.1	6
115	Superplastic behaviour of friction stir processed AZ91 magnesium alloy produced by high pressure die cast. Journal of Materials Processing Technology, 2007, 184, 77-83.	3.1	114
116	Fatigue behaviour of friction stir processed AZ91 magnesium alloy produced by high pressure die casting. Materials Characterization, 2007, 58, 226-232.	1.9	59
117	Hot forming behaviour of Ti–Al–Zr–Si "in situ―metal matrix composite by means of hot torsion tests. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1514-1520.	3.8	9
118	Isothermal forging of metal matrix composites: Recrystallization behaviour by means of deformation efficiency. Composites Science and Technology, 2006, 66, 357-362.	3.8	54
119	Mechanical and microstructural behaviour of 2024–7075 aluminium alloy sheets joined by friction stir welding. International Journal of Machine Tools and Manufacture, 2006, 46, 588-594.	6.2	225
120	Effect of welding parameters on mechanical and microstructural properties of AA6056 joints produced by Friction Stir Welding. Journal of Materials Processing Technology, 2006, 180, 263-270.	3.1	168
121	Effect of friction stir processing on mechanical and microstructural properties of AM60B Magnesium alloy. Journal of Materials Science, 2006, 41, 3459-3464.	1.7	16
122	Effect of minor Sc and Zr addition on the mechanical properties of Friction Stir Processed 2024 Aluminium alloy. Journal of Materials Science, 2006, 41, 4299-4302.	1.7	11
123	Effect of friction stir processing on the fatigue properties of a Zr-modified 2014 aluminium alloy. Materials Characterization, 2006, 57, 100-104.	1.9	31
124	Effect of heat treatments on mechanical properties and damage evolution of thixoformed aluminium alloys. Materials Characterization, 2005, 55, 35-42.	1.9	41
125	High temperature deformation of friction stir processed 7075 aluminium alloy. Materials Characterization, 2005, 55, 136-142.	1.9	69
126	Mechanical response of 2024-7075 aluminium alloys joined by Friction Stir Welding. Journal of Materials Science, 2005, 40, 3669-3676.	1.7	82

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127	Mechanical properties of Friction Stir Processed 2618/Al2O3/20p metal matrix composite. Composites Part A: Applied Science and Manufacturing, 2005, 36, 1657-1665.	3.8	92
128	Friction Stir Welding of Ceramic Particle Reinforced Aluminium Based Metal Matrix Composites. Applied Composite Materials, 2004, 11, 247-258.	1.3	68
129	Friction Stir Welding of Ceramic Particle Reinforced Aluminium Based Metal Matrix Composites. Applied Composite Materials, 2004, 11, 399.	1.3	10
130	Hot deformation and processing maps of a particulate reinforced 2618/Al2O3/20p metal matrix composite. Composites Science and Technology, 2004, 64, 1287-1291.	3.8	46
131	Compressive plastic deformation of an AS21X magnesium alloy produced by high pressure die casting at elevated temperatures. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 367, 9-16.	2.6	20
132	Isothermal forging of AA2618 reinforced with 20% of alumina particles. Composites Part A: Applied Science and Manufacturing, 2004, 35, 619-629.	3.8	48
133	Isothermal forging modelling of 2618 + 20% Al2O3p metal matrix composite. Journal of Alloys and Compounds, 2004, 378, 117-122.	2.8	20
134	Hot and warm forming of 2618 aluminium alloy. Journal of Light Metals, 2002, 2, 247-252.	0.8	39
135	Hot deformation and processing maps of a particulate-reinforced 6061+20% Al2O3 composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 324, 157-161.	2.6	65
136	An analysis of hot formability of the 6061+20% Al2O3 composite by means of different stability criteria. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 327, 144-154.	2.6	66
137	Strengthening of a commercial Al-5754 alloy using equal-channel angular pressing. Journal of Materials Science Letters, 2001, 20, 1601-1603.	0.5	5
138	Effects of thermal treatments on microstructure and mechanical properties in a thixocast 319 aluminum alloy. Materials Science & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 284, 254-260.	2.6	76
139	Friction Stir Welding of Al Alloys: Analysis through a Multi-Objective Optimization Tool. Materials Science Forum, 0, 783-786, 1729-1734.	0.3	0